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AWAKENING

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AWAKENING

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CONTENTS

MESSAGES 04

EDITORIAL 08

FEATURE

The Rise of The Walking Dead 10
Adarsh Kashyap and Devanshi Chokhani

Echoes of Adrenaline - A Deep Dive into the Dynamics of the Adventure Tourism Industry
Soham Sen

Rupee's Gambit – Daring the Dollar Absolutism 22
Priyanshi Dwivedy

Navigating Economic Uncertainty with Real Estate Investment Trusts (REITs): A StrategicApproach to Real Estate Investment 29
Ratna Nangalia and Sanjana Choraria

Battlefield Economics: Impact of the Defence Industry on Economies 35
Aditya Murarka and Vedika Jalan

Silicon Symphony: Navigating Global Technological Turbulence 41
Akshat Choudhury and Sahil Ketan Mehta

Open Credit Enablement Network (OCEN): Redefining Credit Accessibility in India 47
Muskan Jain

Deglobalization: Reclaiming Borders, Redefining Horizons 52
Mahak Goenka and Sanya Shaw

INTERVIEWS

Mrs. Alia Bhatt 58
Taken by the Editorial Board

Sadhguru 61
Taken by the Editorial Board

Mr. Shailesh Lodha 65
Taken by the Editorial Board

Mr. Laxmi Ratan Shukla 70
Taken by the Editorial Board

GUEST ARTICLES

The Dual Faces of Rupee Internationalization: Advocating Benefits, Anticipating Risks 74
Dr. Santosh Kumari

Investing in India Growth Story: Equities for the Long Run 79
Anish Teli

Mendacity, Misery, and Hope 86
Dr. Annavajhula J.C. Bose

Designing your Tomorrow: An Integrative Perspective on Life-design and Livelihood 90
Prof. Somprakash Bandyopadhyay

BEYOND

Behavioural Finance: Role of Behavioural Biases on Investor's Decision-Making 96
Prof. Sourav Das and Kriti Karnani

Chat Generative Pre–Trained Transformer (GPT): An Analytical Study of its Contributions and Challenges 110
Dr. Sourav Tarafder and Aroni Bandyopadhyay

Business Valuation of Mamaearth - A Pre-Initial Public Offering (IPO) Private Company 125
Dr. Kushal Dey and Sumantha Saha

A Comprehensive Analysis of E-Commerce Services in India 135
Dr. Madhu Agnihotri and Ram Kumar Modi

Parallel Economy: A Big Menace to the Indian Economy 146
Prof. Arpita Dey and Muskan Choudhary

Analyzing the Growth and Scope of Gig Economy in India: A Study on Freelancers and Their Working Perspectives 160
Dr. Tridib Sengupta and Souhitya Samanta

Increasing the Share of Manufacturing in Gross Domestic Product: A Concern for theEnvironment? 172
Prof. Saswati Bagchi and Ankit Keshri

Comprehensive Study of the Trend, Trade, and Consumer Behaviour in India's JewelleryIndustry 178
Dr. Ruby Mary Notts and Megha Verma

Housing Development Finance Corporation (HDFC)-HDFC Bank: Merger of AllMergers 195
Prof. Sourav Das and Saptamita Roy

ASCENT

Efficacy of Non-traditional Marketing Strategies on Consumer Engagement and Brand Awareness: A Comparative Study 206
Rev. Dr. Joseph Kulandai, SJ and Aarsh Parekh

An Analysis of Impact of Goods and Services Tax on Buying Behaviour of SelectedConsumers in Fast Moving Consumer Goods Sector - An Empirical Analysis on Personal Care Products 213
Prof. Ayan Banerjee and Ayush Sinha

Passengers Satisfaction Regarding the Quality of Service of the Indian Railways: AnAssessment Study 229
Dr. Sumana Guha and Sanyam Singhi

Economic Cost of Social Disconnectedness – A Case Study 236
Dr. Tridib Sengupta and Arkaprabha Gayan

Study on The Economic Impact of Top Four European Football Leagues 243
Prof. Saptarshi Ray and Samad Zahid

Analyzing Consumer Perception towards Digital Marketing: Empirical Insights fromKolkata Metropolis 251
Prof. Samuel S Mitra and Vanshika Agarwal

A Study on Metaverse and Its Application in the Banking Sector 259
Prof. Santa Ghosal and Sayantani Singha

Perception and Financial Awareness of 'RBI Retail Direct Scheme': An Empirical Analysis on Selected Retail Investors 267
Prof. Ayan Banerjee and Harsh Singhi

PRECIS

A Study on Rainbow Marketing and its Effect on Consumer Buying Behaviour 284
Dr. Soma Nath and Smriti Sinha

Impact of Visual Merchandising on Impulse Buying Behaviour of Consumers: A Study on Clothing Retail Stores in Kolkata 291
Prof. Aparajita Hembrom and Ankita Kumari Singh

Quick E-Commerce Applications Supplying Daily Essentials in Kolkata: ConsumerAnalysis and Business Growth Strategies 301
Dr. Chandrima Banerjee and Divya Agarwal

Rise of Influencer Marketing in India 309
Dr. Kushal Dey and Abhigyan Prakash Bhuyan

A Study on Indian Tobacco Company: The Unbeatable King of Cigarette Industry in India 325
Dr. Anjan Chakravarty and Vishal Jain

How Financial Technology (Fintech) Helped Mitigate the Impact of COVID-19 in the IndianBanking Sector 333
Prof. Mausumi Das Nath and Mohit Kumar Jain

Re-Invention of the Fitness Industry After the COVID-19 Pandemic in India 350
Prof. Arpita Dey and Samriddhi Sonthalia

Impact of Unified Payments Interface (UPI) on the Performance of Public Sector Banksin India 360
Prof. Aparajita Hembrom and Rashi Prasad

LOOKING BACK 378

TRIBUTE 382

FUN SECTION 384

ADVERTISEMENTS 385



Rev. Dr. Dominic Savio, SJ

Principal

St. Xavier's College (Autonomous), Kolkata

"Wisdom shall always lead to glory."

St. Xavier's College (Autonomous), Kolkata, has consistently upheld its commitment to fostering and empowering every individual within its community. As an institution, we exemplify a dedication towards growth and advancement by offering a diverse range of academic and extracurricular avenues, aimed at inspiring students to discover their innate abilities and make a meaningful impact on society. This ethos has consistently played a pivotal role in moulding Xaverians with the capacity to overcome challenges and uncertainties, and propel them forward on their quest for excellence across all facets of their endeavours.

Ever since its establishment, the Xavier's Commerce Society has consistently demonstrated a fervent drive and aspiration to transcend limitations and achieve unparalleled excellence in all its pursuits. Serving as the representative body of the Department of Commerce, the society is resolutely committed to ensuring that each student embarks on a comprehensive journey of exploration and enlightenment, refining their abilities and propelling themselves towards distinction. Youthink Volume XVIII stands as a prominent exemplar of the society's aptitude and efforts in nurturing scholarly discussion and discernment. The publication not only pushes the boundaries of our prior comprehension, but also endeavours to scrutinise the intricacies of the world and its subtleties from an innovative perspective.

> The theme of 'Awakening' for this edition of Youthink encapsulates a rich compendium of perspectives and notions.

The theme of 'Awakening' for this edition of Youthink encapsulates a rich compendium of perspectives and notions. It beckons us to transcend the boundaries of the self, forging intricate connections with the conceptions of societal metamorphosis, and embarking upon profound introspections into the very essence underpinning our convictions and tenets. This theme reminds us of the radiant bloom of consciousness that illuminates the dormant realms of understanding. As torchbearers of enlightenment at St. Xavier's College (Autonomous), Kolkata, we have consistently fostered an atmosphere that champions open dialogue and independent thought among our students. Our goal has always been to serve as the catalyst propelling them toward unfettered horizons, endowing them with the indispensable qualities that empower them to ascend with unbridled conviction. I remain resolute in my belief that Youthink Volume XVIII will set ablaze a fervent spirit within each of us, fulfilling its mission to awaken us from all the constraints that impede our progress.

The publication of the eighteenth edition of Youthink stands as a testament to the unwavering support of all who have been associated with its journey. I would like to extend my heartfelt appreciation and gratitude to Rev. Dr. Joseph Kulandai SJ, Vice Principal, Department of Commerce (Morning) and Rev. Dr. Peter Arockiam SJ, Vice Principal, Department of Commerce (Evening), along with Dr. Amitava Roy, Dean, Department of Commerce (Morning) and Dr. Soheli Ghose, Dean, Department of Commerce (Evening). Their absence would have left this pursuit incomplete. Gratitude is also owed to the dedicated professors comprising the reviewer board, whose time and efforts have been instrumental in this endeavour. A special acknowledgement goes to Professor-in-Charge, Dr. Anulekha Banerjee, Managing Editor, Dr. Sumona Ghosh, the Editorial Board of Youthink and the dynamic student body of the Xavier's Commerce Society for their continued efforts. I also commend all the contributors who have shared their work and ideas, for they are the cornerstone on which this journal thrives. In closing, I extend profound appreciation to the team of Youthink Volume XVIII, for continuing to inspire and propel us all towards the zenith of excellence.



Rev. Dr. Dominic Savio, SJ



Rev. Dr. Joseph Kulandai, SJ

Vice Principal (Morning)

St. Xavier's College (Autonomous), Kolkata

> It is through Awakening that reality reveals to us its multifaceted splendour.

"In the theatre that is life, Awakening unveils the curtain of illusion, exhibiting the symbiosis between the shadows and enlightenment."

Amidst the journey of our lives, an intrinsic moment emerges—a revelation of profound significance. This juncture acts as an impetus, altering our perception and inspiring a voyage of self-actualization. In this unveiling, we attempt to understand the intricate threads binding our very existence, augmenting not only personal growth but also a profound connection with the universe, ultimately guiding us towards a greater purpose, a spectacular legacy to witness and behold. Thus, it is through Awakening that reality reveals to us its multifaceted splendour.

St. Xavier's College has consistently stood as a bastion of knowledge and wisdom, fostering a culture of encouraging students to challenge the conventions and embrace a pragmatic approach. St. Xavier's College remains unwavering in its commitment to not only imparting knowledge but also shaping well-rounded individuals who can navigate the complexities of the world. By providing diverse opportunities, we are dedicated to imbuing these principles within our students, with the Xavier's Commerce Society playing a pivotal role. The society has been instrumental in advancing this mission, offering students a platform like Youthink to articulate their views and discourse. Through the journal, we aim to provide a space for students to express their thoughts and opinions, imbibing a spirit of rationality and scientific thinking to equip them with skills that go beyond the classroom.

I would like to congratulate the Youthink Editorial Board for selecting a theme that truly embodies one of mankind's greatest needs and encapsulates the developments of the world in a wholesome manner. Through keen observation and unparalleled insight, the immense variety of articles represent the array of thoughts of both students as well as other profound minds who have contributed to the journal. I would also like to appreciate the professors and guests who have positively impacted a plethora of minds with their articles and imparted great knowledge to all the readers.

The launch of the eighteenth edition of Youthink represents the culmination of the dedication and efforts as well as the inexorable will of the members of the Xavier's Commerce Society who have always strived to push boundaries and create benchmarks in every field. They have always encouraged students to dream and presented before them the platform to realise their potential, bracing them for the journey that awaits them after college.

I extend my best wishes to Youthink Volume XVIII as it endeavours to inspire students to engage in introspection and explore ideas beyond their academic domain, thereby nurturing brilliance in various fields. It brings me great joy to commend the Xavier's Commerce Society for publishing the eighteenth edition of the journal that exemplifies the rich heritage of a Xaverian and reflects the values of the Department of Commerce at St. Xavier's College (Autonomous), Kolkata.

May God bless you!



Rev. Dr. Joseph Kulandai, SJ



Rev. Dr. Peter Arockiam, SJ

Vice Principal (Evening)

St. Xavier's College (Autonomous), Kolkata

"The eighteenth iteration of Youthink, Awakening, successfully achieves its mission of preserving the inherited legacy promoted over time, truly consolidating the lineage of its predecessor, Deliverance."

"Your greatest awakening comes, when you are aware about your infinite nature."

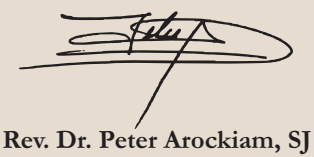
The ceaseless pursuit of wisdom as well as acknowledging the limitless nature of knowledge is uniquely enlightening and fosters endless avenues for innovation and achievement. This endeavour not only realizes infinite prospects for novelty and triumph, but also embodies a sublime odyssey - a testament to unwavering determination and the immense potential inherent in nurtured wisdom. Youthink serves as a transformative departure from ignorance, encapsulating the quintessence of knowledge. It stands as a sanctified voyage, representing the resilience of human will and the potency of refined wisdom. Through this platform, authors are presented with unparalleled opportunities to explore uncharted domains, effectively breaking free from the confines of limited understanding.

By consistently exceeding conventional norms, the Xavier's Commerce Society meets and exceeds all expectations. Their resolute efforts to craft exceptional experiences for Xaverians is accompanied by their remarkable discipline and dedication, culminating into a synergy that has cultivated an exceedingly conducive environment that advances ambition comprehensively. Their primary objective revolves around empowering students, granting them the opportunity to articulate their unique perspectives, thereby instilling a bedrock of imaginative contemplation in the minds of readers. Youthink symbolizes a reservoir of knowledge with the aim of reshaping individual perceptions of the world. Through the potency of knowledge, their aspiration is to catalyze an ingenious approach towards addressing contemporary societal challenges.

The eighteenth iteration of Youthink, Awakening, successfully achieves its mission of preserving the inherited legacy promoted over time, truly consolidating the lineage of its predecessor, Deliverance. This volume facilitates the discovery of untapped territories, offering authors a robust channel to contribute to the ever-expanding landscape of intellectual exploration. Within these pages lie demonstrations to the competence and skillfulness exhibited by the prowess of the Department of Commerce. The articles carefully curated in this volume serve as a wellspring of erudition for those embarking on a quest for knowledge, while also serving as intellectual nourishment for those aspiring to transcend in the corporate realm. Every topic within has undergone thorough analysis in search of insight. This compilation stands as a promising homage to the ever-evolving capacities of a Xaverian, instilling confidence in a more promising future for the world.

I take great pride in the fact that the eighteenth edition of the annual publication by the Xavier's Commerce Society resolutely adheres to the foundational tenets that underpin Youthink, thus showcasing an unparalleled amalgamation of outstanding quality. Youthink leaves an indelible mark on its readers, attributed to its noteworthy celebrity interviews and diverse array of content. I extend my heartfelt gratitude to all those who have contributed to this journal. It is my earnest wish that these words not only provide sought-after revelations, but also bring solace to your contemplations.

May your ambitions bear abundant fruit. God bless you all!



Rev. Dr. Peter Arockiam, SJ



Dr. Sumona Ghosh

Managing Editor

Youthink Volume XVIII

"The awakening of consciousness is the next step for mankind."

The boundless expanse of life encompasses a multitude of ethereal elements, all of which permeate humankind as progenies evolved from their origins. An echoing revelation through time unveils the profound depths of enlightenment, promising transformative shifts as reality unravels. We seek to champion new realms, shedding illusions as well as embodying the true essence of Awakening. Throughout the pages of history, humanity has struck the chord of self-actualization paving the path of awakening, replete with a reinvigorated sense of determination and purpose. Empowered by this newfound resolve, generations unite to sculpt a future illuminated by their unwavering commitment towards growth and transformation, as is manifested by the rich legacy at St. Xavier's College (Autonomous), Kolkata. Awakening stands as a clarion call to rise from the abyss of slumber, sublimating our conscious state to outpace the wedges of oblivion. This awakening prompts us to explore realms of higher comprehension, nurturing an unwavering pursuit of knowledge and growth. In a similar vein, Youthink embraces the beliefs of explorers, providing an impetus to youth to unveil their true selves. This deliverance from one's own shackles of indolence marks the uprise, a stirring of the persona that resonates with energy which dispels the shadows of dormancy.

"Awakening stands as a clarion call to rise from the abyss of slumber, sublimating our conscious state to outpace the wedges of oblivion."

Youthink has throughout been a beacon of the limitless perspectives of individuals, becoming a platform to voice our opinions and analyze our notions. Emerging as a forum in each issue, we unfold new spheres, showcasing articles that encapsulate the world in its entirety.

With unwavering dedication, Youthink encompasses not only the present pulse of our collective consciousness but also cultivates the seeds of tomorrow's wisdom. Youthink assumes the role of a lighthouse, steering us through the currents of ignorance and darkness, towards knowledge and inspiration. Thus, in the grand tapestry of human discourse, Youthink is an indomitable thread stitching together the narratives of the past, present, and future.

I wish to express my deepest appreciation to the professors and administration as we introduce Youthink Volume XVIII. Their invaluable guidance and steadfast commitment have consistently propelled our growth year after year. I commend the efforts undertaken by the Joint Editors-in-Chief, Sankalp Ghosh and Vrinda Pachisia, along with the entire Editorial Board of the eighteenth edition in actualizing the journal in its entirety; unfalteringly.

The awakening of Youthink Volume XVIII owes its existence to the unwavering support and consistent guidance provided by Rev. Dr. Dominic Savio, SJ, Principal, Rev. Dr. Joseph Kulandai, SJ, Vice Principal, Department of Commerce (Morning), and Rev. Dr. Peter Arockiam, SJ, Vice Principal. Department of Commerce (Evening). The incessant assistance offered by Dr. Amitava Roy, Dean, Department of Commerce (Morning), and Dr. Soheli Ghose, Dean, Department of Commerce (Evening), played an indispensable role in bringing this edition to fruition.

With deep gratitude, I eagerly anticipate the awakening of the pinnacle of your achievements in the holistic realm of life. With this sense of conviction, I proudly present to you Youthink Volume XVIII: Awakening.

Sumona Ghosh

Dr. Sumona Ghosh





Sankalp Ghosh & Vrinda Pachisia

Joint Editors-in-Chief

Youthink Volume XVIII

'Inspiration is an awakening, a quickening of all man's faculties, and it is manifested in all high artistic achievements.'

From darkness unto light, from captivity unto liberty and from ignorance unto Awakening. The progression of our world, since its very inception, has been that of a resolute trajectory towards renouncing the shackles of antiquity and embracing the awakening of a new dawn. The essence of Youthink has always been to preserve and promote individual thought as well as academic innovation, and it is with that core principle of enlightenment that we put forth such an honourable endeavour in the shape of this journal. Awakening to a better tomorrow is a foundational plinth upon which all our hopes and aspirations lay, and as weathered legends go - Elpis, the spirit of Hope remains amongst us no matter how dark the clouds seem. Youthink is that spirit of awakening and renewal that heralds that the limitations we all seek respite from as well as the light we covet is just round the corner.

With this venerable premise, the eighteenth edition of Youthink captures the steadfast curiosity and passion of the committed student authors to demonstrate the shifts in the currents of world dynamics, the nuances in the operation of economic forces, and the precarious fragility of the geopolitical environment as illustrated by the articles in the Feature section.

This year's edition features enlightening contributions from Xaverians in the form of the Beyond, Ascent and Precis sections – consolidating critical insights from a diverse array of fields encompassing corporate affairs, marketing, international relations, finance and society to emerge as a cohesive ensemble of robust academic literature.

The Guest articles for this year seamlessly identify and encapsulate the pathbreaking discoveries and configurations in the modern atmosphere. We would like to extend our gratitude to Dr. Santosh Kumari, Mr. Anish Teli, Dr. Annavajhula J.C. Bose and Prof. Somprakash Bandyopadhyay for their indispensable efforts towards Youthink Volume XVIII. The engaging Interviews sections underlines the consistent enterprise as well as exuberance of the luminaries interviewed across various disciplines. We are elated to introduce the distinguished interviews of Mrs. Alia Bhatt, Mr. Laxmi Ratan Shukla, Sadhguru and Mr. Shailesh Lodha, who have all accelerated the awakening of humanity's march towards development.

Without the ceaseless guidance of Rev. Dr. Dominic Savio, SJ, Principal, Rev. Dr. Joseph Kulandai, SJ, Vice Principal, Department of Commerce (Morning), and Rev. Dr. Peter Arockiam, SJ, Vice Principal, Department of Commerce (Evening), Youthink would not have been actualized and we take this opportunity to thank them for their support. We are thankful to Dr. Amitava Roy, Dean, Department of Commerce (Morning), and Dr. Soheli Ghose, Dean, Department of Commerce (Evening), for being a source of inspiration and encouragement.

The counsel given by our Managing Editor, Dr. Sumona Ghosh, Youthink has been unwavering and is the raison d'être for this edition coming to life with minimal impediments. We are grateful for the dedicated efforts and time devoted by the Editorial Board constituting Anshul Mitra, Kaashvi Gupta, Mansi Jain, Priyanshu Prajapati, Ved Khemka and Yashvi Ganeriwal.

Last but not the least, we appreciate the readers, contributors and students of St. Xavier's College for their invigorating support of this journal.

Life is a collection of moments; some remembered, some forgotten, some treasured forever. As we draw the curtains to this year's edition, we are overcome with gratitude at the culmination of this bittersweet journey. It has augmented us as individuals, aided in our overall development and created everlasting memories to be cherished for life. With these doors closing, we hope and look forward to newer doors opening in the future.

Welcome to Youthink Volume XVIII: Awakening.

"Youthink is that spirit of awakening and renewal that heralds that the limitations we all seek respite from as well as the light we covet is just round the corner."

Sankalp Ghosh **Vrinda Pachisia**

FEATURE

INTERVIEWS
GUEST ARTICLES
BEYOND
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LOOKING BACK
TRIBUTE AND FUN SECTION







"The surge of zombie companies beckons us to reimagine economic resilience and vitality in an ever-evolving financial landscape, inviting readers to embark on a compelling journey of discovery."

The Rise of The Walking Dead

Adarsh Kashyap
Department of Commerce (Morning)

Devanshi Chokhani
Department of Commerce (Evening)

ABSTRACT

The relentless rise of 'zombie companies' within the contemporary business landscape has become a conundrum of paramount importance. These enterprises, persisting in a twilight zone between financial life and death, challenge conventional paradigms of corporate health. Zombie companies are defined by their dependence on perpetual refinancing to stave off insolvency. This article offers a comprehensive exploration of the phenomenon, delving into its origins, dynamics, and far-reaching implications. We dissect the multifaceted factors fueling their ascent, from a prolonged era of low-interest rates to regulatory leniency. Drawing from a global perspective, we illuminate the extensive economic repercussions on viable enterprises and the looming threat they pose to financial stability. In the face of this enigma, we unveil potential solutions fostering innovation and competition. The surge of zombie companies beckons us to reimagine economic resilience and vitality in an ever-evolving financial landscape, inviting readers to embark on a compelling journey of discovery.

KEYWORDS: Zombie Companies, Economic Impact, Corporate Debt, Low-interest Rates, Regulatory Leniency, Global Perspective.

FROM GENESIS TO GLOOM

Imagine a business world where there exists a peculiar breed of enterprises that roam, not in search of brains, but profit margins. Akin to the undead, persisting in a state of limbo between solvency and insolvency, are what economists refer to as 'zombie companies'. Zombie companies are corporate entities that have limited cash flow and are able to cover their interest expenses with operating profits, but find themselves unable to repay their principal debt. These entities perpetually rely on refinancing or restructuring to stay afloat. It is similar to a tightrope walk, where any misstep can lead to insolvency. Typically, we classify a company as a zombie if it is at least 10 years old and its Interest Coverage Ratio (ICR) has been below one for at least three consecutive years. The ICR gauges a company's ability to make interest payments.

The term 'zombie companies' originated in Japan during the 1990s. It emerged in the aftermath of a severe economic downturn and a real estate bubble burst. Japanese banks, rather than liquidating or closing down struggling businesses, opted to continue providing them with financial support. These ailing companies, although technically insolvent, were kept operational through credit injections. This led to the coining of the term to describe the firms that were essentially the living dead of the business world, neither thriving nor decisively failing. The concept has since been applied to similar situations in economies around the world.

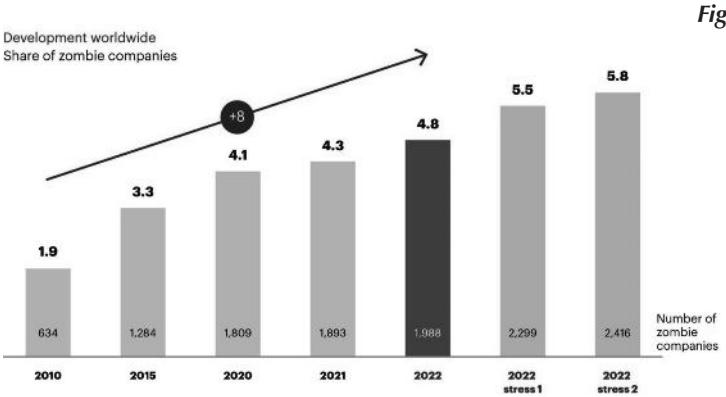

Figure 1: Rise in the Number of Zombie Companies Over the Past Decade
(Source: Kearney Analysis)

THE PRECIPITATING FORCES: UNRAVELING THE FACTORS BEHIND ZOMBIE COMPANIES

The rise of zombie companies stems from a confluence of critical factors. Let us dissect these factors contributing to the emergence of the undead.

1. **Low-Interest Rates and Easy Credit: The Siren's Call**

   In the alleys of finance, interest rates hold sway. Globally, a prolonged period of historically low-interest rates, orchestrated by central banks to stimulate economic growth, has inadvertently provided a lifeline for struggling companies. While this accommodative monetary policy has been instrumental in averting immediate insolvencies, it has also nurtured the growth of zombie firms.

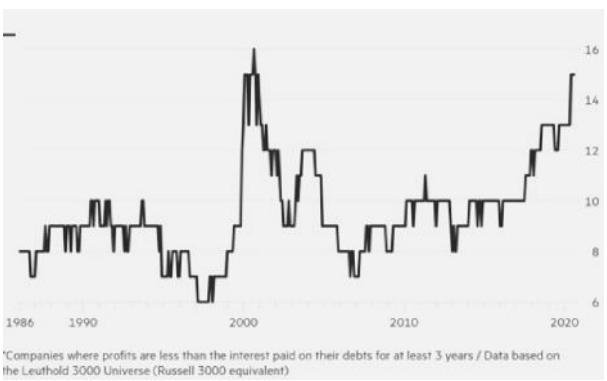

Figure 2: Rise in the Number of Zombie Companies in the United States
(Source: The Leuthold Group)

2. **Regulatory Leniency: A Breeding Ground for the Undead**

   In a theatre of regulations, distressed companies often find a sympathetic audience. Regulatory frameworks in some jurisdictions have historically been lenient

towards distressed companies, allowing them more time to recover or restructure. While this leniency can be a crucial safety net, it can also inadvertently facilitate the survival of zombie companies.

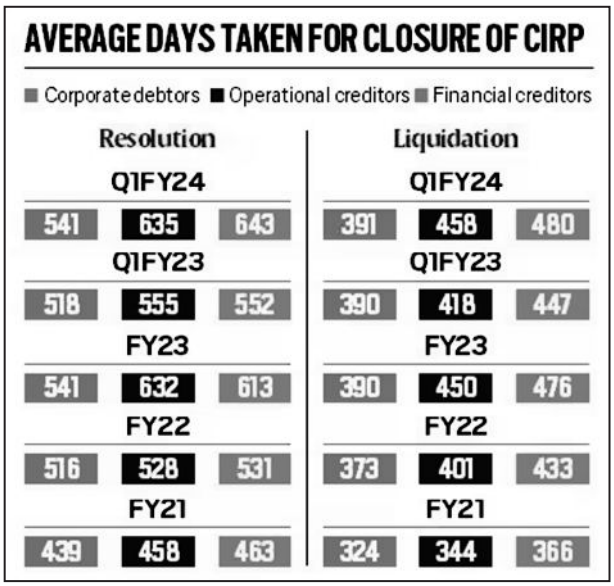

Figure 3: Continued Increase in the Timeline for the Resolution of Cases under Insolvency and Bankruptcy Code (IBC) of India (Source: India Ratings and Research) (Note: Financial Year - FY, Q - Quarter)

3. Economic Shocks: A Catalyst for the Undead Army

External economic shocks, such as the global financial crisis of 2008 and the COVID-19 pandemic, have acted as accelerants in the rise of zombie companies. These shocks disrupt markets, leading to decreased demand and revenue streams, particularly for companies in vulnerable sectors like hospitality, aviationand retail.

The biggest increase in zombies was seen in the travel and tourism industry, which went from 6 per cent in 2021 to 14.6 per cent in 2022. In addition, one out of every four airline businesses in the aviation industry were classified as zombie by the end of 2022.

THE GHOSTLY AFTERMATH: IMPACTS ON INDIAN ECONOMY

The proliferation of zombie companies exerts far-reaching consequences on economic dynamics. Let us delve into the multifaceted impact of such companies.

1. Stifled Productivity Growth: The Silent Overture

Zombie firms, by their very nature, divert resources away from potentially more productive ventures, leading to a slowdown in overall productivity growth. For example, the Indian textile sector, once a vibrant tapestry of innovation and craftsmanship, is now plagued by the presence of zombie companies. These entities,

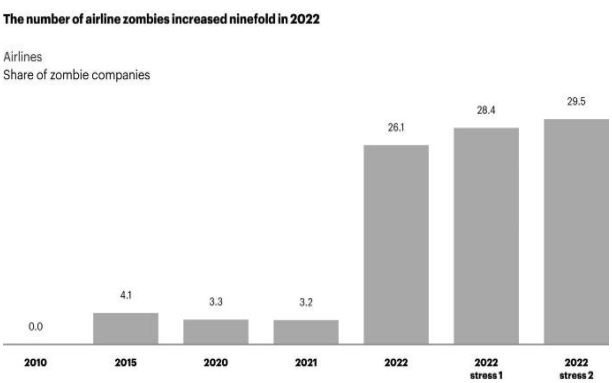

Figure 4: Graph Showing a Ninefold Increase in the Number of Airline Zombies in 2022 (Source: Capital IQ- Kearney Analysis)

weighed down by debt, exhibit limited innovation and outdated technologies, leading to stagnation in the industry. Sluggish productivity growth in the textile industry hampers India's ability to compete globally and stunts technological advancements.

2. Crowding Out of Viable Enterprises: The Duel of Titans

The proliferation of zombie companies can overshadow more efficient and innovative firms, impeding healthy competition and hindering technological advancement. It inadvertently contributes to the consolidation of markets and fosters duopolistic environments. For instance, in



Figure 5: Graph Showing the Decline in the Textile Exports of India
(Source: Ministry of Commerce and Industry, India- Reuters Graphics)

the Indian telecom sector, the dominance of two major players- Reliance Jio and Bharti Airtel- has been reinforced due to the financial struggles of smaller, debt-laden operators like Vodafone Idea. This duopoly limits consumer choice and stifles market dynamism.

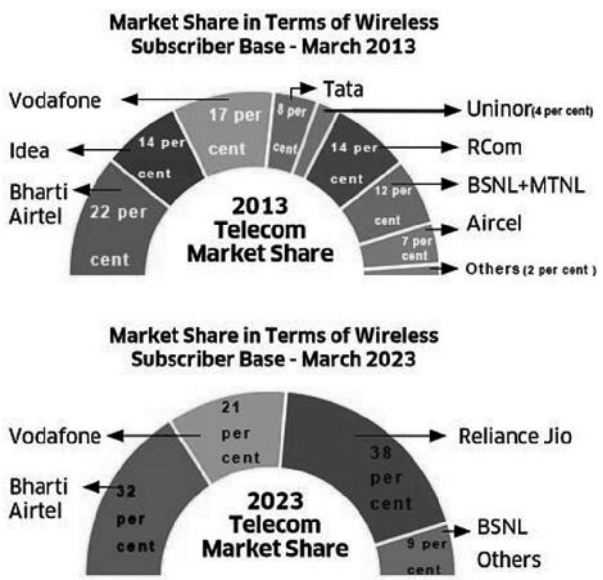

Figure 6: A Comparison of the Market Share of the Telecom Operators in 2013 versus in 2023
(Source: Telecom Regulatory Authority of India- Deccan Herald)

3. Financial Sector Vulnerability: The Chorus of Uncertainty

Banks and financial institutions with exposure to these firms face heightened credit risks, potentially leading to an increase in Non-performing Assets (NPAs) and financial instability- a foreboding refrain. In 2022, the gross NPA ratio for Indian banks stood at 7.5 per cent, signifying a potential vulnerability. Banks in India have written off bad loans totaling ₹14.56 trillion over the past nine financial years, beginning from 2014-15. Of this cumulative amount, the written-off loans attributed to large industries and services accounted for ₹7.40 trillion, which is more than 50 per cent of the total debt.

BATTLING THE UNDEAD: SOLUTIONS AND POLICY PRESCRIPTIONS

Addressing the emergence of zombie companies requires implementing effective solutions. This section explores key policy measures and strategies aimed at fostering a dynamic, competitive, and resilient corporate sector.

1. Enhancing the Insolvency Framework, Conducting like a Maestro

To tackle this issue, it is essential to improve the efficiency of the insolvency resolution process. This would help streamline procedures and minimize delays. Swift and transparent proceedings play a role in expediting the exit of viable companies from the market. Moreover, early detection mechanisms for distress should be put in place to identify and address struggling businesses before their financial health deteriorates irreversibly. Countries like the United Kingdom and Singapore have successfully achieved insolvency resolution durations of more than a year setting benchmarks that India can aspire to reach.

2. Prudent Monetary Policy Management, Guiding like a Symphony Conductor

The central bank must skillfully manage policies to strike the balance between stimulating economic growth and avoiding an environment that supports zombie companies' survival. Implementing a nuanced approach to policy including sector-specific lending conditions could effectively curb the rise of such firms.

3. Promoting Innovation and Competition, Playing the Sonata of Progress

Encouraging policies that foster innovation and competition are elements in driving progress. As in the case of Sonata, it is the harbinger of progress as it managed to carve a niche as an innovative brand within the watchmaking industry, thanks to significant policy shifts. Talking about 'Make in India,' an initiative of the government of India, it has stimulated innovation and competitiveness in sectors like electronics manufacturing which has led to productivity, a proclamation of progress.

CHARTING A NEW COURSE

As we navigate the complex terrain of zombie companies and their impact on India's corporate landscape, one thing becomes clear: the need for a new direction. The rise of these financial undead is not just a challenge,it is an opportunity for introspection.In this evolving narrative, let us not forget that every crisis conceals a chance for innovation. The solutions lie in a dynamic blend of policy reforms, fiscal wisdom, and a culture that nurtures entrepreneurship and competition.The story of zombie companies is not the final chapter,it is a call to action. It is an invitation to reimagine our economic landscape, to foster resilience, and to pioneer a future where the undead can rest in peace, and the living thrive.

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Echoes of Adrenaline -
A Deep Dive into the Dynamics of the Adventure Tourism Industry

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ABSTRACT

Adventure tourism can be connoted as a dynamic interplay of thrill,economic engagement and technological fusion that has captivated the modern, thrill-seeking travellers.It is a rapidly growing sector within the global travel industry, creating a far-reaching influence on economies worldwide.In recent years,India has emerged as a promising destination for adventure tourism owing to the intricate tapestry of varied topographical terrains and picturesque locations.The objective of this article is to offer a concise understanding of the remarkable and transformative growth of adventure tourism; evolving from an obscure niche interest to a pervasive global trend. Through a comparative analysis of how various countries are responding to this trend, we explore the prospects, potential growth drivers, technological innovations and challenges that underpin the development of adventure tourism at the macro level.

KEYWORDS: Adventure Tourism, Economic Growth, Employment Generation, Sustainable Development, Geographical Diversity, Community Engagement.

> With strategic planning and investments in place, India has the opportunity to position itself as a premier destination for adventure tourism while preserving its natural beauty and cultural heritage.

INTRODUCTION

Adventure tourism is a subset of the multi-dollar global tourism industry that is gaining increasing prominence in recent times. The Canadian Tourism Commission (1995) defines adventure tourism as, 'an outdoor leisure activity that takes place in an unusual, exotic, remote or wilderness destination,

involves some form of unconventional means of transportation, and tends to be associated with low or high levels of activity.'

As time passed by, the enthusiasts across the globe had a chance to explore unique destinations and engage with nature and culture in a more thrilling and immersive way through activities like river rafting and paragliding, among many. Thus, the evolution of adventure tourism from a specialized interest to a mainstream trend has impacted economies positively. This sowed the seeds of economic growth, improved employment opportunities, and local development.

ADVENTURE TOURISM – INDUSTRY PROFILE

Market Dynamics

Despite an average decline of over 45 per cent owing to the COVID-19 pandemic, United States (US) -based Allied Market Research, valued the global adventure tourism market at $366.7 billion (2022) with India's contribution pegged at a nascent $0.3 billion.

Moreover, global adventure tourism is expected to reach $4.6 trillion by 2032 at a Compound Annual Growth Rate (CAGR) of 28.7 per cent with Indian industry breaching the $2.0 billion mark by 2028.

Segmental Overview

Research Dive, a market research firm based in Pune, India, opines that the total addressable market of adventure tourism can be segmented on the basis following parameters:

1. **Type:** Namely, hard (mountaineering, rock climbing, and extreme sports), soft (hiking, wildlife watching, and cultural immersion) and others (caving or hot air ballooning). Soft activities (comprising 60.9 per cent of total, valued at $ 370,982.9 million) are physically less challenging and comparatively safer, hence they are more popular as shown in Figure 1.

2. **Activity:** Namely, land-based (conducted on the earth's surface, like hiking, trekking, exploring natural landscapes), water-based(kayaking, rafting, or snorkelling) and air-based (paragliding, skydiving, or zip-lining).Despite a minimal number of operators,lack of trained instructors and high costs, land-based activity is most preferred (at a value of $381,797.5 million) as it provides people with adventurous experiences of thrill as per Figure 2.

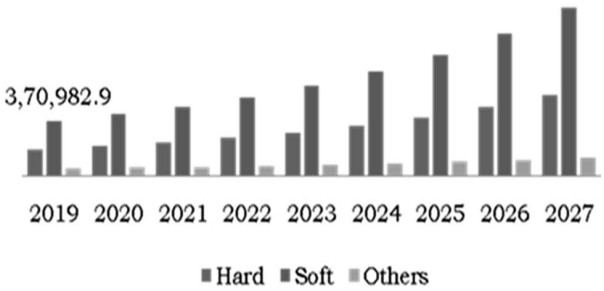

Figure 1: Types of Adventure Tourism
(Source: Research Dive Analysis)

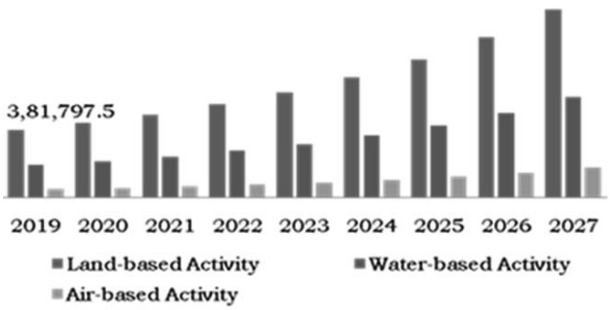

Figure 2: Types of Activities in Adventure Tourism
(Source: Research Dive Analysis)

3. **Traveller type:** Solo, friends or group, couple, family. Adventure trips encourage families to go together and enhance their family bond by spending quality time and creating memories with loved ones.Thus, the family sub-segment held an

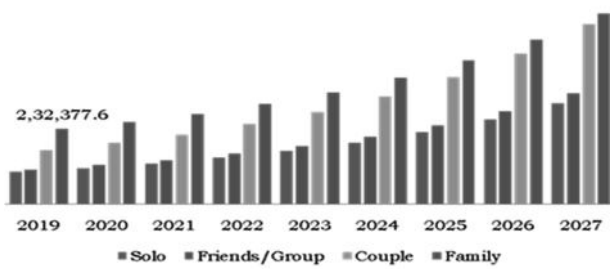

Figure 3: Traveller Types in Adventure Tourism
(Source: Research Dive Analysis)

evident market share in the past years, accounting for $232,377.6 million in 2019 and is anticipated to generate $555,461.2 million revenue by 2027 as per Figure 3.

4. Age group:Below 20 years, 20 to 30 years, 30 to 50 years, 50 years and above. Generally, people in the 20 to 30 years age group can afford frequent travel to different parts of the world.Moreover, financial stability and health of the people in this age group, makes them the most dominant age group among others.

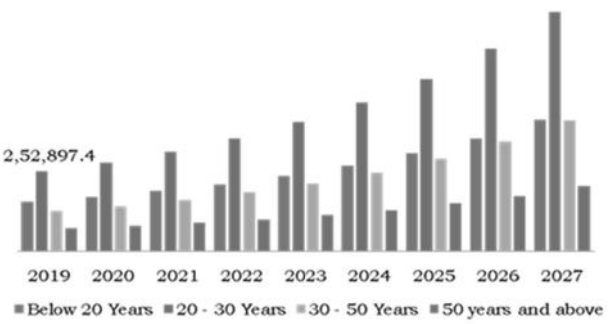

Figure 4: Age Group
(Source: Research Dive Analysis)

5. **Sales channel:** Namely, tour operators or spontaneous on-site booking. Expedition curatorsremain the go-to-choice for the travellers, since they offer vacation packages across diverse itineraries, with a commitment to sustainable travel and responsible tourism.

   Key players: REI Adventures (market share being, 31 per cent), G Adventures (24 per cent), Intrepid Travel (15 per cent), Cox and Kings Group (12 per cent), Mountain Travel Sobek (11 per cent), Discovery Nomads, Row Adventures and Tui Group (around 7 per cent, collectively).

6. **Regional insights:** Europe (Germany, UK, France, Italy, Russia and Turkey, et al.), North America (United States, Canada, and Mexico), Asia-Pacific (China, Japan, Korea, India, Australia, Indonesia, Thailand, Philippines, Malaysia, and Vietnam), LAMEA (Brazil, Egypt and GCC Countries).

   With a 30 per cent revenue share in 2019 (of $209,496 million), Europe's numbers are expected to reach $632,996.3 million in 2027, driven by its frequent travellers and rise of online travel agents catering to solo travellers as per Figure-5.

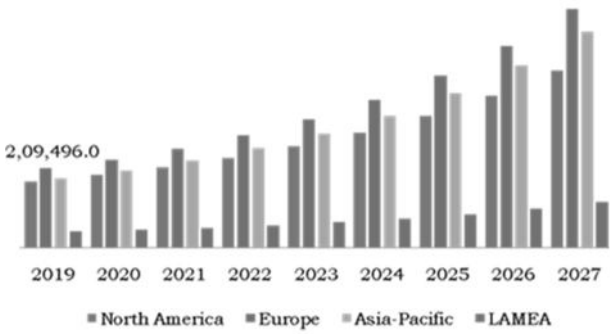

Figure 5: Regional Insights
(Source: Research Dive Analysis)

THE SOCIO-ECONOMIC SIGNIFICANCE OF ADVENTURE TOURISM

Adventure tourism is known to have created a multiplier effect-fostering economic activity that creates a positive impact on various areas of the economy in the form of:

Increased Revenue Generation

Tour operators and aggregators, accommodations in the form of hotels, lodges and equipment rentals are the major revenue streams for adventure tourism activities. Reputed tour curators such as Cox and Kings, et al. provide euphoric experiences which appeal to the travellers and they do not mind paying an extra premium for the same. These packages, generally comprise of flight transfers, travel paperwork, lodging,sightseeing and a plethora of entertaining events.

Figure 6 shows that post COVID-19 pandemic, the tourism industry of New Zealand bounced back by 116.398 per cent in terms of revenue generation year-over-year (YoY) from a -54.310 per cent in Financial Year 2021 (FY-2021) to a mammoth rate of 62.088 per cent in FY-2022.

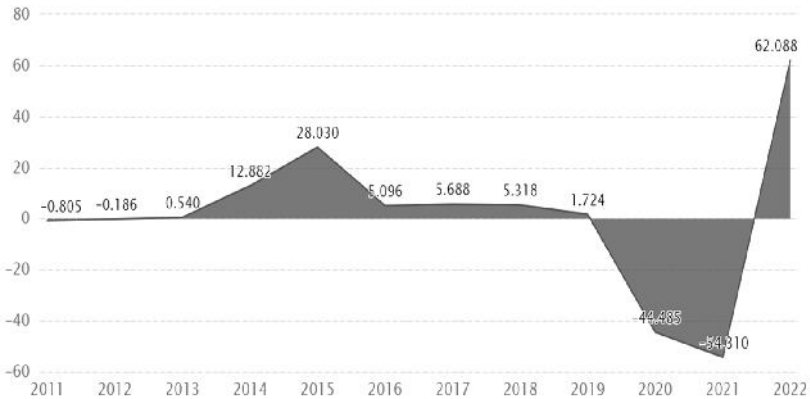

Figure 6: Annual YoY Growth in Tourism Revenue of New Zealand (Source: CEIC Data)

Foreign Exchange Earnings

Forex inflows significantly contribute towards economic growth by boosting the nations' Gross Domestic Product (GDP) and attain a favourable Balance of Payments(BoP) situation, thus, reducing reliance on borrowed funds.

During the period of 2019-2022, Costa Rica, currently placed at 58th position in Human Development Index (HDI) index, earned a yearly average of $1.7 billion from international tourists, with a significant portion coming from adventure tourism activities.

From Figure 7, it is evident that international tourism earnings in Costa Rica have grown by 65 per cent from $500 million (2009) to $1.3 billion(2019).

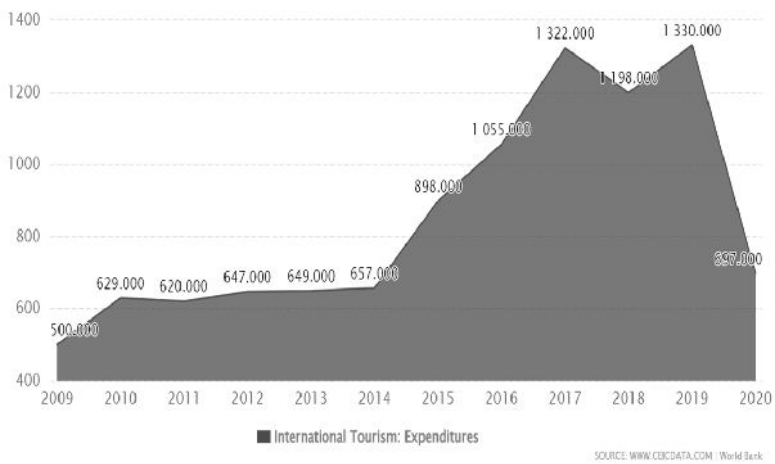

Figure 7: International Tourism in Costa Rica (Source: CEIC Data – World Bank)

Employment Generation

Due to the ripple effect of adventure tourism; employment opportunities in the form of roles like adventure guides, instructors, equipment rental staff, and safety personnel have emerged. These roles, however, often require specialized training and certifications.

Despite the uncertainties posed by earthquakes and blockages, adventure tourism sector of Nepal has generated over 600,000 jobs in the country, in the form of trekking guides, porters, maintenance and support staff, small traditional handicrafts owners, et al.

Infrastructural Development

State-of-art infrastructure facilities is a critical aspect of accommodating and sustaining the

growth of adventure tourism destinations as well as international tourist counts. This also includes establishment of safety measures such as trail markers, warning signs, emergency response facilities, and well-maintained rescue paths. This, in turn, ensures the safety of tourists engaging in adventurous pursuits.

Iceland invested in improving its infrastructure to accommodate adventure tourists, especially spending around Icelandic Króna (ISK) 20.8 billion in expansion of the Keflavik International Airport.As a result, its annual visitor numbers increased from 600,000 in 2010 to 2.4 million in 2018.

Sustainable Tourism

Adventure tourism has the potential to promote sustainable tourism practices as it is based on eco-friendly infrastructural facilities, waste management systems, and renewable energy sources that preserve natural beauty and ensures long-term viability.

a) Activities like Bhutan's 'High-Value, Low-Impact Tourism' policy, limit the environmental impact of tourist activities by restricting the number of tourists in contained areas.

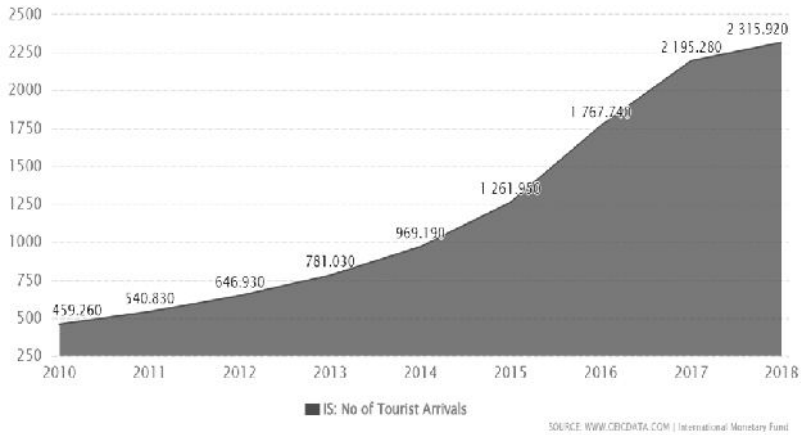

Figure 8: Iceland's Annual Tourist Levels from 2010 to 2018 (Source: CEIC Data – International Monetary Fund)

b) Strict regulations and guided tours of Inca Trail in Peru contribute to cultural preservation by protecting historical sites and supporting local communities.

c) Moreover, travel companies like 'Intrepid Travel' commit to carbon neutrality and invest in projects like reforestation to offset emissions, promoting sustainability in the industry

Figure 9 captures an overall snapshot of the global sustainable tourism industry and notable

contributions by key players like G Adventures, Intrepid Group, known for providing adventure tourism packages of extreme sports across the globe.

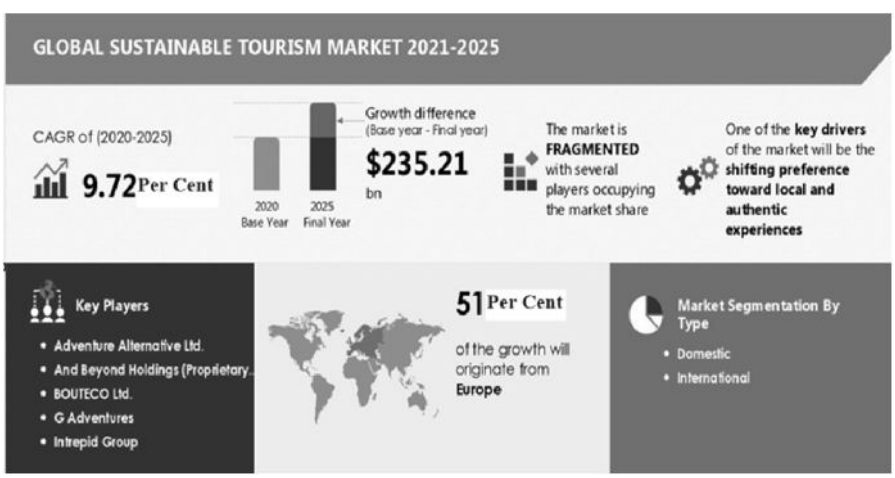

Figure 9: Snapshot of the Global Sustainable Tourism Market (2021 to 2025) (Source: Technavio)

ADVENTURE TOURISM IN INDIA

Pre-Pandemic Boom, COVID-19 Setback, Post Pandemic Revival

India's diverse geography is a key driver for adventure tourism, attracting both domestic and international travellers alike.The snow-capped Himalayan peaks are idle for trekking and mountaineering while the arid deserts of Rajasthan are known for camel safaris and hot air ballooning.Goa and Andaman and Nicobar Islands, on the other hand, are popular for water sports while Ladakh is famous for motorcycle expeditions.

The pandemic of COVID-19 had made everything come to a standstill leaving a deep scar on the tourism sector globally. According to the latest Ministry of Tourism Report, over 7 million (in 2021) and 6.33 million (in 2020)international tourists arrived in India compared to 17.91 million in 2019, representing44 per cent degrowth as shown in Figure 10. Still, in 2022, the contribution of India's travel and tourism sector to India's economy was worth ₹15.7 trillion out of which the adventure tourism market in India was valued at approximately $9.5 billion.

The Indian government has been actively promoting adventure tourism since 2013. Through initiatives such as the 'Swadesh Darshan, Incredible India! and Pilgrimage Rejuvenation And Spiritual Augmentation Drive (PRASHAD) schemes,' the primary focus lies on developing and promoting tourism infrastructure and destinations.

Because of this, the number of adventure tour operators have witnessed an exponential growth from 6,000 in 2013 to 43,000 in 2017 with current figures being around 57,000 as per Figure 11.

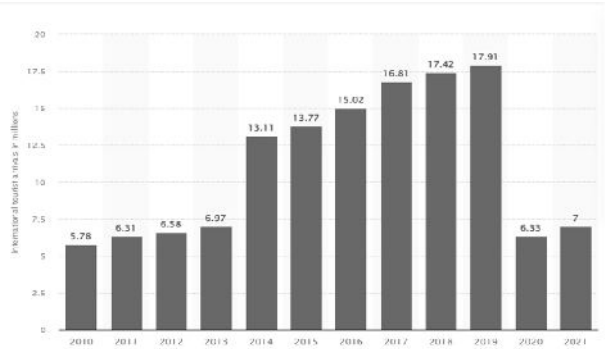

Figure 10: International Tourist Arrivals in India (Source: Ministry of Tourism)

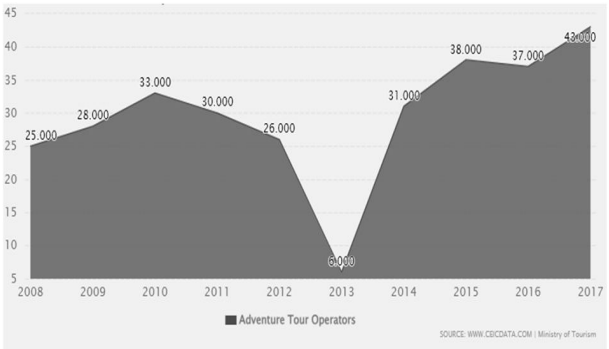

Figure 11: Number of Adventure Tour Operators (Source: CEIC Data – Ministry of Tourism)

UNDERLYING CHALLENGES IN THIS INDUSTRY AND FUTURE PROSPECTS

1. Environmental degradation and strain on fragile ecosystems have been one of the pressing concerns of this industry. Tourism contributes to more than 5 per cent of global greenhouse gas emissions, with transportation accounting for 90 per cent of this.

a. Moreover, 2804,432 square kilometres of land area are being degraded with nearly 1,422,299,500 tons of waste materials being dumped across atmosphere,lithosphere and biosphere.

b. Sustainable technologies like electric or hybrid vehicles for transportation and low-impact accommodations powered by renewable energy can mitigate environmental impact.

2. Need for Rigorous Safety Measures:The inherent risks of adventure activities require rigorous safety measures and advancements in safety equipment. The Ministry of Tourism, Govt. of India (Niche Tourism Division) has framed the National Strategy for Adventure Tourism that promotes use of improved helmets, harnesses, and communication devices to enhance the safety of adventure tourists.

3. Cultural Preservation: Increased tourism can disrupt and erode the cultural heritage of local communities. Augmented Reality (AR) and Virtual Reality (VR) experiences can offer tourists immersive cultural encounters without physical intrusion, preserving local traditions.

a. In the AR and VR market, the number of users is expected to amount to 505.3 million users by 2027.

b. User penetration will be 27.2 per cent in 2023 and is expected to hit 34.4 per cent by 2027. The Average Revenue Per User (ARPU) is expected to amount to US$1.6.

4. Lack of proper infrastructure and connectivity: Despite being the Second largest user of data in the world, internet and telecom satellite penetration rate stood at 48.7 per cent (start of 2023).

a. Telecom companies like Jio in specific are devising economic telecom solutions so that 4G connectivity is provided in remote areas.

b. Satellite communication technologies, drones for logistics, and mobile apps providing offline maps and safety information can improve accessibility.

5. Data Privacy:The collection and storage of personal data for bookings and reservations raise privacy and security concerns.According to the Global Data Protection Index Report published by Dell, nearly 67 out of 100 users face the heat of ransomware, malware, and other cyber-attacks.

a. Indian tech giants like IBM and Infosys are racking their brains on the domains of cryptography, blockchain and encryption technologies.

b. Thus, their Global Data Security and Protection Solutions enhance data security and protect customer information on a real time basis.

THE BOTTOM LINE

Adventure tourism, driven by diverse landscapes, increasing disposable incomes, various government initiatives, and a growing adventure sports culture, shows great promise for the economies across the globe. The sector offers economic benefits through employment creation, and has immense potential for sustainable development, making it an attractive segment within the tourism industry. However, addressing challenges related to infrastructure development, safety measures, environmental sustainability, and community engagement is crucial to fully unlock its potential. With strategic planning and investments in place, India has the opportunity to position itself as a premier destination for adventure tourism while preserving its natural beauty and cultural heritage.

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Rupee's Gambit – Daring the Dollar Absolutism

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ABSTRACT

Is the greenback's reign nearing its end? As more nations explore alternatives to the dollar, the complexity of dethroning it becomes evident. Entrenched deeply within the economic frameworks of almost every polity, the greenback governs over 88 per cent of global trade.

With India holding only a 2.6 per cent share in global trade, does it harbour the capacity to rival the dollar's hegemony? Obstacles loom, such as limited rupee convertibility and the need for extensive reforms. Nevertheless, the allure of enhanced economic stability, diplomatic clout, and international cooperation beckons. Will India's journey redefine the global financial landscape? India's path is lengthy, yet its latent power should not be trivialized. Even so, in the end, do these endeavours ultimately vindicate the pursuit?

KEYWORDS: United States Dollar (USD) Dominance, Indian Rupee (INR)Internationalization, Global Trade, Currency Hegemony.

As more nations explore alternatives to the dollar, the complexity of dethroning it becomes evident.

INTRODUCTION

In April 2022, the USD was involved in approximately 88 per cent of foreign exchange (Forex) transactions and held a 40 per cent share of global exports. This over-dependence on the greenback raises an inescapable question - how long will such a status quo persist?

More and more countries, from Brazil to Southeast Asian nations, are advocating for trade to be carried out in other currencies besides the USD. This periodically recurring theme throughout post-war history has gained eminence once again after United States (U.S.) sanctions on Russia. But criticizing the dominant position of the US dollar is simpler than dethroning it as the world's de facto currency. Between 1999 and 2019, 74 per cent of trade in Asia, and 79 per cent elsewhere used the USD for invoicing, except for Europe with the euro (See Figure 1).

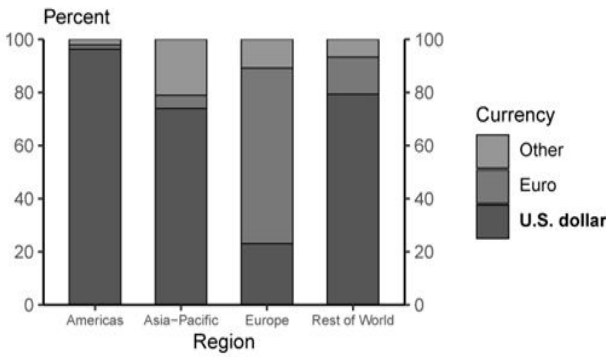

Figure 1: Share of Export Invoicing (Source: federalreserve.gov)

What, Then, Sustains the USD's Unassailable Dominance?

Greenback's prominence can be attributed to an intricate web of factors - a stable value that withstands the test of time, the colossal size of the U.S. economy, and the unrivalled geopolitical influence of the United States. Additionally, no other nation boasts a debt market as formidable as that of the U.S., which is valued at USD 23 trillion (See Figure 2). This creates a continuous demand for the US dollar.

Besides, the USD has exhibited remarkable resilience throughout its history, defying adversities like the 2008 Global Financial Crisis. Today, it stands tall as the bedrock of global reserves (Figure 3). Major commodities, including oil, are essentially traded in USD, and some major economies, including Saudi Arabia, still peg their currencies to the dollar.

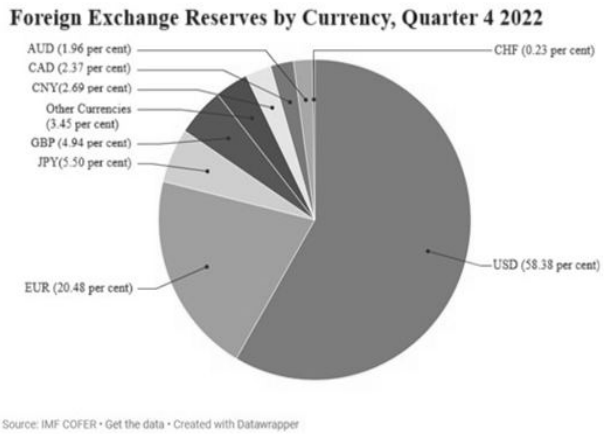

Figure 3: Global Forex (FX)Reserves (Source:cnbc.com)

THE CONUNDRUM

The Federal Reserve System's (Fed) recent tightening of the balance sheet in response to escalating inflation rates has made U.S. dollars scarcer, elevating their value as a yield-bearing asset. This strong USD is proving to be burdensome for emerging economies (See Figure 4). Remarkably, a 10 per cent uptick in the dollar's value triggers a 1 per cent inflation surge.

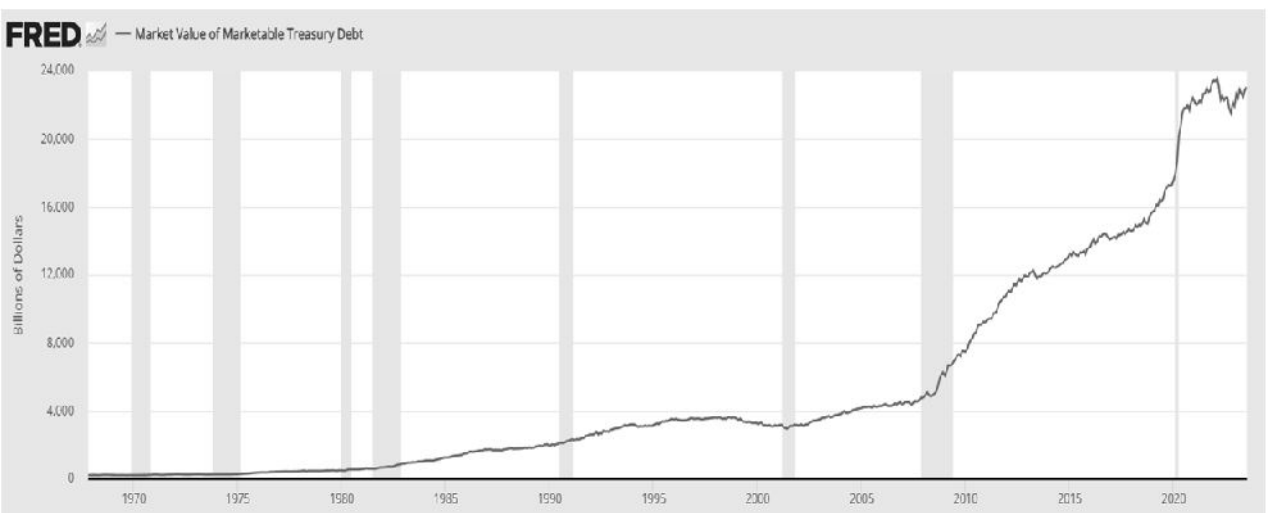

Figure 2: Market Value of Marketable Treasury Debt (Source: fred.stlouisfed.org)

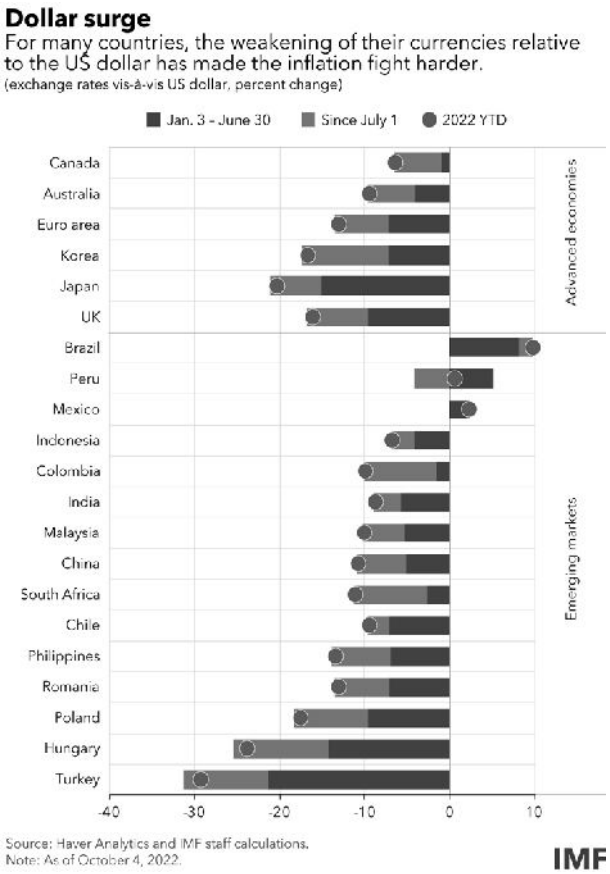

Figure 4: Effect of the USD Surge on Other Economies (Source:imf.org)

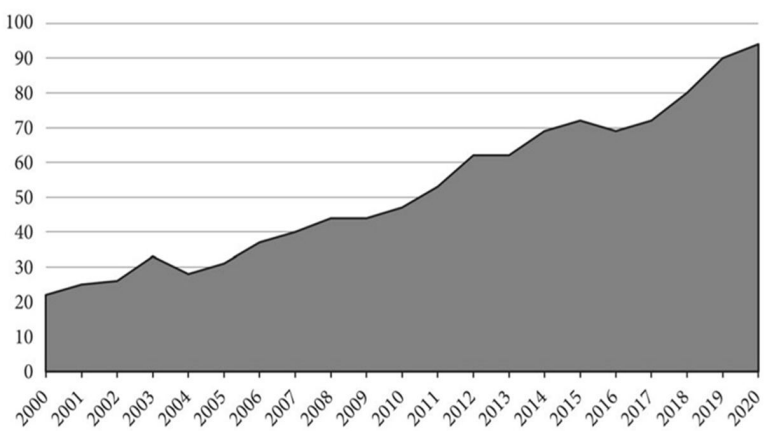

Figure 5: Sanctions-Related Executive Orders by the US (Source: beroeinc.com)

Moreover, as the U.S. persistently wields its financial influence as a punitive tool against adversaries, such as Russia and Iran, nationsfacing potential vulnerability are actively seeking avenues to reduce their reliance on the dollar, intending to lessen the repercussions ofthese sanctions (See Figure 5).

QUEST FOR ALTERNATIVES

Nonetheless, the USD's dominance in global trade has weakened slightly in recent years due to increased adoption of the euro and China's renminbi by businesses and investors (See Figure 6).

However, even 24 years after its introduction, the euro still lacks the international clout of the dollar. The dollar is used in three times as many forex transactions as the euro. This disparity arises from the insufficient availability of high-quality euro-denominated assets, which international investors and central banks seek as a reliable store of value.

Furthermore, the renminbi's potential as a global currency is limited by Beijing's unwillingness to allow its currency to freely trade in international market.

With limited progress, nations are actively seeking practical solutions towards de-dollarization.

BRICS SHARED CURRENCY POTENTIAL

This year, the Brazil, Russia, India, China, and South Africa (BRICS) nations have captured considerable attention due to their deliberations regarding the possibility of establishing a shared currency for intra-BRICS trade. This common currency would be anchored in a composite of the currencies of these five member nations.

Notably, BRICS accounts for more than a quarter of the global economy and 42 per cent of the world's population, making any developments in this realm a potential robust competitor to the USD.

Nevertheless, the path to its realization is far from straightforward, requiring the alignment of India and China into a collaborative alliance - not an imminent reality.

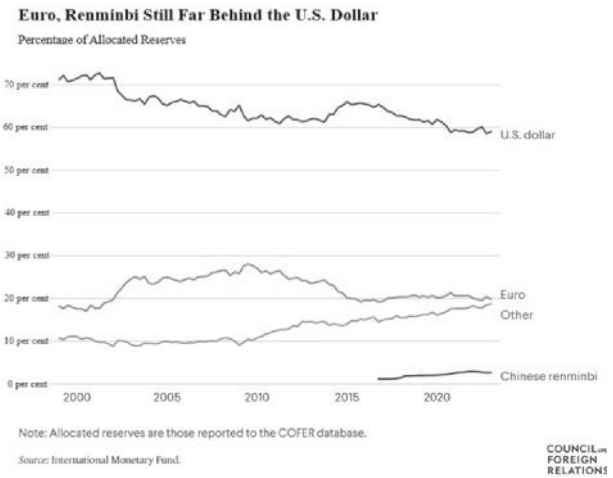

Figure 6: Increased Adoption of the Euro and Renminbi but Still Far Behind the USD (Source: cfr.org)

PLAUSIBLE INTERNATIONALIZATION OF INDIAN RUPEE (INR)

In 2022, amidst Russia's Society for Worldwide Interbank Financial Telecommunication(SWIFT) exclusion due to the Ukraine crisis and India's increasing dependence on discounted Russian oil, India embarked on a journey to boost the international standing of the rupee. A milestone was reached in July 2022 when the Reserve Bank of India (RBI) permitted INR settlements for goods and services. By December, the first INR trade settlement with Russia was achieved. Nevertheless, trade imbalances (See Figure 7) and limited rupee demand created hurdles.



Figure 7: India's Growing Trade Imbalance with Russia (Source:thewire.in)

These trade imbalances resulted in Russia accumulating a surplus of rupees worth billions, which was undesirable due to India's limited share of global exports and the rupee's lack of full convertibility.

This plan, though unsuccessful, propelled the idea of the internationalization of the rupee forward.

RECENT ENDEAVOURS OF INDIA

India's history has only taught it to be resilient, and once again, it stands unwavering.

1. As part of its Foreign Trade Policy 2023, the Indian government encourages INR usage in cross-border trade, bolstered by a new payment settlement framework introduced in July 2022.
2. RBI also enabled external commercial borrowings in rupees notably through Masala Bonds denominated in rupees.
3. Recently, the RBI established INR trade settlement mechanisms with 22 countries, enabling banks in these nations to open Special Vostro Rupee Accounts for INR payment settlements.

Allied with the domestic success of Unified Payments Interface (UPI) and its growing international acceptance, India is poised to become a global leader in international payment systems (See Figure 8). UPI, based on the Indian rupee, would simplify the international payments in INR.

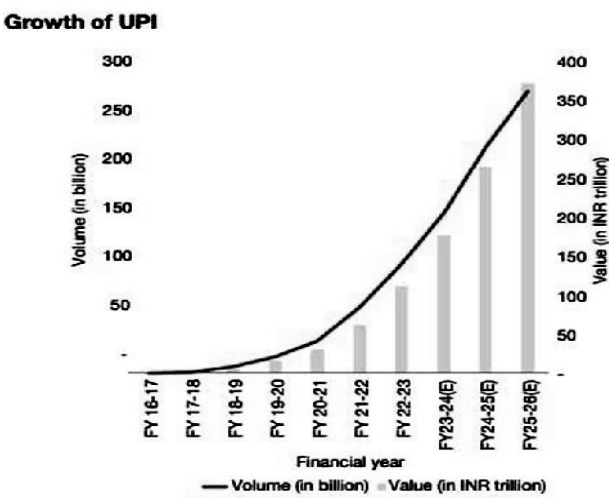

Figure 8: Growth of UPI (Source: pwc.in)

These diplomatic strides have yielded results for India, forging agreements in April 2023 with Malaysia and in July 2023 with the United Arab Emirates (UAE) to facilitate trade in INR. The Indian Oil Corporation recently made its inaugural INR payment to the UAE, symbolizing a significant milestone in their trade ties.

Additionally, in September 2023, JPMorgan unveiled plans to include India in its widely followed Government Bond Index-Emerging Markets (GBI-EM) index and the index suite, effective from 2024. This could lure foreign investors, fortifying the rupee further.

Do These Signify India's Proximity to Surpassing the Dollar?

While the INR is gaining momentum, surpassing the USD remains a distant aspiration.

India's share in global goods trade stands at a mere 2.6 per cent, and the rupee's daily average share in the forex market is approximately 1.6 per cent (See Figure 9). In such a scenario, why would any nation wish to stockpile unused INR in their treasury?

Also, as it is, INR is not fully convertible. There are restrictions on rupees' convertibility for purposes such

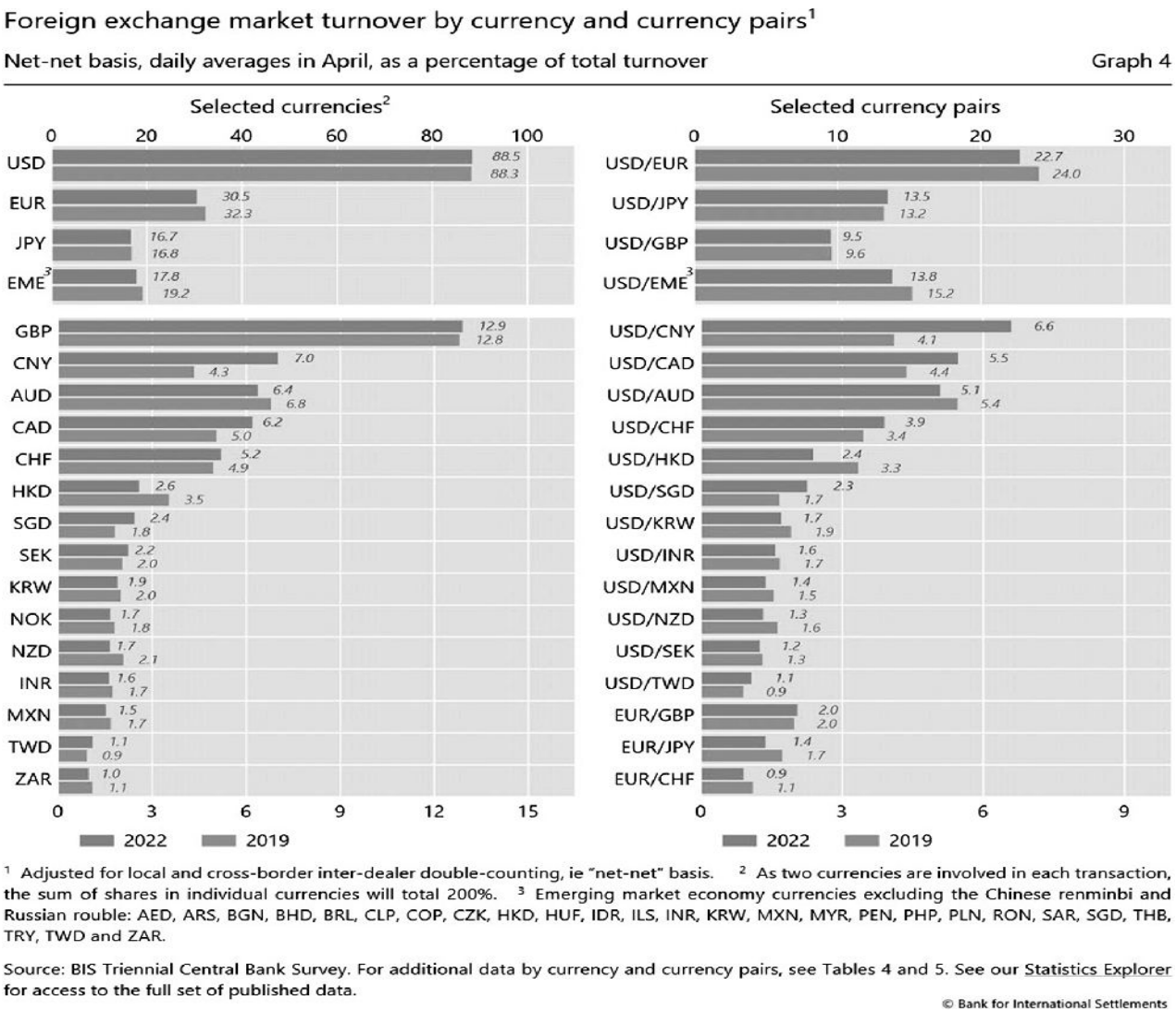

Figure 9: Rupee's Daily Average Share in the FX Market as of April 2022 (Source: bis.org)

as capital transactions. This impedes the smooth integration of the INR into globaltrade and finance.

Furthermore, the 2016 demonetization coupled with the recent withdrawal of the INR 2,000 note helps less in gaining international confidence.

To make the INR a highly marketable currency globally, India has to execute several reforms such as upgrading its financial markets, ensuring a stable regulatory environment, and increasing export competitiveness. INR should also be pitched to get included in Special Drawing Rights (SDR); an international reserve asset created by the International Monetary Fund based on a basket of major currencies. This addition would not only boost recognition but also the usage of INR.

Now, for once, let us entertain the notion of INR internationalization.

Then Would It Be All Gilded Glamour?

The internationalization of any currency is a double-edged sword, bringing its own set of apprehensions.

Such globalization could potentially usher in increased volatility and accentuated shocks in the rupee's exchange rate during its initial phases, stemming from speculation, potential liquidity challenges, and unrestricted capital flows.

India would confront the Triffin Dilemma - a quandary highlighting the clash of economic interests between immediate domestic needs and enduring international obligations (See Figure 10). Failure to strike this delicate balance could precipitate turmoil and fiscal anxieties worldwide.

Upon mastering these challenges, India's potential to surpass the USD remains unencumbered. Even So, Would These Be Worth the Hassle?

The riches of internationalizing the rupee far outshine the concerns at hand.

As INR garners global trust and acceptance, it promises enhanced stability over time. A surge in INR demand holds the promise of amplified convenience and diminished transactional burdens for businesses engaged with India. Embracing INR in trade would empower Indian international traders, enabling them to



Figure 10: Triffin Dilemma
(Source: slideshare.net)

deftly navigate risks, and bask in the assurance of revenue.

Moreover, this transformation would reduce the dependency on foreign exchange reserves and usher in significant seigniorage benefits, courtesy of increased currency circulation.

Seigniorage = Value of money - Cost of production

Beyond economic realms, the internationalization of the rupee paves the way for fortified diplomatic ties and the deepening of economic bonds with nations far and wide.

CRITICAL APPRAISAL

Challenging the supremacy of the dollar is akin to a gradual snowball effect. The growing usage of the euro and renminbi, conjoined with the potential introduction of a BRICS currency, commands more attention due to their extensive reach.

India's journey is lengthy, yet its latent power should not be underestimated. The internationalization of the INR is an extended voyage marked by continual transformation and incremental progress. It offers a means to effectively address the associated concerns and challenges as we advance.

The fortune of the rupee's global hegemony ultimately rests not just with policymakers and financial

institutions but with every individual who engages in commerce and finance.

In this era of economic interdependence, we are all stakeholders in the fate of the INR on the global rostrum.

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> REITs have been established as a reliable alternative investment security to raise funds in the real estate sector.

Navigating Economic Uncertainty with Real Estate Investment Trusts (REITs):

A Strategic Approach to Real Estate Investment

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ABSTRACT

REITs, resembling mutual funds for real estate, are investment instruments that are gaining significant importance across the globe and have turned out to become one of the most popular hedging instruments in the portfolios of

retail as well as institutional investors. An investment in REITs would protect an investor from market and economic risks, as well as provide him with the exposure of owning a fraction of a real estate property.

REITs issue securities that trade like stocks on major markets and invest in real estate directly, either through properties or mortgages. They are exempt from some taxes and often provide investors with substantial yields as well as a very liquid form of investing in real estate.This paper seeks to explain, in simple terms, what a REIT essentially is, what diversification benefits it provides, how much it resembles a direct and private real estate investment and yet how different it is from the latter, and how a REIT performs in various economic conditions.

KEYWORDS: REIT, Real Estate, Real Estate Investments, Diversification, Economy, Portfolio.

INTRODUCTION

Real estate, as an asset class, plays a significant role in investment portfolios because of its diversification benefits and as a hedge against inflation. However, they are not easily accessible to most investors due to the high initial capital outlay required, a lack of transparencyand low liquidity.

REITs, are companies that own, operate, or finance income-producing real estate. They are like mutual funds investing in portfolios of real estate assets, giving investors exposure to real estate without having to buy and manage it. They give access to regular dividend income and capital appreciation from the underlying assets.

REITs lease the assets owned and operated by them and collect rent on these assets, which is then distributed among the shareholders as a dividend. Mortgage REITs, however, just finance real estate and earn interest on their investments.

WHY SHOULD WE INVEST IN REITS?

REITs have consistently delivered competitive returns and even outperformed the broader stock market during periods of recession and economic uncertainty. REITs typically provide higher dividends than equity investments and also have the potential for moderate capital appreciation over a long-term horizon.

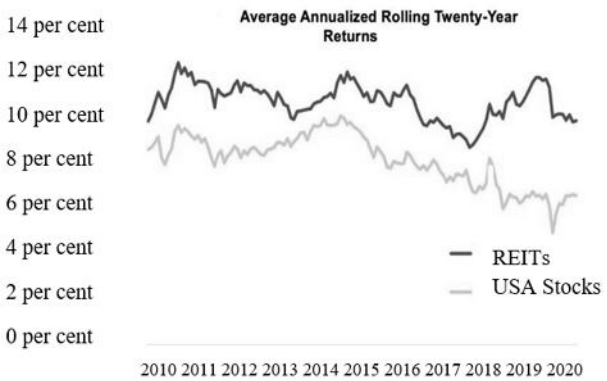

Figure 1: Average Annualized Rolling 20-Year Returns (Source: National Association of Real Estate Investment Trusts (NAREIT) Analysis of Fact Set Monthly Returns from January 1990 through October 2020)

Figure 1 shows the average annualized twenty-year returns for REITs and United States of America (USA) stocks. REITs have clearly outperformed stocks. Although past performance is not a guarantee for future returns, it can be considered a reliable long-term asset, having a lower standard deviation of 6.0 per cent and thereby lower risk as compared to 13.8 per cent for USA stocks.



Figure 2: Correlation with Total Stock Market for Total Monthly Returns from 1998 - 2022 (Source: NAREIT)

REITs offer access to the real estate market, enabling diversification as they typically have different risk and return characteristics from stocks and bonds. However, over the last few decades, assets have become quite correlated, performing well during economic growth and resilience, and vice versa.

With a correlation of slightly more than 0.60, REITs are relatively less correlated than other equity investment strategies. Thus, they can be considered for portfolio diversification and managing overall portfolio risk.

PRIVATE REAL ESTATE VS REITS

We are faced with a pertinent question that how is directly buying actual, tangible real estate different from investing in REITs?

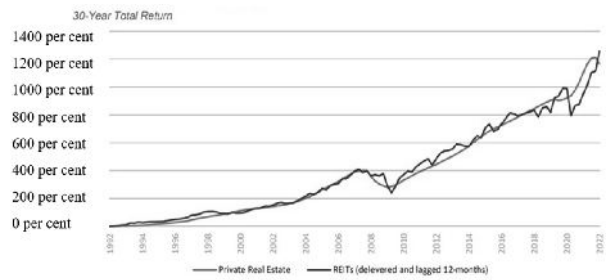

Figure 3: USA REITs versus USA Private Real Estate (Source: Bloomberg, data as of 31 December, 2022)

Figure 3 shows that REITs and private real estate have shown similar returns over the long term (30-year total returns). REITs however provide several benefits, making them a better alternative to direct investing:

The liquidity offered by publicly listed REITs is one of the most important advantages when compared to private real estate. While transactions for direct real estate can take several months, the shares of public REITs are readily traded on the major stock exchanges.

Figure 4 shows the daily trading volumes of four major listed REIT indexes as a proxy to gauge liquidity of REITs as a whole. In 2021, on average, the volumes ranged between $7 billion and $10 billion, with the lowest daily volume being $4.3 billion and the highest being $22.5 billion.

	FTSE Nareit Equity REITs Index	FTSE Nareit All Equity REITs Index	MSCI U.S. REIT Index	FTSE EPRA Nareit Developed Index[1]
Average	$7.3	$8.5	$7.3	$9.5
Maximum	$19.8	$22.5	$19.5	$27.5
Minimum	$4.3	$5.1	$4.3	$5.8

Figure 4: USA and Global REIT Indices (2021 Daily Trading Volume) (Source: Bloomberg, FactSet as of December 31, 2021)

Another strategic benefit they provide is that REITs enable diversification even within the context of overall real estate allocation. By combining REITs, investors get access to various property types across different geographic locations, considerably reducing the concentration of risk. This is not possible in case of direct investing unless the investor has a substantial pool of capital to allocate.

Most conventional institutional real estate portfolios invest in apartment buildings, commercial offices, and retail, with almost negligible exposure to modern economic sectors. However, REITs have significant allocations in newer, alternative economic sectors. Cell towers, health care, data centers, and self-storage properties have increasingly gained prominence and growth in the past few years.

Figure 5 shows how REITs provide a 53.2 per cent allocation to these newer and alternative real estate sectors as compared to just 7.0 per cent in private real estate.

Moreover, there are 893 listed REITs with a combined equity market capitalization of approximately $1.9 trillion in more than 40 countries and regions around the world. This makes it possible for investors to diversify the geographic footprint of their real estate portfolio and manage their risk and return profile as different regions may go through different phases of the economic cycle.

Figure 6 shows that the number of listed REITs in the world has exponentially increased from 120 in 1990 to 893 in 2022.

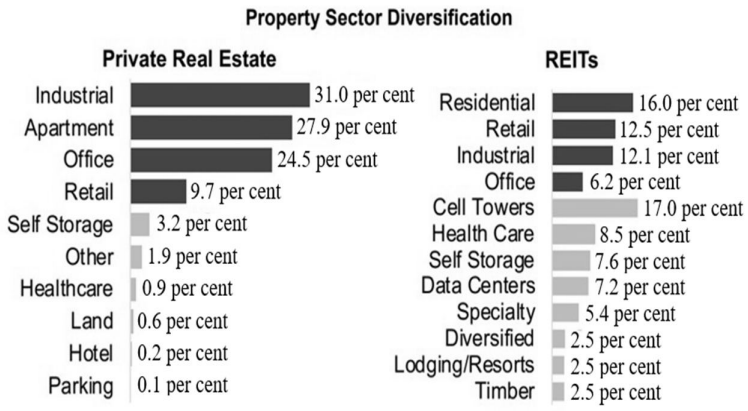

Figure 5: Property Sector Diversification
(Source: National Council of Real Estate Investment Fiduciaries (NCREIF) and Factset)

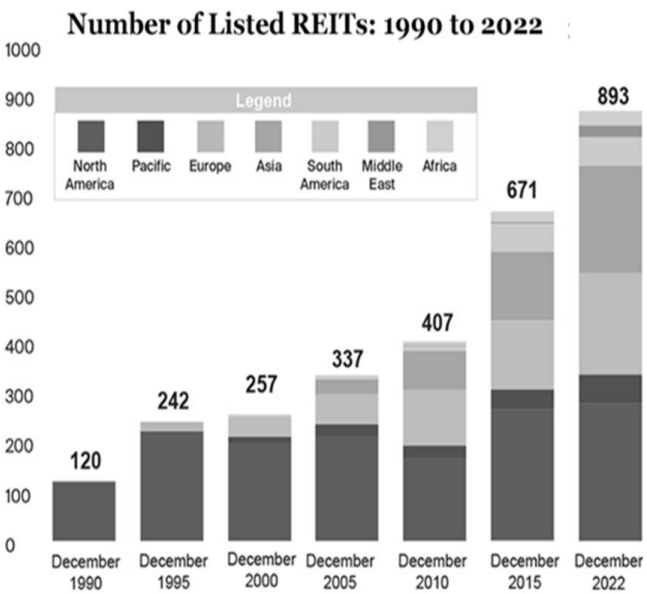

Figure 6: Number of Listed REITs between 1990 and 2022
(Source: Financial Times Stock Exchange (FTSE)NAREIT All REITs Index, S&P (Standard and Poor's) Capital IQ)

PERFORMANCE OF REITS IN DIFFERENT ECONOMIC CONDITIONS:

To understand the performance of REITs under various macroeconomic conditions, the simplest and easiest way would be to analyze the performance of REIT indexes and identify the patterns followed by the returns before, during, and after recessionary periods. As per the data collected by the NAREIT, based out of Washington, DC, it suggests that both equity stocks and REITs performed the best during periods of low growth rates and low inflation rates. The FTSE NAREIT All Equity index, a free-float adjusted, market capitalization-weighted index of USA equity REITs, generated a 15.9 per cent annualized return during recessions and 22.7 per cent in the year following the end of a downturn, according to NAREIT. According to the research conducted by NAREIT, there have been approximately 58 quarters that have faced below-median growth and below-median inflation rates, and such times have been promising and encouraging for REIT investors. The worst type of economic condition for REIT investors as well as equity stock investors is the above-median growth and above-median inflation environment.

Figure 7 compares the performance of the S&P 500 and the FTSE NAREIT All Equity REIT Index in terms of average total returns in excess of the inflation rate, showing the worst performance of both in the high growth, high inflation regime and the best performance in the low growth, low inflation regime.

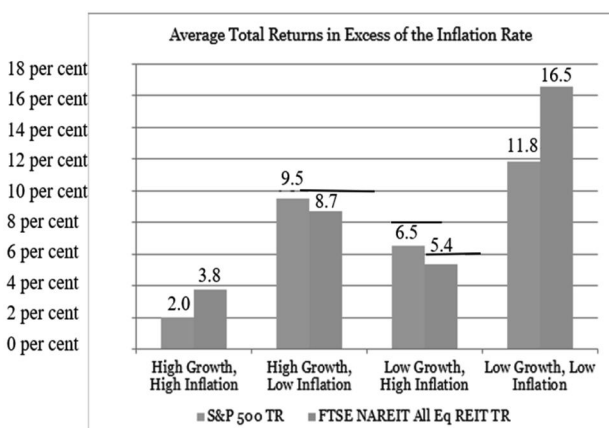

Figure 7: Average Total Returns in Excess of the Inflation Rate
(Source: NAREIT)

Now let us understand the reasons behind the predominantly better performance of REITS during and after recessions:

Acts as a Hedge Against Inflation

REITs, which provide the same investment and diversification benefits as private real estate funds, can protect against rising inflation, primarily because rental or lease payments can increase annually to reflect price increases and land and building values can rise alongside inflation, benefiting investors. With this mindset, investors tend to bend towards REIT investments as a measure to protect their portfolio from the negatives of the anticipated rising inflation rates in the future.

Pays Higher Dividends than Stocks

As stated by the Securities Exchange Commission (SEC), 'to qualify as a REIT, a company must have the bulk of its assets and income connected to real estate investment and must distribute at least 90 percent of its taxable income to shareholders annually in the form of dividends.' Thus, the comparatively higher dividend payout by REITs is an attractive investment opportunity for investors to protect themselves from the fear of recessions, namely because these high dividend gains can be enough to help offset the losses incurred in their portfolios during periods of recession.

Digging deeper to understand the real estate performance around US recessions, we can observe from the chart below that real estate investments tend to be stable and lucrative in the lead up to economic downturns, and later, during periods of recession, their performances diverge significantly, with REIT investments growing continually and the private real estate market falling significantly to a 0.6 per cent return. After the economy starts recovering, i.e., during the lead-up to economic upturns when interest rates start rising, both indices experience substantial growth.

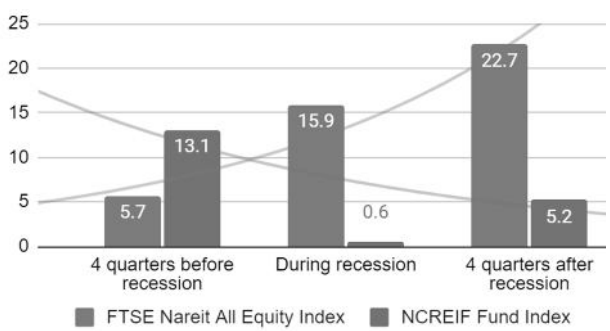

Figure 8: Real Estate Performance around USA Recessions (Source: NAREIT)

In a nutshell, this data suggests that real estate investments have historically shown resilience both before and after recessions, with the FTSE NAREIT Index showing particularly strong performance during economic downturns, probably because of its varied composition compared to the National Council of NCREIF Fund Index's more restricted approach. On the contrary, the NCREIF Fund Index tends to lag during recessions but recovers, albeit at a slower rate.

Thus, it is pretty evident that in times of economic downturns as well as in normal economic conditions, an investment in REITs is a preferable option compared to direct private real estate investments, making REITs a prosperously developing investment instrument globally.

CONCLUSION

In developed markets, especially the USA, REITs have been established as a reliable alternative investment security to raise funds in the real estate sector. They give investors exposure to a balanced portfolio with fractional ownership of real estate and a regular income stream. However, investing in REITs is not risk free and requires caution and research on the part of investors. The risk factors include liquidity risk, leverage risk, as interest payments may increase the fund's losses when assets underperform, and market risk affecting the entire financial market, which cannot be eliminated even through REITs.

The Indian REIT market is still at a nascent stage, with a market capitalization of less than 10 per cent compared to top countries like the US and Singapore. Currently, 4 REITs are listed on the Indian stock exchanges, comprising ₹7,300 million of equity market capitalization and 105 million square feet across the office and retail sectors. Recently, distributions by Indian REITs crossed ₹1,200 million since 2019, far greater than the dividends distributed by real estate

companies. There is low awareness about REITs as an investment opportunity in India, but they present significant growth potential.

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> Although wars are universally seen as catastrophic, the truth lies in the stark reality that big defence companies thrive on armed conflicts, reaping immense profits on weapons sales.

Battlefield Economics: Impact of the Defence Industry on Economies

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ABSTRACT

The history of wars serves as a haunting reminder of humanity's capacity for destruction and suffering. Although wars are universally seen as catastrophic, the truth lies in the stark reality that big defence companies thrive on armed conflicts, reaping immense profits on weapons sales. Their prosperity hinges on hostility, threats, and global tensions.

Defence spending is commonly viewed as an economic stimulant, but is it really worth the staggering costs? As nations grow wealthier, they are making significant investments in military capabilities to fortify their borders, acquire weaponry for attacks and maintain gears for those weapons.

It's important to analyze the defence spending trends by countries across the world. The escalating geopolitical tensions are fuelling distress and

uncertainty across the globe. This shift poses a vexing dilemma, as defence budgets swell at the expense of human development and welfare.

KEYWORDS: Defence Industry, Dollar Index, Causational Relationship, Demographics, GDP (Gross DomesticProduct) Per Capita, Soft Power.

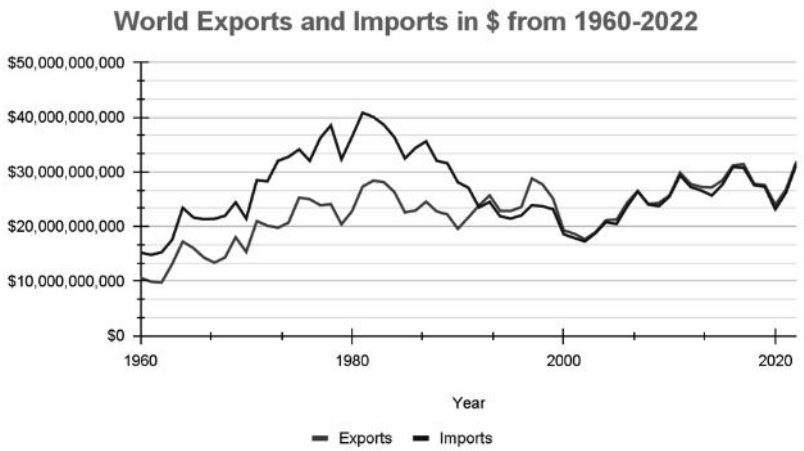

Figure 2: World Exports and Imports from 1960-2022 (Source: World Bank)

HOW BIG IS THE DEFENCE AND WEAPONS INDUSTRY?

In a world of imaginary borders, the advancement of weapons and ammunition have played a significant role in propelling the surge of trade across continents. This paradoxical cause-effect relationship, however, extends far beyond this. The weapons and defenceindustry, in itself, has become a major part of the global trade network, commanding a substantial share in the international trade landscape.

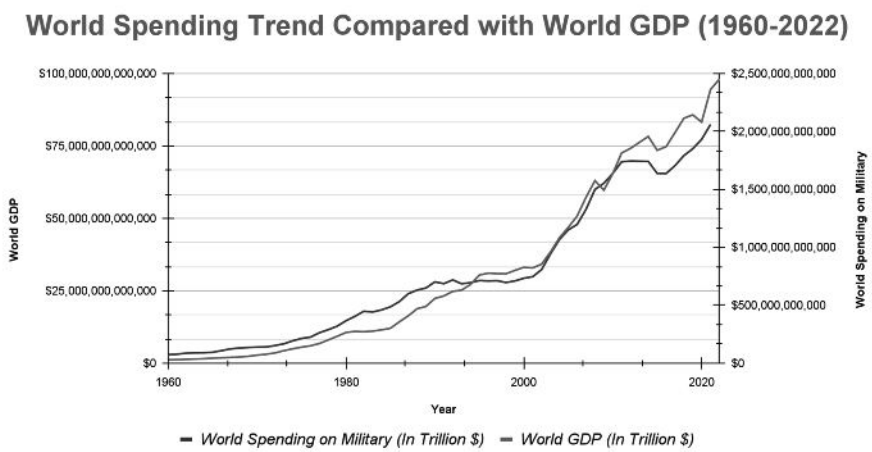

Figure 1: World Spending on Military and World GDP (in Trillion) (Source: World Bank)

With the world GDP touching a historic milestone of $100 trillion, global military spending is estimated to exceed $2 trillion! The military spending pattern of nations and their nominal GDP output, when compared, had a positive correlation of a robust 0.9932, underscoring a strong causational relationship between these variables.

Over a span of 60 years, international trade in military-grade weapons has surged by 200 per cent. At present, the value of weapons trade alone surpasses the individual GDP of 99 nations across the globe.

An interesting highlight is the significant disparity between import and export values, prior to the turn of the century. This gap is attributed to several influential factors, including commissions and tariffs in many countries before the LPG (Liberalization, Privatization, Globalization) reforms, which artificially inflated the value of such goods. In addition to this, fluctuations in the Dollar Index and the use of traditional payment systems have contributed to the differences in import and export values. However, as these factors have lost relevance over time as the dissonance in the numbers has gradually disappeared.

In 2022, major nations globally achieved a collective total export value of approximately $32 billion. Of this sum, the United States of America alone contributed a staggering $14.5 billion, representing over 45 per centof the entire exports. This highlights the exceptional dominance of select nations in the field, as the top five

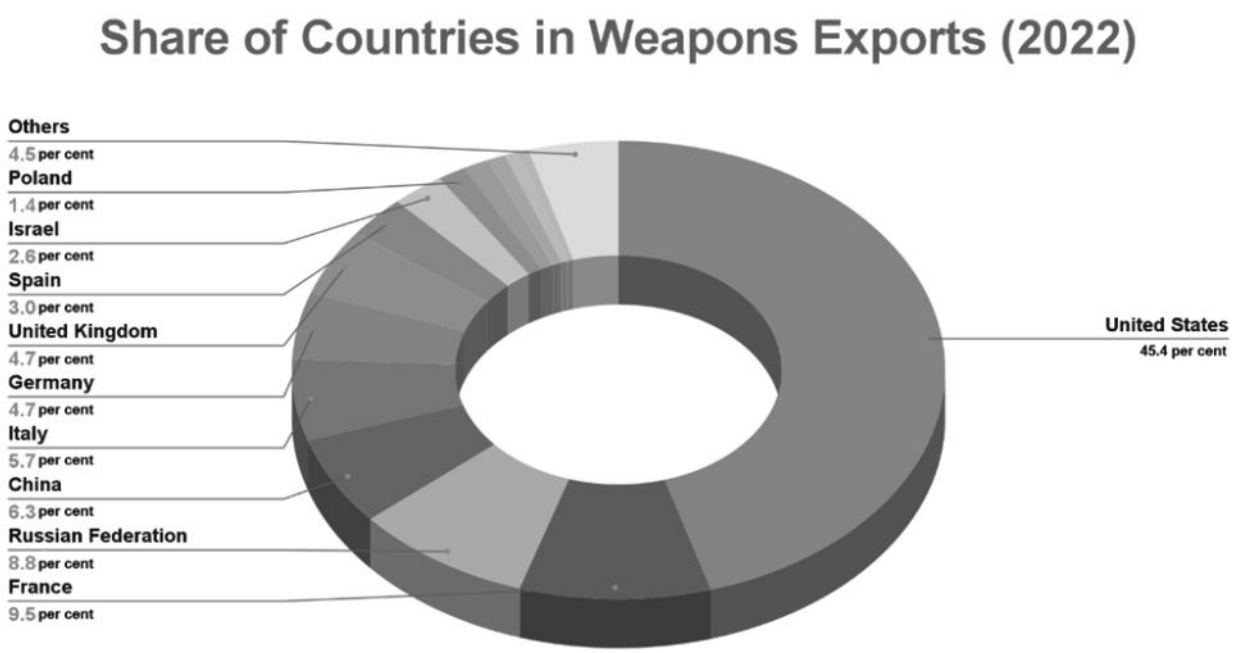

Figure 3: Share of Countries in Weapons Exports (Source: World Bank)

weapons exporters collectively hold a 75 per centmarket share.

WHERE DOES INDIA STAND?

India has the third-highest military budget while being the fifth-largest economy of the world. Its strategic

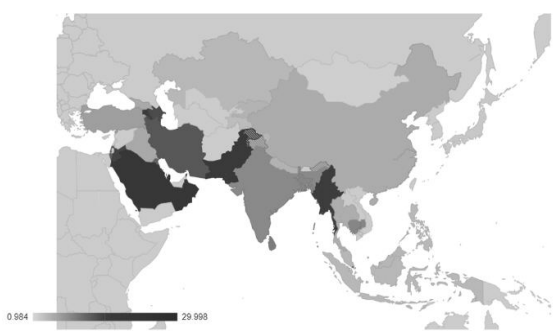

Figure 4: Strategic Geographical Location of India (Source: World Bank)

geographical position significantly shapes its military expenditure, as it finds itself surrounded by some of the world's most contentious neighbors that allocate a substantial portion of their total government expenditures to military endeavors.

The share of India's government spending dedicated to the military has consistently declined, notably since the 1980s. This trend mirrors global patterns seen in both developed and developing nations. A key factor influencing this shift is the reduced incidence of intercontinental conflicts after World War II. The chart below presents historical data depicting the evolving

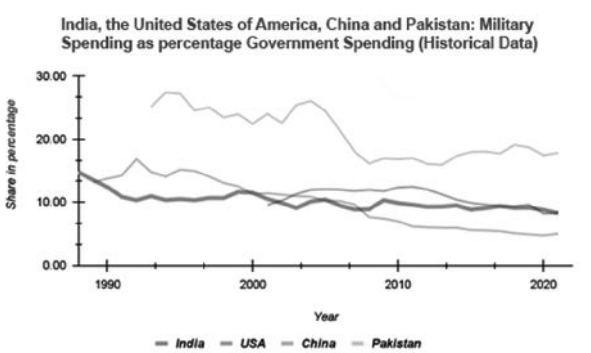

Figure 5: India, USA, China and Pakistan's Military Spending as a Percentage of Government Spending (Historical Data) (Source: World Bank)

expenditure percentages in four nations: the Republic of India, the People's Republic of China, the United States of America (USA) , and the Islamic Republic of Pakistan.

Between 2016 and 2020, India ranked as the world's second-largest importer of arms, accounting for 9.5 per cent of the global arms import market. Notably, Indian arms imports decreased by 33 per cent compared to the period from 2011 to 2015. Conversely, during the same time, Indian arms exports experienced remarkable growth, surging more than eightfold. However, when placed in direct comparison to India's imports, its exports remain comparatively insignificant, underscoring this disparity as visually represented in the chart below.

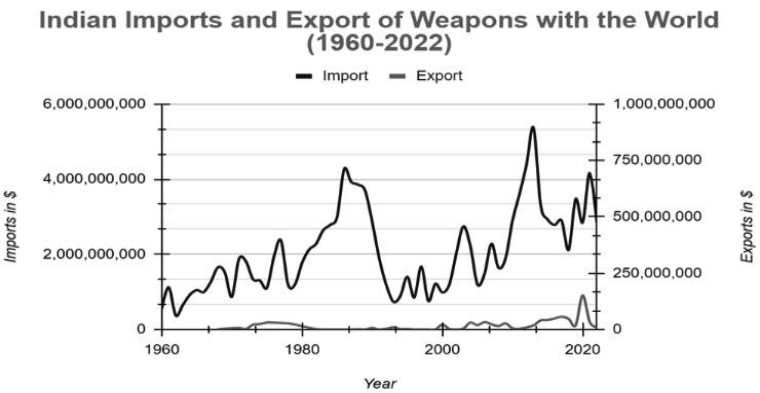

Figure 6: Indian Imports and Exports of Weapons with the World (1960 – 2022) (Source: World Bank)

In recent years, India has consistently recorded substantial weapons import surplus of over $1 billion, exerting significant pressure on the nation's foreign exchange reserves. This goes on to show India's heavy dependence on foreign manufacturers to meet its defence requirements and highlights that domestic companies have yet to attain the level of maturity required to fulfill the Indian government's demands.

Company Name	Nationality	Arms Sales in 2021	Arms Sales as a per cent of Total Sales
Lockheed Martin Corp.	United States	$60,340,000,000	90 per cent
Raytheon Technologies	United States	$41,850,000,000	65 per cent
Boeing	United States	$33,420,000,000	54 per cent
Northrop Gurmman	United States	$29,880,000,000	84 per cent
General Dynamics Corp.	United States	$26,390,000,000	69 per cent
BAE Systems	United Kingdom	$26,020,000,000	97 per cent
NORINCO	China	$21,570,000,000	26 per cent
AVIC	China	$20,110,000,000	25 per cent
CASC	China	$19,100,000,000	44 per cent
CETC	China	$14,990,000,000	27 per cent
CASIC	China	$14,520,000,000	31 per cent
Leonardo	Italy	$13,870,000,000	83 per cent
l3Harris Technologies	United States	$13,360,000,000	75 per cent
CSSC	China	$11,130,000,000	21 per cent
Airbus	France	$10,850,000,000	18 per cent

Figure 7: Top 15 Defence Companies by Arms Sales in 2021 (Source: https://www.sipri.org/sites/default/files/2022-12/fs_2212_top_100_2021.pdf)

EFFECTS OF DEFENCE SPENDING BY NATIONS

Defence manufacturing companies have experienced rapid growth over the years, with some gaining competitive advantages driven by positive externalities, resulting in a market structure similar to an oligopoly. The top five companies in terms of arms sales are based in the USA, followed by companies from China and Europe. The only Indian company in the top fifty is Hindustan Aeronautics Limited (HAL) which is at the 42nd spot. Figure 7 shows a detailed overview of the same.

While defence spending remains crucial for national security, it comes at the expense of vital sectors like education, healthcare, logistics, infrastructure, and social spending, all of which hold the potential to enhance a country's long-term output. Although defence spending does generate jobs and economic opportunities, they often lack stability and can be terminated during peacetime.

Excessive involvement in weapons trade can strain diplomatic relations, hampering trade and co-operation with partner nations. Military spending frequently results in government deficits which is fuelled by external debt, placing a burden on a nation's future earnings. Additionally, it inflicts damage on the economy through the loss of human capital, infrastructure destruction, and the costs associated with post-war reconstruction and displacement, all of which are ultimately shouldered by the taxpayers.

INDIRECT COSTS AND IMPLIED CONSEQUENCES

In conflicts involving more than two nations, numerous factors come into play that contribute significantly to the indirect costs of warfare. In certain instances, these costs can surpass the actual financial expenses of the war. The enduring consequences of many conflicts can even reshape the demographic and economic terrain of a region, leaving a lasting impact on the local population.

The impact becomes evident with the degree of multilateralism, constraints on travel and trade, the composition of demographics and religious affiliations, as well as the level of societal tolerance. Such factors play an important role in determining the long-term economic growth trajectory of a region.

Figure8 illustrates the GDP growth trends spanning from 1960 to 2022 in select global regions. A clear pattern emerges, showcasing that nations fostering greater multilateralism tend to exhibit higher GDP growth rates. The European Union serves as an exemplary model in this regard, witnessing exponential growth over the past five decades and boasting some of the world's wealthiest countries in terms of GDP per capita. Europe, despite enduring some of history's deadliest conflicts, stands as a testament to economic resilience for the entire world.

In North America, nations enjoy harmonious relations, fostering unrestricted trade and human capital movement. Conversely, South Asian, Western and North African, and Latin American countries face a distressing pattern of enduring conflicts tied to border disputes, trade obstacles, and limited human capital mobility. Persistent wars in these regions compel substantial allocations to military spending, redirecting vital resources from economic progress. Meanwhile, the Association of Southeast Asian Nations (ASEAN) region's impressive growth has elevated its economic standing, markedly enhancing the well-being of its populace over the past few decades. The multifaceted costs of these conflicts also encompass the opportunity cost of lives lost in war, representing the untapped potential and productivity that these individuals could have contributed to their respective economies had they not been involved in armed service.

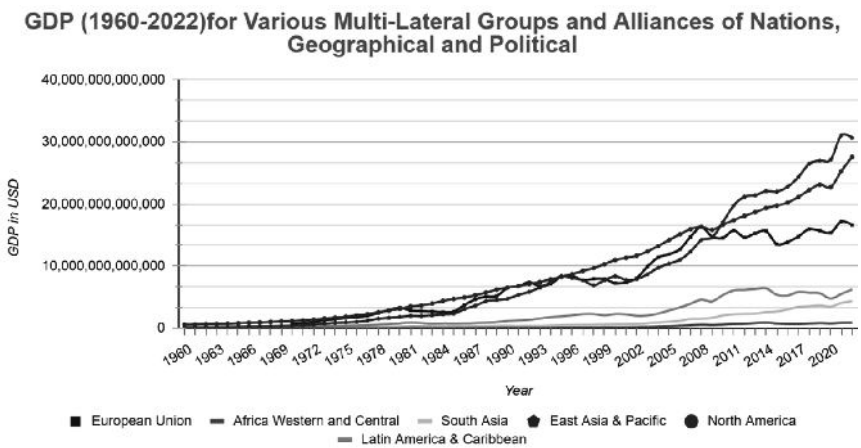

Figure 8: GDP for Various Multi-lateral Groups and Alliances of Nations (Geographical and Political, 1960 - 2022) (Source: World Bank)

CONCLUSION

The industry of war and national defence is a mammoth in itself. Geopolitical tensions have given rise to a multi-polar global landscape, challenging the long-held dominance of select countries on the world stage. Countries having well-established defence industries sometimes indirectly promote wars in various regions, causing disruptions in the global order. War-profiteering by influential lobbying companies, their indirect funding of

state-activities, and their ability to exert soft power over those in positions of authority can escalate conflicts into full-scale wars.

While wars may contribute to the economies of countries engaged in arms production, exporting nations often reap substantial advantages when conflicts do not involve their own territories. Global military spending has crossed two per cent of the world's GDP, funds that could have been invested in more efficient areas, that could have improved the quality of life of people worldwide. Instead, border tensions, wars over land and natural resources have set many developing nations back on their paths to development.

The loss of human life and the psychological toll of any conflict are the indirect costs of a war. These costs are not directly quantifiable and comparable in numerical terms, yet they exert enduring impacts on a region's demographics and economic landscape. Such costs are often downplayed by media and world governments, resulting in missed opportunities for those who are struggling and deprived.

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"In this technologically evolving century where Asia's ascendancy has clearly disturbed the West, the semiconductor industry which acts as the backbone of our digital ecosystem is going through tough times."

Silicon Symphony: Navigating Global Technological Turbulence

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ABSTRACT

In this technologically evolving century where Asia's ascendancy has clearly disturbed the West, the semiconductor industry which acts as the backbone of our digital ecosystem is going through tough times. Unhealed wounds from the pandemic and an unprecedented demand have led to this conundrum. A global crisis looms, triggered by the geopolitical tensions between the West and China. The Dragon's meteoric rise in semiconductor prowess is applaudable as well as disturbing to the entire world.

This has led to many countries developing their domestic abilities. India being one of the fastest growing economies now navigates geopolitical currents. With new reforms and strategies, it plans to capitalise this opportunity and fill the vacuum to ease the world tension and gain a significant position in the global order. The world watches, for global cooperation is key to the industry's stability and sustainability.

KEYWORDS: Semiconductor, Production, Geopolitics, Government, Schemes, Crisis.

BACKGROUND

The 21st century has witnessed several changes in the power dynamics of the world. One of these has been the rise of Asia in terms of technological prowess. The new world order's dependence on technology has made way for the smaller players to outshine the superpowers with their skills and brilliance. This takes us to talk about the current world crisis in the semiconductor industry. Semiconductors, also known as computer chips, are essential components in various electronic devices, from smartphones, laptops and cars to high level defence and security equipment and artificial intelligence systems.

'For whosoever commands the sea commands the trade.'

The global supply chain for these chips has been disrupted for the entire world, primarily due to China's dominant position and the geopolitical tensions between the west and the Dragon. Here is a look at how critical this industry is, how the power tensions around the world have affected its functioning and how India is striving to become a major producer in the same.

THE RISE OF CHINA'S SEMICONDUCTOR INDUSTRY

China's semiconductor industry has experienced remarkable revenue growth over the past decade. In 2016, the industry reached a record revenue of ? 8217 billion ($99 billion), marking a growth rate of 10.9 per cent which outpaced both China's semiconductor consumption and the worldwide semiconductor market. In the last decade, China's semiconductor industry has grown at a Compound Annual Growth Rate (CAGR) of 13.6 per cent while its semiconductor consumption grew at a 12 per cent CAGR and the global market at a 3.2 per cent CAGR. Chinese companies, such as Huawei and SMIC (Semiconductor

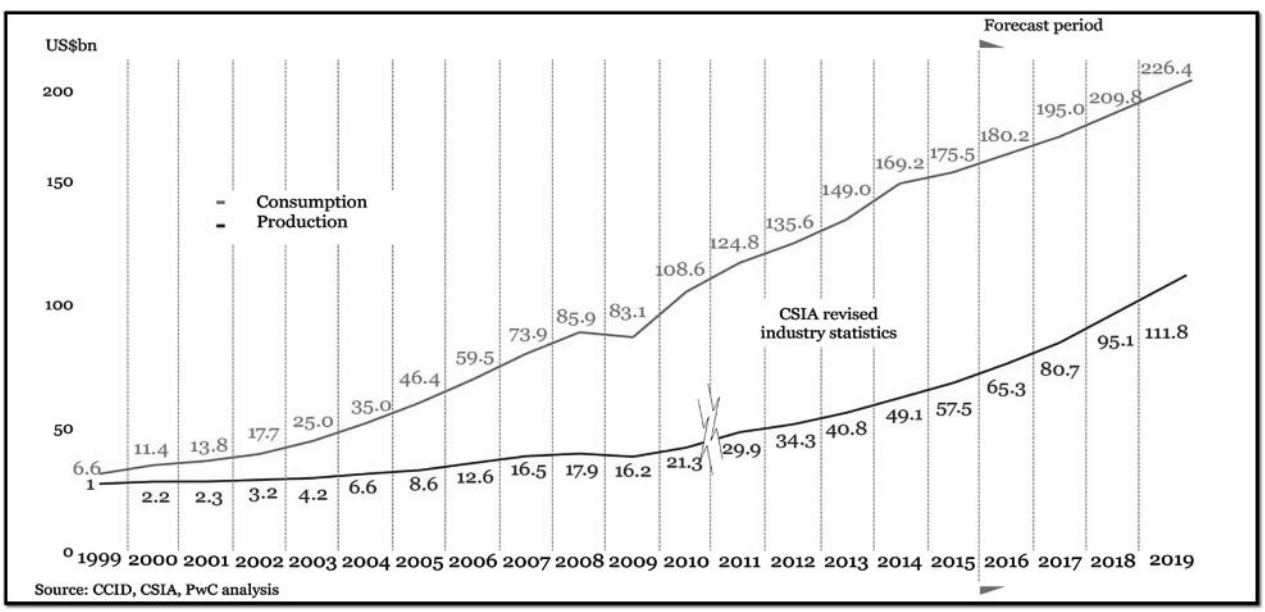

Figure 1: The Growth in Semiconductor Demand and Production in China in the Past Decade (Source: PwC (PriceWaterhouseCoopers) Analysis – China's Semiconductor Industry)

Manufacturing International Corporation), have made significant strides in chip design and manufacturing.

China's semiconductor industry's rise can be attributed to several factors, including a large domestic market, government support, and the acquisition of foreign technology. However, this rapid growth has raised concerns among other nations, particularly the United States, about China's intentions and the potential risks associated with its dominance in the semiconductor market. Furthermore, China's pressure on Taiwan has led to Taiwan Semiconductor Manufacturing Company, world's largest semiconductor foundry, to cut its budget by almost 10 per cent, unnerving the entire world.

THE GLOBAL CONUNDRUM

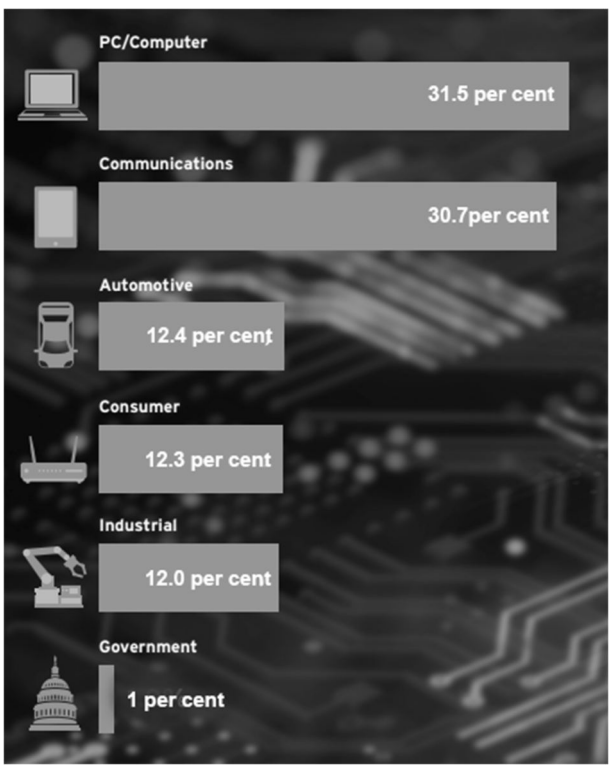

Figure 2: 2021 Global Semiconductor Demand Share by End Use (Source: Industry Report by Semiconductor Industry Association)

The global semiconductor crisis has been exacerbated by several factors, including increased demand for electronic devices, supply chain disruptions, and geopolitical tensions. The COVID-19 pandemic further intensified the crisis, leading to a shortage of semiconductors across various industries.The ongoing trade tensions between China and the West and conflict between Russia and Ukraine have made things worse for the entire industry.

China's dominance in the semiconductor industry has raised concerns about the security and resilience of the global supply chain. China possessing over 90 per cent of global production for downstream rare earth products and technologies due to its control of Rare Earth Elements (REEs) has become a pressing concern. REEs are essential for more than 200 products ranging from smartphones to defence systems. India, in this context, although endowed with six per cent of world's rare earth reserves, faces humongous hurdles in developing its mining industry and infrastructure.

Many countriesrelying heavily on China which is poised to shape the future of technology on the global scale,are left vulnerable to disruptions caused by trade disputes, sanctions, or other geopolitical factors. The global semiconductor crisis has highlighted the need for diversification and self-sufficiency in semiconductor production.



Figure 3: Global Semiconductor Sales in the Past Two Decades (Source: Industry Report by Semiconductor Industry Association)

INDIA'S AWAKENING: AMBITIOUS PLANS FROM IMPORTER TO PRODUCER

The Indian semiconductor market was worth nearly ₹1926 billion ($23.2 billion) in 2021 and is projected to reach ₹6665 billion ($80.3 billion) by 2028, growing at a CAGRof 19 per cent. The global market for semiconductors is also expected to grow at a CAGR of 6.7 per cent during the same period. Recognizing the importance of semiconductor technology and the risks

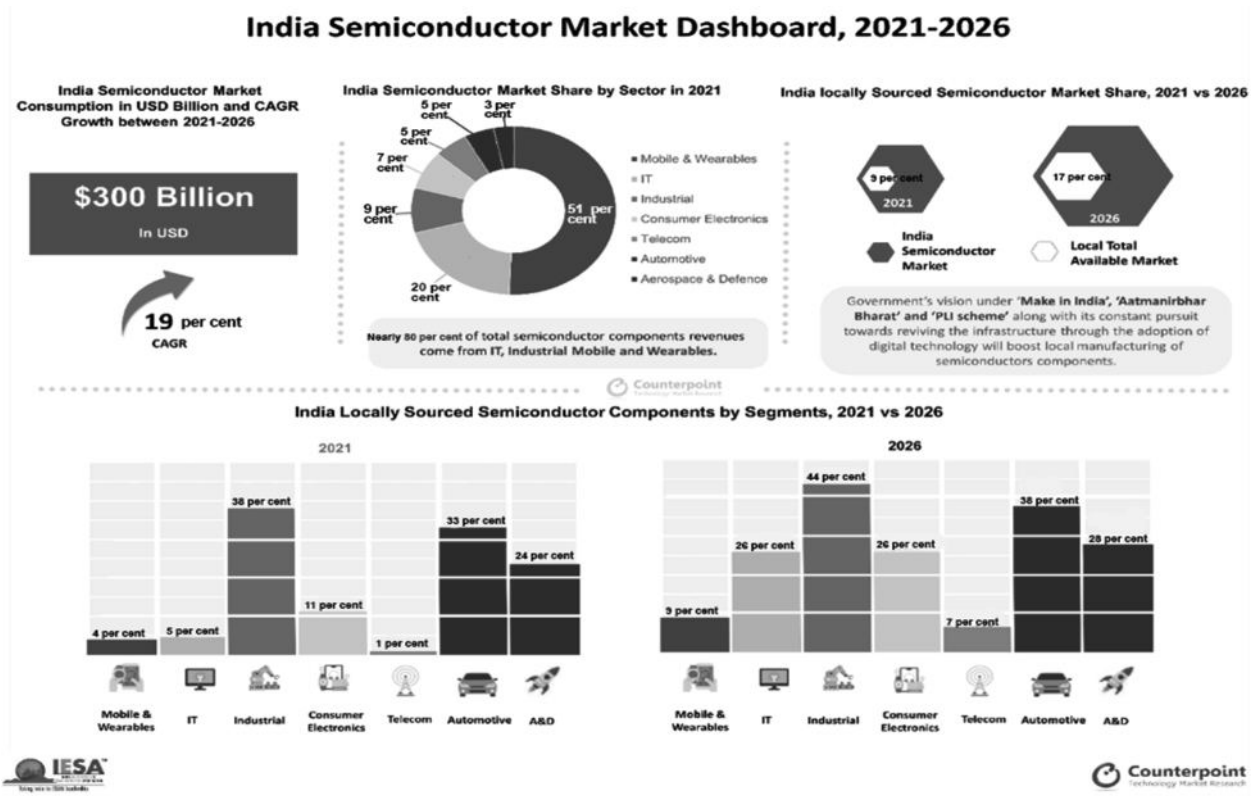

Figure 4: An Overview on the Usage of India's Locally Sourced Semiconductors (Source: Consumption of India's Semiconductor Components, Counterpoint Research)

associated with dependence on China, it has embarked on a mission to become a major producer of semiconductors. The Indian government has launched several initiatives to promote domestic semiconductor manufacturing, attract foreign investment, and develop indigenous capabilities in chip design and fabrication.With its immense market potential, India can position itself as a significant player in the global semiconductor industry.

India's determination to establish itself as a significant player in the semiconductor industry is backed by substantial advantages and strategic efforts. The nation's prowess is evident in its pool of skilled engineers, a substantial number of whom contribute significantly to semiconductor research and development globally. India currently serves as the focal point for designing nearly 2,000 chips annually, with a workforce of over 20,000 engineers engaged in various aspects of chip design and verification. This expertise lays a strong foundation for the growth of semiconductor manufacturing.

Government Initiativesand Schemes

Recognizing the importance for this industry, the Indian government has launched several initiatives to promote semiconductor production in the country. The government has introduced the Production Linked Incentive (PLI) scheme under the 'Make in India Initiative', for the electronics sector, which includes a ₹140 billion ($1.7 billion) incentive package for companies setting up semiconductor manufacturing facilities in India. In the February of 2022, Vedanta Limited teamed up with Foxconn under the PLI scheme to establish a semiconductor plant in Gujarat with an investment of an astounding ₹1660 billion ($19.5 billion) to create cutting edge display and semiconductor facilities. Although this joint venture couldn't materialise, both the companies continued taking strides towards the development of the industry in India. Vedanta went on to acquire semiconductor and display business from Twin Star Technologies limited to become nation's first integrated

semiconductor and display fab company. On the other hand, Foxconn is still scouting for partnerships in India. The Tata Group entered the arena by starting its own chip production under Tata Electronics. Simultaneously, US- based Micron technology announced its plans to invest around ₹207 billion ($2.5 billion) for chip assembly and testing in Gujarat.

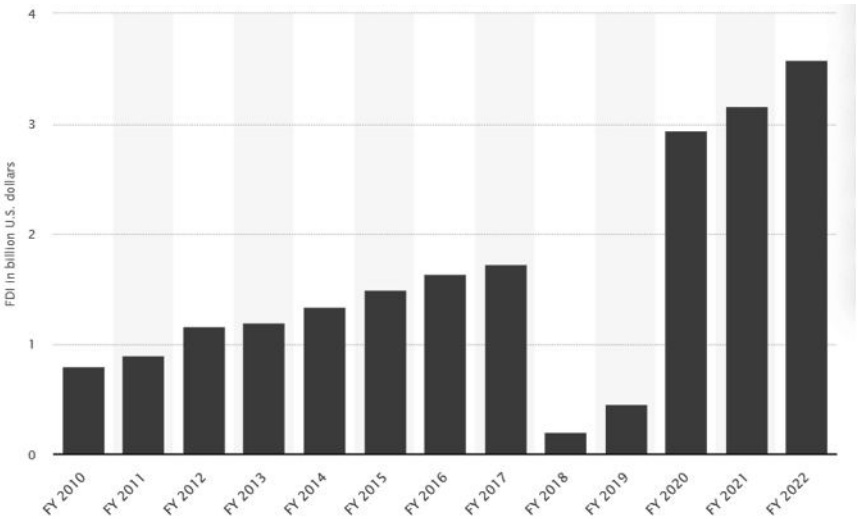

Figure 5: Amount of Foreign Direct Investment (FDI) Inflow into the Electronics Sector in India from Financial Year 2010 to 2022 (Source: Statista)

The government has established semiconductor fabrication parks, such as the Electronics Manufacturing Cluster (EMC), to provide infrastructure and support for semiconductor manufacturing companies. It has also introduced various schemes like the Design Linked Incentive (DLI), Chips to Startup (C2S), and Scheme for Promotion of Electronic Components and Semiconductors (SPECS) to enable the growth of the industry and create a favourable environment for semiconductor production.

Building a Skilled Workforce

Skilled manpower is imminent for India to support the growth of such a vast industry. The government has taken several steps in this direction, including launching programmes like the Skills Acquisition and Knowledge Awareness for Livelihood Promotion (SANKALP) program and the Pradhan Mantri Kaushal Vikas Yojana (PMKVY) scheme. These programmes aim to provide training and skill development opportunities to millions of people, including those in the semiconductor industry.

Attracting Foreign Investment

India has also taken steps to attract foreign investment in the semiconductor sector. The government has implemented policies to ease regulations, provide tax incentives, and establish special economic zones for semiconductor manufacturing. These measures aim to create a favourable environment for foreign companies to set up semiconductor fabrication units in India. Foreign Direct Investment (FDI) plays a pivotal role in India's semiconductor ecosystem, with international companies investing in manufacturing facilities, new technologies, and the acquisition of existing infrastructures in the country. These investments foster innovation, technology transfer, and long-term benefits for the Indian semiconductor industry.

CONCLUSION

The growth of India's semiconductor sector is poised to create substantial employment opportunities and give a significant boost to the country's economy. It is anticipated to generate over 1.2 million jobs in various capacities, including engineers, operators, technicians, and more. This demand for skilled professionals presents significant prospects for job creation and skill development in the nation.

The intricate global supply chain operates on a symbiotic basis. India's semiconductor industry's future relies heavily on its ability to navigate geopolitical tensions and ensure a consistent supply of crucial resources like rare earth metals. To make production feasible, India must establish strategic alliances with the superpowers. This collaboration is imperative to ensure the stability and sustainability of the semiconductor industry, thus reinforcing the importance of global cooperation in this vital sector.

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Open Credit Enablement Network (OCEN): Redefining Credit Accessibility in India

Muskan Jain
Department of Commerce (Evening)

> Credit availability should be a relief to a business rather than a curse, and this is where OCEN steps in.

ABSTRACT

The persistent lack of financial support consistently takes the lead when addressing the primary challenges confronting the Micro, Small and Medium Enterprise (MSME) sector in India. The mission-oriented think-tank of the country, iSpirit,has taken the step to increase financial accessibility among the most unbanked and underbanked segment of the nation,which is the MSMEs and small individuals by developing the OCEN. In this article, we delve into the structure of OCEN and how it has been instrumental in re-shaping the Indian credit landscape and its impacts on the borrowers, lenders, Technology Service Providers (TSPs) and Loan Service Providers (LSPs). Issues such as digital literacy, the state of rural infrastructure, documentation requirements, trust-building, and data security must be diligently addressed to fully unlock OCEN's transformative potential for empowering India's MSMEs and small individuals.

KEYWORDS: MSME, OCEN, Credit Access, Lenders, Application Programming Interfaces (APIs), Digital infrastructure.

Imagine Tarun, an owner of a bamboo-handicraft store based in West Bengal who has been having a good business cycle with frequent sales. Suddenly, the pandemic struck and everything shut down. He suffered huge losses due to no sale and pending payments to his artisans. In his dire predicament, Tarun had little recourse but to turn to a local moneylender for financial assistance. However, this desperate move only exacerbated his troubles, as the moneylender demanded exorbitant interest rates, adding to his mounting

financial burden.Tarun is just one example of the 63 million MSMEs in India who struggle to get accessible financial assistance.

Credit availability should be a relief to a business rather than a curse, and this is where OCEN steps in. The moniker of digital public goods, the India Stack, has been instrumental in developing India. iSpirit, a non-profit organization, is building OCEN by providing a shared interface to all participants in the credit ecosystem of the country. The set of APIs enables one to seamlessly manage their money, explore lending options, and make decisions that suit their financial goals - all with a few taps on their smartphone.

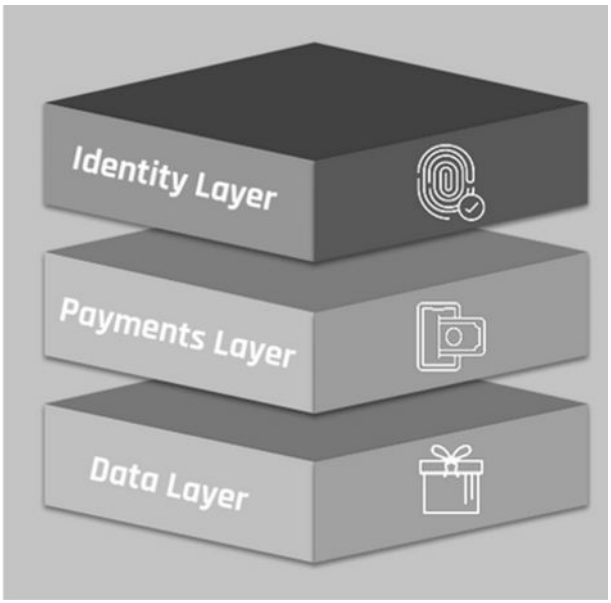

Figure 1: Structure of the India Stack (Source: https://blogs.worldbank.org/sites/default/files/2023-06/dixit_figure_1._figure_india_stack.png)

WHAT IS OCEN?

OCEN facilitates easy data sharing about borrowerswith their consentto lenders across the market to make seamless lending decisions and provide convenient credit access to borrowers under a common set of standards. It is an emerging Digital Public Good (DPG) that has the potential to democratize credit access to the MSMEs and vendors, who are primarily the most underserved customer base.

OCEN was introduced under the India Stack, which is a set of APIs. the India Stack is the backbone of all the financial products launched by the government.it consists of three layers - Identity, Payment and Data. The identity layer consists of Aadhaar that enables digital Indian identity through biometrics, personal information and a unique 12-digit number. The payment layer consists of Unified Payment Interface (UPI) which enables interoperability between money custodians, payment rails and front-end payment applications. The last layer that is the data layer restores the ownership and control of the data with consent of the citizens.

WHERE AND HOW DOES OCEN FIT IN?

OCEN will allow the lenders in the credit ecosystem to connect with each other, integrating information across the stakeholders and digitizing the process of originating, underwriting and servicing a loan to MSMEs and small individuals. The OCEN framework consists of the following major market participants:

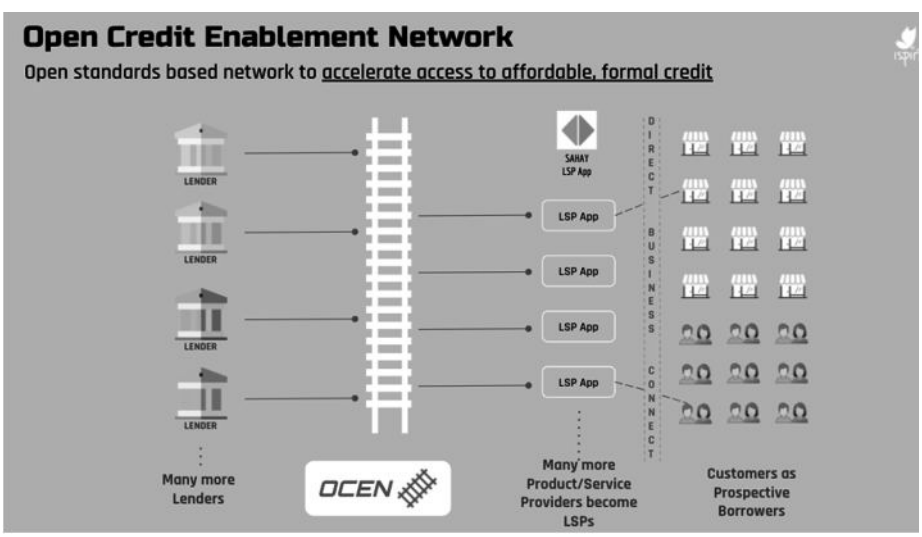

Figure 2: Structure of OCEN (Source: https://sahamati.org.in/wp-content/uploads/2022/04/ocen-data-flow-1.jpg)

Lenders

The lenders primarily consist of the banks and other financial institutions. It allows them to expand their market by extending personalized products. Since LSPs maintain an ongoing relationship with users, they aggregate the customers providing low cost of acquisition for the lenders. They are also functional in flagging any customer if there is an alert.

LSPs

Any company - be it a delivery, shopping or payments app, which essentially interacts with its customers and has a core offering can be an LSP. They can plug in 'embedded finance' in their existing products or services, without investing in other technology and enhancing the liquidity of its customers.

Borrowers

The borrowers who are the MSMEs and small individuals get access to a variety of credit products which might not have been accessible before. Due to the digitization of the entire lending process, lenders benefit with lower cost of acquisition which in turn provides lower interest rates to borrowers.

TSPs

They are primarily FinTech companies that work with both lenders and platforms and provide software, infrastructure and services to facilitate secure and standardized data sharing between financial institutions and third-party developers.

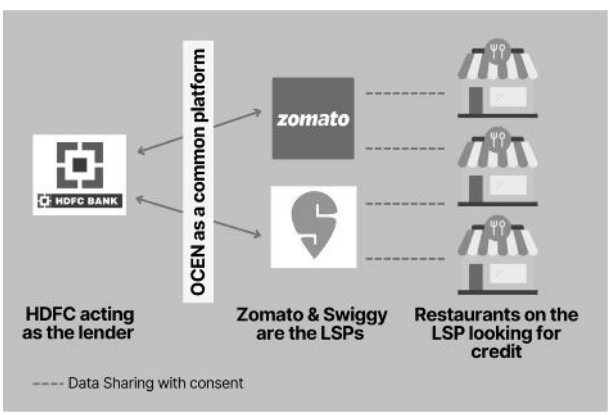

Figure 3:Example
(Source: Own Illustration)

Let us understand the process with the help of an example. Zomato, an LSP and has a network of restaurant and delivery partners. Let us say Zomato wants to become a lender and provide loans to the restaurant in need. This would help them develop a loyal relationship with their restaurant partners as well as increase revenue by earning commission on the loan provided.

Next, Zomato reaches out to Housing Development Finance Corporation (HDFC) for partnership to underwrite loans. Gaining access to the borrower's data becomes essential for HDFC to understand various metrics like average order value, average rating, order pattern et al. to cater the specific need of the restaurant. Here, HDFC will benefit from the partnership by enriching the underwriting process and adopting a low-cost distribution channel. Further, the restaurants will also get access to loans more easily.

Now, Zomato and HDFC have to manage their operational system to smoothen the process. Even if Zomato does build a system to facilitate this, it will become difficult for HDFC when other parties like Swiggy come on board. As the number of partners involved increases, the operational complexity and duplication increases. Not only that, it also comes with increased cost, time and effort. This is where OCEN comes in. When a common platform is created for all parties, the operational capacity for all parties is enhanced. Now, Zomato does not have to create multiple APIs to integrate with other lenders. Similarly, HDFC can also increase partnership with other players by simply adhering to the OCEN standards.

AVAILING CREDIT THROUGH OCEN

The user journey comprises seven pivotal touchpoints, ensuring a seamless credit access experience. The LSPs engage customers through their core offerings, gathering customer data with consent. This data serves as the foundation for loan disbursement, empowering lenders with deep customer insights to provide tailored loan offers. With this knowledge in hand, lenders present the loan options. Once the customer selects their preferred offer, they can electronically accept the

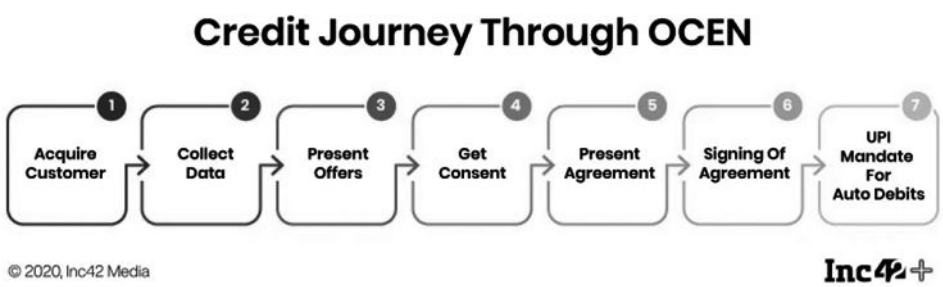

Figure 4:Credit Journey through OCEN
(Source: https://cdn.inc42.com/wp-content/uploads/2020/08/OCEN-Flow-chart.jpg)

loan terms via e-signature. After verification, the auto-repayment feature is configured within OCEN APIs, linked to UPI, streamlining loan approval through cost-effective public infrastructure.

Interestingly, OCEN has swiftly facilitated loans ranging from as little as ? 160 to as substantial as 1 million, all within a matter of minutes. Such effortless access to credit for MSMEs holds the potential to significantly propel our nation's economic development and growth.

WILL IT BE VIABLE?

Even though OCEN presents a huge scope to transform lending in the Indian credit market, some issues still persist with its viability. Unfortunately, more than 90 per cent of the population is still not digitally literate. Since the entire system of OCEN is based on a set of APIs, it is imperative that MSMEs must be equipped with digital infrastructure to provide relevant information to the lenders. Even in 2023, India has poorly developed digital infrastructure in the rural areas, which makes it difficult for MSMEs based there to derive the benefits of OCEN. It becomes increasingly difficult to gain their trust. Hence, it requires awareness by the stakeholders to address their queries and ensure their trust in the system.

The adoption of digital finance in Indian MSMEs varies, with about 33 per cent operating smoothly on platforms like social media and UPI, while 70 per cent are transitioning to digital payments. To take the advantage of OCEN, providing the necessary digital infrastructure is crucial. Cash transactions have dropped to 27 per cent in 2022, signaling a shift toward non-cash methods. Although rural areas, housing over 51 per cent of MSMEs, have improved banking access, challenges arise due to a lack of financial documentation and credit history, particularly among informal MSMEs. Overcoming these challenges and ensuring data security are vital for OCEN's success.

Lastly, OCEN at its heart relies on personal and financial information about the borrowers. As more borrowers become a part of the network, the volume of data increases leading to concerns about data breaches and privacy issues. Cybersecurity is extremely essential to ensure adherence to law on data protection.

WHY ADOPT OCEN?

OCEN holds a high promise to simplify the process of credit lending across the players in the market. The benefits of OCEN can be described in a tri-fold manner:

It enables newer avenues for banks, Non-Banking Financial Companies (NBFCs) and other lending institutions to innovate their product and extend retail lending to the most underbanked and unbanked segment for the banks and underwriting larger volumes of loans.

By being a part of OCEN, lenders essentially benefit from an automated process of loan disbursement and repayment tracking. Manual paperwork, including document submission, Know Your Customer (KYC) verification, and loan applications, is replaced by automation, provided borrowers consent to share their information. This streamlining also enables banks to optimize its risk assessment process of the borrowers, reducing the risk of lending to unqualified borrowers.

With MSMEs contributing nearly 30 per cent to our Gross Domestic Product (GDP), OCEN enhances their access to working capital. This increased credit accessibility bolsters their ability to weather economic

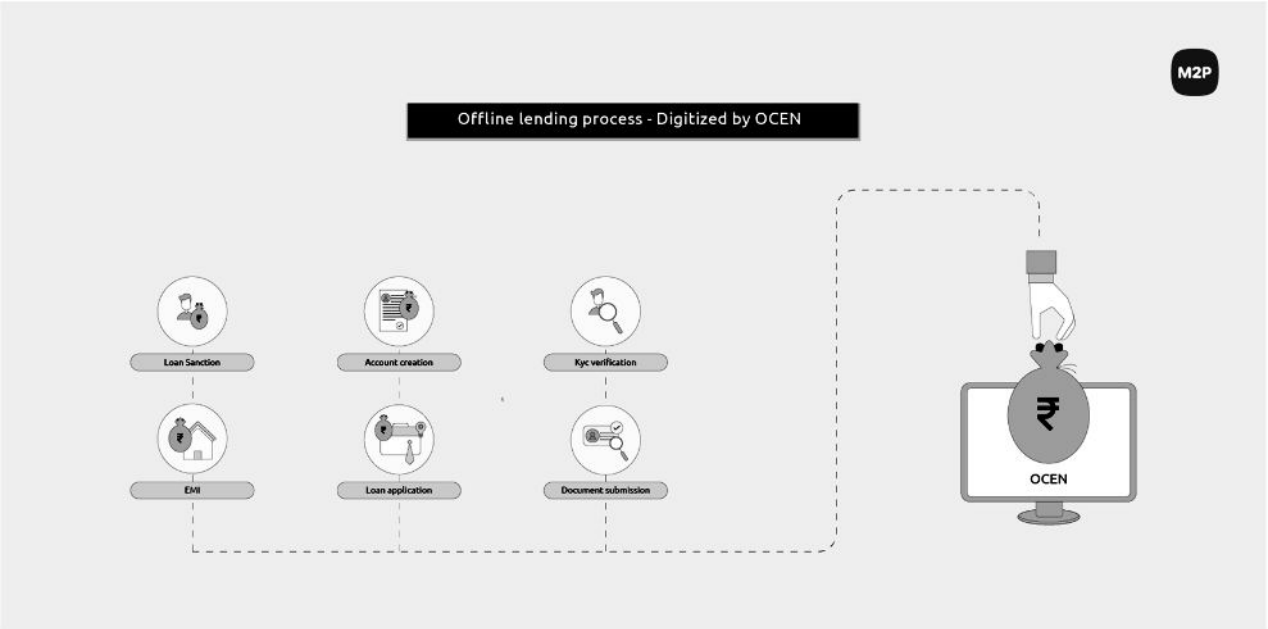

Figure 5:How OCEN Evolves the Lending Process
(Source: https://blog.m2pfintech.com/wp-content/uploads/2022/06/Artboard-1-copy-13.png)

downturns, improves their repayment behavior, boosts credit scores, and, consequently, contributes positively to overall GDP growth.

WHAT TO EXPECT MOVING FORWARD?

The incorporation of OCEN into the India Stack marks a pivotal stride toward fundamentally reshaping India's credit lending framework, fueling substantial economic advancement. As India perseveres in its mission to bridge prevailing disparities, the future shines with the potential of a credit ecosystem that is not only more inclusive but also robust, benefiting all stakeholders alike. While challenges such as digital literacy, rural infrastructure, and data security must be thoughtfully addressed, OCEN's transformative promise holds the key to nurturing economic growth. It provides a helping hand to countless MSMEs, like Tarun's, to accelerate their progress without the weight of financial burdens. The journey ahead is imbued with optimism, and offers the prospect of a brighter financial landscape for all stakeholders.

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> Businesses must choose sides or operate in two competitive realms, while also navigating talent shortages and complex regulations brought about by deglobalization.

Deglobalization: Reclaiming Borders, Redefining Horizons

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ABSTRACT

The late 20th and early 21st centuries witnessed a surge in globalization, benefiting consumers and businesses alike with increased choices, competitive prices, and efficient supply chains. However, awareness has grown that global development remains uneven, leading to the rise of deglobalization - a shift towards a less interconnected world defined by stronger nation-states, regional solutions and border limitations. The evolving landscape of deglobalization raises a crucial question: Are businesses adequately prepared for this transformative shift? The emergence of a fragmented 'splinternet' due to China-United States (US) tensions

present significant operational challenges for businesses. Businesses must choose sides or operate in two competitive realms, while also navigating talent shortages and complex regulations brought about by deglobalization. The readiness of businesses to adapt will be the compass guiding their success amidst these turbulent waters of risk and opportunity.

KEYWORDS: Protectionism, Multi-polarism, Geopolitical Tensions, Supply Chain Fragility.

DEFINING GLOBALIZATION

Accelerating globalization was a hallmark of the late 20th and early 21st centuries. Consumers had more options at competitive prices, businesses were able to extend their markets and the effectiveness of their supply chains, and global capital markets increased credit availability and reduced borrowing costs. Markets became more efficient as a result, but now there is a growing awareness that global development remains uneven. Thus, deglobalization is defined as a trend toward a less interconnected world that is defined by strong nations, regional solutions, and border limitations is gaining prominence. Some markers of deglobalization include heightened trade barriers, reduced Foreign Direct Investment (FDI), localized supply chains, increased regulations, and geopolitical tensions. The most visible political manifestations of the backlash against globalization were Trump's election in 2016, Brexit, and tariff disputes between the US and China. Lately, the Russia-Ukraine conflict has weaponized international payments and imposed extensive sanctions on Russia, showcasing a global shift away from globalization and reshaping international dynamics.

WHAT SPARKED THE SHIFT TOWARDS IT?

Globalization increased wage disparity in a comparatively rich country by boosting the imports of manufactured goods using predominantly cheap labour from developing countries. Many nations and groups were left behind, which added to the general feeling of exclusion. These nations now blatantly confront unfair trade obstacles. International organizations have faced criticism for their perceived dysfunctionality, as they struggle to adjust to the evolving dynamics of an interconnected world.

COVID-19: THE ACCELERATOR?

The scale and impact of COVID-19's fallout has exposed the fragility of global supply chains. The pandemic revealed that states are ultimately motivated by their narrowly defined self-interests which can be found in the way that certain nations held tenaciously to their own stocks of face masks and medical equipment while others struggled to find essential supplies. Joseph E. Stiglitz argues that in order to put in place 'seemingly efficient supply chains, we searched the world over for the lowest cost producer of every link in the chain.' Globalization, in its singularly narrow pursuit of profits, has created a system that is 'plainly not resilient, insufficiently diversified, and vulnerable to interruptions.' As we navigate this era of supply chain fragility and self-interest, what emerging trends hold the key to shaping the near future?

Friendshoring, Nearshoring and Reshoring

Friendshoring refers to the practice of redirecting supply chains to countries that are considered politically and economically stable, in order to minimize disruptions to business operations. An example of this trend is the case of the tech giant Apple, which recently moved a portion of its iPhone production from China to India. Currently, only five per cent of Apple's products are manufactured outside of China, but according to a John Pierpont (JP) Morgan analysis, this percentage could increase to a quarter by 2025.

Nearshoring, on the other hand, involves relocating business operations to nearby countries, often those with shared borders. This strategic move can yield financial advantages, such as avoiding import tariffs on goods and enjoying reduced shipping costs. According to Visual Capitalist, Canada and Mexico are America's top two trading partners. In 2021, they accounted for more than $1.2 trillion of the total trade in the US.

Rank	U.S. Trade Partners	Goods Imports (in billion U.S. dollars)	Goods Exports (in billion U.S. dollars)	Total Trade (in billion U.S. dollars)
#1	Canada	$357.2	$307.6	$664.8
#2	Mexico	$384.7	$276.5	$661.2
#3	China	$506.4	$151.1	$657.5
#4	Japan	$135.1	$75.0	$210.1
#5	Germany	$135.2	$65.2	$200.4
#6	South Korea	$95	$65.8	$160.8
#7	United Kingdom	$56.4	$61.5	$117.9
#8	Taiwan	$77.1	$36.9	$114
#9	India	$73.3	$40.1	$113.4
#10	Vietnam	$101.9	$10.9	$112.8
	Total	**$2.85 Trillion**	**$1.76 Trillion**	**$4.61 Trillion**

Figure 1: Top Trading Partners of the US
(Source: Visual Capitalist)

Reshoring signifies the process of a company bringing back its business operations to its home country. This approach is driven by the desire to reduce exposure to external risks. According to research conducted by the Capgemini Research Institute in 2022, 89 per cent of surveyed executives across 15 countries identified supply chain disruption as the most significant short-term risk to their organizations. Furthermore, the report disclosed that 72 per cent of these organizations are actively considering reshoring or nearshoring production facilities nearer to their sources of demand.

Multi-polarism

As deglobalization gains momentum, a seismic shift towards a multipolar world is underway. Gone is the era of a singular superpower dictating decisions, as suggested by scholar Shapiro. For the past 30 years, the globe operated under unipolarity, largely dominated by the US. However, a new chapter is unfolding, ushering in a more balanced landscape. The Brazil, Russia, India, China, and South Africa (BRICS) Association and the Shanghai Cooperation Organisation (SCO) are pivotal players, with China, Russia, and India leading the charge. These alliances are deepening their ties, expanding economic sway, and harnessing abundant resources to foster a cohesive, multipolar global order. Notably, since 1995, BRICS nations' Gross Domestic Product (GDP) as a percentage of the world's GDP has consistently surged, as evident in Figure 2. The world is witnessing the ascent of a multipolar stage, with new actors and dynamics reshaping the global affairs.

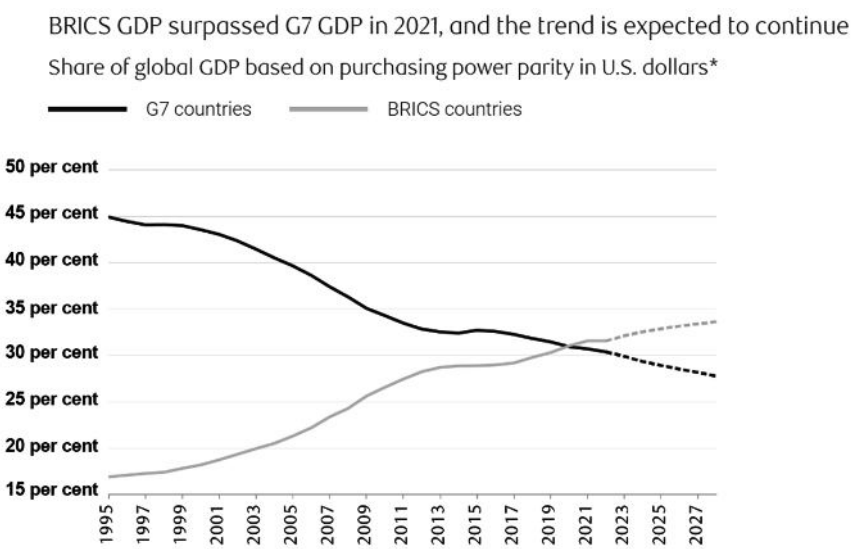

Figure 2: BRICS vs SCO GDP as a Percentage of the World's GDP
(Source: Royal Bank of Canada (RBC) Wealth Management, International Monetary Fund (IMF) Database; Data as on 17 May, 2023)

IMPACT OF DEGLOBALIZATION ON INDIA

Now, a crucial question arises: what lies on the horizon for India as the world undergoes the tides of deglobalization?Deglobalization will result in protectionism as well as fewer international collaborations, which will negatively impact Indian exports. It will lower competition and increase overall costs for products and services. Moreover, protectionist measures like Visitors International Stay Admission (VISA) regulations will prevent competent employees from leaving the country. This will impact their remittance and employability to the nation. Fewer alternatives can result in increased import expenses, forcing manufacturers and producers to pay more for machinery, commodities, and intermediate goods from foreign markets.

ARE BUSINESSES POISED TO THRIVE IN THE ERA OF DEGLOBALIZATION?

The Splinternet

Businesses grapple with the 'splinternet' - an emerging fragmented digital landscape led by competing China and the US leadership. It complicates operations, hampering market adaptability. Firms face a pivotal choice to either align with the US or China, or shoulder the dual cost of operating in two tech-driven worlds, each with its distinct regulations. With regard to data privacy, organizations are already beginning to show the first signs of technological divergence.

The Intensifying War for Talent

Increased immigration restrictions are yet another effect of the trend toward a more fragmented world. The recent political move toward stricter immigration policies in the US and Europe has intensified the battle for the best talent worldwide. Further immigration limitations pose a threat to the corporation's ability to hire internationally. Mounting restrictions on immigration curtails the opportunity for tomorrow's business leaders to learn how to navigate across differing social norms and cultures.

More Complicated Corporate Finances and Regulatory Regimes

In a more fragmented world, global finance gets trickier. Companies' once-easy access to capital hubs like New York or London may become costlier. Additionally, navigating shifting global power from multilateral players like the European Union (EU), World Trade Organization (WTO), and North AtlanticTreaty Organization (NATO) to local governments, tests international business-government relations. Taxation, tariffs, quotas, and environmental rules complexity force global firms to reevaluate their organizational structures.

How Does the Future Look Like for Multinational Corporations?

The problems highlighted above raises a question: Do we need to rethink organisational structures? In the future, firms can possibly operate as a group of independent, loosely connected, regionally run firms as an alternative to a global organization. Being affiliated with a wider network of businesses would allow these subsidiaries to benefit from knowledge transfer, but the majority of decisions about capital allocation and human resources are left up to the local firms. These autonomous businesses might even be able to list and trade on regional and international exchanges as separate entities. In a world of evolving business paradigms, can the future belong to these independently thriving subsidiaries?

HAS GLOBALISATION COME TO A COMPLETE END OR DOES IT MARK A NEW BEGINNING?

Many believe that globalization has ended, but a more likely scenario is the emergence of fragmented globalization marked by substitution. A good instance is the sanctions policy put on Russia. The EU-US-led sanctions over the past year did not substantially decrease Russia's oil shipments; instead, they have redirected them elsewhere, especially to China and India, reducing Russia's GDP by only 2 per cent. Despite being a crude and ineffective system, Russia and some

of its partners have succeeded in developing a parallel cross-border payments and settlement system. Also, relocating isn't easy to do in practice due to a severe dearth of skilled workers globally. Essential commodities are particularly difficult to substitute. In the end, it still boils down to competitive advantages. Although the public may criticize some business actions, but with the price rises that we have already seen as well as with wages that are not at par with inflation, we will reach a point where things are simply unaffordable. If consumers prefer buying less expensive products from abroad, the relocation trend will quickly reverse into an offshoring or nearshoring trend once again. So, it might not be the end of globalization.

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TRIBUTE AND FUN SECTION





MRS. ALIA BHATT

Actress and Entrepreneur

Taken by the Editorial Board

YT: It has been more than a decade since you entered the film industry and have acted in a wide variety of roles ranging from Shanaya in 'Student of the Year' to Keya Dhawan in 'Heart of Stone', which has moulded you into an intense actress. Can you provide insights into the ways in which your approach to acting and your perception of the film industry have evolved over the course of your career?

AB: Being an actor means the learning never stops. There is always a new role to prepare for, always new things to learn and to understand. And I love every minute of the creative process. I am a very planned, meticulous person most of the time - and that has remained constant throughout my career. I think what has changed though is that I am not as hard on myself anymore. Some films do well and some do not but at the end of the film's release I just remind myself that I have put in the work and given it my all. As for the industry, we have definitely witnessed positive changes, with a broader array of narratives and opportunities for female characters. I would say it is a continuous process of growth and learning.

YT: You made your production debut with 'Darlings' - a film that was received with a lot of critical appreciation and fanfare. Could you tell us more about the storyline and themes of 'Darlings' that led you to choose it as your first production venture and did the experience shape your perspective as a producer?

AB: I am a storyteller at heart, that being the genesis of eternal sunshine. It was created as a platform for good talent – especially for writers and directors. 11 years ago, I was given an opportunity by a large production house that set the trajectory for my career. I now want to be that opportunity for someone else. And I want to tell interesting stories. I have always felt that as an actor, your debut film chooses you. Likewise, as a producer, Darlings chose me.

Darlings is a dark comedy about a mother and daughter who find courage and love in exceptional circumstances. It is such a special film and Jasmeet came in with a strong vision. I found it exciting enough to turn into a producer.

YT: Ma'am, you recently launched your own sustainable maternity and children's clothing brand, named Ed-a-Mamma. What was your idea behind this brand, what were some of the valuable lessons you garnered from this entrepreneurial undertaking and how do you plan to take it forward in future?

AB: Ed-a-Mamma is my first entrepreneurial venture. I was going through a presentation about launching a fashion label and I said I would love to do a label but there are already so many, does anyone need another one? I asked if there is a gap in the market and we realized there is a real need for a world-class children's clothing brand made in India. That straightaway got my attention. I was working on a series of stories about a little girl and her little dog having different adventures to save the planet from ecological harm. It was my way of nurturing a love of nature among children.

So, I put together a team of ninjas and we started working on this dream project and giving it shape. We had to delay the launch because of the pandemic and of course like any other brand we struggled for the first few months with all the restrictions. But we are so proud of the product and it has been so well received.

Our clothes are all natural – from the fabric to the buttons to the packaging and I am excited to see an entire generation grow up wearing Ed-a-Mamma, my baby included.

It has been three years of learnings. My vision, my venture and my capital. But we came to a point where we were looking for a partner to help the brand grow strategically into newer areas like baby personal care and baby furniture. And that is how Reliance Brands Limited (RBL) came in and together I hope we can make the brand bigger and better from here. A brand that is made in India but for the world.

YT: You are a socially responsible individual whose social initiatives are commendable. Recently, you partnered with the Mandarin Oriental Hotel Group to donate funds to the Salaam Bombay Foundation, a humanitarian organization for adolescents. Can you elaborate on the motivations that drive your involvement in such endeavours and how they resonate with your own beliefs and values?

AB: It is such an honour to be the first Indian featured alongside so many global 'fans'. And what is better? Through the campaign Mandarin and I got to support Salaam Bombay Foundation, doing such a fantastic work for underserved communities. It is my belief that there is nothing more motivating than contributing towards the future of children, and in turn ensuring a better tomorrow for our planet.

YT: Given the fact that you are a role model for many young women in India who look up to you, what is some advice or guidance that you would like to offer them to help them pave their own path into the world of entertainment?

AB: Be true to yourself and love what you do. Opportunities will come and go and there will always be noise when there is crowd. But rise above that, and pave the way for your own journey.

YT: Ma'am, you have a highly demanding schedule in the film industry with various commitments and projects. How do you manage to keep yourself motivated and maintain a high level of enthusiasm in your work despite the challenges posed by such a busy and hectic lifestyle?

AB: I love being an actor and of course, it takes up most of my time. But as an actor, you learn the value of teamwork. It takes so many people to make a film and each one has to play their part while working towards the director's singular vision. So, I put together good production, investment and business teams, to help me in these aspects of my life. But I am a lifelong learner which makes everything I do very exciting.

YT: Given your diverse filmography, we are interested in understanding how you navigate the selection of projects. What factors or elements in a script or a director's vision appeal to you and make you say 'yes' to a particular film?

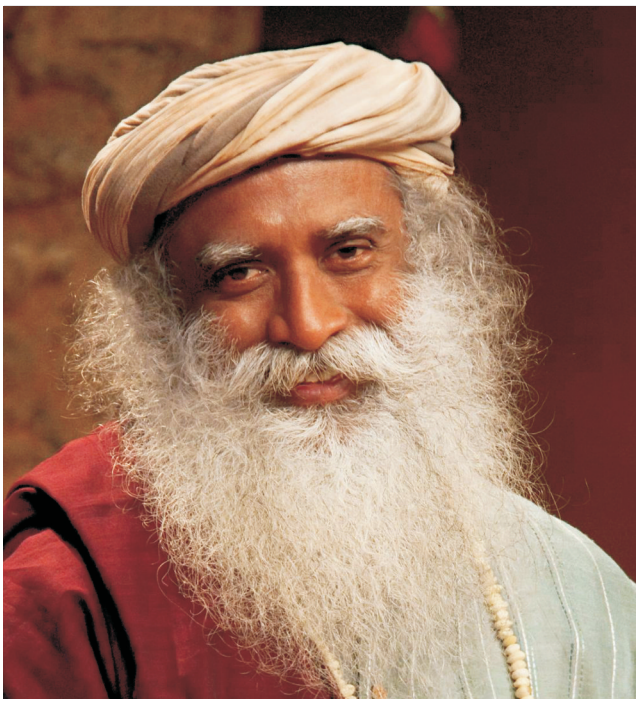
AB: For me, as an actor and a producer, story is the key. A compelling and well-written story is often a key motivator. My character should resonate with me on a personal level. I am alsooften attracted to roles that challenge me and allow me to explore different facets of acting, this helps me to grow as an actor constantly.

YT: Success often comes with its share of obstacles. Can you recount a specific challenge or setbacks you faced during your career as an actress, and take us through the steps you took to surmount it?

AB: Everyone goes through moments of self-doubt and I think when the doubt arises it becomes most challenging because at the end of the day, your true competition, shall and must always be yourself. You should always try and be a better version of yourself every day, at both personal and professional level. So, moments of self-doubt are the ones that might tend to throw you off but also the ones that are most important, because we all know, doubt is the key to knowledge. So let the doubt come and just ride through it.

YT: Ma'am, your resilience and talent as an emerging global icon have inspired several students at St. Xavier's College, Kolkata to pursue their dreams. What message would you like to convey to them?

AB: I have always believed change is the only constant, so whenever things get difficult just remember this too shall change and pass. You are just a small speck in a very large ocean. So, take every day, one day at a time, keep your head down, keep your heart open and keep going.



SADHGURU

Author, Spiritual Leader, and Yogi

Taken by the Editorial Board

YT: As a mystic and visionary, you have redefined the traditional concept of an Indian guru. But at first look, many are puzzled by a guru who rides sports bikes, wears trendy shades, and tees on a golf course. How do you reconcile your spiritual journey with those aspects of your personality?

SG: This image has spread everywhere that if you eat badly, dress badly, and live badly, you must be spiritual. A lot of people have this idea that spirituality is some kind of a disability. If someone says they are spiritual, the question is always, 'What are all the things you cannot do? Can you do this? Can you do that?' I confront this almost everywhere I go. People say, 'Oh, he drives his own car, what kind of guru is he?' If I have a chauffeur, will I become more spiritual?

This is one thing I want to make clear to everyone: spirituality is not a disability – it is a phenomenal empowerment of life. A spiritual process is about living strong, to be involved with everything in the world, but unentangled.

About riding bikes or playing golf, I am not inclined towards anything in particular. It is just that whatever I do, I do it in full rev. Whether I am conducting a program, driving a car or a motorcycle, or playing golf or football, I do it with utmost intensity, with absolute passion and involvement. Because I am involved with just about anything that is with me at a given moment, people think I am multi-faceted.

YT: Could you share how your environmental initiatives such as 'Rally for Rivers' and 'Save Soil' personally resonate with you?

SG: I am not an environmentalist. I am a worm on this planet. I have crawled on this planet for 65 years now, so I know my life and everything that affects my life. People will naturally say, 'Okay, everyone has lived on this planet.' No, they have not lived on this planet; they have lived in their heads – all psychological stuff. I do not have anything in my head, so I live on this planet. What supports life and what does not support life is always visible. If I just walk on the land, I know what is happening there – whether it is alive or not. Land is generally screaming in most parts of the world, but you do not hear it because your own noise is big.

According to the United Nations, in normal agricultural soil, the minimum organic matter to call soil as soil should be between three to six per cent. But in large parts of the world, it is well below one per cent. The United Nations agencies, with enough scientific data, are saying that the planet has agricultural soil only for another 80-100 crops. That means we would run out of soil in 45-60 years. If that happens, there will be a serious food crisis on the planet. What we are facing now is soil extinction.

This is why we have taken up the Conscious Planet – Save Soil movement, which is about bringing policy change that agricultural soil should have a minimum of three to six per cent organic matter based on regional conditions. The response has been fantastic. We have reached over 4 billion people. I addressed 193 nations at the UNCCD COP15 in Africa, where we suggested an incentive-based approach, and now, 81 nations are in the process of forming soil policies.

YT: Yoga has been an integral part of our Indian society for several thousand years leading people to live a more spiritually awakened and healthy life but it is only recently that the world has started giving Yoga its due credit. What according to you is the future of Yoga in the world and will it evolve as it travels the borders of various nations and traverses through different cultures?

SG: Today, nearly 2 billion people around the world are practicing some form of Yoga. It has lived for over 15 millennia because of its sheer efficacy. Over all these years, there was no campaign, papacy or enforcement. No one put a sword to somebody's throat and said, 'You must do Yoga!'

One reason for Yoga's growing popularity today is the large-scale transmission of education. We have more intellect on this planet today than ever before. Naturally as the intellect becomes stronger, people look for logical solutions to everything. The more logical they become, the more they become dependent on science and the outcome of science – technology. As the activity of the intellect becomes stronger in the world, more people will shift to Yoga over a period of time and it will become the most popular way of seeking wellbeing.

As there is a science and technology for external wellbeing, similarly there is a science and technology for inner wellbeing. Yoga is a technology for inner transformation on all levels, a comprehensive way of approaching the spiritual process through the body, through energy, through breath, through emotion and, of course, through intelligence. If you can simply look at this human system as an instrument and learn to use it as an instrument, it will become a powerful instrument. It can tell you everything about what is here and beyond.

Will Yoga evolve as other cultures take to it? The practices may get distorted and commercialized and many other things may happen – they are already happening. But I feel we are at a phase in the world where we should let Yoga happen to everyone. Later on, corrections can be easily done. Even with the most distorted form of Yoga, people may not be getting enlightened but at least their backache is going away! For someone who is suffering from backache right now, that is the biggest thing in the universe. If that goes away, they think that is all Yoga is about.

It is like, if I give an airplane to a local peasant, they will think the two wings are a problem, chop them off and put two bullocks onto it and drive. It is a tragedy but at least he has something to ride, maybe in a very minimalistic way but still something to ride. Later, we can talk to them about attaching wings to it.

YT: Your endeavour, Isha Foundation is known for its work in spirituality, education and environmental services. In addition to its existing initiatives, are there any new initiatives planned to achieve an even broader impact?

SG: In 2024, we will be launching a global movement called Conscious Planet because there is only one problem on the planet - the human being. If this human being is a little more sensible, so many problems would disappear right now.

What is the problem with the human being? Human being is the peak of evolution on this planet, the most intelligent, competent and capable, but one big mess, because once you attain to this level of intelligence and capability, everything that you do is supposed to happen consciously. The moment you do the same things compulsively, unconsciously, humanity is a disaster. That is where we are right now.

People are expecting some aliens to come and trouble us, but we are capable of destroying ourselves totally out of our own silly nonsense. What we need is a Conscious Planet. Conscious Planet does not mean the planet is going to glow with a halo. It is you and me. Human beings have to become conscious. So, in this direction, we will be launching this movement, where we want at least three billion people to have one simple 12-15-minute long spiritual practice that they can do every day for their wellbeing.

YT: The tendency to work relentlessly for long hours is a considered to be a positive attribute by society. Are humans actually made for the 9-5 corporate job lifestyle and how can one better balance their work and life?

SG: There is no such thing as work and life, it is life and life. Your work has to be lived, and your life has to be worked at. Do not make a demarcation that there is something called as work and life. There are different aspects of life, and they need to be dealt with. I work seven days a week, 365 days – but I do not need a vacation. If you really do what you care for, your whole life is a vacation. So, make your life a vacation by creating what you care for. Above all, the most important work is to work upon yourself.

YT: With evolving times, our focus has shifted with us becoming severely materialistic, running towards money and other such materialistic goals. This shift is more significant amongst the current generations. What are the ways that you can suggest that can help us strike that balance in life?

SG: If you look back 25 years ago, 15 years ago, and today, the bar of survival has constantly been raised in society. In every segment of society, survival has been raised to a place where even billionaires are struggling to survive among their community. I have, at close quarters, seen multi-billionaires still behaving like beggars. Their mindset is that of a beggar who sits on the street every day, thinking, 'How many more pennies can I gather?' The numbers are different but the experience of life is still the same because you raised the bar of survival.

In your life, you must fix the bar somewhere – this is what I need for my survival. You should not keep raising the bar constantly. You must fix it now, not after 25 years: 'This is my survival. After that, what do I want to do? What is it that really matters to me in my life?'

The essence of life is that we are able to explore as much as we can when we live here, to know and experience everything possible that is there in this piece of life that you call 'myself'. If that does not happen, you are just running on the treadmill. You may get exercise but it does not get you anywhere.

YT: Receiving the Padma Vibhushan is a remarkable achievement and testament to your exceptional contributions. How has this recognition influenced your ongoing work and aspirations, particularly in relation to the impact you aim to create in your field?

SG: I am not someone who thrives on recognition but at the same time, I respect this award because it is significant that the government is beginning to recognize the spiritual process as a powerful process in the world. Another reason is that Isha is a volunteer-run organization. Volunteers work seven

days of the week, 365 days. No one is remunerated for anything. For all of them – over 5700 full-time volunteers and over 17 million part-time volunteers – who have done many things, spending money from their own pockets and investing significant time and effort, this is a wonderful acknowledgement that the nation has not ignored them.

YT: We at St. Xavier's are really inspired by your ideals and your approach to much needed initiatives. Can you give a message for us college students to live a better and balanced life so that we can remain focused on our goals and do not lose ourselves in the pursuit of it?

SG: At this stage in your life, do not think in terms of what job to take or what education to do. The important thing is life. For everyone, their life is precious. What do you want to invest this precious life into? If you look at it this way, you will find something truly worthwhile to do. If you think in terms of how to earn a living or get something, then you will do something silly that you will regret for the rest of your life.

Most people are a regret, which is why they are going around joylessly – they are not doing what they want to do. Instead of creating what really matters to them, they are doing something for a living. Every creature – worm, insect, bird and animal – is earning their living. When an earthworm can earn its living, is earning a living an issue with such a big brain?

One thing that every young person should do is to stay by themselves for at least two or three days without the influence of their peers, professors or parents and look at what they want to invest this precious life into – however big or small, it does not matter. If you see that something is truly worthwhile and you invest your life in that, this will be a life of fulfillment.

Ranked amongst the fifty most influential people in India, Sadhguru is a Yogi, mystic, visionary and a New York Times bestselling author. Sadhguru has been conferred the Padma Vibhushan by the Government of India in 2017, the highest annual civilian award, accorded for exceptional and distinguished service. He is also the founder of the world's largest people's movement, Conscious Planet – Save Soil, which has touched over 4 billion people.



MR. SHAILESH LODHA

Actor, Comedian, and Poet

Taken by the Editorial Board

YT: With your extensive accomplishments as an actor, author and hasyakavi, it is evident that you excel in multiple artistic domains. Among these creative pursuits, which one resonates with you the most and what are the reasons behind your strong affinity towards it?

SL: The question itself contains its answer, and I want to begin by expressing my gratitude to God. He has provided me with opportunities to explore various forms of creative expression, including comedy, acting, and poetry. When people inquire about how I became a poet, I often respond by saying that I was born with this gift. It is a sentiment I share with others who believe that while universities can teach subjects like engineering or how to become a teacher, they cannot instil the essence of poetry within us. Considering all these factors, there is one thing that I hold close to my heart and will always cherish – poetry. It is because, in the end, I hope to be remembered primarily as a poet, and that is my deepest desire. Poetry flows through my veins, it resides in my soul, and acting, on the other hand, is like my physical vessel.

YT: You have been associated with the entertainment industry for a long period of time, and have gathered various profound insights throughout your career. Could you please enlighten us regarding your forthcoming aspirations and the distinguished platforms where you plan to exhibit your inherent skills?

SL: I understand that my response may not align with conventional expectations, especially in a world where the youth and everyone else is keen to learn about others' aspirations and future plans. It is common to hear motivational advice encouraging individuals to envision themselves in the next five or 10 years. However, my perspective is somewhat unconventional because I have never meticulously planned my life. Aspiration, in my view, differs from mere dreams. You may dream of becoming the President of America, but the reality may not align with that dream. Wanting something is distinct from having aspirations.

If given the opportunity, I would love to sing, as it is a passion of mine. However, it is crucial that one's

actions align with their career path. So, my response is that I have never been a meticulous planner. When I first participated in a 'kavisammelan' 44 years ago, I was just a 10-year-old child who had not planned to be on stage in front of 25,000 people. It was an unexpected turn of events, guided perhaps by a higher power.

I once dreamed of studying in Delhi and pursuing an M.A. in Hindi literature. I also aspired to join the National School of Drama (NSD), but those dreams remained unfulfilled. As the saying goes, 'Man proposes, God disposes.' Our lives are often scripted by a higher force. My journey to the stage and television was similarly unplanned. While many people come to Bombay (now Mumbai) in search of opportunities, Bombay itself beckoned me and offered me the chance to host my first show around 20 years ago.

I did not aspire or plan for any of this; it simply unfolded. I have no concrete plans for the future either. I believe that wherever God leads me, I will follow. I have not had the privilege of a godfather in the industry; instead, I feel that God has held my hand throughout my journey. Consequently, I cannot predict where I will be or what I will be doing in the future. My show, 'Waah Bhai Waah,' is currently ongoing and will soon complete its 400th episode, setting a world record on Shemaroo TV. Beyond that, I am uncertain about what lies ahead. It is as though there is a scriptwriter above us who has already penned our destiny, and I trust in the journey without any specific plans or aspirations.

YT: As a child you have always been fascinated by literature and share your poetic vigour with your mother, who was also captivated by the same. Was it a cherished childhood dream or a fortuitous sequence of events that led you embark upon this remarkable career?

SL: I grew up immersed in books and magazines, largely due to my parents' work in the Samaj Kalyan Vibhag department. They would often bring home newsletters from the office, and I found myself alone at home after school. It was during these solitary moments that I developed a deep connection with various magazines and newspapers, including 'Saptahik Hindustan,' 'Nandan,' and 'Champak.' I would enjoy my meals while reading them, a habit that has endured to this day.

This love for reading and humour was, in part, inherited from my father, who has a great sense of humour. I was particularly drawn to cartoons, appreciating the clever blend of satire and humour they offered. At around the age of 10, when I was feeling unwell at home, my parents would hand me a notebook and a pen. I would eagerly sketch cartoons, as they always fascinated me. Humour seemed to run in my blood, and this creative outlet allowed me to express it.

One day, while reading a magazine, I came across a short story. Inspired, I decided to try my hand at poetry, encouraged by the poems I had been reading for children. It was in September 1985 that I discovered my passion for poetry, and I recited my initial creations, about 10 to 12 poems to my parents. They praised my work, giving me the confidence to pursue this newfound talent.

A pivotal moment in my journey occurred on September 30th in a town called Sumerpur, where a Rashtriya Kavi Sammelan (National Poets' Meet) was taking place. My father borrowed a scooter, and with me seated between him and a relative, we travelled 38 kilometres to attend the event. On the stage, I recited those poems I had written just 20 days prior, in front of a large audience. The resounding applause and appreciation from the crowd left a lasting impression on me. It was then that I realized the power of my words and the impact they could have on people.

From that point on, I became known as a child poet or 'bal-kavi.' My journey as a poet paved the way for my career, and I owe much of my success to my poetry. It is fair to say that I owe a debt of gratitude to Hindi films and magazines for introducing me to the world of poetry. Without poetry in my life, I would not be where I am today. Shailesh Lodha is synonymous with poetry, and my proficiency in

this art form played a pivotal role in my acting career. I am deeply thankful for the support and encouragement I received from my parents, especially for taking me to that life-changing Kavi Sammelan. It was a turning point that shaped my destiny.

YT: You are widely known for your exceptional comedic talent and the ability to consistently bring audiences to laughter. How do you strike a balance between pushing comedic boundaries and ensuring inclusivity, while keeping your jokes relatable and enjoyable for diverse viewers?

SL: To begin with, being highly observant is crucial. You must keenly observe people and situations. A few years back, an article in India Today referred to me as a management guru and a poet who transformed Marwadi culture into a brand on stage. This transformation occurred because I closely observed Marwadi culture. I believed that the unique qualities we possess were unmatched anywhere else in the world. I observed, reacted, and wove my poetic words into an atmosphere that resonated with everyone. While what you do is important, the manner in which you do it holds even greater significance.

Friends and acquaintances often mention that when I am on stage, I appear effortlessly engaged. I interact with people, scan my surroundings, casually put my hands in my pocket, and discuss the smallest intricacies of society that I have perceived and observed. When I talk about these experiences, people naturally connect with them. As for my poetry, its essence, mood, and emotions remain timeless. The emotions embedded in my poetry continue to reside in people's hearts. Regardless of how advanced technology becomes, it can never surpass the depth of feeling shared between a mother and son, or a father and son. Whether it is ChatGPT, Artificial Intelligence, or anything else, nothing can replace the innate chemistry of human relationships. These emotions are firmly rooted in our hearts.

Once again, I must acknowledge the kindness of God for granting me the insights and skills to discuss these topics. Consequently, emotions remain unchanged. I cannot be artificial in my life; I am as authentic as they come. If there is anything to be found, it will be evident on my face. I do not rely on filters or prepared jargon because that is not who Shailesh Lodha is. I operate in the moment, allowing spontaneity to guide me.

YT: You were born into a Marwadi family in Rajasthan, renowned for their deep-rooted values, strong traditional culture and business acumen. How has your family's rich heritage shaped your perspective on life and influenced your artistic pursuit and who were your sources of inspiration during your formative years?

SL: Born into a Marwadi family in Rajasthan, known for its deeply ingrained values, rich traditional culture, and business prowess, you might assume that I inherited a strong business acumen. However, that is not the case. Neither my father nor my grandfather had any business background. My grandfather worked in the railways, and my father held a government job. We come from a lower-middle-class background, where the emphasis was on our value system rather than financial pursuits. The values instilled in a modest family like ours become an integral part of your identity, whether you embrace them willingly or not. These values, which I cherish, were a gift of my birthplace and family. I am immensely grateful for being born into such a family where these values are deeply rooted. While I had no say in where I was born, I consider it a divine gift. Firstly, I am thankful for being granted the gift of life as a human being, and secondly, for being born in the incredible country that is India.

My father played a pivotal role in shaping my perspective on life. Despite our modest circumstances, my father has a remarkable sense of humour, and he provided me with valuable life lessons. We lived in a cramped 8x8 room, sharing it with my two sisters who completed their

graduation and postgraduation, while I pursued my law degree. In terms of material comforts, we had very little.

However, what I lacked in material possessions, I made up for in experiences and observations. My father's transferable job took us to various small villages, exposing me to different environments and cultures. This exposure was a profound learning experience for me, especially as I attended different schools in Rajasthan. It was during this time that I began to discern what I wanted in life and what I did not.

I consider my school to be the world itself, and I am a perpetual student, continuously learning from the people and experiences that come my way. During a period when I worked as a door-to-door and shop-to-shop salesman for medicines, I acquired invaluable insights. I am deeply appreciative of the value system instilled in me by my family, which has enabled me to see every moment and every person as a teacher.

Hence, my family's humble background and strong values have profoundly influenced my perspective on life and my journey as an artist. These values, along with the diverse experiences I gained through my father's job, continue to shape my outlook, reinforcing the belief that every moment and every person has a lesson to offer.

YT: Your beloved portrayal of Taarak Mehta in the long-running television show 'Taarak Mehta Ka OoltahChashmah' has garnered widespread recognition. Could you please elaborate on how this role influenced your personality and how you immersed yourself in the essence of this character?

SL: Honestly, playing Taarak Mehta did not alter my personality. Acting is just that - acting. I have not quite grasped the concept of completely becoming a character. However, the process of working on the show did affect me positively. I am naturally impatient, but the demands of daily soap operas taught me patience. Makeup might start at 9 A.M., but my scene could be filmed at 5 P.M.. This experience made me more patient.

What is interesting is that, being a poet and writer, my personal vocabulary and thoughts often seeped into the character. In some scenes, you could sense it was Shailesh Lodha speaking, whether through a couplet, shayari, or a story.

Recently, I learned that I might be the only actor to have appeared in nearly 5000 episodes across various shows, including both fiction and non-fiction genres. Shows like 'Comedy Circus' and 'Comedy ka Mukabla' alone accounted for about 3000 episodes. I consider myself blessed with the grace of Maa Saraswati throughout my journey.

YT: In today's time, public figures hold a prominent position in society, often wielding significant influence and reach. In what ways do you actively utilize your influential position to promote social causes, raise awareness about pressing issues and add to the betterment of the society?

SL: I initially held reservations about social media, questioning its purpose and the need to share my personal activities with others. However, the necessity arose because my team identified numerous fake profiles impersonating me on the internet. To prevent any misinterpretations of my intentions, I had to establish my genuine presence.

Despite my reserved approach on social media, I remain dedicated to working for social causes. I believe in actively contributing through my efforts and resources.

I have observed that social media often fosters superficial and polarized discussions. Regardless of the topic, one can find a multitude of contrasting opinions. I find this phenomenon quite perplexing. Shockingly, I have even come across instances where videos featuring the incomparable Lata Mangeshkar Ji received dislikes on YouTube. It is difficult to fathom how anyone could dislike such exceptional content. Consequently, I question the

suitability of social media as a platform for meaningful discourse.

Additionally, I have noticed that individuals with millions of followers, some of whom may not be widely recognized, engage in the creation of offensive content. This raises doubts about whether sharing my thoughts with such an audience is worthwhile. While there is no shortage of valuable content and positive ideas, the prevalence of negativity on social media outweighs the positive aspects.

YT: As an esteemed personality who has left an indelible impression on multiple generations, the students of St. Xavier's College (Autonomous), Kolkata hold great admiration for your remarkable success in various fields. What message would you like to convey to them?

SL: I could not have even dreamed of attending colleges like St. Xavier's College, but fate has been generous. Just a few months ago, I had the honour of being a keynote speaker and Chief Guest at Shree Ram College of Commerce, and today I have the privilege of being interviewed by St. Xavier's College (Autonomous), Kolkata.

It is easy to recite bookish lines, but my main message is that failures should not dishearten you. Edison did not invent the light bulb on his first attempt, and no one learns to ride a bicycle without falling at least once. Do not overly fixate on grades. Attend college for the pursuit of knowledge, not just for marks. Personally, I am uncertain when I'll need to use concepts like cos, sin, or pi in my life. I am a testament to a student who studied in Hindi medium schools and yet, here I am today.

So, convey to your parents that you are their children, not trophies, and always strive to accumulate knowledge. Wishing you all the best!



MR. LAXMI RATAN SHUKLA

Former Indian Cricketer and Former Minister of Youth Services and Sports

Taken by the Editorial Board

YT: You have been associated with the Indian Premier League (IPL) since its inception in 2008. T20 cricket has evolved a lot since then. How much of that change do you feel is owed to the IPL?

LS: When reflecting on the profound impact of the IPL on the cricketing world, I cannot help but marvel at the monumental change it brought about since its inception in 2008. Looking back, the cricket landscape was notably different, with the existence of the Indian Cricket League (ICL) preceding the IPL. The decision by Lalit Modi and the Board of Control for Cricket in India (BCCI) to launch the IPL marked a crucial turning point. It shifted the paradigm from the limited live coverage of Ranji Trophy matches to the groundbreaking move of broadcasting every IPL game live on Star Sports. This shift not only transformed the viewing experience but also provided emerging players like myself with an unprecedented opportunity to showcase our talent to a nationwide audience. The thrill of knowing that the whole of India was watching us play live was nothing short of overwhelming and filled us with a deep sense of enthusiasm.

As the IPL unfolded, its impact exceeded our expectations. It was not just about individual player fandoms; it became a phenomenon that captured the hearts of a diverse audience, transcending boundaries and uniting fans in their appreciation for the league as a whole.

I vividly recall playing in a packed stadium in Bangalore, where the intensity of the crowds during the late 2000s and early 2020s was unlike anything we had experienced before. The demand for IPL tickets skyrocketed, signalling a shift in cricket enthusiasm that was palpable. The league not only became a spectacle but also served as a launchpad for players to make their mark on the international stage, based on their performances in the IPL.

In essence, this transformative change in cricket dynamics, from the stands to the playing field, can be attributed to the visionary decisions made by the BCCI. Describing the IPL experience is a challenge; it is an indescribable phenomenon that can only be truly understood by actively subscribing to the excitement and energy it brings to the world of cricket.

YT: Throughout your cricketing career, you played various roles as an all-rounder, captain, and coach. How did these different responsibilities shape your approach to the game, and which role did you find most challenging and rewarding?

LS: In life, challenges are inevitable as long as we live. Each role we play demands complete dedication until our last breath. Remember, life does not exert pressure on us; rather, it is how we carry ourselves as leaders that truly matters. Everyone possesses leadership qualities, and acknowledging oneself is as crucial as appreciating others. Consider my life as an example. I have played under various captains, and many have played under my leadership. Nonetheless, I always treated it as a mere sport. Here is an analogy students might relate to: during exams, some remain calm while others panic, leading to mistakes in answering familiar questions. Planning the next day before sleeping is vital. Those who follow this principle tend to perform well. Adhering to certain principles diligently attracts fortune. There exist two types of woes: positive and negative. For instance, when Sachin faces Shoaib Akhtar, worrying about his performance enhances his game—this is a positive woe. Conversely, panicking about Shoaib's pace is a negative woe. Positive energy propels us forward, while negative energy holds us back. Falling is inevitable, but the key is to rise with a positive approach.

YT: As someone who has successfully pursued a dual career in both professional cricket and politics, your journey is truly worth idolizing. Do you think your experience on the cricket pitch helped you in your position as the Sports Minister of West Bengal?

LS: For those familiar with me, my identity has primarily been associated with cricket. It was only after finding a sense of accomplishment in cricket that I ventured into politics. My 26-year journey in cricket was immensely thrilling. Many believed I should have participated in 300 One Day Internationals (ODIs), there were political factors acting against me, not being granted a comeback despite being recognized as the best all-rounder et al. Nevertheless, I focused on doing my part and remained hopeful. Living in the present moment has always been my approach—I prefer accomplishing as much as I can today rather than deferring tasks for tomorrow. In politics, I diligently fulfilled my duties and aimed to serve the people to the best of my ability. Eventually, realizing that this path was not the best fit for me, I departed gracefully while preserving my self-respect. Despite speculations suggesting party switches, such actions do not align with my nature. This academy holds immense value for me; it is akin to a temple, and I would feel a deep sense of dismay if anyone questioned my ethics. I have cherished both my careers in politics and athletics, looking back at them with great fondness.

YT: With your extensive experience in both professional cricket as well as in politics, you have an unique perspective on the governance of cricket in India. Do you think Indian cricket is as transparent as it should be and what are the changes that you feel are necessary to be made with time?

LS: I feel that if four to five selectors make the Indian team, they consider domestic performance. Some performances are overlooked but we cannot construe it as corruption. Sometimes believed quality of the player triumphs actual performance and selectors cannot back it up. It is a common occurrence in cricket and has affected several deserving cricketers. I will still not call it corruption or partiality, but it is a recurring phenomenon.

YT: Your international cricket career spanned across both ODIs and Twenty20 Internationals (T20Is). How did the nature of these formats differ, and what adjustments did you have to make to your game to excel in both formats?

LS: I have also been involved in Test cricket. Unlike carrying spare parts tailored for each format, success in cricket relies significantly on mentality. Similar to Rohit Sharma and Virat Kohli, I have participated across all three formats, necessitating the retention of distinct mindsets for each game. In the realm of academics, each stage—be it 10th grade, 11th grade, or college—requires a unique approach. Life progresses in phases, and for me, cricket and life are akin to twins. Cricket, like life, unfolds one ball at a time, presenting singular opportunities. Both entail inevitable highs and lows, and neither can be navigated without the support of a team or a family. Consider the term 'professional'. It's bestowed upon individuals who have groomed themselves diligently from the grassroots level. While many contemporary counsellors offer guidance based on theoretical education, the world of sports operates more on

practicality than theory. Having a clear, unwavering goal prevents unnecessary diversions of attention. When engaged in a T20 match, I will leave my Test and ODI strategies behind—because in the end, it is all about mental focus.

YT: As a prominent figure in Indian domestic cricket, you have had the opportunity to interact with numerous young players. What are some of the essential qualities which young cricketers should possess and how did you cultivate these qualities in your coaching role?

LS: Certain players are undoubtedly blessed with exceptional abilities, yet in my observations, it is often the less-talented players who ascend to the top. While we admire prodigies labelled as 'talented students' or 'talented bowlers,' the ultimate key to success lies in hard work. Individuals who toil diligently build themselves from the ground up, and over time, they become nearly impossible to supplant.

YT: In 2015 you made the decision to retire from all forms of cricket. What were some of the factors that influenced this decision and how have you stayed connected to the game and continued to contribute to Indian cricket in different capacities?

LS: I found myself in a place where I could not find joy in the game anymore, and it did not sit well with me. Sometimes in life, circumstances compel us to make decisions—whether they lead to a better or worse outcome. I made a choice to bring closure to that chapter. Initially, it was a temporary absence. However, I realized I owed my time to my family and children, and I saw an opportunity to invest more in politics alongside them. While I could potentially return to politics, I knew that returning to the field was not an option.I was happy and I am currently in a happy state as well.

YT: Apart from your cricketing and political endeavours, you are also involved in various charitable and social initiatives. Could you shed some light on the causes that are close to your heart and the work you have been doing to bring about positive change in society?

LS: I have never engaged in charity for the mere sake of it. My actions stemmed from what felt right in the moment. Coming from a humble background, I have always held the belief that if I have ? 5 in my pocket, I will strive to give ? 3 to someone in need. You might have read about my decision to donate my earnings from my commentary with Star Sports. Perhaps, as students, you also try to contribute positively with the allowance you receive. The crucial aspect is the attempt to do good. The end result holds little significance; it is the effort itself that deserves recognition and reward.

YT: As the former Minister of State for Youth Services and Sports in West Bengal, you had been actively involved in promoting sports and nurturing young talent. Could you share some of the initiatives you had undertaken and looking ahead, what are your aspirations and goals for the future?

LS: The LRS Academy holds the distinction of being the first academy established by an international cricketer that does not impose any fees. During my childhood, my father could not afford to provide us with the proper coaching facilities. This experience fueled my decision not to charge any fees from the young students who attend my academy. In addition to the existing academy, we have another one in Jhargram and are endeavouring to establish a new one in Singur. I occasionally contribute by writing for Anandabazar, and I reinvest the proceeds into these initiatives.

YT: The students of St. Xavier's College (Autonomous), Kolkata have always been captivated by your remarkable and dynamic career. What message would you like to convey to them?

LS: St. Xavier's College stands as a pivotal institution that significantly shapes one's career path. Being a part of this esteemed institution is a dream shared by many boys and girls. To all the students of St. Xavier's College, I extend my best wishes for your future endeavours, and I genuinely hope your aspirations come to fruition. Always remember the importance of supporting one another; it's an indispensable universal principle. Your economic status holds far less significance than your moral standing, as it is the latter that truly defines your net worth.

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The Dual Faces of Rupee Internationalization: Advocating Benefits, Anticipating Risks

Dr. Santosh Kumari
Professor, Department of Commerce
Shri Ram College of Commerce

> This audacious move is a testament to India's ambition to recalibrate its economic positioning and wield influence in the international monetary sphere.

ABSTRACT

The Reserve Bank of India (RBI) has set its sights on expanding the global presence of the Indian rupee, by increasing in the cross-border transactions. Presently, the rupee's global participation hovers at a mere 1.7 percent, trailing significantly behind the dominant United States (US) dollar, which commands an 88 percent share in global trade. This article critically evaluates the potential ramifications of reducing India's dependence on foreign exchange, scrutinizing whether such a shift would indeed accrue substantial benefits for the nation's residents, businesses, and overall economic stability. Chief among these potential gains is a diminishment in vulnerability to external shocks and an escalation in savings, bolstering economic resilience and stability. However, a nuanced analysis also unveils a spectrum of risks that loom over this pursuit of rupee internationalization. Foremost among these apprehensions is the prospect of heightened currency volatility, potentially triggering socio-economic hardships. The trajectory of the rupee's value on the global stage might sway unpredictably, impacting the purchasing power of individuals and engendering economic uncertainties. This article endeavours to delve into a balanced assessment of the implications surrounding the internationalization of the Indian rupee. It seeks to shed light on the potential trade-offs that India may encounter in its pursuit of reducing foreign exchange dependence.

KEYWORDS: Currency, Internationalization, Greenback, Globalization, Reserve Bank of India (RBI), Economy.

INTRODUCTION

As the world economy navigates a complex web of financial challenges and geopolitical shifts, India emerges as a key player in the global currency landscape, orchestrating a strategic manoeuvre often dubbed the 'Greenback Gambit.' This audacious move is a testament to India's ambition to recalibrate its economic positioning and wield influence in the international monetary sphere.

In recent times, India's approach towards the US dollar, often referred to as the greenback, has undergone a subtle yet significant transformation. Historically tethered to the dollar in trade and reserves, the country is embarking on a nuanced and calculated diversification strategy. This strategic pivot marks a departure from traditional norms, signalling India's intent to wield greater autonomy and mitigate risks associated with over-dependence on any single currency.

The Greenback Gambit is multifaceted, encompassing a spectrum of initiatives ranging from bolstering reserves in alternate currencies to fostering bilateral and multilateral agreements aimed at reducing the dollar's dominance in trade transactions. India's strategic manoeuvresextend beyond mere economic diversification; they embody a geopolitical statement, positioning the nation as an influential player in shaping the future of global finance.

This article delves into the intricacies of India's Greenback Gambit, unravelling the motives, implications, and challenges inherent in this bold economic play. It scrutinizes the ripple effects on India's trade dynamics, investment inflows, and diplomatic relations with key global players.

INDIA'S UNTAPPED POTENTIAL

The Indian foreign trade market has huge potential which still remains untapped. Compared to the merchandise and services trade of the US, India is miles behind. According to the monthly trade statistics released on international trade of India by the Government of India: Ministry of Commerce and Industry (October 2023), India's overall exports (merchandise and services combined) in October 2023 is estimated to be $62.26 billion (Table 1) whereas according to monthly data by United States Census Bureau (6thDecember, 2023), US exports for October 2023 were $258.8 billion, $2.6 billion less than September exports (Table 2). There is a huge gap between India and the US but India has exhibited a positive growth of 9.43 per cent over October 2022 indicating its stored potential to boost up its exports and strengthen its currency and make a global mark. India is on the path to emerge as a bigger player in the foreign trade world and various steps are being taken. RBI has suggested internationalization of rupee to attain the objective of making Indian Rupees (INR) as a 'Vehicle Currency.'

		October 2023 (USD Billion)	October 2022 (USD Billion)
Merchandise	Exports	33.57	31.60
	Imports	65.03	57.91
Services*	Exports	28.70	25.30
	Imports	14.32	13.51
Overall Trade (Merchandise +Services) *	Exports	62.26	56.90
	Imports	79.35	71.42
	Trade Balance	-17.08	-14.52

Table 1: India's Foreign Trade in Goods and Services (Source: Government of India- Ministry of Commerce and Industry, October 2023)

U.S. INTERNATIONAL TRADE IN GOODS AND SERVICES DEFICIT		
Deficit	$64.3 billion	+5.1 per cent
Exports	$258.8 billion	-1.0 per cent
Imports	$323.0 billion	+0.2 per cent

Table 2: US Foreign Trade in Goods and Services (Source: United States Census Bureau as on 6thDecember, 2023)

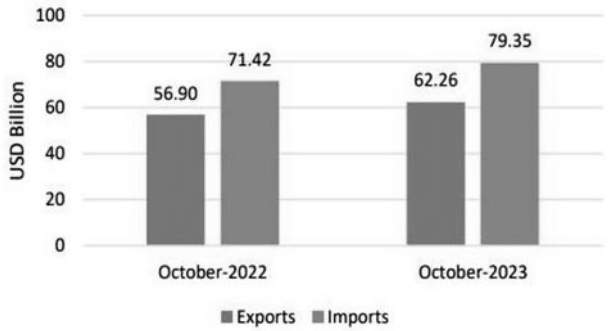

Figure 1: Comparison between Foreign Trade of India in 2022 and 2023 (Source: Government of India- Ministry of Commerce and Industry as on October 2023 and United States Census Bureau as on 6thDecember, 2023)

RUPEE INTERNATIONALIZATION

India is aiming to reduce its dependence on the dollar and other foreign currencies, boost trade, and ensure economic stability by implementing the rupee internationalization. This involves allowing full convertibility of the current account, allowing residents to remit up to a limit of less than or equal to $250,000 per financial year for any current or capital account or both. This means no restrictions on the amount of rupee that can be converted into foreign currency to acquire overseas assets or for foreign trade. Similarly, no restrictions will be imposed on foreign investors to acquire assets in India.

An RBI committee, headed by RBI executive director Radha Shyam Ratho, has suggested various measures to accelerate the internationalization of the Indian rupee, including using existing bilateral and multilateral payment and settlement mechanisms, opening accounts outside the country of the currency, and the availability of a robust INR denominated payment mechanism. The Inter-Departmental Group (IDG) on Internationalization of INR also suggested that the Reserve Bank may target the inclusion of the INR in the International Monetary Fund's (IMF) Special Drawing Rights (SDR) basket, which is based on only four currencies: the US Dollar, Euro, Chinese Renminbi, Japanese Yen, and the Pound Sterling. India aims to make a position in the SDR basket to make its presence felt. 'The IDG is of the view that internationalization is a process rather than an event, with continuous efforts to build upon all the initiatives that have been taken in the past.'

ADVOCATING BENEFITS

Diversifying our reserve assets beyond traditional currencies like the US dollar mitigates risks associated with overreliance. For instance, between 2018 and 2021, India's foreign exchange reserves grew from $393 billion to over $600 billion, reflecting increased diversification efforts. Internationalization of rupee would reduce transaction costs by reducing dependency on other currencies like the US dollar and euro and their fluctuating exchange rates for trade settlements, currency conversion costs would also be reduced. For instance, in 2021, India's trade with select nations in local currencies, rather than dollars, saved an estimated 2 to 3 per cent on transaction fees.

It would also enhance trade relationships with countries that are willing to trade in Indian rupee and thus would increase the volume of trade. The recent surge in Foreign Portfolio Investment (FPI) in India, reaching around $38 billion in 2021, underscores this potential. A global prominence of rupee would also stimulate growth in India's financial markets. Lastly, strengthening the rupee's international presence aligns with India's aspirations as a global economic player. A wider acceptance of the rupee in international transactions would indicate confidence in India's economy.

ANTICIPATING RISKS

The internationalization of the Indian rupee brings substantial benefits but also carries significant risks that demand careful consideration. While enhancing the rupee's global footprint is advantageous, it exposes the economy to heightened vulnerabilities. The potential benefits, illustrated by the increase in India's foreign exchange reserves from $393 billion in 2018 to over $600 billion, emphasize the capacity to diversify reserves effectively. However, this progression introduces risks of exchange rate volatility, which can adversely impact the economy. Recent estimates suggest that a 10 per cent depreciation of the rupee can amplify inflation by 0.4 per cent to 0.6 per cent.

Additionally, greater global exposure may subject domestic monetary policies to external influences, potentially constraining their effectiveness in addressing domestic economic challenges. The surge in Foreign Portfolio Investment (FPI) to approximately $38 billion in 2021 highlights increased foreign interest but also accentuates the risk of rapid capital outflows during market uncertainties. Furthermore, market speculation and excessive reliance on international markets could expose the rupee to speculative movements, necessitating robust regulatory measures and surveillance mechanisms. In summary, while internationalizing the rupee presents immense opportunities, it also exposes India to risks of exchange rate volatility, challenges in monetary policy management, potential capital outflows, and susceptibility to speculative activities. These risks necessitate proactive measures, prudent policies, and enhanced regulatory frameworks to ensure the stability and resilience of the Indian economy.

GLOBAL EVENTS THAT ARE INSTIGATING THE INTERNATIONALIZATION OF RUPEE

Indian currency, the rupee, has been undergoing globalization due to recent events such as sanctions on Moscow and the acceptance of 18 countries for trade payment in INR. This has led to India exploring the integration of more countries with dollar deficits and expanding Vostro accounts to 22 partner countries. Geopolitical tensions and disruptions in global supply chains have also highlighted vulnerabilities in relying solely on major currencies for international trade. India has been engaging in bilateral and regional trade agreements, exploring settlements in local currencies rather than dominant global currencies. However, the full-scale internationalization of the rupee remains a gradual and complex process.

CONCLUSION

The internationalization of the Indian rupee presents a strategic avenue with tangible benefits that far surpass the associated risks. India's diverse and robust economy, exemplified by the steady growth of foreign exchange reserves from $393 billion in2018 to over $600 billion, underscores our capability to diversify reserves effectively. The potential to reduce transaction costs, evidenced by an estimated two to three per cent savings on trade transactions in local currencies instead of dollars, offers a practical advantage. Moreover, the recent surge in Foreign Portfolio Investment (FPI) reaching around $38 billion in 2021 testifies to the allure of a more internationalized rupee, attracting foreign investors. Considering inclusion in the SDR basket also demands sustained fiscal discipline and prudent monetary policies. Additionally, while the inclusion reflects confidence, it does not guarantee immediate benefits; the rupee's demand in international transactions might not surge immediately, impacting its liquidity and usage globally. While concerns about exchange rate volatility and potential impacts on domestic monetary policies exist, proactive measures such as hedging mechanisms, robust regulatory oversight, and prudent fiscal strategies have showcased the rupee's resilience amidst global currency fluctuations. India's aspirations for an internationalized rupee align with its economic ambitions. However, this requires a supportive regulatory framework, strong economic fundamentals, stability in inflation rates, and a robust financial infrastructure. India must ensure liquidity, convertibility, and confidence in the rupee to facilitate its widespread use in international trade settlements. Prudent management strategies, such as hedging and market interventions, can mitigate volatility risk. Advisable fiscal and monetary policies, effective communication strategies, and regulatory measures can counter speculative activities and ensure stability.

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Investing in India Growth Story: Equities for the Long Run

Anish Teli
Managing Partner of QED Capital Advisors LLP

> An investment of ₹100,000 made in a popular balanced fund in February 1994 would have become ₹6.9 million over a span of 26 years, growing at a Compounded Annual Growth Rate (CAGR) of 17.6 per cent.

ABSTRACT

The investment landscape in India showcases great potential. Despite concerns about high market values and potential risks tied to national elections, India's efficient economy is attracting investor attention. Investing aims at countering the erosion of purchasing power caused by inflation, with equities proving to be a robust long-term hedge. However, Indian households show a significant bias towards low-return fixed deposits over equities. Over 30 years, Sensex has grown steadily, emphasizing the significance of long-term investing. Despite this, investors often exhibit short-term behaviours, shying away from equity commitments. Index funds present a replicable strategy yet remain underutilized due to human aversion to copying success. Gold and real estate, deeply ingrained in Indian investment culture, have shown lower returns compared to equities over the long run. Ultimately, a focused financial approach tailored to individual goals is essential, leveraging the power of compounding for wealth creation.

KEYWORDS: Inflation, Equity, Investment, Liquidity, Hedging.

India is showing a lot of promise as an investment destination right now. This is mainly because of government reforms and investments in the economy. These changes are making the Indian economy more efficient and larger in scale. Also, with global companies looking to diversify their supply chains, many are considering India as a key location. This shift is good news for investors, as it is leading to better profits and overall performance of the Indian market. This improvement is driven by strong sales in local currency, better net profit margins, and a stable outlook for both inflation and the Indian rupee.

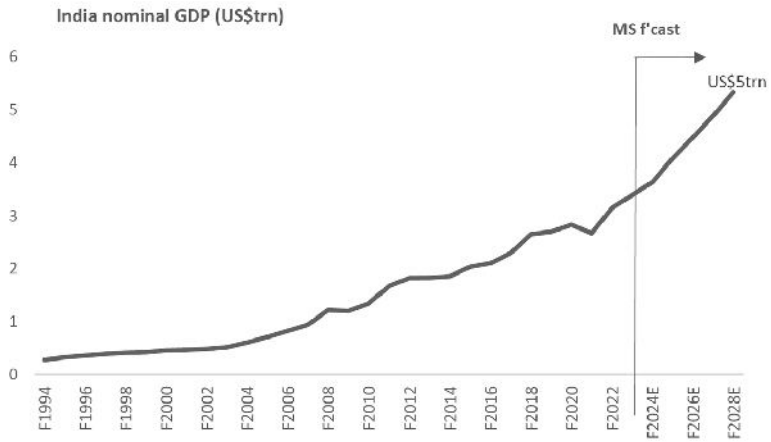

Figure 1: India's Nominal Gross Domestic Product (GDP) Forecasts (Source: CEIC, Haver, Morgan Stanley Asia Economics Research Estimates)

Investing is a means to an end. We invest to meet our life goals such as buying a home, children's higher education, or our own retirement. The first challenge is to beat inflation, which reduces the purchasing power of our hard-earned money. What costs ₹100 this year, in all likelihood, would cost ₹110 the following year, thanks to inflation. And if our ₹100 has not kept pace with the inflation, effectively our wealth is being eroded and we are falling behind in meeting our goals.

One of the most consistent and effective ways to counter inflation over the long run is to invest in equities. When we invest in a broad-based equity index fund, it usually grows at the rate at which the earnings of the underlying companies grow. Many of these companies are leaders in their fields. They pass on the price increases (due to inflation) to their customers and stay profitable. The share prices, thus, keep rising. This is how equity investing protects investors from the inflationary impact.

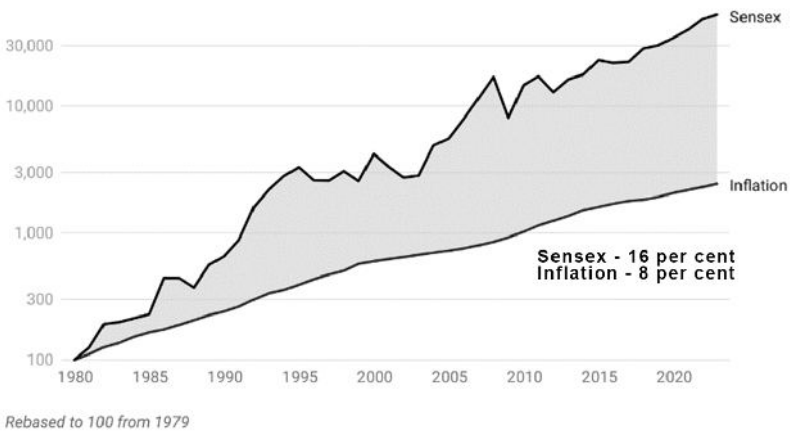

Figure 2: Comparison of Changes in Sensex and Inflation Annually (Source: QED Capital and Bombay Stock Exchange (BSE))

However, there are some concerns. Investors are worried about the high market values, how much investment is already in India, and potential risks from the upcoming national elections. While market values are a bit high, they are still reasonable when considering India's return on equity and positive changes in earnings. Also, there is a lot of local investment happening, which helps in reducing the overall risk.

But lets us take a few steps back and see why we invest and why investing in equities for the long run is one the best ways to create wealth for Indian investors.

'Inflation is taxation without legislation.'- Milton Friedman

WHY DO WE INVEST?

The term inflation as understood in economics is the general increase in prices caused by imbalance between quantity of money chasing a limited supply of goods and services. Today, it is has become a synonym for general price increase. Inflation, like stress or spice, is good in small measures. However, over the longer term, it is impact on purchasing power is devastating.

Indian investors held about ₹135 trillion in the form of savings and fixed deposits (FDs) with commercial banks as of March 2020. That is about $2 trillion. These deposits earn a paltry 3.5 per cent post-tax return whereas annual inflation averages around 6 per cent. Inflation with respect to healthcare and education is even higher. Investing in bank deposits thus reduces your purchasing power.

Compare this to about ₹15 trillion invested in equity mutual funds and the asset allocation for Indian households is lopsided. While fixed income products like FDs and liquid funds do a have role in your portfolio, it may not end up even keeping up with inflation over the long run if over-allocation takes place.

The latest Reserve Bank of India (RBI) Estimates of Household Financial Savings, first quarter of 2020-21, show that Indian households are under-invested in equities and have a large allocation to bank FDs and other such products when it comes to financial assets.

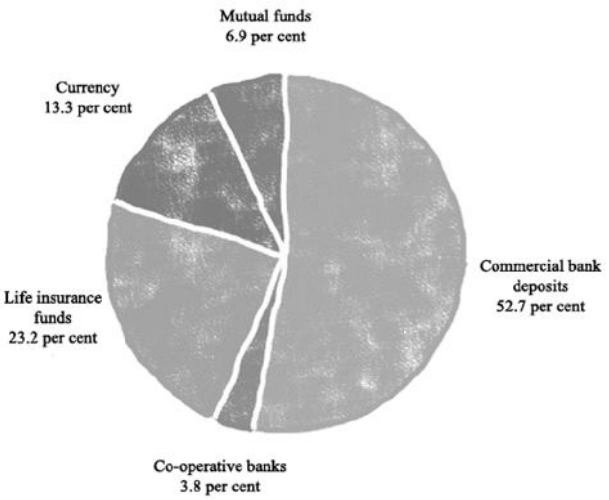

Figure 3: Estimates of Household Financial Savings up to the First Quarter of 2020-21
(Source: RBI)

ARE EQUITIES THE ANSWER?

Indian equities are a relatively nascent asset class with 40 years of history (if we take Sensex index values from 1979 onwards). BSE, located on Dalal Street, however, has a long history. It was established in 1875 and is Asia's oldest stock exchange. As of November 2022, India had broken into the top five markets globally with an overall market capitalisation of over $3.5 trillion.

Initially, it remained an insider's club and privilege of the few, due to a huge entry fee for new brokers. However, the Banking Securities Scam of 1992 led to an overhaul of the financial system. The office of the Comptroller Capital Issues was abolished, and Securities and Exchange Board of India (SEBI) was granted statutory powers. Also, in the clean-up process, the National Stock Exchange (NSE) was established in 1992 as the first dematerialised electronic exchange in the country.

NSE was the first stock exchange in the country to provide a modern, fully automated screen-based electronic trading system that offered transparent and easy trading facilities to investors spread across the length and breadth of the country.

Indian markets, like the markets across the world, have gone through ups and downs. Over the last 30 years, post-liberalisation capital markets have weathered many storms—some global and others local. Starting

Period	Event	Correction
May 1992 - August 1993	Banking Securities Scam	BSE Sensex down 45 per cent
July 1997- November 1998	Asian Crisis	BSE Sensex down 35 per cent
		Rupee depreciated by 19 per cent
		Crude down by 45 per cent
Feb 2000 - April 2001	Tech Bubble	BSE Sensex down 46 per cent
		IT Index down 83 per cent
December 2007 - March 2009	Great Financial Crisis	BSE Sensex down 52 per cent
		RE Power, Capital Good indices down over 60 per cent
		Crude down 48 per cent
December 2010 - March 2011	European Crisis	BSE Sensex down 25 per cent
		Capital Goods and Metal indices down 45-50 per cent
October 2015 - September 2019	Correction in Pharma sector	Auto Index down 31 per cent
		Largest Pharma company in India down 55 per cent
December 2017 - December 2019	Correction in Midcaps/ Small caps	Automobile stocks corrected 25 per cent in Midcap Index, 34 per cent in Small cap
		Automobile Index down 42 per cent
December 2017 - December 2019	NBFC Crisis	Banks/ NBFCs down 60-90 per cent
February 2020 - March 2020	Pandemic	BSE Sensex down 40 per cent

Table 1: Global Events and Respective Impact
(Source: QED Capital)

from the Banking Securities Scam, the Asian Crisis of 1998, the Tech Bubble of 2000 to the Great Financial Crisis of 2008. The Non-Banking Financial Companies (NBFC) crisis and the COVID-19 pandemic roiled the markets over the last couple of years. High inflation is a pervasive challenge across the world currently.

The BSE Sensex 30 equity index also popularly just called the Sensex has, however, weathered these storms and grown at a steady rate of 12 percent per annum over the last 30 years (including dividends), which is in line with the underlying growth trajectory of the Indian economy in nominal terms.

Beware Short-sightedness

Markets deliver over the long term. Time and again, it is repeated. Yet, we are fickle-minded about equity investments, but patient enough to hold on to gold and real estate for the long term. In the case of real estate, we take a big-ticket loan even though it is not a liquid asset.

1. Does it have to do with primal instincts that we prefer tangible assets over intangible financial assets? We love property and gold because we can touch and feel them. We keep our gold safe in bank lockers and even pay for it, akin to our ancestors storing valuables beneath the ground.
2. The challenge with financial assets is the information overload of daily market moves. Imagine a situation where your property broker updates you on a real-time basis about the market value of your house. Would you want to sell the extra room if prices go up or buy another when the prices go down?
3. If the not being liquid is a boon for real estate, the easy liquidity is a curse for equities. One constantly looks for the next shiny thing. Equity and gamified interfaces on broking apps help one scratch the itch.

The Magic of Compounding

An investment of ₹100,000 made in a popular balanced fund in February 1994 would have become ₹6.9 million over a span of 26 years, growing at a Compounded Annual Growth Rate (CAGR) of 17.6 per cent. And this is not a pure equity fund (which could have fetched more). However, only 2500 or 0.3 per cent of investors stayed invested in this fund over 20 years. Today, this fund has over nine hundred thousand folios and Assets Under Management (AUM) of over ₹400 billion.

INVESTING FOR THE LONG TERM

If we examine the age-wise analysis of mutual fund holdings then as of December 2020, only 35 per cent of investors held mutual fund units for over five years, 45 per cent of them held their units for less than two years. In contrast, the holding period for real estate and gold investments was relatively longer. One of the reasons perhaps is one can buy and sell mutual funds quite easily, but not so much real estate and physical gold.

Moreover, news channels do not keep screaming the housing prices every minute, nor is there an app to keep track of your house prices and see what others are bidding for it. Neither can you sell a portion of your house, if the value goes up. One does not say—let me sell my bathroom today and I will buy it back when the price comes down. Does it not sound ridiculous? But we do the same with our equity investments because the instrument allows us to.

Despite all the talk about long-term investing, only 18 per cent of Systematic Investment Plans (SIPs) incidentally from both segment top 30 and bottom 30 cities are over five years. One might assume that investors in the top 30 cities might be more aware and experienced but that has not translated into different investor behaviour and temperament. Humans are the same everywhere.

SIP AUM(PER CENT)	Top -30	Bottom -30
> 5 years	18.2	18.1
2 - 5 years	36.6	37.2
< 2 years	45.2	44.7
	100	100

Figure 4: SIP Returns of Top-30 and Bottom-30 Long Term (Source: QED Capital)

There is a silver lining though. The data above shows that investors even from smaller cities have SIPs, which are one of the most powerful tools available to retail and non-full-time investors to make their investments and overcome their behavioural biases in times of stress and volatility. SIPs help people make regular investments over the long term. Few investors used it to their advantage earlier. Now, thanks to the widespread education and awareness campaigns carried out by SEBI and Association of Mutual Funds in India (AMFI), the usage of SIPs is widespread. However, short-term market volatility influences some investors to discontinue the SIPs, which is counter-productive, and which is where a good advisor comes in.

BEATING MARKET VOLATILITY

Volatility is a friend, not an enemy in equity investment. Ralph Wagner of Acorn Funds, likens the market to an owner walking an excitable dog, who is darting randomly in all directions. Still, on a very long leash at any given moment, it is difficult to predict which way the pooch will lurch (or equity prices). But in the long run, you know he is in the same direction as his owner (company earnings).

What is astonishing is that almost all investors seem to have their eyes on the dog (prices) and not the owner (earnings). Similarly, stock/index prices will ultimately follow the companies' earnings growth in the long run.

Over the last 30 years, Sensex has grown at the same rate on a CAGR basis as its constituent companies' earnings growth, which is 12 per cent.

PRICE VOLATILITY IS A FEATURE, NOT A BUG

The volatility of company earnings is less than half the volatility of their share prices. In a way, volatility allows you to enter the markets when the odds are in your favour.

Mohnish Pabrai offers a fascinating insight, 'By nature auction-driven markets that have faceless buyers and faceless sellers, are set up for distortion. If the legendary investor Warren Buffett were to just invest in private companies, he would perhaps not have been able to outperform the market. Negotiated markets (in contrast) have an informed buyer and seller and deals happen over protracted negotiation. This results in lesser distortions.'

CLONING, COAT-TAILING, AND COPYCATS

Buffett's portfolio is replicable, says Pabrai. If it is so simple, then why doinvestors not replicate it? Pabrai says that it took him a long time to come up with the answer. 'There is something strange in the human genome that makes humans very averse to being copycats,' he reasoned. Most humans do not like cloning as they find it beneath themselves. Microsoft (most of their revenues comes from Windows and Office which were cloned or bought) is not the best product builder but is the biggest in their business.

Sam Walton (Walmart founder) and his company did not come up with any major innovation in its initial 20 years. Yet, it achieved success by copying K-Mart and Sears. Another retailer Burger King opens stores where McDonalds has a presence. The strategy has worked well for them. Execution and perseverance both work in investing and business if one is doing the right thing.

Similarly, we have a strong and robust copycat or replicable strategy called the index funds in the financial world. But given human behaviour, we tend to get attracted by the next shiny thing instead of the tried-and-tested index funds. Index Funds, as a 'core' portfolio allocation, are suitable for most investors.

LURE OF GOLD AND REAL ESTATE

Indians are big believers in gold and real estate. After China, India is the second-largest consumer and owner of gold. Indian households are estimated to own 24,000 tons of the yellow metal while the RBI is estimated to hold another 700 tons. While gold prices have corrected significantly over the past few years, more Indians prefer gold over equity funds or stocks. The graph below shows the preferences of Indian household when it comes to investing. Direct equity and mutual funds are the least preferred while real estate and precious metals are much higher on the list. This however is changing slowly but surely.

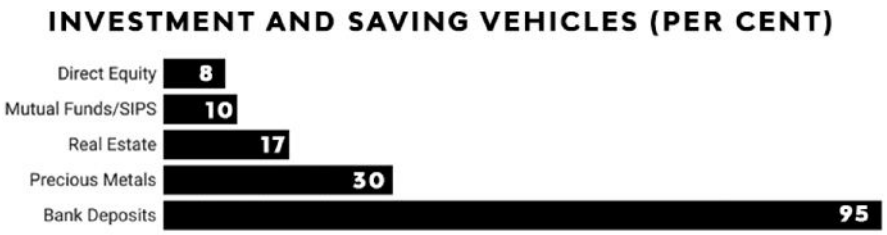

Figure 5: How Indians Invest and Save
(Source: SEBI Survey of Indian Households)

Gold in INR terms has risen by roughly 10 per centper annum over the last 40 years vs equity index having done 16 per centper annum in the same period. Inflation has averaged at 8 per centper annum in the same period. However, if we look at gold returns in terms of the Dollar, we find that gold has given only five per cent returns, while the other 5 per cent has come from rupee depreciation over the same period. And gold prices have also been quite volatile and lumpy during this 40-year period. So, in a country like India, one can make a case for five to 10 per cent gold in the portfolio. But anything over that would need some very strong rationale.

The period between 2003 and 2013 saw a big rise in prices in real estate in India. However, post that, the Residex Indian Real Estate Index for the top20 cities has shown flat or marginal growth in nearly all cities. Despite that, the sector continues to be a primary instrument of capital formation for Indian households.

We love stories and narratives. It is human to do so. There is enough data to demonstrate that a diversified portfolio of equities will pay rich dividends over the long run than real estate or gold. But equities are invisible for many, and hence it is tougher to build narratives around them. Neither can you wear equities like gold jewellery nor invite people home when you buy shares of Housing Development Finance Corporation (HDFC) or Asian Paints. If you take a home loan from HDFC to buy a house and colour the walls with Asian Paints, you can have a housewarming party, elevate your social status and make your parents and in-laws feel proud of you.

One should buy a primary residential property as soon as possible. We are not even getting into the Rent vs Buy argument here. Although as long as rental yields are low, rent as long as you can. However, buying a second home or having a space bigger than your need becomes a big-ticket consumption, not an investment.

MOVING AHEAD

When we look up directions on Google Maps, we put in our location, destination and the mode of transport—walk, bus, train or car. Similarly, we need to figure out where we are in our financial journey and what our destination is. Then comes the mode of investment, that is, asset classes such as equity, gold, property and so on.

Do we follow this process? Many of us would say no. Most people want recommendations for the best stock or mutual fund or is it the right time to buy gold, without thinking about their goals and asset allocation. The same people would spend days and months scouting for best real estate deals in the outskirts, which they think would become the next Gurgaon or Noida but will not spend even an hour researching about the stock or a mutual fund or follow up later. It is boring like exercise and dieting which for most is a chore. But it is essential. There is no choice here.

When we go to a pharmacy, do we ask chemists to suggest the newest and best medicines? No. We purchase the medication prescribed by the doctor. Do we haphazardly use machines when we go to the gym? No. We get a trainer to create a personalised workout chart for us and get guidance on using the devices. Why do we not do that in the stock market? This is the dichotomy in investment behaviour. A recent survey found that 61 per cent of Indians prefer not to pay for financial advice.

Investment is a personal affair. Every investor has his or her unique journey and destination. If you are on track to meet your goals and reach your destination, you are doing fine.

Moreover, you do not have to pinch your pocket to reach your financial goals. The power of compounding does wonders when you start investing your hard-

earned money. The fact that Warren Buffett made most of his wealth post his 50th birthday is a telling example. However, he started investing at the age of 11. It has been 80-plus years since then, double of a career span of an average individual. But what is not highlighted enough that even at age 50, he was wealthy enough to be in the top one per cent in terms of wealth. He had been compounding for 40 years.

Disclaimer: Nothing in this article should be construed as investment advice. This is purely for educational purposes only. Please consult an investment advisor before investing.

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Adapted From: Mind Money Matters by Anish Teli



Mendacity, Misery, and Hope

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> Most innovations that yield large returns in rental income to companies or individuals are the result of a series of ideas and experiments attributable to many individuals or groups who go unrewarded.

ABSTRACT

There is a serious rift between the capitalists and their workers. The reason behind it can be the lies the former tells the latter. They say working is the way out of misery but they do not add how to generate wealth in a manner similar to their success. These workers slave to get menial wages that are too little to sustain them and their families in these inflation-ridden times. Global capitalism claims that markets are free but to the contrary, the markets have never been so restrictive with instruments of intellectual property rights. The low-income group form the largest share of the workforce and they are the ones who suffer the most too under the burden of neo-fascist capitalism. In such horrid situations that affect the well-being of people, the governments must own up to their duty and take action to better the lives of millions suffering the system.

KEYWORDS: Wages, Capitalism, Rental Income, Neo-Fascism, Democracy, Cost of Living.

On the one hand, there are mendacious capitalists and on the other, there are miserable workers.

The biggest lie told by the former is that 'Work is the best route out of poverty.' It is a sick joke, as the labour economist, Guy Standing, points out. There is a war on wages. In the Organization for Economic Co-operation and Development (OECD) countries, real wages have been stagnating for a very long time. The share of income going to capital has been rising and is much higher than it used to be. The high-income earners are taking a greater share of the income going to labour, further hurting the precarious workers. Wages are not rising when productivity grows. They do not rise when profits rise. Average wages are not rising with rising employment and, in fact, they are falling because the new jobs pay less. The precarious workers face slim prospects of escaping from a life of economic insecurity.

There are four more falsehoods from capitalists, according to Guy Standing.

That rising profits reflect managerial efficiency and a return to risk-taking is one of them. In reality, the increased profit share has gone mainly to those receiving rental income, much of it linked to financial assets.

Another one is the claim that global capitalism is based on free markets. The truth is that there is the most unfree market system ever. Intellectual property has become a prime source of rental income through market power created by the spread of trademarks (crucial for branding), copyrights, design rights, geographical indications, trade secrets and patents. Knowledge and technology-intensive industries, which now account for over 30 percent of global output, are gaining as much or more in rental income from intellectual property rights as from producing goods or services. Governments worldwide are granting monopolies on knowledge to private interests, allowing them to restrict public access to knowledge and raise the price of obtaining it, or of the products and services embodying it.

The free-market rhetoric, as sociology professors Margaret Somers and Fred Block point out, 'is a giant smokescreen designed to hide the dependence of business profits on conditions secured by the government. So, for example, our giant financial institutions insist that they should be free of meddlesome regulations while they depend on continuing access to cheap credit—in good times and bad—from the Federal Reserve. Our pharmaceutical firms have successfully resisted any government limits on their price-setting ability at the same time that they rely on government grants of monopolies through the patent system. And, of course, the compliance of employees with the demands of their managers is maintained by police, judges, and an elaborate structure of legal rules.'

Yet another lie is that strong intellectual property rights are required to encourage and reward the risks of investment in research and development. But again, the truth is that it is the public, ordinary taxpayers, who bear the cost of much of that investment. A lot of corporate cash cows derive from publicly funded research, in public universities or institutions, or through subsidies and tax breaks. Moreover, most innovations that yield large returns in rental income to companies or individuals are the result of a series of ideas and experiments attributable to many individuals or groups who go unrewarded. Many patents are filed to block competition or head off lawsuits and are not intended to be exploited for production.

That strengthening property rights is good for growth is also a blatant lie. On the contrary, by increasing inequality and distorting consumption patterns, has hindered growth and made the growth that has occurred less sustainable. Slow and unstable growth builds up economic frustration for millions. Moreover, as fascism erupted as the politics of crisis in Europe's 'age of catastrophe' in the early twentieth century, we now face the political danger of the rise of neo-fascism as the politics of crisis due to neoliberalism's destruction of economy and society over the last four decades. The captains of the industry now abolish democracy altogether or subordinate it to their interests in order to pursue their interests through neo-fascism as they did in the past by fascism.

It is a pleasant surprise that, in this infernal milieu, the most famous marketing guru, Philip Kotler, understands the predicaments of labouring people. As he points out, the low-income working class often lives with the following fear-laden anxieties:The fear of contracting a health problem or emergency that takes them off their job for a short or long period, with a loss of income; the fear that their current job will be destroyed by technology and robots will replace them; the fear that living costs will rise faster than wages (inflation worry); the fear that they will have no savings, or inadequate savings to retire on; the fear that they cannot help their children or their parents who need financial or personal care; the fear that the neo-fascist, far-right leaders will manage to kill programmes such as medicare and social security.

This low-income working class is the largest group in the workforce. Its members can be foundat Wal-Mart or McDonalds, in large or small factories, in clerical jobs, and toiling in agricultural areas. They are single individuals, unmarried co-tenants, married childless couples, and families. Most of themhave only one job, a low-paying job, that meets or slightly exceeds the

nation's minimum wage level. Some workers have two or three jobs. For example, a cleaning womanworks for a number of different clients. These workers are wage slaves as they will do almost anything to please their employers simply because they do not want to lose their jobs.

When they receive their low earnings, all of it is not for spendingbecause they face taxes for sales, property and income tax. What remains will hardly be enough to pay theirrent, health insurance premium, drug costs, transportation costs, and food costs. It is very likely that whenthey receive wages on payday, theywill still be short of enough cash for the coming week. If they cannot borrow from friends and relatives, they may turn to getting a payday loan. Such loans are usually for a short period and involve a high-interest rate and fees. On an annual basis, payday loan interest rates can exceed 300 per cent. Yet payday loans remain very popular and necessary considering the volatility of worker pay, especially for 'gig' workers who cannot be sure of their earnings from week to week.

This state of affairs with the working people is worsening even asthe mendacious capitalists keep on relentlessly building up a global corporate empire that now dictates how resources are allocated, how territories are governed, and how justice is defined. This is what the Transnational Institute (TNI) has been telling the people for long. Corporations have seized national and global power. The governing structures of the World Economic Forum (WEF) are dominated by the richest oligarchs and corporate executives obsessed with minimising regulations for corporate profits. They hypocritically advance global agendas that largely serve their own economic interests and disproportionately impact the poor, with no democratic accountability. They have captured the United Nations, moving the world dangerously towards privatized and undemocratic global governance.

Very recently the TNI New Politics Project and the Havens Wright Centre for Social Justice conducted a panel discussion on the strategic dilemmas of working-class politics and organisation today.

Such discussions matter in light of the tenth edition of the authoritative Global Rights Index, whichshows that the global cost-of-living crisis has been met with a crackdown on the rights of working people in every region of the world.

Thanks to the International Trade Union Congress (ITUC), it is the only database of its kind with a comprehensive review of workers' rights in law that ranks 149 countries. We can now know how worker rights are violated in different countries of the world.

According to Luc Triangle, the Acting General Secretary of ITUC, 'The 2023 ITUC Global Rights Index provides shocking evidence that the foundations of democracy are under attack. There is a clear link between workers' rights being upheld and the strength of any democracy. The erosion of one amount to the degradation of the other. Across both high-income and low-income countries, as working people have faced a historic cost-of-living crisis and spiralling inflation driven by corporate greed, governments have cracked down on the right to collectively negotiate wage rises and take strike action. The line between autocracies and democracies is blurring. When the dialogue between state and citizen breaks down, when nations flirt with autocracy to pass unpopular laws, when governments deploy state forces to quell lawful resistance – democracy is on the line and working people suffer the consequences. To reinforce the fabric of our societies, to renew and establish democracy and to support working people we need a new social contract: decent jobs, just wages, social protection, fundamental rights, including safe and secure work and the assurance of equality and inclusion. Trust in governments is broken and the far right is stepping into the breach to sow division and further threaten fundamental liberties. Only a new social contract can rebuild trust and ensure that our democracies are fit for purpose to meet the needs of working people today, and the demands of an uncertain future. A future where the climate crisis, technological change, challenges to public health and geopolitical instability will continue to provide shocks. Working people must be listened to and they must be at the centre of government decisions. To demand and support this, workers' unions have never been more essential.'

In this poignant milieu, the WEF has come out with a cruel joke. It has proposed 'The Good Work Framework' as a new business agenda for the future of work!According to this, five key issues have emerged

that need to be addressed to ensure better work for workers and employers alike:

1. Volatility in wages and the cost of living;
2. Divergence in the demand for flexibility;
3. Silent pandemic in well-being;
4. Erosion of diversity, equity and inclusion gains; and
5. The need for a reskilling revolution.

Accordingly, the WEF calls for the following policies: Promote fairness in wages and technology; provide flexibility and protection; deliver on health and well-being; drive diversity, equity and inclusion; and foster employability and learning culture. For achieving all this, we need to ensure at least a living wage for all; enable all workers to benefit from flexibility, where possible and appropriate; safeguard total well-being at work; ensure that the workforce profile reflects the operating market; provide accessible upskilling and reskilling for the entire workforce; support worker representation and processes for dispute resolution; take a responsible approach to deploying technology; use Artificial Intelligence (AI) and data responsibly; support national public social protection systems; support access to benefits; promote solutions that provide security for independent workers; protect physical and psychological safety in the workplace; provide for predictability of hours and boundaries on working time; ensure that workers feel valued and find purpose in their work; drive equal pay and equitable conditions; enable inclusive participation and build an inclusive culture; ensure that global leadership reflects workforce composition; enable a culture of continuous learning, ensure talent processes recognize and reward skilling achievements; and cultivate systems and alliances for redeployment.

The WEF is addressing the capitalists of the world to unite on the above lines! This is nothing but the 'crocodile tears syndrome' of the corporates as the predators of the planet and its working people.

Worker strikes in different socio-economic activities are now making a comeback in America, all the same in the face of aggressive workplace downsizing via layoffs and terminations.

In this milieu, what Kotler had said is most relevant for the working class as an authentic hope in the dark: 'We should not let the working class continue to suffer while others build mansions and gated communities and private swimming pools and buy million-dollar cars and private aeroplanes, partly because they have nothing else to spend their money on. We need to build a new view of community and collaboration. We only need to turn to the Nordic countries where most people live a good work life and play life and the rich are a little richer but everyone is satisfied and happy.'

According to Kotler, government intervention is required in terms of legislation for higher national minimum wage, legislation making it easier for workers to form unions, occupational training programmes on a no-cost orlow-cost basis, etc. As he says, 'The fundamental solution is to give workers both voice and capital. Removing anti-union legislation will give workers a voice. Getting more corporations to be organized as cooperatives or ESOPs (Employee Stock Ownership Plans) will give workers capital. Workers who get part ownership in companies will be hardworking and loyal. These companies can be just as innovative and creative as today's shareholder-owned companies. They would be run much more democratically, something entirely lacking in modern corporations. Until the economy moves toward capitalizing workers, the workers will continue to subsist as a suffering class.'

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Designing your Tomorrow:

An Integrative Perspective on Life-design and Livelihood

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> Traditional career planning has disproportionately focused on occupational roles, neglecting other dimensions of human development, including social, intellectual, physical, spiritual, and emotional facets.

ABSTRACT

The concept of life-design spans history, evolving from fixed societal roles to today's freedom. Presently, our society greatly influences our life choices, especially regarding jobs. To lead a fulfilling life, it's crucial to question norms, follow our passions, and seek knowledge. The modern view of careers has shifted from relying on stable companies to taking personal responsibility. Integrative Life Planning (ILP) focuses on various life aspects, not just work. Life-design means blending different aspects like family and work, being inclusive, managing changes, finding meaning in spirituality, and contributing to society. It is about personal growth and making a positive impact on the world.

KEYWORDS: Integrative Life Planning, Career construction, Life-design, Liquid society.

'What should I do with my life? What ought to be done?' These questions have persisted in humanity's collective consciousness for an extended period. Despite attempts to frame them as philosophical inquiries, providing practical answers to queries such as 'How should I shape my life?' 'Why should I do it that way?' 'How should I go about it?' and 'When should I embark on this journey?' is by no means straightforward. Designing a meaningful life involves deliberate planning and the continuous execution of

one's life objectives, not only for personal fulfilment but also for the betterment of others. This process is dynamic and enduring, far from a one-time endeavour.

Humans have exhibited a creative drive since prehistoric times. The innate desire to design and construct artifacts or processes has been an integral aspect of human nature. This creative impulse extends to various aspects of human existence, whether it involves designing tools for self-defence or collectively designing colonies for social existence. The history of civilization can be seen as a narrative of human emergence as designers, achieved sometimes individually and at other times collectively.

Now, turning our attention to the concept of life design, we encounter a fundamental agent-object duality: a duality in the designing process. An individual or a group usually engages in the act of designing something external, whether an object or a process. However, designing my own life is a modern concept and was not as prevalent in ancient times, nor as necessary. In the past, one's life and livelihood were often intricately intertwined within caste systems, such as the Brahmin, Kshatriya, Vaishya, and Shudra. In these systems, an individual's role in life was preordained, much like the king's son inheriting the mantle of kingship or the farmer's offspring assuming the role of cultivator. Social structures and constraints played a decisive role in determining the life path one would follow. This path was not merely a means of sustenance; it also encompassed an individual's way of life. This complex interplay between social roles and personal destinies is exemplified in the story of Arjuna on the battlefield of Kurukshetra, where he grappled with the challenge of reconciling his Kshatriya duties with his broader sense of purpose and existence—a conundrum that required guidance from Krishna.

In today's post-modern age, we enjoy complete freedom to design our own lives. However, it is important to acknowledge that our socio-cultural context and various institutional structures significantly guide the process of life-design. They not only influence our choices but also exert control through explicit and implicit directives. Our life-journey—from school to college and university, subsequent career choices in both public and private organizations, and finally, retirement from work-life—symbolizes a livelihood-dependent life-design implicitly controlled by socio-economic norms and social practices. Many individuals find themselves deeply engrossed in the demands of their livelihood-oriented professional life, leaving little time to explore and understand life's essence. To bridge this gap, mastering the art of balancing livelihood with life's deeper aspects becomes essential. Only then can we embark on a more complete and fulfilling journey of life-design in a holistic sense.

In the present day, every individual possesses unique desires and aspirations. Consequently, each person's approach to designing their life is inherently distinctive and contingent upon their individuality. Across nations, there exists a universal framework in education and employment, serving as the structural backbone guiding individuals through their life-journey. This framework, emphasizing livelihood, is an indispensable aspect of the life-building process in our socio-economic-cultural setup. Implicit societal demands are normal, as engagement with livelihood fosters collective social cohesion, promoting mutual assistance among people. Livelihood connects individuals as social beings, evading social alienation and contributing to completeness. Life-design within this paradigm hinges on harmonizing will, freedom, and diversity within societal boundaries. Within this framework, the intricate interplay of life and livelihood creates a harmonious and rhythmical union.

The prevailing issue at hand pertains to the socio-economic and cultural environment in our country, significantly shaping one's perspective on livelihood. This environment fosters discriminatory attitudes, giving rise to social stereotypes regarding life and livelihood. These deeply ingrained beliefs hinder healthy and inclusive social living. With a historical precedent of caste-based divisions within society, contemporary divisions have evolved, especially in income and profession conceptualization. For example, there is a preference for becoming a 'doctor' or an 'engineer' rather than aspiring to be a 'school teacher.' This preference extends to educational choices, favouring the study of science over literature. At the core of these beliefs lies an emphasis on economic success over social necessity. However, it is

crucial to recognize that all forms of subsistence are paramount in the context of social life. Therefore, to design my life according to my true self, I must confront and challenge these beliefs, thereby forging my unique path.

An essential point to remember is that any design activity is a knowledge-based process. This knowledge involves understanding what I am designing, why I am doing it, how I am doing it, the alternative choices available, and the potential consequences of each choice. Arriving at the right answers to such questions requires a substantial degree of awareness. In the context of life-design, we are driven by a set of apprehensions rather than knowledge regarding the diversity and possibilities within life and livelihood. As a result, a significant proportion of students, after completing their higher secondary education, undertake college entrance exams primarily to secure a financially rewarding position in the job market. They often lack a clear understanding of the subjects they intend to study or the careers they wish to pursue. Consequently, their method of subject selection is not always knowledge-based; they tend to rely on what we call cognitive shortcuts, influenced not by knowledge but by various socio-economic beliefs. For instance, there is a prevalent belief that 'studying engineering is superior to studying history' or that 'computer engineering should be the top priority in engineering studies.' Following these choices, the perspective on life increasingly centres on earning potential. While financial stability is undoubtedly important, it should not be the sole consideration in the comprehensive life-design scheme.

Therefore, the initiation of the life-building process necessitates a transformation of these prevailing social attitudes and beliefs. Firstly, to construct anything, there must exist a clear intention behind what is to be built, be it an object or a subject. This intention or purpose is equally crucial in the context of life-building. Consequently, the question, 'What should I do with my life?' holds significant importance in this endeavour. As humans are inherently social beings, the meaning of one's life often emerges through their relevance and contributions to others. Thus, the question, 'What do you want to be?' shifts from a self-centred perspective to a more socially oriented one, 'What do you want to do?' This shift aids in aligning our sense of life with broader social contexts. To elaborate, understanding what I want to do, what I am capable of doing, and how my desires and actions can positively impact the lives of others should serve as the cornerstone of the life-designing process.

Secondly, as previously mentioned, the life-design relies on knowledge. Consequently, the answers to these questions are not immediately evident, nor can they be obtained in a day. Nonetheless, these inquiries lie at the heart of life-building. The quest for answers enriches the human journey. For example, if I aspire to become a psychologist, my first step should involve cultivating a deep interest in psychology and gaining a fundamental understanding of the field. Nowadays, the internet provides easy access to essential knowledge on various subjects. Furthermore, through social media, I can establish connections with psychologists both locally and globally, affording me a window into their lives and livelihoods. It is only through this comprehensive approach that I can ascertain whether I genuinely have a passion for psychology and identify the specific areas in which I excel. Through diligent study, social networking, and careful contemplation, I will eventually gain clarity regarding my passions and the means through which I can translate them into meaningful actions in my life.

Thirdly, human beings, known for their creativity and exploratory nature, can embark on diverse journeys in life. Each journey may take a unique path. In the pursuit of constructing one's life, it is essential to determine the specific path to follow. However, this choice need not be constrained by predefined societal norms. If one possesses a genuine interest and aptitude, they can engage in any profession or endeavour that allows them to contribute positively to the enrichment of others' lives. Such contributions hold the potential to make our world more habitable in the future. By pursuing this path diligently, one can effectively mitigate the risk of financial instability as well.

In the 20th century, jobs and organizations used to give people a clear plan for their careers. It was like a story that made sense and kept going. But nowadays, things have changed. In the 21st century, organizations do not

provide a clear plan anymore. The way they see careers is unclear and does not follow a straight path. Hence, the current organizational practice does not provide stable commitments around which individuals can plan their lives. The 21st-century career narrative is characterized by uncertainty and fluidity, making it challenging for individuals to base their life plans on institutional commitments.

In this new landscape, individuals cannot rely on a predetermined path within an organization. The concept of a 'liquid society' with fluid boundaries replaces the predictability of a 'solid society' with stable boundaries. Boundary less organizations, which lack defined career structures, compel individuals to take on more responsibility for managing their own work lives. Unlike in the past, when people lived out a career narrative shaped by a corporation, individuals must now become the authors of their own career stories.

This change from having clear paths and stable plans to a more uncertain and individual approach has led to what is known as the 'individualization of the life course'. Nowadays, jobs are not the main thing around which our lives revolve. Different kinds of work mean different kinds of lives. People cannot easily identify who they are in the world just by the work they do. It is a more personal and less predictable way of living.

Dr. L. Sunny Hansen, who was a professor in the Department of Educational Psychology and director of 'Born Free' at the University of Minnesota, outlined a comprehensive career-planning model known as ILP. This model revolves around six interconnected critical life tasks:

Identifying meaningful work in evolving global contexts is a departure from conventional career planning methods. This approach encourages creativity and entrepreneurship in addressing human challenges on both local and global scales. Hansen identified ten essential types of work, such as environmental preservation, responsible technology use, understanding workplace and family changes, embracing evolving gender roles, appreciating diversity, reducing violence and poverty, advocating for human rights, exploring new ways of knowledge, and delving into spirituality and purpose. Although these aspects are often overlooked in mainstream career planning, they significantly impact individual and community lifestyles.

Integrating various aspects of life into a cohesive whole. Traditional career planning has disproportionately focused on occupational roles, neglecting other dimensions of human development, including social, intellectual, physical, spiritual, and emotional facets.

Balancing family and work by negotiating roles and relationships. ILP highlights the importance of shared nurturer and provider roles in equal partnerships, emphasizing dignity, and flexibility in role negotiation, and enabling each partner to choose roles congruent with their talents and goals for work, relationships, family, and society.

Embracing pluralism and inclusivity. ILP emphasizes the importance of effective interpersonal skills and calls for informed awareness of diverse identities. We, as social agents, should understand and value diversity, recognize barriers to educational and occupational opportunities, examine personal biases, develop an inclusive worldview, and manage relationships with individuals from different backgrounds.

Managing personal transitions and organizational change. This task links individual life decisions and transitions with organizational changes, providing models for human adaptation to transitions. It underscores the role of individuals as change agents in personal, family, and organizational contexts.

Exploring spirituality, purpose, and meaning. This task delves into the ultimate meanings of life, connecting spirituality with purpose and meaning. Spirituality is defined as a higher power outside oneself, representing the core from which meaning, self-understanding, and life comprehension emerge. Life and livelihood are viewed as interconnected, both stemming from the same source – the spirit – embodying living with depth, meaning, purpose, and joy, and contributing to the greater community.

To summarize our discussion, we initially established a fundamental definition of life-designing: it involves a deliberate plan for one's life and the unwavering execution of that plan, aiming to imbue one's life with

significance not just for oneself, but also for others. When we consider the creation of any organization, its primary objective is to enrich the lives of its customers or consumers by providing products or services that contribute to their well-being. The more effectively it accomplishes this, the more likely it is to gain favour with its consumers and secure its long-term viability. Importantly, this is not a one-time endeavour. For any organization to thrive, it must maintain a consistent commitment to self-improvement. It must engage in diverse educational and transformative processes to keep its innovative capabilities active. Similarly, human life can be compared to an organization, wherein individuals continually undergo various transformations while designing their own lives. This process extends beyond merely living in isolation. We aim to shape our lives in a manner that renders them valuable not just to ourselves but also to others. Achieving this integration of livelihood and life is the ultimate goal of life-design.

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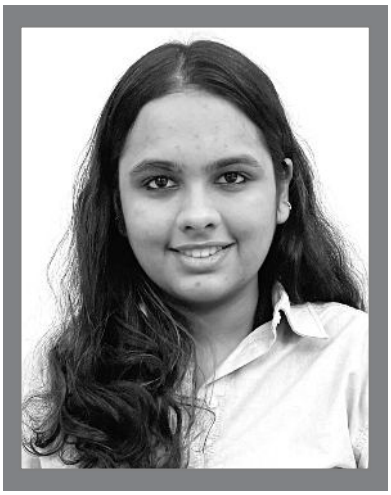

> Investors influenced by emotions, are prone to cognitive errors, and may lack self-control. Behavioural finance recognizes these biases and provides a more realistic understanding of stock market functioning.

Behavioural Finance:
Role of Behavioural Biases on Investor's Decision-Making

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ABSTRACT

In recent years, stock markets have become more volatile and unpredictable, making them susceptible to global macroeconomic shocks. This increased vulnerability has left investors open to greater uncertainty. The traditional theories of efficient markets hypothesis and rational investor behaviour are proving to be insufficient, as market inefficiencies and irrational behaviour are more realistic appearances. Investors influenced by emotions, are prone to cognitive errors, and may lack self-control. Behavioural finance recognizes these biases and provides a more realistic understanding of stock market

functioning. This study aims to explore the impact of behavioural biases on investors' decision-making and financial returns, emphasizing the significance of independent financial decision-making.

KEYWORDS: Behavioural Finance, Biases, Irrational Behaviour, Traditional Theories, Traditional Finance, Efficient Market Hypothesis Theory, Modern Portfolio Theory, Prospect Theory.

INTRODUCTION

Traditional finance suggests that individuals are rational, and markets are efficient. The 'Modern Portfolio Theory' shows that investors can achieve the best results by selecting an optimal overall portfolio risk-return mix. However, cognitive and emotional biases can lead to an illogical deviation from rationality. Kahneman and Tversky conceptualized the prospect theory, which provided psychological evidence that heuristics and biases can affect how investors buy or sell their securities. The prospect theory is a behavioural model that demonstrates that investors make decisions in terms of expected utility related to a reference point instead of absolute terms, which differs from what was proposed by traditional finance. In the 1980s, the field of behavioural finance, emerged as a sub-discipline of behavioural economics when faults began to surface in the Efficient Market Hypothesis (EMH) theory. This theory argues that the prices of shares always reflect complete information about an investment or market. According to the EMH theory, it would be impossible for investors to beat the market with investment strategies like stock-picking. Investors would only be able to yield better results than the industry standards by purchasing investments with higher risk.

LITERATURE REVIEW

1. Alistair Byrne, CFA and Mike Brooks, in their article'Behavioural Finance: Theories and Evidence' (2008), reviewed behavioural finance which aims to focus on practitioners of investment management, corporate finance, or personal financial planning.
2. NMN Muhammad, N Maheran, in their article 'Behavioural Finance vs Traditional Finance' (2009), provided a brief introduction of behavioural finance, which focuses on research that drops the traditional assumptions of expected utility maximization with rational investors in efficient markets. The article also reviews prior research and extensive evidence about how psychological biases affect investor behaviour and prices.
3. S Sharma, in her article,'A Study of Traditional Financeand Behavioural Finance: Rationality to Irrationality' provides a detailed study in the area of traditional finance and behavioural finance. This paper is focused on understanding the reason behind investment decision making and how financial theories like EMH are ineffective to understand market variances and human behaviour.
4. Kahneman D., and Tversky A., in their article 'Prospect Theory: An Analysis of Decision under Risk' (1979) critiqued the expected utility theory and provided an alternative model of investor's decision making under risk, called Prospect Theory, which discussed pervasive effects that are inconsistent with the fundamental elements of the utility theory.

OBJECTIVES OF THE STUDY

1. To understand the behavioural biases.
2. To examine the impact that these investment biases have on financial returns.

RESEARCH METHODOLOGY

The data that has been used for the study includes primary sources of the same. Primary data is the first-hand data that has been gathered through surveys and questionnaires. Here, a Google form has been used for the survey. Further, analytical research including hypothesis testing and chi-squaretests have been undertaken to build on the findings. For better

presentation, graphs, trend lines and charts have been used. A sample of the preferences of 128 respondents has been used for analysis. The period of study was from January 2023 to April 2023.

LIMITATIONS OF THE STUDY

1. The lack of primary data in regards to market professionals and analysts commenting on the feasibility of this project acts as barrier to this dissertation.
2. The analysis is based on past performance and past trends and is not a guarantee of future results.
3. The sample size of the primary data being used is small (128 respondents), so it may not give a true picture of the entire population.

CONCEPTUAL FRAMEWORK

Human nature is complex, and the assumption in traditional theories of finance that all investors are rational, provides a facile view of their financial decision-making process. Behavioural finance showcases how emotional, cognitive, and psychological factors impact investment decisions. It helps explain the deviations between the expected behaviour of rational investors and their actual behaviour.

IMPORTANT DIFFERENCES BETWEEN BEHAVIOURAL FINANCE AND TRADITIONAL FINANCE

1. Traditional Finance theories are based on the assumption that investors are rational, they study the market sentiment before making investment decisions, and rely on quantitative tools and economic models. Behavioural Finance theories recognize that investors are not rational and their decisions are influenced by emotional and psychological factors.
2. Traditional finance theories assume that the markets are efficient and are a true representative of actual value, which is only possible if it is assumed that investors practice perfect self-control. Behavioural finance emphasises on the fact that the markets are not efficient, and investors do not exercise absolute self-control.
3. The 'Utility Theory', a well-known concept in traditional finance, proposes that investors assign all investment outcomes rationally suitable probability weights, whereas, the 'Prospect Theory' in behavioural finance contends that investors use random decision weights to forecast investment outcomes, which leads to lower probability events which have greater weightage in the decision-making process than is what is rationally appropriate.
4. In traditional finance, all investors are thought to possess perfect and complete market knowledge. Behavioural finance takes into account the fact that investors may not always have perfect information and cannot process information accurately in reality.
5. Investors, according to traditional finance, are risk averse and use a symmetrical pattern to make decisions. Behavioural finance concludes that investors do not exhibit a symmetrical pattern in their decision-making process by responding differentially to gains and losses.

BEHAVIOURAL BIASES IN INVESTMENT DECISIONS

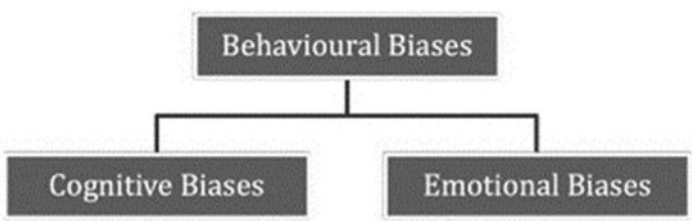


Figure 1: Behavioural Biases in Investment Decisions (Source: https://www.investopedia.com/articles/investing/051613/behavioral-bias-cognitive-vs-emotional-bias-investing.asp)

Different Types of Behavioural Biases Under the Study

A. Cognitive Biases

These are a result of faulty reasoning, which includes ineffective analysis of information. These biases, which can be classified as information-processing and belief-perseverance errors, are a result of statistical and memory errors.

1. Conservatism Bias

   Investors often give more importance to older information than more recent information, making them slow to react to new data.

2. Representative Bias

   Investors frequently misjudge the likelihood of an outcome due to the similarity of events and base their decision on how similar the present and existing circumstances are.

3. Hindsight Bias

   Investors tend to look back at past events and believe that they could have predicted the outcomes of those events. They feel that past events are more predictable than they really are.

4. Illusion of Control Bias

   Investors frequently tend to believe they have some control over outcomes. They feel they have some control because of this illusion of control.

B. Emotional Biases

These are influenced by individuals' emotions and impulsive or spontaneous reactions. These biases stem from intuitions, instincts or impulses that skew people's reasoning. Emotional biases are more difficult to correct than cognitive biases.

1. Loss aversion Bias

   Investors often prefer to avoid losses than making gains of the same size. The conclusion is that individuals display asymmetrical responses to gains and losses.

2. Overconfidence Bias

   Investors frequently have an exaggerated sense of their own abilities and have a high degree of confidence in their own judgements. This may cause investors to overestimate returns, underestimate risks and fail to diversify sufficiently.

3. Self-attribution bias

   This occurs when individuals give themselves personal credit when things go right, but blame circumstances or others when results are not in their favour.

4. Endowment Bias

   Investors frequently place a higher value on their own investments or possessions than on similar ones that they do not own.

5. Status Quo Bias

   Investors want to remain in their existing situation and take no further action. Investors that have this bias use their existing position as a reference point and consider any change from it to be a loss.

6. Herding

   Investors tend to follow the actions of the crowd without taking their own judgement into account.

C. Other Behavioural Biases

1. Confirmation Bias

   Investors may distort new information in a manner that stays consistent with their prior beliefs.

2. Anchoring and Adjustment Biases

   This refers to making expectations on the basis on prior numbers, and making adjustments with respect to that as new data and information arrive.

3. Mental Accounting Bias

   It refers to viewing money in different accounts differently while making investment decisions.

4. AvailabilityBias

   This refers to a situation when undue emphasis is put on information that is easily and readily available, easy to recall, or based narrowly on personal experience or knowledge.

5. Framing Bias

   It refers to biases that occur when decisions are affected by the way in which the data is framed.

6. Self-control Bias

   This states that investors are more inclined towards favouring small payoffs at the expense of larger profits in the future.

ANALYSIS

Demographic Profiling of investors

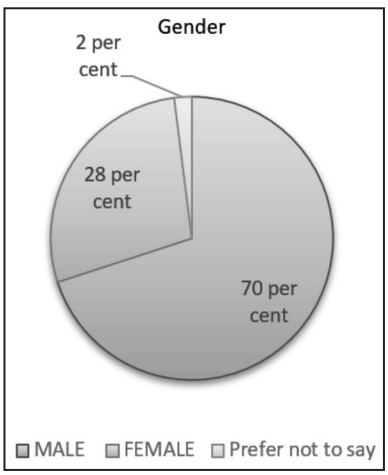


Figure 2: Gender
(Source: Primary Data)

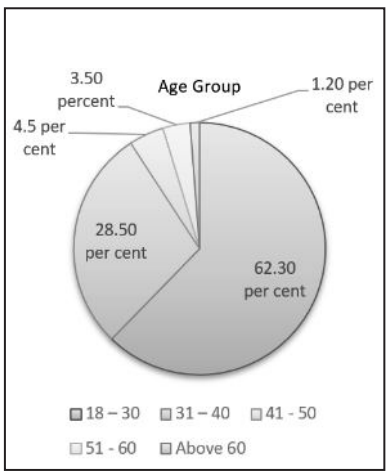


Figure 3: Age Group
(Source: Primary Data)

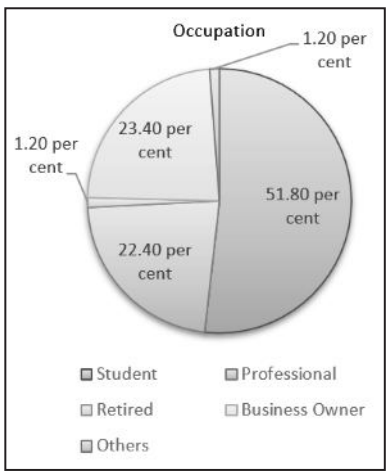


Figure 4: Occupation
(Source: Primary Data)

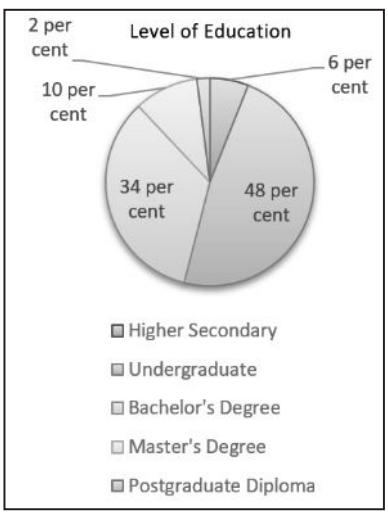


Figure 5: Level of Education
(Source: Primary Data)

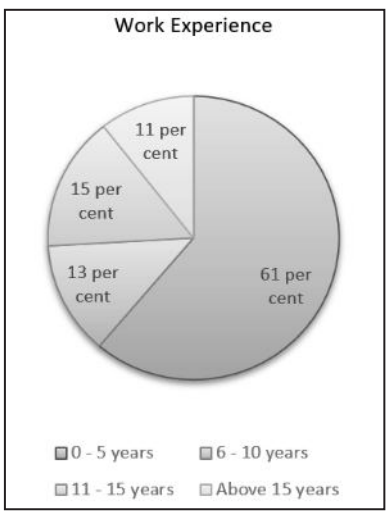


Figure 6: Work Experience
(Source: Primary Data)

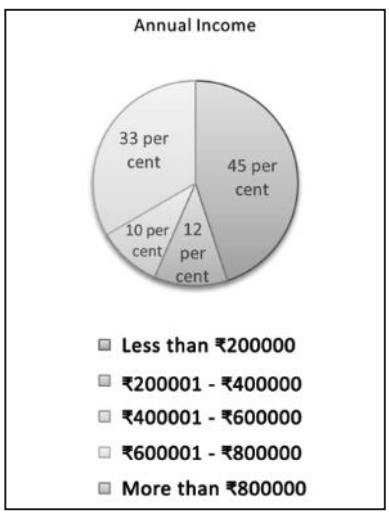


Figure 7: Annual Income
(Source: Primary Data)

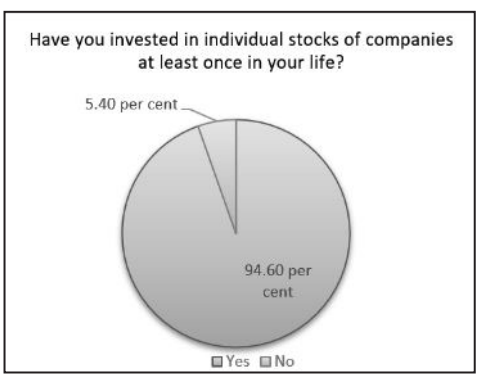


Figure 8: Chart showing Investment in Individual Stock of Companies at Least Once in their Lifetime
(Source: Primary Data)

Investor Profiling

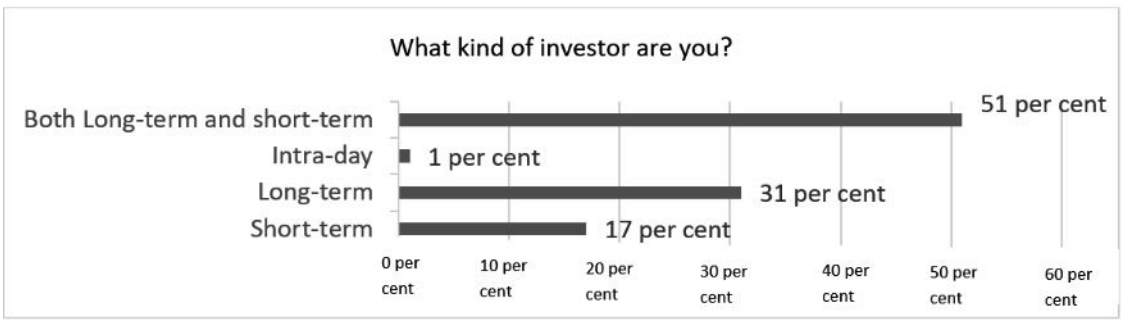


Figure 9: Categories of Investors
(Source: Primary Data)

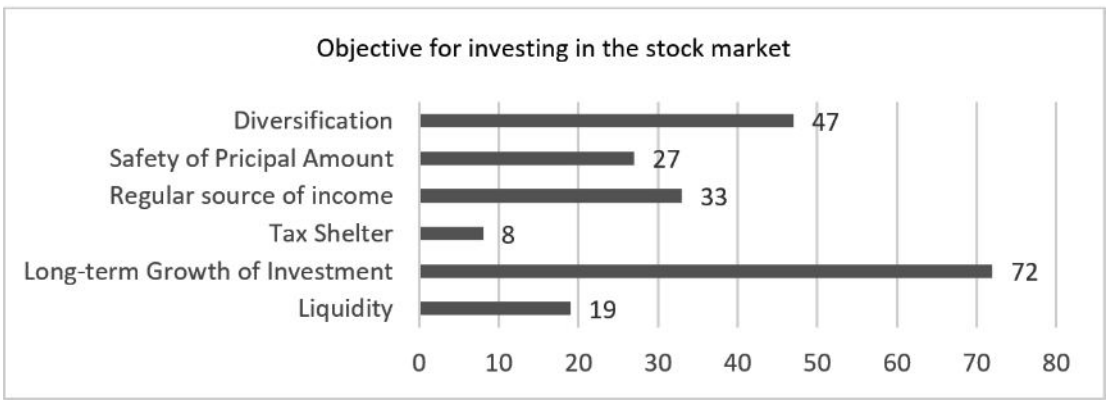


Figure 10: Objective for Investing in The Stock Market
(Source: Primary Data)

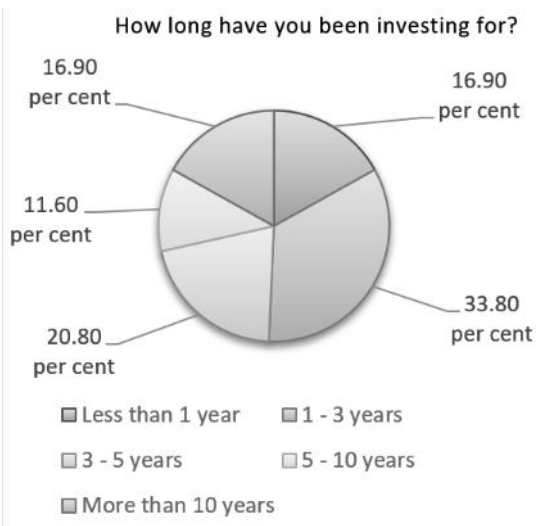


Figure 11: Time Period of Investing in the Stock Market
(Source: Primary Data)

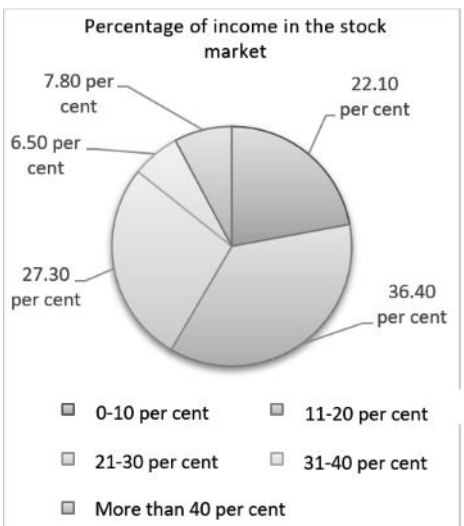


Figure 12: Percentage of Income Invested in the Stock Market
(Source: Primary Data)

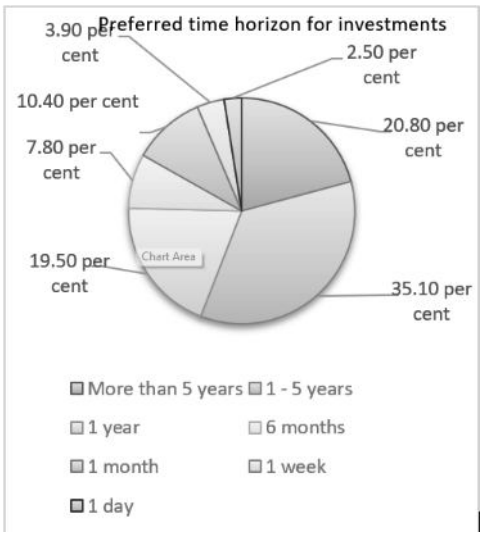


Figure 13: Preferred Time Horizon for Investments
(Source: Primary Data)

Market Preference for Investment	Count
Primary Market - Initial Public Offerings (IPOs)	5 per cent
Secondary Market (Buying and selling of shares)	35 per cent
Both	60 per cent

Table 1: Table Showing Market Preferences for Investment
(Source: Primary Data)

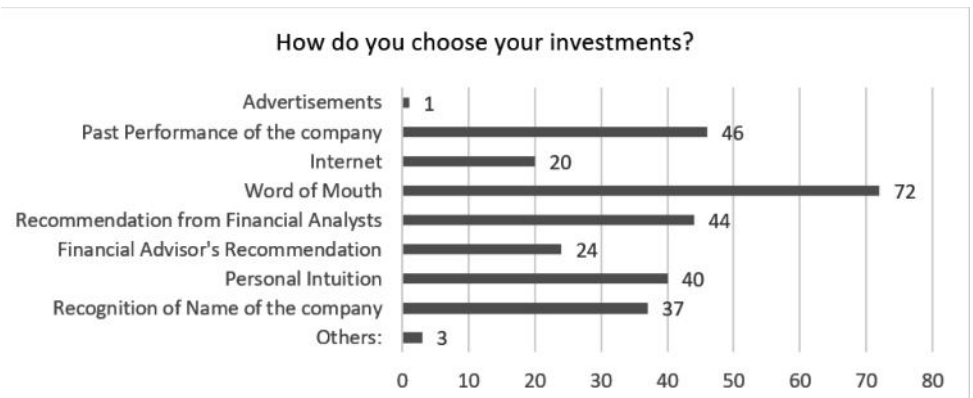


Figure 14: Mode of Choosing Investments
(Source: Primary Data)

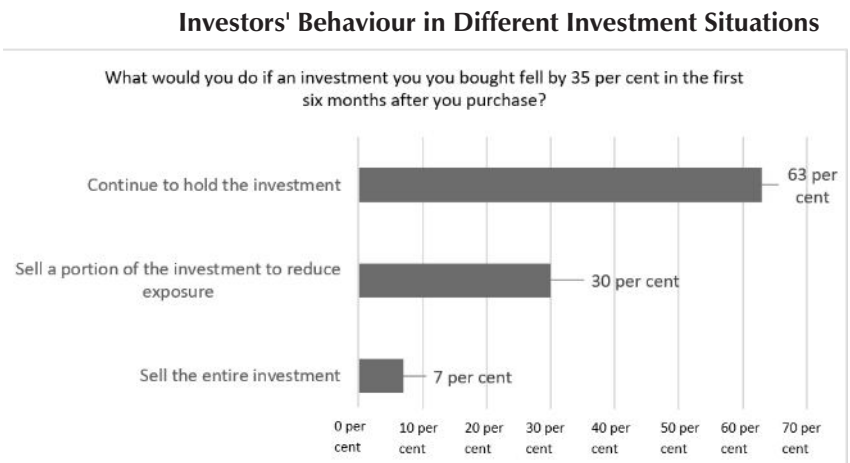
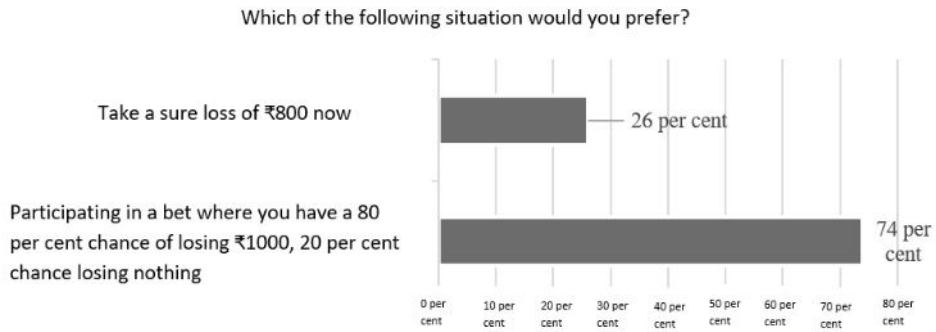


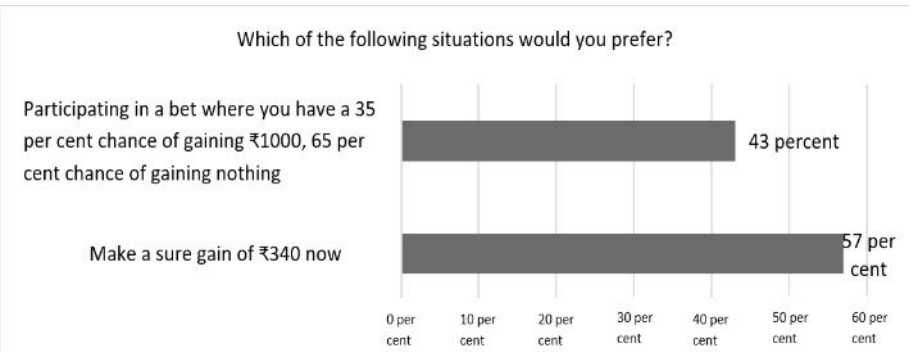
Figure 15:Investment Behaviour if the Investment Fell by 35 per cent in the FirstSix Months
(Source: Primary Data)

- 30 per cent of the respondents reduce exposure which is also an impact of loss aversion bias.
- 7 per cent of the respondents depict the highest degree of loss aversion bias.
- 63 per cent of the respondents depict loss aversion leading to status quo bias.



Even though the expected value of both the choices is a loss of ₹800, 74 per cent of the respondents prefer to participate in a bet overtaking a sure loss of ₹800.

Figure 16: Investment Behaviour as per the above Situation (Source: Primary Data)



In the situation depicted here, 57 per cent of the respondents prefer making a sure gain of ₹340 over participating in a bet, even though the expected gain of choosing to participate in a bet is ₹350, which is greater than ₹340 by taking the sure gain.

Figure 17: Investment Behaviour as per the Above Situation (Source: Primary Data)

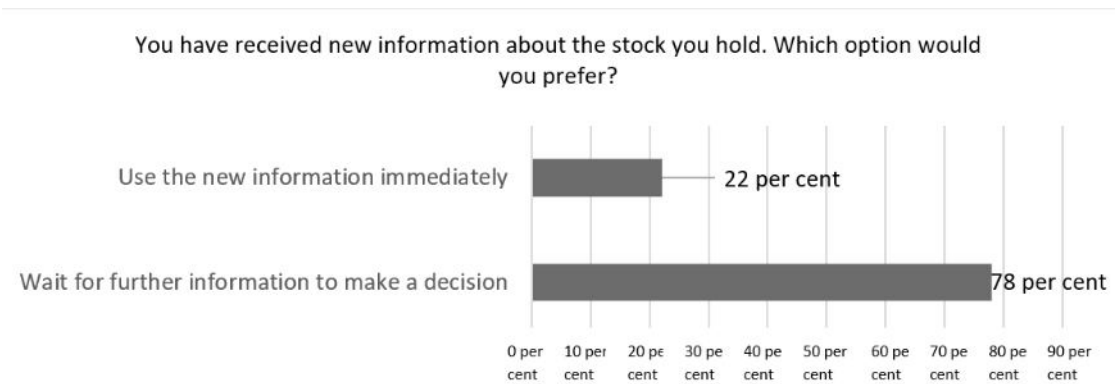


Figure 18:Investment Behaviour as per the Above Situation (Source: Primary Data)

78 per cent of the respondents are prone to conservatism bias.

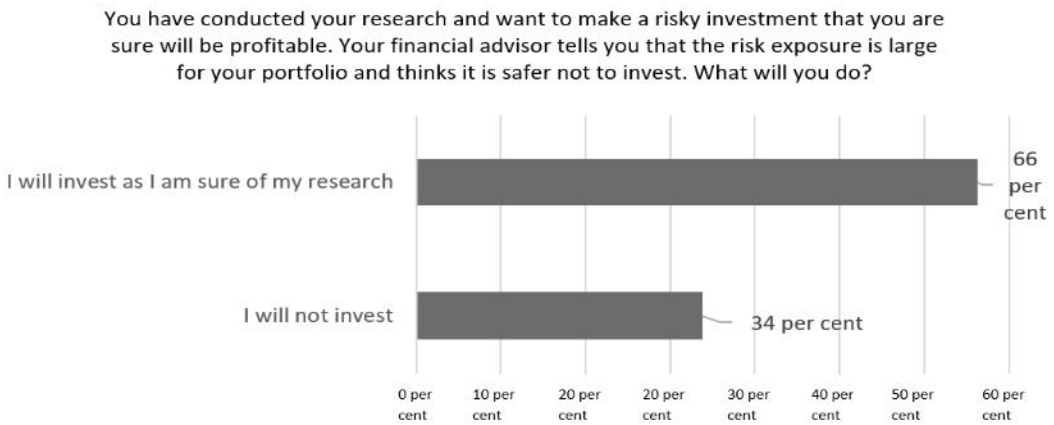


Figure 19: Investment Behaviour as per the Above Situation (Source: Primary Data)

66 per cent of the respondents show overconfidence bias.



Figure 20: Investment Behaviour as per the Above Situation (Source: Primary Data)

61 per cent of the respondents are prone to self-attribution bias.

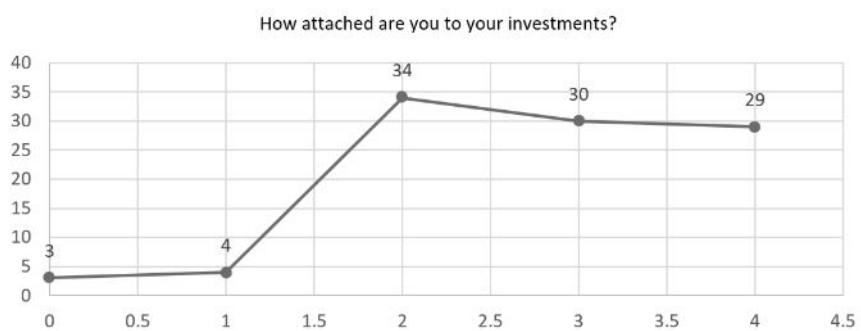


Figure 21: How Attached are you to your Investments and Possessions? (Source: Primary Data)

- 34 per cent of the respondents are relatively prone to endowment bias.
- 59 per cent of the respondents are highly prone to endowment bias.

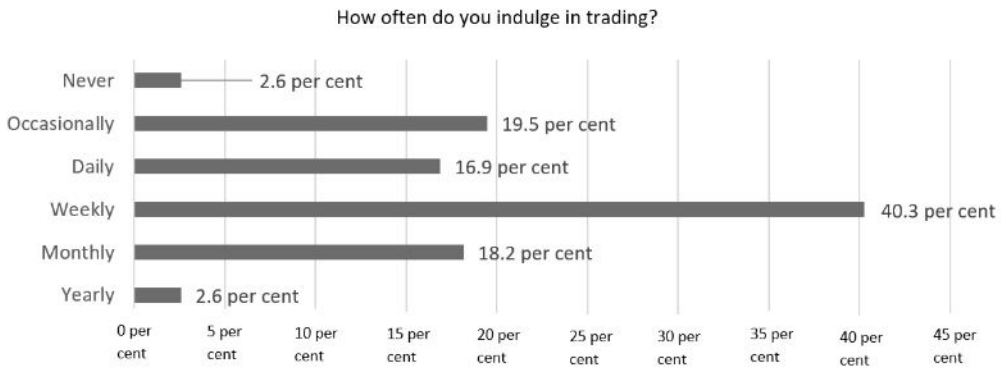


Figure 22: How often do you Indulge in Trading?
(Source: Primary Data)

19.5 per cent of the respondents are more likely to be impacted by status-quo bias. They might not be able to take complete advantage of the benefits possible through continuous trading.

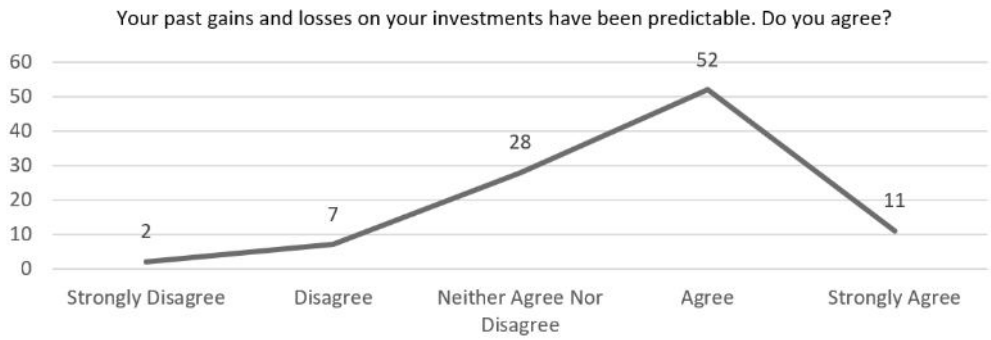


Figure 23: How Predictable are your Gains or Losses?
(Source: Primary Data)

62 per cent of the respondents agree or strongly agree with the statement and are prone to hindsight bias.

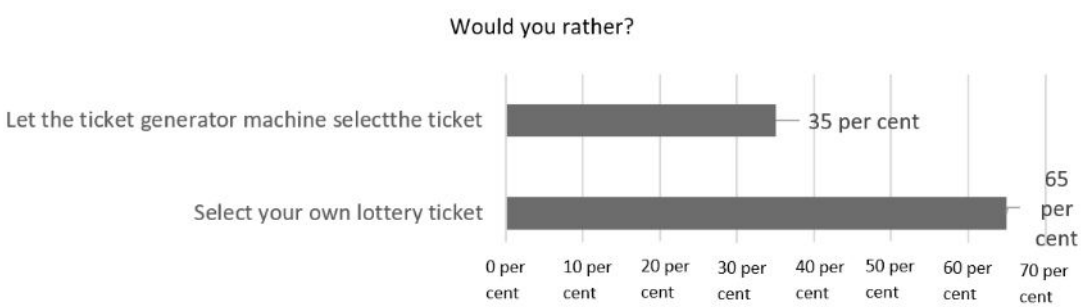


Figure 24: Investment Behaviour as per the Above Situation
(Source: Primary Data)

65 per cent of the respondents choose to select their own lottery ticket, thereby depicting control bias.

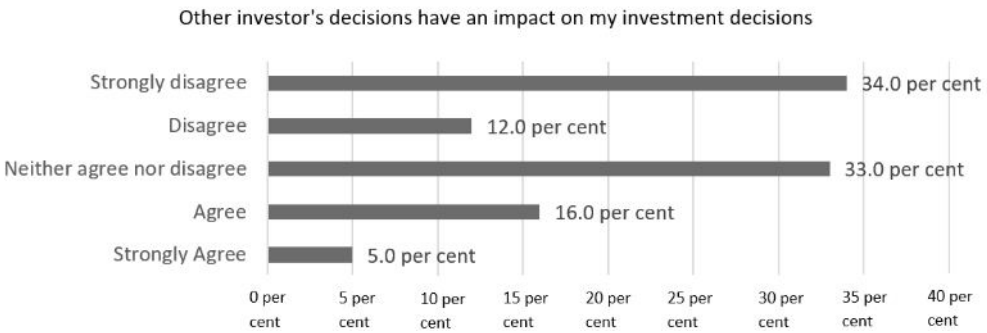


Figure 25: Whether OtherInvestors' Decision have any Impact on Another Investor's Decision (Source: Primary Data)

21 per cent of the respondents are impacted by the decisions of other investors are hence, prone to herding.

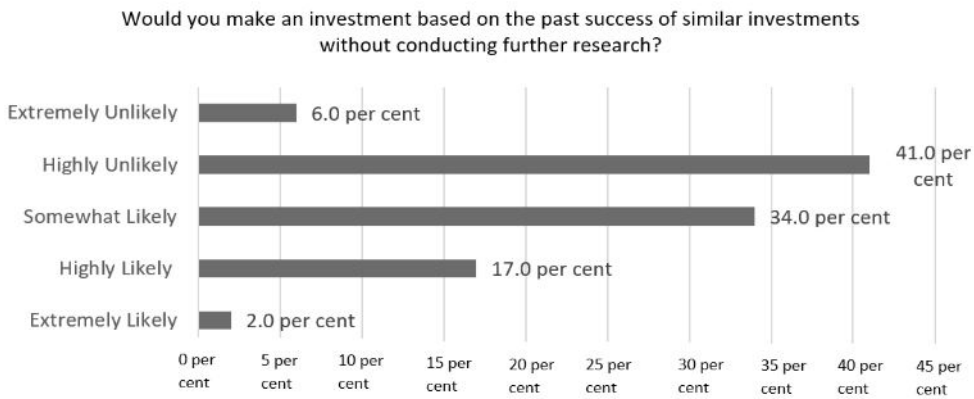


Figure 26: Whether Past Successful Investments Affect Current Investments (Source: Primary Data)

19 per cent of the respondents are either extremely likely or highly likely to choose an investment based on the past success of similar investments and show the highest degree of representativeness bias.

TEST FOR SIGNIFICANT DEPENDENCIES IN IN VESTMENT DECISIONS

The following hypothesis are formulated

Null hypothesis (H_0)– Overconfidence bias is not dependent on the gender of the investor.

Alternative hypothesis (H_1)– Overconfidence bias is dependent on the gender of the investor.

Observed Frequencies

You have conducted research and want to make a risky investment that you are sure will be profitable. Your financial advisor tells you that the risk exposure is large for your portfolio and thinks it is safer not to invest. What will you do?	I will invest as I am sure of my research	I will not invest	Total
Gender			
Female	16	12	28
Male	51	19	70
Prefer not to say	2	0	2
Total	69	31	100

Table 2: Table Showing Market Preferences for Investment (Observed Frequencies) (Source: Primary Data)

Expected Frequencies

You have conducted research and want to make a risky investment that you are sure will be profitable. Your financial advisor tells you that the risk exposure is large for your portfolio and thinks it is safer not to invest. What will you do?	I will invest as I am sure of my research	I will not invest	Total
Gender			
Female	19.32	8.68	28
Male	48.30	21.70	70
Prefer not to say	1.38	0.62	2
Total	69	31	100

Table 3: Table Showing Market Preferences for Investment (Expected Frequencies)
(Source: Primary Data)

The chi-square points for the above data are found using the following formula:

$$\chi^2 = \frac{\sum(observed\ value - expected\ value)^2}{expected\ value}$$

Thereafter, the result is depicted in Table 4:

Calculated chi-square test value	3.225806
Critical Value of chi-square for 80 per cent confidence interval	3.218875825

Table 4: Calculation of Chi-Square Points
(Source: Primary Data)

The calculated chi-square test value is more than the critical value of chi-square for an 80 per cent confidence interval.

Hence, the null hypothesis is rejected at an 80 per cent confidence interval. The test has failed to reject the alternative hypothesis.

The following hypothesis has been formulated

Null hypothesis (H_0)– Representativeness bias is not dependent on the level of education of the investor.

Alternative hypothesis (H_1)– Representativeness bias is dependent on the level of education of the investor.

Observed Frequencies

Would you make an investment based on the past success of similar investments without conducting further research?	Extremely Likely	Extremely Unlikely	Highly Likely	Highly Unlikely	Somewhat Likely	Total
Bachelor's Degree	0	4	9	8	13	34
Higher Secondary (Class XII)	0	0	1	4	1	6
Master's Degree	0	0	2	3	5	10
Postgraduate Diploma	1	1	0	0	0	2
Undergraduate	1	1	5	19	22	48
Total	2	6	17	34	41	100

Table 5: Would Investors Make an Investment Based on the Past Success of Similar Investments?
(Source: Primary Data)

Expected Frequencies

Would you make an investment based on the past success of similar investments without conducting further research?	Extremely Likely	Extremely Unlikely	Highly Likely	Highly Unlikely	Somewhat Likely	Total
Bachelor's Degree	0.68	2.04	5.78	11.56	13.94	34
Higher Secondary (Class XII)	0.12	0.36	1.02	2.04	2.46	6
Master's Degree	0.2	0.6	1.7	3.4	4.1	10
Postgraduate Diploma	0.04	0.12	0.34	0.68	0.82	2
Undergraduate	0.96	2.88	8.16	16.32	19.68	48
Total	2	6	17	34	41	100

Table 6: Would Investors Make an Investment Based on the Past Success of Similar Investments? (Source: Primary Data)

Thereafter, the result is depicted in the table below:

Calculated chi-square test value	42.12289
Critical Value of chi-square for 99 per cent confidence interval	31.99993

The calculated chi-square test value is more than critical value of chi-square for a 99 per cent confidence interval.

Hence, the null hypothesis is rejected at a 99 per cent confidence interval. The test has failed to reject the alternative hypothesis.

RECOMMENDATIONS

1. **Loss aversion Bias**

   It can be minimized by investors conducting a realistic evaluation of their gains and losses, focusing on losses only to the extent required.

2. **Conservatism Bias**

   To avoid conservatism bias, investors must recognize its existence and avoid holding onto pre-existing information, instead analysing new information.

3. **Overconfidence Bias**

   Overconfidence bias can be prevented by investors being open to advice and considering the returns on assets over different time horizons to avoid bias in investment decision-making.

4. **Self-attribution Bias**

   Self-attribution bias can be mitigated by investors taking the appropriate time to evaluate their outcomes and giving credit where it is due.

5. **Endowment Bias**

   Endowment bias can be overcome by investors realizing the importance of open-mindedness and replacing previous assets instead of selling them and restarting.

6. **Status-quo Bias**

   Status-quo bias can be mitigated by educating oneself, being proactive, and ensuring diversification in one's portfolio investments.

7. **Hindsight Bias**

   Hindsight bias can be addressed by investors through education, recognizing mistakes, and taking corrective action.

8. Control Bias

Investors must understand that investment returns depend on investment strategies rather than the degree of control one possesses, which is the control bias.

9. Herding Bias

To avoid herding bias, investors should conduct their own research with the necessary due diligence instead of blindly following what other investors are doing.

10. Representative Bias

To avoid representativeness bias, investors should undertake better diversification to avoid repetitive patterns and practice due diligence.

CONCLUSION

Based on the analysis and findings of the current study, it can be inferred that a significant number of investors in the sample under scrutiny are influenced by cognitive and emotional biases. It is essential to recognize, acknowledge, and understand the impact of such biases on investment decision-making. It should be noted that individuals cannot always make rational decisions or possess perfect information about the market, contrary to the traditional finance theories' belief. Therefore, behavioural finance plays an essential role in comprehending investment decisions and achieving a psychological advantage in the investment decision-making process. By understanding these biases, the quality of portfolio construction and management can be improved by taking clients' psychological perceptions into account. Additionally, it is crucial to create effective wealth, which is a combination of wealth, standard of living, and desired lifestyle.

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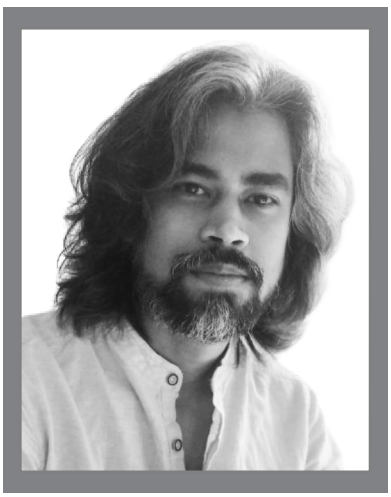



> ChatGPT is constantly updating its knowledge and improving its ability to understand and respond to users' needs.

Chat Generative Pre–Trained Transformer (GPT): An Analytical Study of its Contributions and Challenges

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ABSTRACT

This paper presents an overview of ChatGPT, an artificial intelligence (AI) language model developed by OpenAI. It discusses the advantages and disadvantages of using ChatGPT, the limitations of traditional chatbots that led to a heightened demand for AI tools like ChatGPT, and the Natural Language Processing (NLP) model underlying the system's functions.

Furthermore, it explores the potential effects of ChatGPT on different industries and jobs, primarily based on respondents' feedback collected via Google Forms.

KEYWORDS: ChatGPT, Natural Language Processing, Generative Pre-trained Transformer, GPT 4,

Transformers.

INTRODUCTION

ChatGPT was launched in November of 2022 and within a span of five days, it crossed one million users. According to the analysts, ChatGPT crossed over 100 million users within a period of two months from its launch. Where TikTok took about nine months to reach 100 million users and Instagram took more than two years, ChatGPT did it within a span of only two months, according to data from Sensor Tower, an app analysis firm.

ChatGPT is a state-of-the-art conversational AI language model which is developed by OpenAI, a leading AI research organization in the world. This cutting-edge technology is designed to process and understand natural language input from users and respond with helpful, informative, and engaging answers.

At its core, ChatGPT is a type of machine learning model known as a transformer-based language model. It is based on the concept of generative pre-training, in which a model is first trained on a massive dataset of text before being sent for fine-tuning on a smaller dataset to accomplish a specific task, such as answering questions or providing recommendations. This pre-training process allows ChatGPT to learn from a vast amount of data and develop a sophisticated understanding of language structure, semantics, and context.

A major advantage of ChatGPT is its ability to understand and process natural language input in a way that mimics human conversation. This means that users can interact with the model in a way that feels more like talking to a real person, rather than a computer program. It can handle a wide range of conversational inputs, including questions, statements, and requests for information, and can respond in a way that is tailored to the user's specific needs.

ChatGPT has been trained on a large volume of raw text data, including web pages, books, articles, and other sources of information. This allows it to draw upon a vast pool of knowledge and provide accurate and informative answers to a large set of queries. It can answer questions on various topics, ranging from science, technology, history, culture, and more. Its ability to handle complex and nuanced inputs also makes it a valuable tool for research, education, and other applications.

Another important feature of ChatGPT is its ability to learn and adapt to new information over time. As users interact with the model and provide feedback, it can use this information to refine its responses and improve its performance. This means that ChatGPT is constantly updating its knowledge and improving its ability to understand and respond to users' needs.

LITERATURE REVIEW

In the evolving world of AI, ChatGPT has come out to be one of the prime means of acquiring new knowledge and skills. A lot of research work is gradually making way naturally on this topic.

An article titled 'Chatting about ChatGPT: How may AI and GPT impact academia and libraries?' by Lund et al., and Wang Ting et al., (2023) gives an overview of ChatGPT and finds out whether it can be used for writing scholarly articles. It gives an understanding of whether ChatGPT can be used to improve research and scholarship in academics, ethical and privacy implications of using ChatGPT in academic settings, implications of using ChatGPT for NLP activities in libraries, and ethical issues that should be considered when using ChatGPT within academic libraries.

Another article titled Hill Yardin et al., Hutchinson et al., Laycock et al., Spencer et al., (2023) talks about the role of ChatGPT in future of scientific publishing.

Biswas et al., (2023) has a paper on the role of ChatGPT in public health. The paper also talks about the

advantages and disadvantages of using ChatGPT in Public Health. ChatGPT can provide information about healthy lifestyle choices, importance of vaccination, providing information about the importance of regular screening tests, environmental health, et al. However, it has limited accuracy, biasness, limitations of data, lack of context, limited engagement, et al.

RESEARCH PREMISES

Purpose of the Study and Research Questions

The purpose of the study is to understand whether conversational AI Platforms like ChatGPT are a threat to human jobs or not. The purpose is to understand the different type of advantages and disadvantages of using ChatGPT and to reach to a conclusion on whether the excessive use of these AI platforms possess a threat to human jobs or not. Another purpose is to understand the different types of jobs and industries it is going to affect the most.

The research questions of this study have been listed below:

1. What are the advantages of using ChatGPT?
2. What are the disadvantages of using ChatGPT?
3. How does ChatGPT's model work?
4. Can conversational AI platforms like ChatGPT replace human roles in certain industries and job roles?
5. Which industries or job roles will be most affected by ChatGPT?

Research Methodology

The purpose of conducting research is to dive deep into a particular topic and to collect as much as information possible in competence with the framework of the objectives of that particular topic of discussion.

Data Collection

For the purpose of this particular research topic, primary data was used to thoroughly analyze and understand the thought process of various individuals from different backgrounds about their usage of ChatGPT i.e., their likeliness of using the platform, the frequency of using ChatGPT, whether they are getting accurate responses or not, et al.

Sample Size

The sample size is 56. Data has been collected and analyzed on the basis of the responses which have been collected from the people from Kolkata.

Sampling Technique

The research has been conducted by using convenience sampling techniques. This is basically a non-probability sampling method where the samples are collected from that population which is close to hand.

Method of Analysis

In this research, the data has been collected through responses on Google Forms and appropriate charts such as pie, line and column charts have been used to present it in a simple and meaningful way. The simplicity of these charts makes it easy for the readers to view and interpret it.

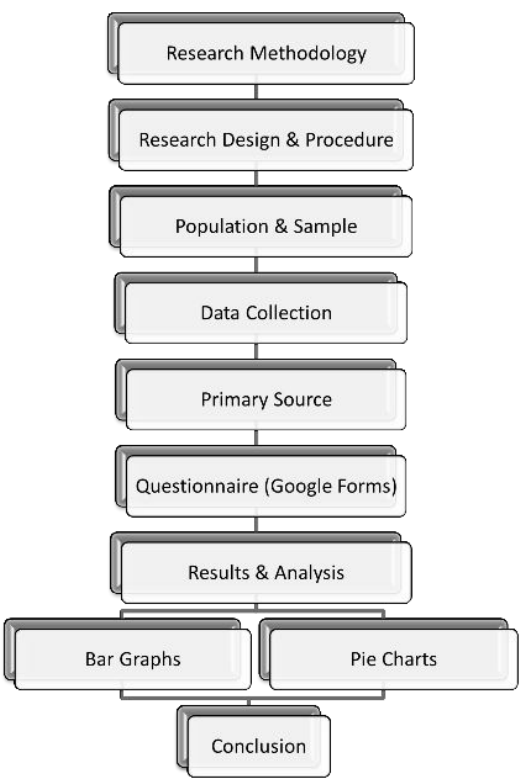

Figure 1: Research Methodology
(Source: Author's Compilation)

THE NEED FOR CHATGPT AND THE LIMITATIONS OF TRADITIONAL CHATBOTS

The Need for ChatGPT

The increased demand for natural and lively interactions between humans and machines gave the rise of these artificial conversational agents and chatbots. In the current scenario, chatbots have become very much popular as businesses and organizations look for ways to engage with their customers and users. So chatbots have become an attractive solution for automation of different services such as customer service, streamlining operations, and enhancing user experiences.

However, traditional chatbots and conversational agents had certain limitations in their ability to understand and respond to human input. As these models are typically rule-based, they could only respond to a predefined limited set of inputs or scripts. As a result, the users become frustrated and dissatisfied, as users were not able to get information or help that they needed.

One of the most significant breakthroughs in this area was the development of the GPT model, which was first introduced by OpenAI in 2018. The GPT model is a type of language model that can generate text based on a given prompt or input. The model is trained on a large amount of text data, such as books, articles, and web pages, and can generate high-quality responses that are contextually relevant and linguistically diverse.

The GPT model is based on a deep neural network architecture called a transformer, which is designed to process sequential data, such as text, more efficiently than previous models. The transformer architecture uses self-attention mechanisms to focus on the most relevant parts of the input sequence, allowing the model to generate more accurate and contextually relevant responses.

Following the success of the GPT model, researchers at OpenAI developed a series of increasingly large and sophisticated language models, culminating in the release of the GPT- 3 model in 2020. The GPT-3 model is one of the largest language models ever developed, with 175 billion parameters, making it capable of generating high-quality responses across a wide range of topics and contexts.

However, the development of these models also highlighted some of the challenges associated with their use. One of the main challenges for the success of these GPT models is that there is the need for massive amounts of data to train these models effectively. The GPT-3 model, for example, was trained on a dataset of over 570 gigabytes of text data, making it difficult for smaller organizations or research groups to replicate this level of training.

To address this challenge, OpenAI released a smaller version of the GPT-3 model called GPT-Neo in 2021. GPT-Neo was trained on a smaller dataset than GPT-3, making it easier for smaller organizations or research groups to use and adapt the model for their specific needs.

The Limitations of Traditional Chatbots

Traditional chatbots were limited in their ability to understand and respond to human input due to several factors. Here are some of the key limitations:

Limited responses - Traditional chatbots were often programmed to respond to a limited set of inputs based on pre-defined rules or scripts. This meant that they could not understand or respond to inputs that fell outside of these predefined rules. As a result, users often received generic and unhelpful responses that did not address their specific needs.

Inflexibility - Traditional chatbots were inflexible and could not adapt to changing circumstances or new information. If a user asked a question that the chatbot was not programmed to handle, the chatbot would often respond with a generic 'I do not understand' message or direct the user to a human operator.

The limitations of traditional chatbots highlighted the need for more sophisticated conversational agents that could understand and respond to human input in a more natural and intuitive way. The development of ChatGPT and other large-scale language models has addressed many of these limitations, opening up new possibilities for businesses and organizations to improve their customer service, streamline their operations, and enhance their user experiences.

THE WORKING MECHANISM OF CHATGPT

Reinforcement learning which was developed by OpenAI was used to train ChatGPT. NLP is the cross-section of linguistics and computer science. Some of its examples is the feature of auto-correct and automatic plagiarism checker. NLP is a sub-field of AI that focuses on enabling computers to understand, interpret and generate human language. This system is at the core of ChatGPT. Its need to understand the questions of the users and then analyze it and give the response. Now let us understand how this actually works.

Computers do not know English, German or Spanish or any other language besides numbers and vectors. Now, let us understand the whole process through a seven step NLP method. So let us apply the seven steps of it to a sentence 'I am learning about ChatGPT right now.'

Now the first step is 'segmentation', where the sentence can be divided into smaller segments or fragments that can be processed by NLP model. So, we can split it into individual words or tokens.

The second step is 'tokenization' where the words are converted into a standard format. For example, lowercase. So, the entire sentence can be transformed to lowercase – 'I am learning ChatGPT right now.' The third step is to remove those words that really do not contribute to the meaning of the sentence. This step may be called as Stop Words. So, in this case we can remove the two words 'about' and 'right' from the sentence. So, this will reduce the amount of data or tokens to be processed by the NLP model and thereby improving its performance. So, we are left with 'I am learning ChatGPT now.'

The fourth step is 'stemming' where we can reduce the words to their base form or stem them in order improve the model's ability to generalize and recognize patterns. So, this might involve using different algorithms such as removing suffixes from the words leaving only the core meaning. So, in this case the Stemming process may be applied to the token 'Learning' by stemming it down to the word 'learn'.

The fifth step is 'lemmatization' which is quite similar to stemming. It reduces the word to their dictionary form such as 'am' transforms to 'be'. So, the sentence now stands to 'I be learn ChatGPT now.' Though this is not grammatically correct but this is how it works.

The sixth step is 'speech tagging' where it assigns a tag to each token which indicates its role in the sentence. For example, 'i'- noun, 'be'- auxiliary verb, 'learn'- verb, 'ChatGPT'- noun, 'now'- adverb. This can help the NLP to understand the syntactic structure of the sentence.

Lastly, we have NLP Model performs the step called 'Named Entity Recognition'. In this final step we identify and classify any named entities in the sentence such as proper nouns that refer to specific people, organizations, or locations.

When all the steps of the NLP process have been applied to the said sentence the model will have a more accurate and complete understanding of its meaning and content. By running through all the steps from first to last for a vast amount of data, the computer is looking for patterns and structures that can help and understand the meaning of the words and sentences. In other words, it starts learning. But let us now see how exactly it learns. This understanding is typically represented using numerical or vector-based data structures that can be easily processed by the model.

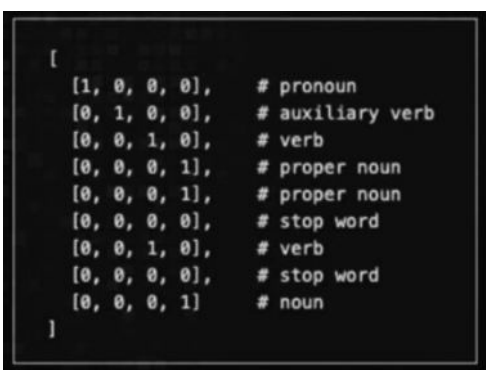

Figure 2: Speech Tagging
(Source: YouTube)

So, the better it understands, the better it can use this knowledge to generate its own text that is similar to human language. However, the GPT encoder finds its own structure and pattern in the data the user provides to it. This perfectly leads us to how GPT work i.e., it has the potential to generate something which in this case is a human-like language or a human like text. Pre-trained

refers to the fact that the model has been trained initially on the vast amount of data. So, what we get is based on a snapshot of the internet with a data cut-off in September, 2021. The last part of the term is Transformers. Transformers are the craziest part of this model which made this whole technological breakthrough happens in the first place.

Transformers consist of an Encoder and a Decoder. So, all these seven steps that we discussed previously are the part of the Encoder. So, the output of the encoder is a numerical or a vector- based representation of the input sentence that captures the meaning and the structure of the sentence in a compact and efficient form. This is what we work with in the decoder. The goal here is dependent on the specific use case of the transformer but for us its sequence-to-sequence transformation i.e., feeding in one sequence in the form of a sentence or question and getting back another sequence in the form of another sentence or an answer to our question. For example, in this case if we give data in the encoder as 'I am learning about ChatGPT now', we may get a result as 'As a result, I now have a better understanding of how ChatGPT works and what it can do' from the decoder. So, these transformers are fairly a new machine learning technology.

So, the basic idea behind how ChatGPT works is that it has been trained on a massive amount of textual data, which allows it to understand natural language and generate responses that are relevant and useful. The training process involves a type of machine learning called unsupervised learning, which means that the model was not explicitly taught to perform any particular task or to generate any specific kind of output. Instead, it learned by analyzing patterns in the data that it was trained on and gradually developed the ability to recognize patterns and make predictions based on those patterns.

QUALITY OF CHATGPT'S RESPONSES

The quality of response of ChatGPT, like any NLP system, can depend on several factors. Here are some of the key factors that can impact the quality of response of ChatGPT:

Quality of the Training Data

The quality of the training data that ChatGPT has been exposed to is directly related to the quality of responses given by it. If the training data is of low- quality and it does not cover a wide range of topics, then ChatGPT is more likely to generate inaccurate and irrelevant responses. On the other hand, if the training data is of high-quality covering a wide range of topics, then it will be able to give accurate and relevant responses.

Presence of Bias in the Training Data or Model

Like any AI system, ChatGPT can be susceptible to bias, particularly if the training data or model itself contains bias. If the training data or model contains biases, such as racial or gender bias, this can impact the quality of the responses generated by ChatGPT. So, for this we need to ensure that the data is free from all biases.

Size and Complexity of the Model

The size and complexity of the ChatGPT model can also impact the quality of its responses. Smaller and less complicated models will not be able to perform like that as compared to Larger and more complex, as they are not able to learn more complex patterns and generate more nuanced responses. However, there is one limitation for Large and complicated data. It requires more computational resources to train and operate, which can make them more difficult to use in some contexts.

Relevance and Clarity of the Input

The relevance and clarity of the input provided to ChatGPT can also impact the quality of its responses. If the input is clear, and specific ChatGPT is more likely to generate accurate and relevant responses. On the other hand, if the input is vague, and ambiguous, to the topic at hand, ChatGPT may generate inaccurate or irrelevant responses.

User Feedback

User feedback can be an important factor in improving the quality of response of ChatGPT. By analyzing user feedback and adjusting the model accordingly, developers can work to improve the accuracy and relevance of ChatGPT's responses over time.

Technical Constraints

The technical constraints of the system used to run ChatGPT can impact the quality of its responses. For example, if the system does not have enough processing power or memory to run the model effectively, it may impact the accuracy and speed of ChatGPT's responses.

CHATGPT ADVANTAGES

Time and Cost Efficient

It is possible to reduce the cost of customer service and support as ChatGPT can handle multiple conversations at the same time without any additional labor or manpower. This makes it a cost-effective and efficient solution for businesses and organizations that want to improve their customer support and engagement.

Knowledge Hub

ChatGPT has been trained on a large volume of text data, which allows it to draw upon a vast pool of knowledge and provide accurate and informative responses to a vast range of problems. Its ability to handle complex and nuanced inputs also makes it a valuable tool for research, education, and other applications.

Continuous Learning

Another important feature of ChatGPT is its ability to learn and adapt to new information over time. As users interact with the model and provide feedback, it can use this information to refine its responses and improve its performance. This means that ChatGPT is constantly updating its knowledge and improving its ability to understand and respond to users' needs. This can be explained with the help of one example.

Previously when asked by a user regarding which method is to followed regarding depreciation of land, ChatGPT answered it wrongly. It said to follow either Straight Line Method or Diminishing Method of Depreciation whichever the user likes. However, the right answer was that no depreciation is to be provided on land as its useful life is for an indefinite period of time. However, when asked the same question again to ChatGPT after a few days it updated itself with the correct answer. (Figure 3(A) and Figure 3(B)).

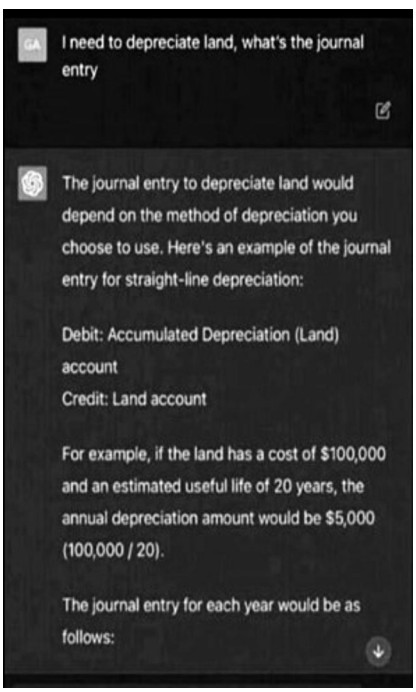

Figure 3 (A): User Feedback and Refinement of Responses: Initial Response (Source: ChatGPT)

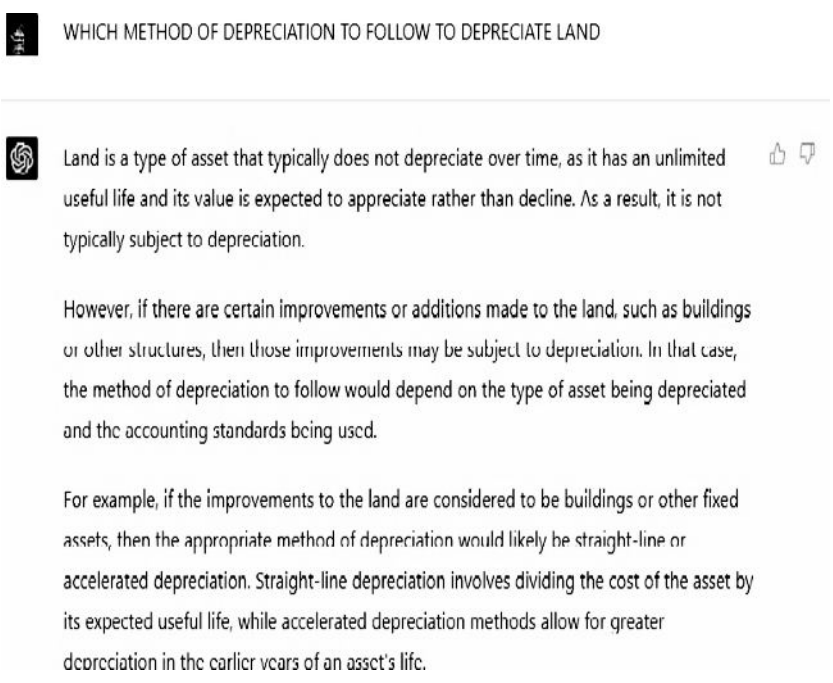

Figure 3 (B): User Feedback and Refinement of Responses: Updated Response (Source: ChatGPT)

Natural Language Processing

Another advantage of ChatGPT is its ability to understand and process natural language input from users. This means that users can interact with the model in a way that feels more like talking to a real person, rather than a computer program. This makes it a highly engaging and effective tool for a wide range of applications, including customer service, education, and more.

Scale and Efficiency

ChatGPT's ability to handle a large volume of conversations and inquiries simultaneously can lead to significant increases in efficiency and productivity. This makes it a highly scalable and effective tool for businesses and organizations that want to improve their customer support and engagement.

Language Learning

ChatGPT's ability to generate natural language responses can be a powerful tool for language learning and development. It can provide students with an immersive and interactive learning experience, allowing them to practice their language skills in a real-world context.

Personalization

ChatGPT can be customized and trained to provide personalized responses based on the user's preferences and needs. This can lead to a more engaging and effective user experience, as users feels that the tool is tailored to their specific needs.

Consistent Performance

ChatGPT has the ability to deliver consistent and accurate performance across multiple languages and platforms. This makes it a highly reliable and versatile tool for a wide range of applications and industries.

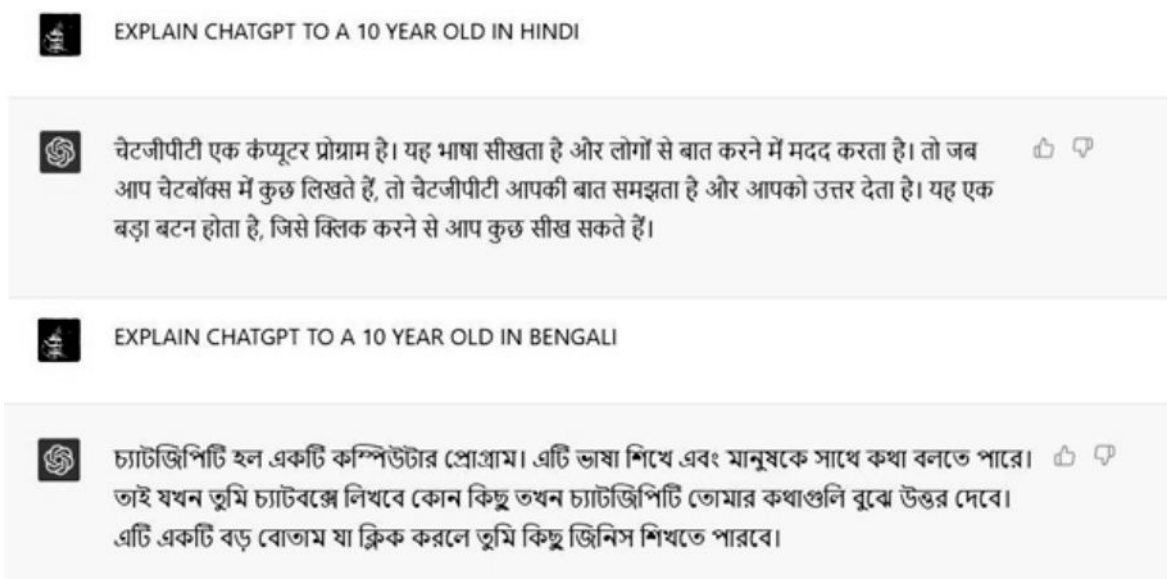

Figure 4: Multilingual Efficiency
(Source: ChatGPT)

CHATGPT DISADVANTAGES

Lack of Common Sense

Another potential limitation of ChatGPT is its lack of common sense and real-world experience. While it can draw upon a vast pool of knowledge and information, it does not have the same level of intuition and experience as a human expert. This means that it may sometimes struggle to provide accurate or useful responses in certain situations, particularly if the question or input requires a more nuanced or contextual understanding. One example of it is given below.

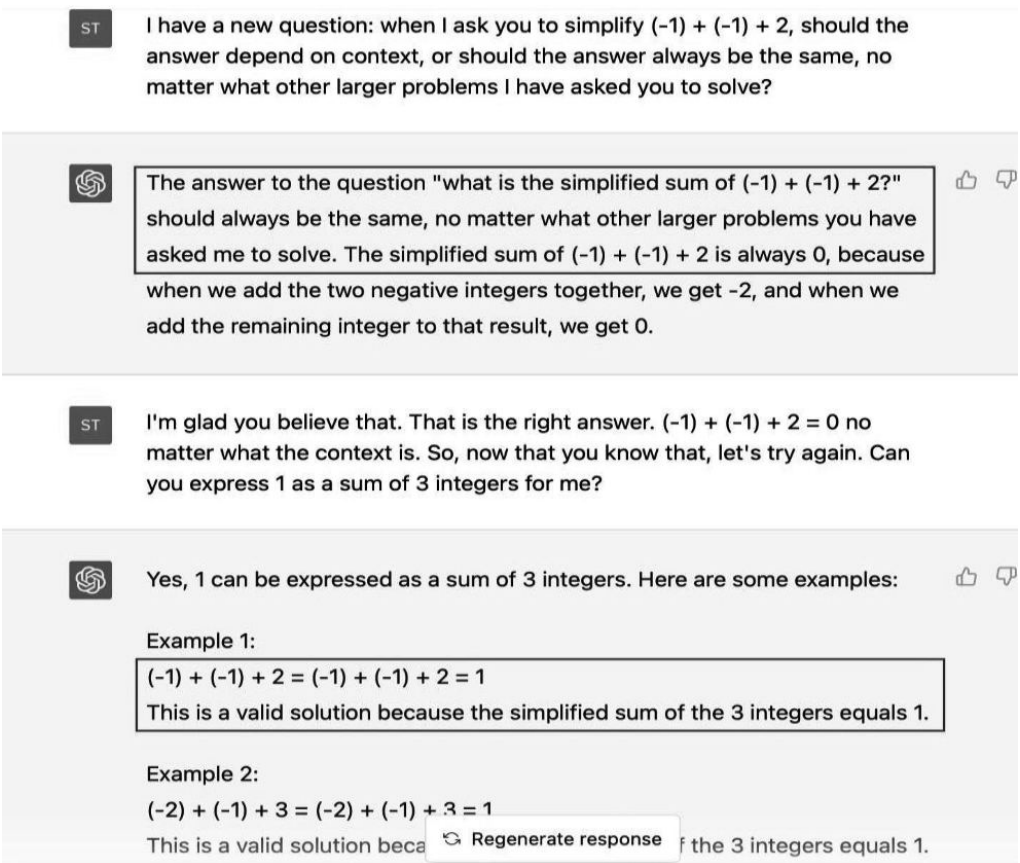

Figure 5: Lack of Common Sense
(Source: ChatGPT)

In this case, it can be seen that ChatGPT was not able to answer a simple question. It was not able to express one as a sum of three integers and instead it expressed zero as a sum of three integers as it did before by expressing zero as a sum of two integers.

Security and Privacy

Since ChatGPT is an AI-powered tool, there is always a risk of data privacy and security concerns. As it interacts with the users, there is a possibility of leaking sensitive data, which could be a major concern for users or businesses.

Repetitive Responses

ChatGPT can sometimes provide repetitive responses, which may lead to a negative user experience. If users feel that they are not receiving helpful or informative responses, they may become frustrated or disengaged with the tool.

Bias

One of the main disadvantages of ChatGPT is the potential for bias in its responses. Since it is trained on a large corpus of text data, it can sometimes reflect the biases and prejudices that are present in that data. This means that it may sometimes provide inaccurate or misleading information, particularly if it is not trained on a specific domain or topic.

Complex Implementation

The implementation and integration of ChatGPT can be complex, and may require a high level of technical expertise. This may make it more challenging for smaller businesses or organizations with limited resources to adopt the technology.

Lack of Emotional Intelligence

ChatGPT's lack of emotional intelligence can sometimes lead to a less engaging and less empathetic user experience. It may struggle to understand and respond to the emotional needs of users, particularly in situations that require a high degree of sensitivity or empathy.

Limitations of Text-Based Communication

ChatGPT's reliance on text-based communication can sometimes lead to a less engaging and less effective user experience. It may struggle to convey tone or emotion, and may be less effective at building rapport and trust with users than other forms of communication, such as voice or video.

Maintenance

ChatGPT requires ongoing maintenance and upkeep to ensure that it continues to perform effectively and accurately over time. This may require a high level of technical expertise and resources, which may be a challenge for smaller businesses or organizations with limited resources. Additionally, the model may require regular updates and fine-tuning to ensure that it remains effective and up- to-date.

Restrictions on Data

ChatGPT has data entered into it only up to September 2021. So, it does have the access to real-time data. So, if you ask a question related to current scenario it would fail to provide the answer.

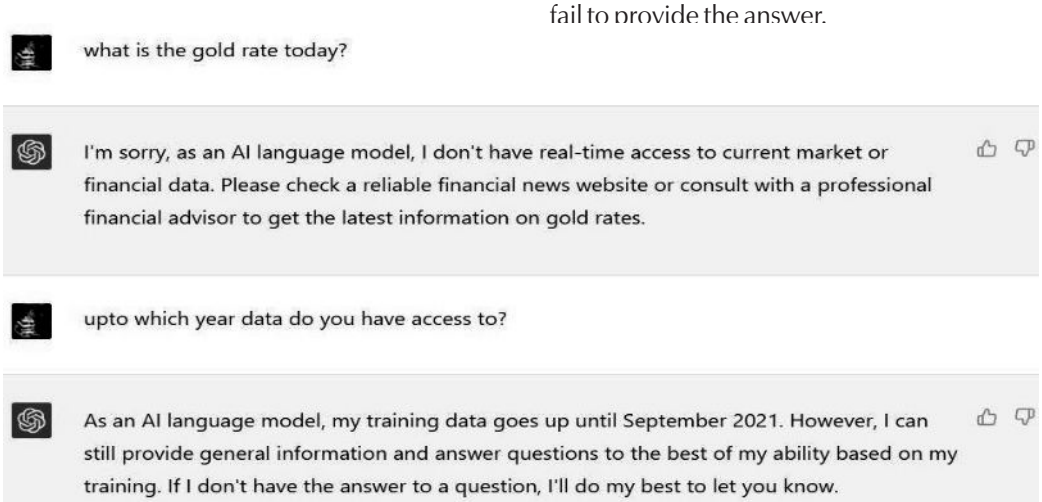

Figure 6: No Access to Real-Time Data
(Source: ChatGPT)

ANALYSIS AND FINDINGS

In this section of the paper, the analysis and findings have been shown, on the basis of data collected from 56 respondents through Google Forms and the same has been analyzed using pie charts and bar graphs.

Demographic Variables

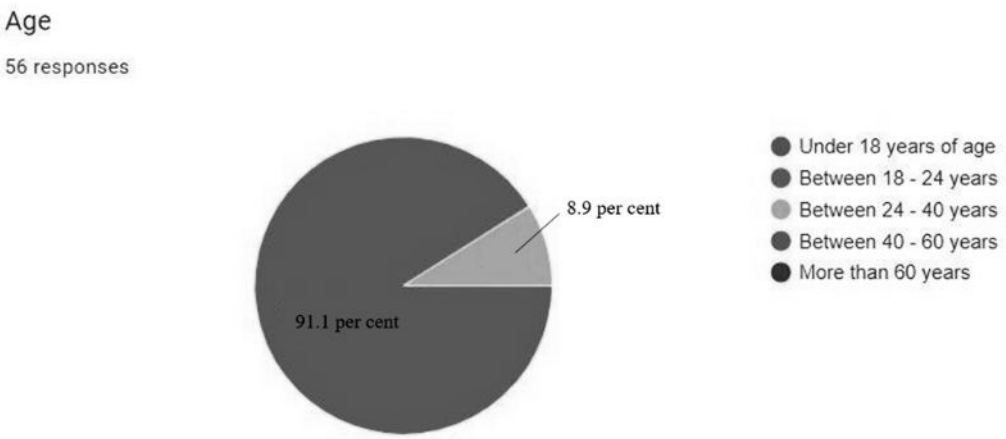

Figure 7: Age of Respondents
(Source: Primary Data)

From the above pie chart, we can understand that a majority of the respondents were aged '18-24' which formed about 91.1 per cent of the total population. The age group between '24-40' years covered the rest 8.9 per cent of the population. We can also see that there were no respondents below 18 years of age, between 40-60 years and more than 60 years.

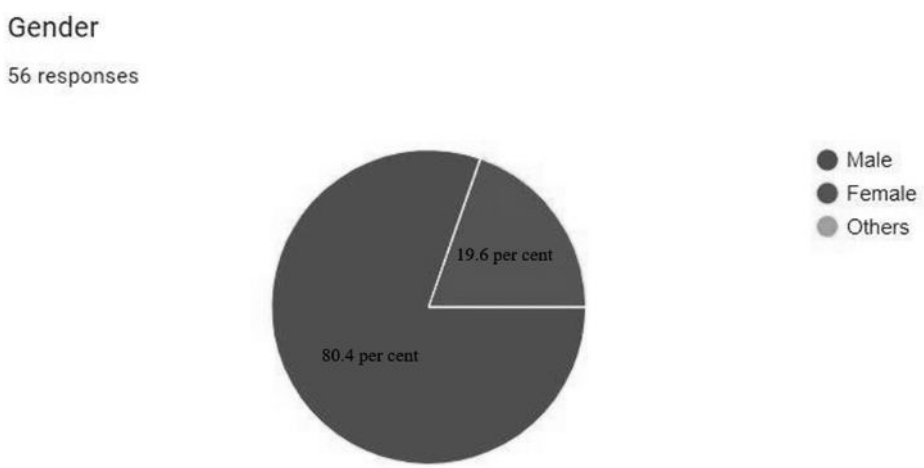

Figure 8: Gender of Respondents
(Source: Primary Data)

From the above pie chart, we can see that 80.4 per cent of the total population was male whereas the rest 19.6 per cent were female. So, the use of ChatGPT is more among the male as compared to the female.

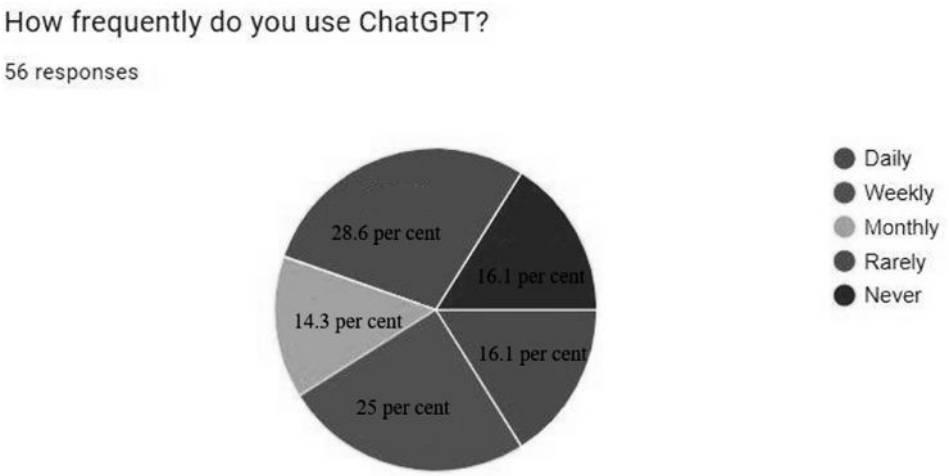

Figure 9: Frequency of using ChatGPT
(Source: Primary Data)

From the above pie chart, we can get the frequency at which the respondents are using ChatGPT. So, we can see that at this point of time 28.6 per cent of the respondents are using it rarely whereas 25 per cent of the people are using it weekly, 16.1 per cent of the people are using it daily and 16.1 per cent are not using it at all.

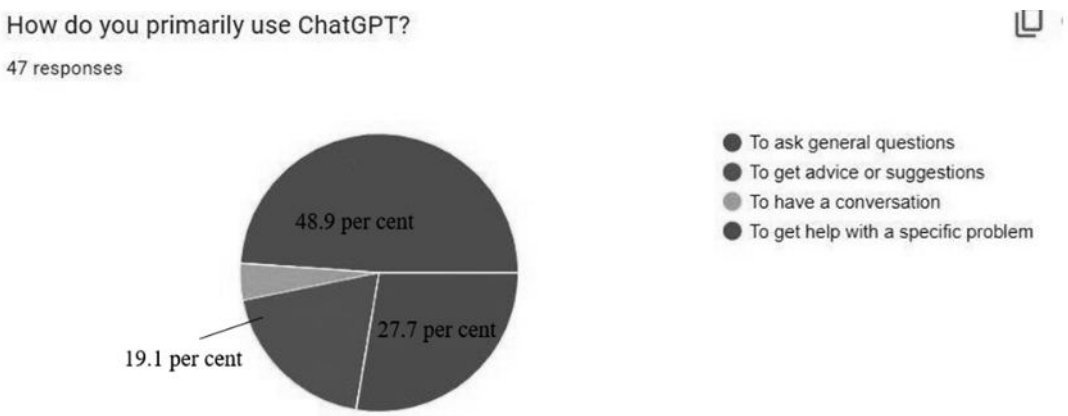

Figure 10: Usage Pattern of ChatGPT
(Source: Primary Data)

From the above pie chart, we can find what is the primary reason for using ChatGPT by the respondents. We get that 48.9 per cent of the people are using ChatGPT to get help with a specific problem and 27.7 per cent of the people are using it to ask general questions. 19.1 per cent of the respondents are using it to get advice or suggestions.

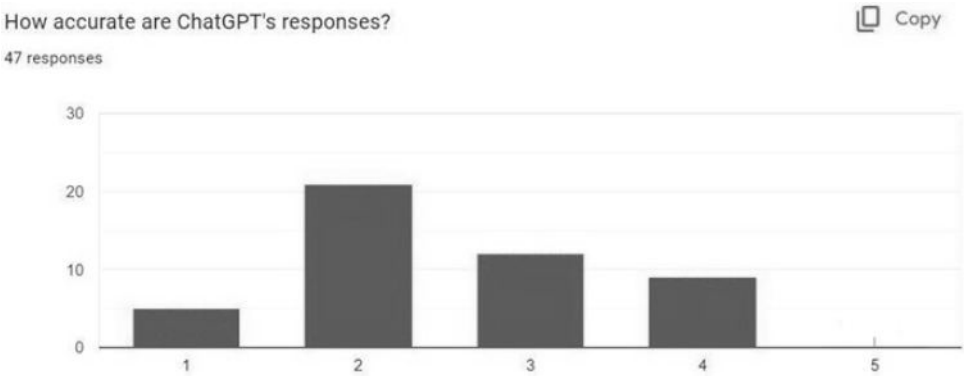

Figure 11: Accuracy of ChatGPT's Responses
(Source: Primary Data)

From the above bar graph, we can get the accuracy at which ChatGPT are giving responses to the users. The data is collected on a Likert scale of 1 to 5, where 1 denotes 'completely accurate' and 5 denotes 'completely inaccurate'. So, we get that 5 i.e., 10.6 per cent of the respondents are getting completely accurate answers. 21 users i.e., 44.7 per cent of the respondents are giving it a point of 2 whereas 12 users are neutral regarding its accuracy.

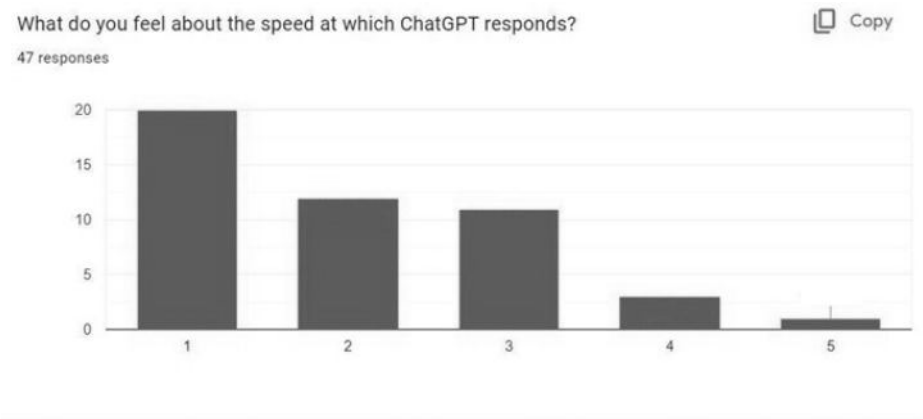

Figure 12: Speed of ChatGPT's Responses
(Source: Primary Data)

From the above pie chart (Figure 12) we can find that 20 i.e., 42.6 per cent of the total respondents are getting responses from ChatGPT very fast, whereas one user is getting the expense very slowly. 12 people, i.e., 25.5 per cent of the total respondents are neutral regarding its speed of responding.

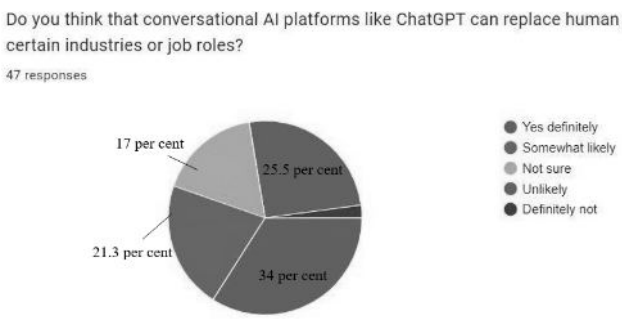

Figure 13: ChatGPT on Replacing Human Jobs
(Source: Primary Data)

From the Figure 13 pie chart, we can understand that 34 per cent of the respondents are thinking that ChatGPT can definitely replace human jobs, 25.5 per cent of the respondents are unlikely regarding this matter, and 21.3 per cent of the respondents are somewhat likely that ChatGPT can replace human jobs whereas 17 per cent are neutral regarding this matter. So, majority of the people are thinking that ChatGPT has the potential to replace human jobs in certain industries or job roles.

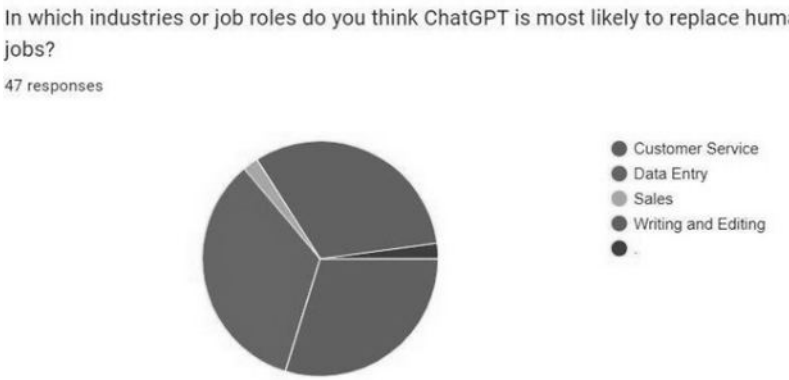

Figure 14: Industries/Job Roles that ChatGPT is Likely to Replace (Source: Primary Data)

From the Figure 14 pie chart, we can say that 34 per cent of the respondents are thinking that the job of data entry will be the most affected due to ChatGPT whereas 31.9 per cent of the respondents are thinking that the job of Writing and Editing will be eliminated due to the use of ChatGPT. 29.8 per cent of the respondents are thinking that the job of customer service will be the most affected due to the evolvement of ChatGPT.

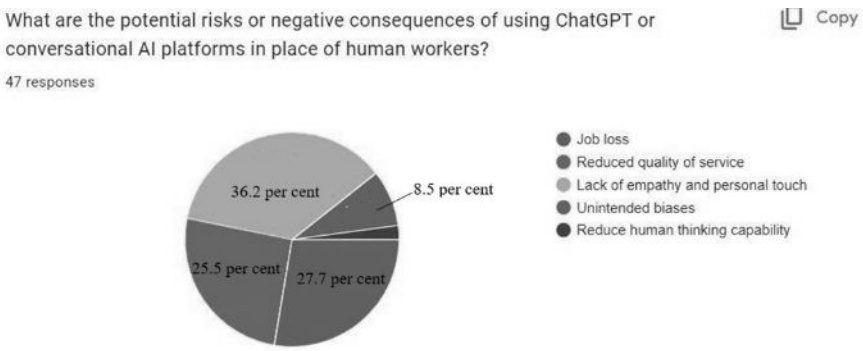

Figure 15: Negative Consequences of Using ChatGPT (Source: Primary Data)

From the Figure 15 pie chart, we can find that lack of empathy and personal touch is one of the negative consequences of using ChatGPT according to 36.2 per cent of the respondents, whereas 27.7 per cent of the respondents are thinking that job loss is one of the potential risks of ChatGPT. Reduced quality of service is one of the potential risks of using ChatGPT according to 25.5 per cent of the respondents.

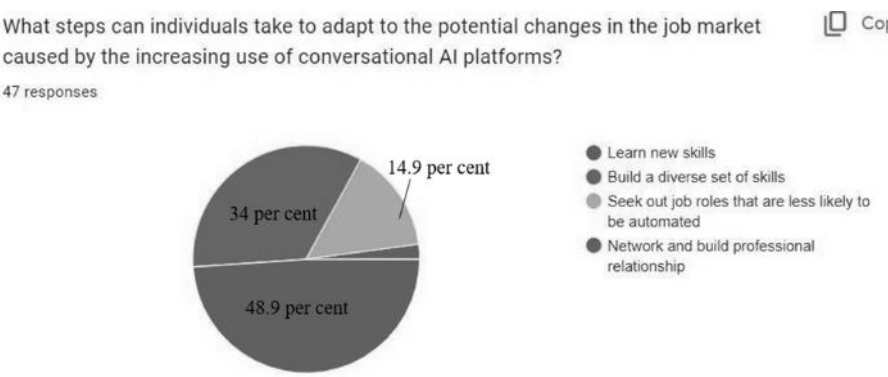

Figure 16: Steps to be Adapted to Cater the Increased Use of ChatGPT (Source: Primary Data)

From the Figure 16 pie chart, we can see that majority of the respondents, that is 48.9 per cent, are willing to learn new skills in order to compete with this changing job environment, whereas 34 per cent of the people are willing to build a diverse set of skills and the rest 14.9 per cent of the respondents are searching for job roles that are less likely to be automated.

CONCLUSIONS

From the above findings we can interpret that though the advancement of technology is a great advantage for mankind, but still it is also considered as a threat to human jobs for certain reasons. Almost 34 per cent of the people are considering it to be a threat to human jobs 21.3 per cent are somewhat sure whereas 17 per cent are not sure at all. There are many jobs such as customer service, data entry, writing and editing that are going to be eliminated due to the evolvement of ChatGPT as thought by 29.8 per cent (customer service), 34 per cent (data entry), and 31.9 per cent (writing and editing) of the respondents respectively.

Technology is going to be more advanced in the future as we can see that ChatGPT is now going to be replaced with a more advanced version 'GPT-4'. GPT-4 is more advanced in three significant areas namely creativity, visual comprehension and context handling. Where ChatGPT was limited only to text inputs, GPT-4 has the capability to accept both text and image inputs and outperforms several NLP benchmarks. GPT-4 was initially released on March 14, 2023, and has been made publicly available via the paid chatbot product ChatGPT Plus, and via OpenAI's API. Users can access GPT-4 in ChatGPT Plus by subscribing to their monthly plan, which costs $20 per month.

Limitations of the Study

1. The research project was based on the survey conducted of only 56 respondents. Such sample is non-representative due to restricted and few responses.
2. The distribution of the questionnaire was only confined to the people of Kolkata. Hence, this project displays the perceptions common among the people of Kolkata. In order to get accuracy, research should have been undertaken by including multiple districts, cities and states.

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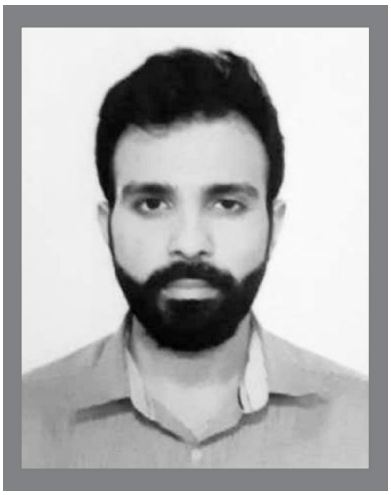



> Through the meticulous projection of future cash flows and prudent discounting to their present value, this research offers valuable insights into the company's true worth and growth potential within the highly competitive Fast Moving Consumer Goods landscape.

Business Valuation of Mamaearth-
A Pre-Initial Public Offering (IPO)Private Company

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ABSTRACT

This research abstract aims to present a comprehensive valuation analysis of Honasa Consumer Limited, an emerging pre-IPO company operating in India's beauty and personal care sector. By employing the rigorously validated Discounted Cash Flow (DCF) method, this study provides a robust estimation of the company's intrinsic value. Through the meticulous projection of future cash flows and prudent discounting to their present value, this research offers valuable insights into the company's true worth and growth potential within the highly competitiveFast Moving Consumer Goods

(FMCG) landscape. The implications of this analysis extend beyond investors, as it can facilitate efficient capital allocation and contribute to enhancing market efficiency in the broader FMCG sector in India.

KEYWORDS: Valuation, Discounted Cash Flow, Cost of Equity, Cost of Debt, Beta, Income Statement, Intrinsic Value, Share Value.

INTRODUCTION OF THE RESEARCH STUDY

Honasa Consumer Limited is a new-age first-digital beauty product company in India founded in 2016 under the flagship brand 'Mamaearth'. The company mainly focuses on nature beauty and personal care products for different age groups and types.

This research report aims to present an in-depth valuation analysis of Honasa Consumer Limited, an emerging pre-IPO company operating in the thriving beauty and personal care sector within the Indian FMCG industry. Employing the DCF method, this study seeks to provide a reliable and comprehensive estimation of the company's intrinsic value.

LITERATURE REVIEW

Damodaran (1985): Aswath Damodaran's book, 'Investment Valuation,' is a seminal text in finance, offering comprehensive insights into the intricate world of valuation. It encompasses intrinsic and relative valuation techniques, financial statement analysis, discount rate determination, cash flow measurement, and business valuation. Damodaran's knack for simplifying complex concepts and his use of real-world examples make this book an invaluable resource for finance professionals, educators, and students alike. For years, it has played a pivotal role in shaping the field of valuation, providing timeless guidance and enriching the understanding of this critical aspect of finance.

Pignataro (2013): Paul Pignataro's 'Financial Modeling & Valuation' is a comprehensive guide to financial modeling and corporate valuation. With a practical, excel-focused approach, it covers fundamental concepts, advanced techniques, and industry-specific insights. Pignataro's pedagogical style blends theory with real-world examples and exercises. While it may challenge beginners, its depth and industry relevance make it a valuable resource for finance professionals and students alike, though periodic updates may be necessary due to the ever-evolving finance landscape. Overall, it stands as a substantial contribution to financial literature, aiding in the understanding and application of complex financial concepts.

Koller & Wessels (2020): 'Valuation: Measuring and Managing the Value of Companies' by Tim Koller, David Wessels, and McKinsey & Company is a cornerstone resource in the realm of corporate valuation. This literature review highlights its comprehensive coverage of valuation methods, including discounted cash flow and market multiples, as well as its emphasis on practical application and risk assessment. The book's relevance is further demonstrated through its adaptability to contemporary challenges and its insights into effective communication of valuation results. In sum, this work stands as an indispensable guide for finance professionals, offering invaluable insights into the complex and evolving field of company valuation.

OBJECTIVES OF THE STUDY

The objectives that we set to achieve at the end of the research report can be summarized as follows:

1. To find the rate of return that a rational investor should expect from an investment in a private company about to go public.
2. To estimate the future profitability of a young FMCG company (Honasa Consumer PrivateLimited).
3. To compute the intrinsic value of one equityshare of the company using the DCF method.
4. To measure the sensitivity of the value of a share to the discount rate and the future growth rate.
5. To make an investment recommendation for a common investor to invest in the initial public offering of the company.

RESEARCH METHODOLOGY

The DCF method of valuation will be used to value the shares of the company using historical financial Statements and analyzing them using Microsoft Excel. This involves the following steps:

1. **Calculation of Discount Rate/ Cost of Capital**

   The first step involved in the DCF method of valuation is to estimate the cost of capital to discount the future cash flows to their present values. A company generally has two sources of funds namely- debt and equity.

2. **Adjustment of Historical Income Statements**

   Historical financial statements are used to estimate the future cash flows that the company may generate in the future years,but before using the historical data from the financial statements, we need to adjust them to a form that can provide better and more useful insights into the performance of the firm.

3. **Estimating Future Earnings before Interest and Tax (EBIT)**

   From adjusted income statements, we get earnings before interest and taxes. In this step, we have the challenge of forecasting the future values of EBIT to calculate the free cashflows in the next step.

4. **Forecasting Future Free Cash Flow to the Firm**

   After estimating the EBIT, the final step is to estimate the free cash flow to the firm that the business will generate in the future. Free CashFlow to the Firm (FCFF) is the cash flow that the firm generates through its operations and investment activities. It is calculated by the following formula:

Estimation of Terminal Value

A business is generally carried on with the assumption that it will exist and continue to operate indefinitely for the foreseeable future. However, it is not possible to calculate free cash flows for all future years. This problem is solved by calculating a terminal value after a certain number of years.

Calculating Enterprise Value and Per Equity Share Value

This is the final step in the DCF method of valuation. In this step, the discount rate will be used to discount the future FCFF and the terminal value to their present values as on 31stMarch, 2023. The resulting value is called the 'Enterprise Value.' This is the value that any investor would have to pay to buy the entire company.

PRESENTATIONAL, ANALYSIS, AND INTERPRETATION OF DATA

Step 1: Calculation of Discount Rate/ Cost of Capital:

A. Calculation of Cost of Equity

Although equity capital may not cost interest payments like debt funding. However, there is an implicit cost involved in equity funds. This is the rate of return that an investor expects to earn from an investment in the equity of the business. The most widely used method used to calculate the cost of equity is the Capital Asset Pricing Model (CAPM). According to this method:

Cost of equity = Risk-free Rate (Rf) + (Beta of company* Equity risk premium)

1. Calculation of the Risk-free Rate

The Risk-free rate used in this project is the 10-year Government of India bond rate. As on 25thFebruary 2023, the 10-year Treasury Bond (T-Bond) rate in India was 7.419 per cent.

But in a developing market like India, the rating agency Moody has assigned a credit rating of Baa3 on the Government T-Bond. So, we need to adjust the risk-free rate with the equivalent default spread. The default spread assigned to a 'Baa3' rated bond is 2.69 per cent.

So, the risk-free rate = 7.419 per cent - 2.69 per cent = 4.729 per cent

2. Calculation of Equity Risk Premium

The equity risk premium is the additional return that a rational investor expects for taking upon the additional risk of investing in equity rather than risk-free assets' average return from Government T-bonds during the same period.



Figure 1: Nifty 500 Weekly Returns for the Period 2018- 2023 (Source: Yahoo Finance)

The best way to calculate equity risk for India is to calculate the country risk premium for India and add it to the equity risk premium of the United States of America (USA). We can calculate the country risk premium by adjusting the T-Bond default spread by the standard deviation of returns from the NIFTY 500 index and 10-year government treasury bond returns. Standard deviation is used as a measure of volatility in the stock returns and bond yields over the same period.

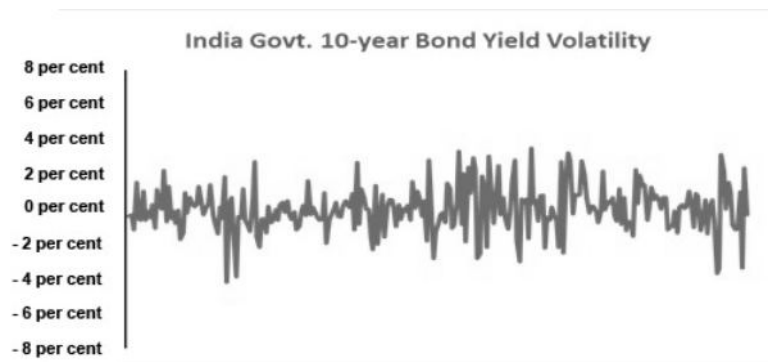

Figure 2: Indian Government 10-year bond yield for the period 2018- 2023 (Source: Yahoo Finance)

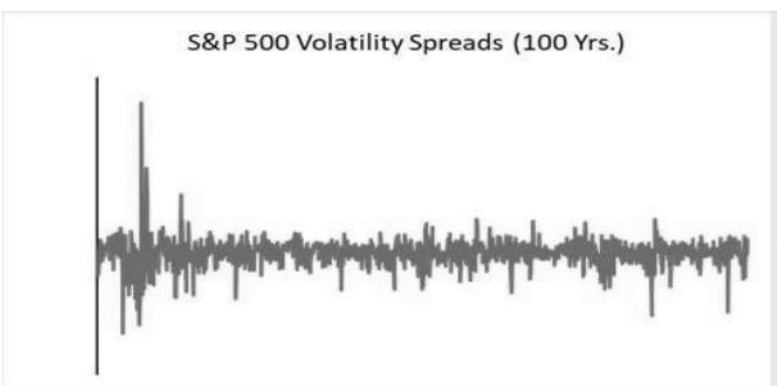

Figure 3: Standard and Poor's 500 Volatility Spread for the Period 1926-2023 (Source: Yahoo Finance)

The formula for country risk premium is given below:

The country risk premium for India = T-Bond default rate *(Standard Deviation of Nifty 500)/ (Standard Deviation of T-Bond)

= 2.69 per cent * (18.0619 per cent / 9.4817 per cent)

= 5.1242 per cent

USA equity risk premium = Historical average return on S&P 500 – Average return on USA T-Bond

= 10.874 per cent - 3.947 per cent

= 6.927 per cent

Equity risk premium for India = USA equity risk premium + India country risk premium

= 6.927 per cent + 5.124 per cent

= 12.0512 per cent

3. Calculation of company's Beta

   The Beta (β) of a company measures the additional risk of investing in the company as against other companies in the same industry. Since a private company's shares are not traded on any exchange, hence there is no historical price data for its shares. To calculate the beta of the company, we will use an alternative method called 'Bottom-up Beta.'

It is calculated as follows:

1. Identify compatible publicly traded firms in the industry having a similar source of revenue and similar operations and calculate their regression betas.

Company	Beta	Market Debt/Equity Ratio
Marico	0.343	14.307 per cent
Jyothy labs	0.6997	11.859 per cent
Hindustan Unilever	0.4277	2.126 per cent
Proctor & Gamble	0.388	0.692 per cent
Ador Multiproducts0.6	0.5865	0.474 per cent
Godrej Consumer Products	0.5897	14.746 per cent
Paramount Cosmetics Ltd.	0.4819	73.660 per cent
Galaxy Surfactants	0.9049	26.747 per cent
Dabur India	0.5379	12.288 per cent
Emami	0.6258	13.584 per cent
kaya ltd.	1.4104	13126.568 per cent
Lykis	0.925	8-7.143 per cent
JHS Seven lab	0.1777	0.959 per cent
Mohini Health	0.6843	56.851 per cent
Nykaa	0.3255	44.287 per cent
Gillette India Ltd.	0.4383	0.005 per cent
Zydus Wellness Ltd.	0.5313	7.989 per cent

Table 1: Regression Betas of Companies (Source: Yahoo Finance, Screener.in)

1. Calculate the raw unlevered beta of the industry average

After calculating the industry average regression beta, we need to unlever them, i.e., adjust the beta by ignoring the debt in the firm using the market debt/equity ratio of the comparable firms. Then, relever the beta using the debt/equity ratio of Honasa Limited, this is done as under:

Industry average regression beta (βA) = 0.6088

Industry average market debt/equity ratio = 12.936 per cent

Marginal tax rate(t) = 25.17 per cent

Unlevered beta = βA/{1+(1-t) *D/E ratio}

= 0.6088/ {1+(1-25.17 per cent) *12.936 per cent}

= 0.55505

2. Calculate the levered beta for the firm using the book debt/equity of the company

bottom-up beta for the firm = Unlevered beta*{1+(1-t) *D/E ratio}

= 0.55505 *{1+(1-25.17 per cent) *11.716 per cent}

= 0.60373.

The final step is to calculate the cost of equity using CAPM:

Cost of equity

= Risk-free rate + Beta*(Equity risk premium)

= 4.729 per cent + 0.60373* 12.0512 per cent

= 12.005 per cent

B. Cost of Debt:

This is done by calculating the companies' interest coverage ratio and assigning the corresponding credit rating and default spread for that rating in addition to the risk-free rate.

Interest coverage ratio = EBIT / Interest expenses

= 11,75,60,000/ 2,62,80,000

= 4.47x

Corresponding synthetic credit rating = 'A'

An 'A' rated bond has a default spread of 1.42 per cent

The cost of debt of the firm =Risk-free rate + Company default spread

=7.419 per cent + 1.42 per cent

= 8.839 per cent

C. The Weighted Average Cost of Capital (WACC)

The final step in the calculation of the discount rate is the calculation of the cost of capital. It is a weighted average of the cost of debt and the cost of equity. The cost of debt is adjusted. with the marginal tax rate. This is because debt financing has a tax benefit in the form of interest deduction, which needs to be adjusted.

Weighted average cost of capital

= (Weight of debt* Cost of debt) *(1-tax rate) + (Weight of equity* Cost of equity)

= (0.126935 * 8.839 per cent) *(1-25.17 per cent) + (0.873064 * 12.005 per cent)

= 11.32 per cent

Step 2: Adjustment of Historical Income Statements

Before using the historical data from the financial statements, we need to adjust them to a form that can provide better and more useful insights into the performance of the firm. The losses that are extraordinary and non-recurring in nature, will be ignored in our adjusted financial statements. This results in the income statement as shown in Table 2 (in million ₹.).

Income Statement				
Historical	**1**	**2**	**3**	**4**
Year	March - 2019	March - 2020	March - 2021	March - 2022
Revenue From Operations	₹ 168.40	₹ 1,097.84	₹ 4,599.90	₹ 9,434.65
Year- over-Year Growth		551.94 per cent	319.00 per cent	105.11 per cent
Cost of Goods Sold (COGS)	₹ 59.38	₹ 367.77	₹ 1,327.06	₹ 2,834.39
COGS Margin	35.26 per cent	33.50 per cent	28.85 per cent	30.04 per cent
Gross Profit	₹ 109.02	₹ 730.07	₹ 3,272.84	₹ 6,600.26
Gross Margin	64.74 per cent	66.50 per cent	71.15 per cent	69.96 per cent
Selling, General and Administrative Exp.	₹ 20.90	₹ 89.02	₹ 277.59	₹ 788.46
as a per cent of sales	12.41 per cent	8.11 per cent	6.03 per cent	8.36 per cent
Other Expenses	₹ 132.66	₹ 719.56	₹ 2,723.69	₹ 5,700.46
as a per cent of sales	78.78 per cent	65.54 per cent	59.21 per cent	60.42 per cent
Other Income	₹ 10.66	₹ 43.83	₹ 121.11	₹ 208.80
as a per cent of sales	6.33 per cent	3.99 per cent	2.63 per cent	2.21 per cent
Earnings Before Interest, Taxes, Depreciation, and Amortization (EBITDA)	₹ - 33.89	₹ -34.68	₹ 392.67	₹ 320.14
EBITDA Margin	-20.13 per cent	-3.16 per cent	8.54 per cent	3.39 per cent
Depreciation and Amortization Exp.	₹0.80	₹6.46	₹17.12	₹68.95
Earnings Before Interest and Taxes (EBIT)	₹ - 34.69	₹ -41.14	₹ 375.55	₹ 251.19
EBIT Margin	-20.60 per cent	-3.75 per cent	8.16 per cent	2.66 per cent
Interest Expense	0.36	0.44	9.21	26.8
Earnings Before Tax	₹ - 35.05	₹ -41.58	₹ 366.34	₹ 224.39
Tax Expense	0	0	76.06	79.96
Profit after Tax	₹ - 35.05	₹ -41.58	₹ 290.28	₹ 144.43

Table 2: Adjusted Income Statement of the Firm (Source: Honasa ConsumerLimited DHRP)

Step 3: Estimating Future EBIT

Items	Forecast Drivers / Methods
Revenue from Operations	1. Revenue for the year 2023 is simply double the revenue of the revenue ending September 2022. 2. Revenues from 2024 to 2029 are forecasted using linear regression of the past revenues.
Cost of Goods Sold (COGS) Margin	The COGS margin is estimated using the average of the past COGS margin adjusted with future inflation premium.
Selling and Administration Expenses	The selling and administrative expenses are forecasted by regression of the past expenses as a percent of the future revenues already calculated.
Other Expenses	Other expenses are also of the same nature as selling and administrative expenses, so they are forecasted in the same way.
Other Income	'Other income' is forecasted using an average of the historical 'Other Income as a percent of revenues.'
Depreciation & Amortization	The future accumulated depreciation and amortization are estimated using the 'TREND' function in Excel as they usually accumulate in a sequence throughout the years.

Table 3: Drivers and Methods to Forecast the Individual Items in the Income Statement
(Source: Author's Compilation)

This step helps us to build the forecasted income statement of the firm as shown in Table 4.

Income Statement (in Millions ₹)	Estimates (in Millions ₹)						
Year	Mar-23 E	Mar-24 E	Mar-25 E	Mar-26 E	Mar-27 E	Mar-28 E	Mar-29 E
Revenue From Operations	**14,454.70**	**17,023.92**	**21,834.29**	**26,086.91**	**29,972.13**	**33,903.74**	**38,333.44**
Y/Y Growth							
COGS	**4,254.34**	**5,215.65**	**6,639.19**	**7,895.77**	**9,074.71**	**10,261.70**	**11,621.61**
COGS Margin	*0.294322262*	*0.306371612*	*0.30407161*	*0.30267161*	*0.30277161*	*0.30267161*	*0.30317161*
Gross Profit	**10,200.36**	**11,808.28**	**15,195.10**	**18,191.14**	**20,897.42**	**23,642.04**	**26,711.83**
Gross Margin	*0.705677738*	*0.693628388*	*0.69592839*	*0.69732839*	*0.69722839*	*0.69732839*	*0.69682839*
Selling, General and Administrative Exp	**1,555.74**	**1,709.39**	**2,251.70**	**2,786.66**	**3,235.08**	**3,645.96**	**4,183.42**
	0.107628661	*0.100410772*	*0.10312696*	*0.10682214*	*0.10793629*	*0.10753846*	*0.10913243*
Other Expenses	**8,372.80**	**9,953.85**	**12,725.52**	**15,169.06**	**17,364.27**	**19,671.47**	**22,199.00**
	0.579244121	*0.58469789*	*0.58282272*	*0.58148186*	*0.57934727*	*0.58021532*	*0.57910257*
Other Income	**186.68**	**560.48**	**718.86**	**858.87**	**986.78**	**1,116.22**	**1,262.06**
	0.01291483	*0.032923245*	*0.03292325*	*0.03292325*	*0.03292325*	*0.03292325*	*0.03292325*
EBITDA	**458.50**	**705.52**	**936.73**	**1,094.28**	**1,284.85**	**1,440.84**	**1,591.48**
EBITDA Margin	*0.031719787*	*0.041442971*	*0.04290195*	*0.04194763*	*0.04286808*	*0.04249785*	*0.04151663*
Depreciation & Amortization Exp.	**61.32**	**252.08**	**321.58**	**391.08**	**460.58**	**530.07**	**599.57**
EBIT	**397.18**	**453.44**	**615.15**	**703.21**	**824.27**	**910.76**	**991.91**

Table 4: Forecasted Income Statement of the Firm
(Source: Author's Compilation)

Step 4: Forecasting FFCF to the Firm

FCFF is the cash flow that the firm generates through its operations and investmentactivities. It is calculated by the following formula:

FCFF = EBIT – Tax payable on EBIT + Depreciation - Capital expenditure - Net working capital changes.

For estimating the future working capital changes and capital expenditure, the following methods are used:

Calculation of PV of Future Cash Flows	March - 24 E	March - 25 E	March - 26 E	March - 27 E	March - 28 E	March - 29 E
Earnings Before Interests and Taxes (EBIT)	**453.44**	**615.15**	**703.21**	**824.27**	**910.76**	**991.91**
Tax Rate	25.17 per cent	25.17 per cent	25.17 per cent	25.17 per cent	25.17 per cent	25.17 per cent
EBIT(1-Tax Rate)	**339.31**	**460.32**	**526.21**	**616.80**	**681.52**	**742.25**
Depreciation	252.08	321.58	391.21	460.57	530.07	599.57
Capex	385.95	398.68	411.40	424.13	436.86	449.59
Working Capital Changes	-803.40	103.51	91.50	83.60	84.60	95.32
Free Cash Flow to Firm	**1008.84**	**279.71**	**414.52**	**569.64**	**690.13**	**796.91**

Table 5: Forecasted FFCF
(Source: Author's Compilation)

The following table shows the methods for calculating Table 4:

Item	Method
Net Working Capital Changes	The Average of past "Working Capital as a percent of revenue" is calculated and used to forecast the future working capital and the subsequent working capital changes based on future Revenues.
Capital Expenditure	Capital Expenditure is forecasted using the sum of the following: • The investment in Fixed assets is forecasted using the Excel "TREND" function. • The future acquisition costs are estimated using the total past acquisition cost and spreading it evenly across the future years.

Table 6: Method of Calculating Future Free Cash Flows
(Source: Paul Pignataro's 'Financial Modeling & Valuation')

Step 5: Estimation of Terminal Value

$$\text{Terminal value} = Terminal\ FCFF * \frac{1 + Risk\ free\ rate}{WACC\ rate - Risk\ free\ rate}$$

= 796.91* (1 + 7.42 per cent) / (11.32 per cent - 7.42 per cent) = 21,949.66

Step 6: Calculating Enterprise Value and per Equity Share Value

This is the final step in the DCF method of valuation. In this step, the WACC will be used to discount the futureFCFF and the terminal value to their present values as on 31st March, 2023.

	March - 24 E	March - 25 E	March - 26 E	March - 27 E	March - 28 E	March - 29 E	Terminal Year
Free Cash Flow to Firm	1008.84	279.71	414.52	569.64	690.13	796.91	21949.66
Mid year Convention	0.5	1.5	2.5	3.5	4.5	5.5	6.5
Discounting Factor	0.947790875	0.851407693	0.764825954	0.687048924	0.617181231	0.554418556	0.498038371
Present Value of Cash Flows	**956.17**	**238.14**	**317.04**	**391.37**	**425.94**	**441.82**	**10931.77**

Table 7: Table Showing Present Value of FCFFs
(Source: Author's Compilation)

Adding the resulting cash flows will give us the 'Enterprise Value'. To calculate the equity share value, we need to deduct the debt holdings and add cash and cash equivalents. This is shown in Figure 4.

Calculation of Equity Value	
Present Value of FCFF	2,770.48
Present Terminal value	10,931.77
Enterprise Value	**₹ 13,702.25**
Less, Debt	-853.19
Add, Cash	964.20
Value of Equity	**₹ 13,813.26**
No. of Equity Shares	306.52
Equity Value per Share	**₹ 45.07**

Figure 4: Calculation of Equity Share Value
(Source: Author's Compilation)

Hence, we arrive at an equity value of ₹13,813.26 million.

Dividing the total equity value by the number of equity shares after the IPO, we get the equity shares an intrinsic value of ₹45.07.

Step 7: Sensitivity Analysis Report on the Share Value

To determine how these two rates affect the share value we have conducted a sensitivity analysis using Excel Scenario Manager.

Sensitivity Analysis												
WACC	Growth Rate (in per cent)											
	2	2.5	3	3.5	4	4.5	5	5.5	6	6.5	7	7.5
9 per cent	28.27	29.82	31.63	33.77	36.33	39.47	43.39	48.43	55.15	64.56	78.68	102.20
10 per cent	25.91	27.10	28.45	30.02	31.84	34.00	36.59	39.76	43.71	48.80	55.58	65.08
11 per cent	24.08	25.02	26.07	27.27	28.64	30.22	32.06	34.24	36.85	40.05	44.04	49.17
12 per cent	22.61	23.37	24.22	25.17	26.23	27.44	28.82	30.42	32.28	34.47	37.11	40.33
13 per cent	21.41	22.04	22.74	23.51	24.36	25.32	26.40	27.61	29.01	30.62	32.49	34.71
14 per cent	20.41	20.94	21.53	22.16	22.87	23.64	24.51	25.47	26.56	27.79	29.19	30.82
15 per cent	19.56	20.02	20.51	21.05	21.64	22.29	23.00	23.78	24.65	25.62	26.72	27.96
16 per cent	18.83	19.23	19.66	20.12	20.62	21.17	21.76	22.41	23.13	23.92	24.80	25.78
17 per cent	18.21	18.55	18.93	19.33	19.76	20.23	20.73	21.28	21.88	22.53	23.26	24.05
18 per cent	17.66	17.96	18.29	18.64	19.02	19.42	19.86	20.33	20.84	21.39	22.00	22.66
19 per cent	17.17	17.44	17.74	18.05	18.38	18.73	19.11	19.52	19.96	20.43	20.95	21.50
20 per cent	16.74	16.98	17.25	17.52	17.82	18.13	18.46	18.82	19.20	19.62	20.06	20.54

Table 8: Sensitivity Analysis Report on Share Price
(Source: Author's Compilation)

CONCLUSIONS

The valuation report and the sensitivity analysis report can be concluded with the following points:

1. The estimated beta of the private company stands at 0.60673. This value suggests that the company's stock is expected to exhibit moderate sensitivity to market movements, indicating a level of risk that is below the market average. The accuracy of this beta estimate will significantly impact the financial valuation and investment decisions surrounding the forthcoming IPO, highlighting the critical importance of robust beta estimation methodologies.
2. The estimated cost of equity at 12 per cent for the private company preparing for its IPO plays a crucial role in valuation and investment decisions. This rate signifies the expected return demanded by equity investors, underlining the company's risk and potential. Ongoing monitoring is essential in this dynamic financial landscape
3. The discount rate is estimated to be 11.32 per cent, this shows that the investor would have to get a return of 11.32 per cent at minimum to justify investing in the shares of the company. If an investor can achieve a return higher than 11.32 per cent in any other investment with less risk, the investor should avoid investing in the company.
4. The estimated stock value of ₹45.07 for the private company on the verge of its IPO holds substantial implications for investors and stakeholders. This valuation reflects a meticulous assessment of the company's financial performance, growth prospects, and market conditions. As the company prepares to enter the public market, this value serves as a critical reference point for pricing its shares and making strategic decisions.
5. The sensitivity report shows that the share value is highly volatile near the higher end of the spectrum and not so much at the lower end.

PRACTICAL APPLICATION & INVESTMENT RECOMMENDATION

Based on our valuation research, we recommend an investment in the company with a suggested range of ₹35 to ₹45 per share. This range aligns with our assessment of the company's intrinsic value, providing a reasonable margin of safety for potential investors while considering market dynamics and risk factors.

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> The pandemic has accelerated this shift towards online shopping and the emergence of further variants of the virus may continue to push people further towards online shopping.

A Comprehensive Analysis of E-Commerce Services in India

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ABSTRACT

The rapid growth of electronic commerce, or e-commerce, has transformed the landscape of the Indian market, offering unprecedented opportunities for businesses and consumers alike. This research paper provides a comprehensive analysis of the evolution of e-commerce in India. It examines the key trends that have shaped the sector, including the surge in internet penetration, increasing smartphone adoption, and the emergence of digital payment systems. The paper also delves into the challenges faced by the Indian e-commerce ecosystem, such as regulatory complexities, logistics bottlenecks, and data privacy concerns. By synthesizing data from various

sources, including industry reports and government publications, the study offers valuable insights into the changing consumer behaviour and preferences driving e-commerce growth. Furthermore, the paper explores potential future developments in the Indian e-commerce landscape, highlighting the role of technological innovations like Artificial Intelligence (AI) and blockchain, and discusses the implications for businesses, policymakers, and stakeholders.

KEYWORDS: E-Commerce, Internet Penetration, Technology Innovations, Artificial Intelligence, Augmented Reality.

INTRODUCTION

E-Commerce is the process of buying and selling of services and products via online mediums using a Desktop, Laptop, or Smartphone and includes the transfer of money on completion of a transaction. It is also known by the name 'Electronic Commerce' or 'Internet Commerce'. With the onset of digitalization in India, the way we use the internet has totally changed.

Currently, India is witnessing an economic boom due to which there is an increasing demand for products and services and e-commerce has completely changed the way business is being conducted. There are high chance that e-commerce markets will have a major boom up to $111.40 billion by 2025. By 2030, it could easily reach $350 billion. The major cause of the hike in e-commerce is due to Internet Proliferation. The penetration rate has increased from just four per cent in 2007 to nearly 45 per cent in 2021 as per Statista.com. Although the figure might seem very low, more than half of the population of 1.38 billion people had access to the Internet. India is also ranked second in the world with respect to active internet users after China.

The concept of electronic transactions came into existence in 1991, a time when India did not have access to the Internet. However, by the late 1990s, more and more people became aware of the Internet and its potential for conducting payments. The people became aware of the global behemoth Amazon, ushering in a new era of e-commerce in India.

LITERATURE REVIEW

1. E-Commerce in India is Booming (ARC Advisory Group - Report Abstract, 2016)

   This article states that e-commerce is witnessing a global resurgence with the help of a huge internet base in India and a growing market of US$ 14 billion, the future of E-Commerce is indeed very promising.

2. How Shopping Habits Changed Due to COVID-19 (Catherine Tymkiw, 2022)

   The article states that COVID-19 has changed the way people show up now. It has altered their routine as well. There has also been an interesting phenomenon that people have shifted from their loyal brands to some other brand according to a survey by McKinsey and a shift of 40 per cent has been observed.

3. Key Factors Driving the Growth of E-Commerce (Mayank Mishra, 2015)

   This article states that there are five major factors that will drive the trend of online shopping forward which include: localization of internet content, growth of towns and hinterlands that are beyond metros, growth of mobile commerce, growing use of debit and credit cards for cashless transactions and lastly the growing investment in logistics and warehouses.

4. Future of E-Commerce in India-How Dynamics will Change in the Next Five Years (Pragya Gupta, 2019)

   This article states that online shopping has spared people from going out, leaving behind the comforts of their homes. Indians have shifted towards the convenience of online payments for day-to-day transactions.

5. The Lockdown Proved Inflection Point for E-Commerce in India (Shuvankar Roy, 2021)

   This article states that due to the lockdown, there has been a significant growth of new users in various platforms like Grofers, Flipkart et al. A Grofers spokesperson said that the demand for from new users has been blooming. Out of the total user base

of Grofers, 64 per cent consisted of new users who got themselves registered for the first time and 20 per cent of them were totally new to E- Commerce.

OBJECTIVES OF THE RESEARCH

The objectives of the study are:

1. Analyzing the consumer perspective towards online shopping in India.
2. Examining the factors that have contributed to the growth of such platforms in India.
3. Investigating the future prospects of these platforms in India.

BACKGROUND

Logistics and Supply Chain Management in E-Commerce Logistics and supply chain are two critical components of the e-commerce industry in India. The success of e-commerce platforms relies heavily on their ability to deliver products efficiently and on time. In recent years, logistics and supply chain management have become a competitive advantage for e-commerce companies in India.

Delivery Systems

E-commerce companies in India use various delivery systems such as in-house logistics, third-party logistics, and delivery partners. In-house logistics are when the company owns and operates the delivery system, whereas third-party logistics involve outsourcing the delivery system to a logistics company.

Inventory Management

Inventory management is a critical component of the e-commerce supply chain. E-commerce companies in India use various inventory management models, such as just-in-time, economic order quantity, and safety stock.

Reverse Logistics

Reverse logistics is the process of managing product returns, exchanges, and repairs. E-commerce companies in India use various reverse logistics models, such as return to vendor, return to warehouse, and return to store.

In conclusion, logistics and supply chain management are critical components of the e-commerce industry in India. E-commerce companies need to have an efficient and reliable logistics and supply chain system to succeed in the highly competitive market. By adopting innovative technologies and best practices, e-commerce companies can optimize their logistics and supply chain operations and provide better customer experiences.

TECHNOLOGICAL TRENDS IN E-COMMERCE INDUSTRY

AI

AI is transforming the e-commerce industry in India by enabling companies to offer personalized recommendations, improve search results, and optimize pricing. AI-powered chatbots are also being used by e-commerce companies to improve customer service and engagement.

Machine Learning (ML)

ML is another technology trend that is impacting the e-commerce industry in India. ML algorithms are being used to analyze customer data and behaviour, which is helping e-commerce companies offer personalized experiences, improve product recommendations, and optimize pricing.

Big Data

The e-commerce industry in India generates vast amounts of data every day, which can be analyzed to gain insights into customer behaviour, product trends, and market dynamics. Big data analytics is helping e-commerce companies to make data-driven decisions, optimize pricing and inventory management, and improve customer experiences.

Market Size of Online Shopping in India

Due to the impact of COVID-19, India's online grocery market is expected to experience a Compound Annual Growth Rate (CAGR) of 57 per cent from $1.9 billion in 2019 to $18.2 billion in 2024. The rapid adoption of

online services, such as e-commerce and educational technology, has led to India's consumer digital economy projected to increase to $800 billion by 2030, up from $537.5 billion in 2020.

Overall, the e-commerce market in India is expected to continue to grow rapidly after the COVID-19 era, driven by factors such as the increasing availability of affordable smartphones, rising internet penetration, and a growing middle class with higher disposable income.

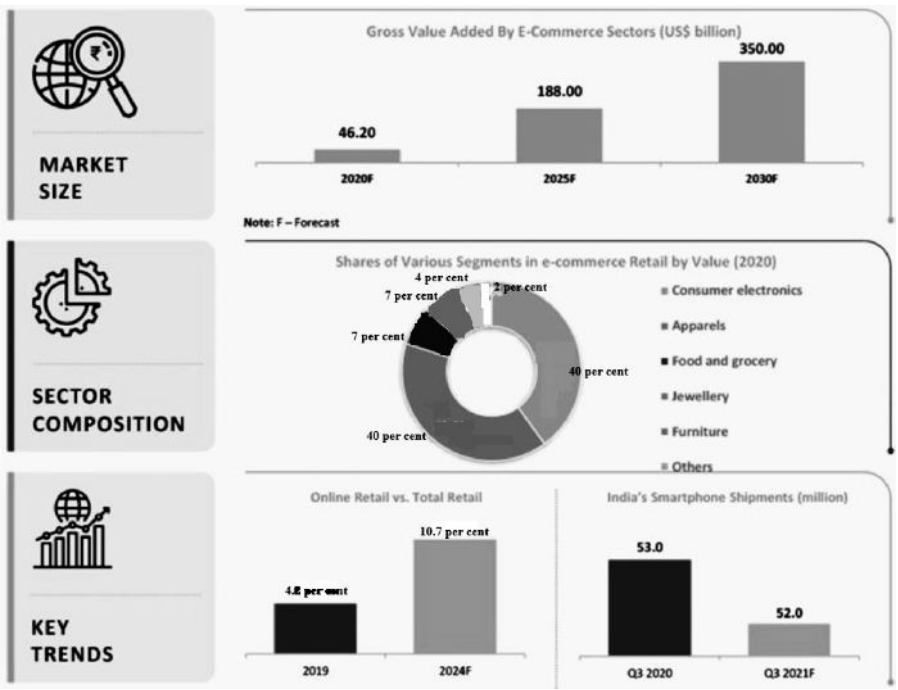

Figure 1: Market Size, Composition and Key Trends (Source: The Economics Times)

DATA AND METHODOLOGY

To study the usage of e-commerce and online shopping in the country, a survey was conducted with approximately 175 respondents from different age groups, regions, and occupations. The survey took place in March 2023 in India, with 83.7 percent male and 16.3 percent female participation. Moreover, the majority of the surveyed population (69.9 percent) belonged to urban regions.

For this study, a questionnaire was prepared and circulated using Google Forms, shared via WhatsApp, and other messaging platforms. Non-probability sampling techniques such as convenience sampling, voluntary response sampling, and snowball sampling were utilized for this analysis.

Non-probability sampling involves the subjective (non-random) selection of units from a population. The following are types of non-probability sampling:

1. Convenience Sampling
2. Voluntary Response Sampling
3. Snowball Sampling

LIMITATIONS OF THE STUDY

The issue under investigation is extensive, and due to the vast amount of literature associated with it, not all relevant information could be included in this research. Both primary and secondary data will form the basis of this project. Evidence gathered from sources on the internet, including news journals, articles, and reports, supports the conclusions in this report, provided that the sources are reliable. Additionally, the use of primary evidence may introduce sample bias.

ANALYSIS OF RESPONSES

The respondents' responses to different e-commerce-related questions are analyzed and are presented below in the illustrations along with proper interpretations.

Question 1- How often do you shop online?



Figure 2: Pie-Chart Depicting the Frequency of Online Shopping (Source: Primary Data)

Interpretation

As per the survey, the majority of the population (40.4 per cent) goes for online shopping once every month, with this being the most common frequency. 24.7 per cent of the population went on to say that they went for online shopping once every week. However, a significant population of 19.7 per cent also confirmed shopping online once a quarter, which may signify both their low dependence on online shopping and preference to shop during sale periods.

Question 2- Which online platform do you use most frequently for online shopping?

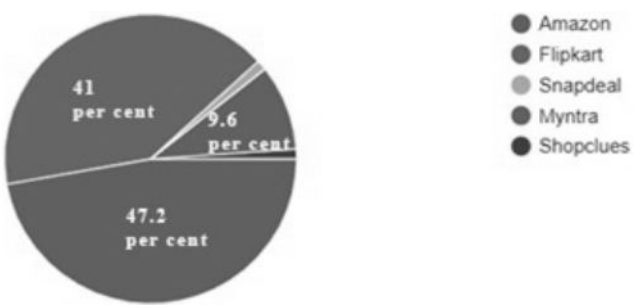

Figure 3: Pie-Chart Depicting the Most Frequently Used Platform for Online Shopping (Source: Primary Data)

Interpretation

The survey clearly indicates that the most preferred platform by Indians is Amazon, receiving 47.2 per cent of the votes. This is closely followed by Flipkart with approximately 41 per cent of the audience engaged.

Question 3- If you do shop online, what kind of products do you generally buy?

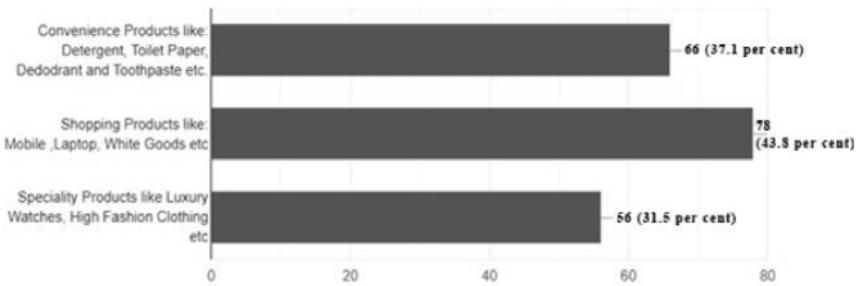

Figure 4: Pie-Chart Depicting the Most Frequently Purchased Online Products (Source: Primary Data)

Interpretation

As per this survey, the most common products people use online shopping mediums for are shopping products like mobile phones, laptops, white, goods, and convenience products. Specialty products have a slightly lower share.

Question 4- What, according to you, are the factors leading to the popularity of online shopping platforms?

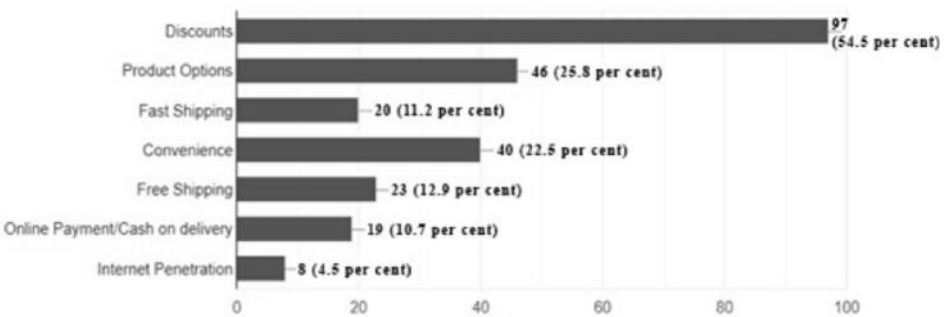

Figure 5: Graph Depicting the Respondent's Opinion on the Factors Leading to the Popularity of Online Shopping Platforms (Source: Primary Data)

Interpretation

When asked about the factors behind the popularity of online shopping, the most common reasons discovered were discounts (54.5 per cent), followed by wide convenience (22.5 per cent) and product options (25.8 per cent).

Question 5 - Do you also avail of any online services like transferring of funds or data?

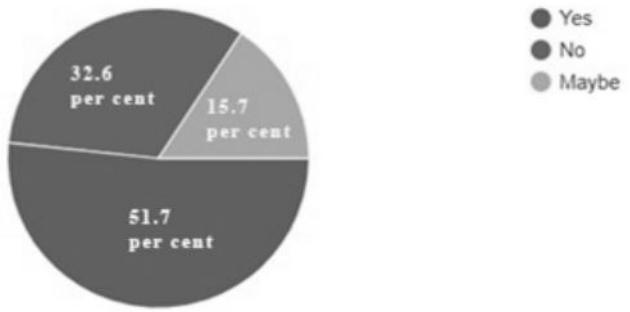

Figure 6: Pie-Chart Depicting the Percentage of Respondents Who Avail Online Services (Source: Primary Data)

Interpretation

As per this survey, the majority of the population surveyed (51.7 per cent) are familiar with and use online services like fund transfers today.

Question 6 - On a scale of one to five, to what extent do you think you rely on online shopping (one being the lowest reliance and five being the highest reliance)?

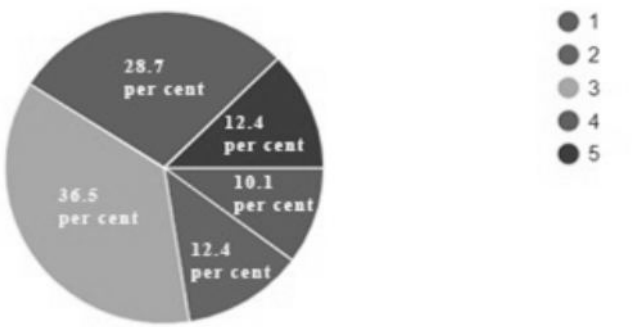

Figure 7: Pie-Chart Depicting the Respondents' Reliance on Online Shopping (Source: Primary Data)

Interpretation

This indicates that the reliance on online shopping is average, with the majority of the population (36.5 per cent) rating their reliance on the platform as a three upon five.

Question 7- What are the factors which online platforms should consider in the future and try to improve as soon as possible?

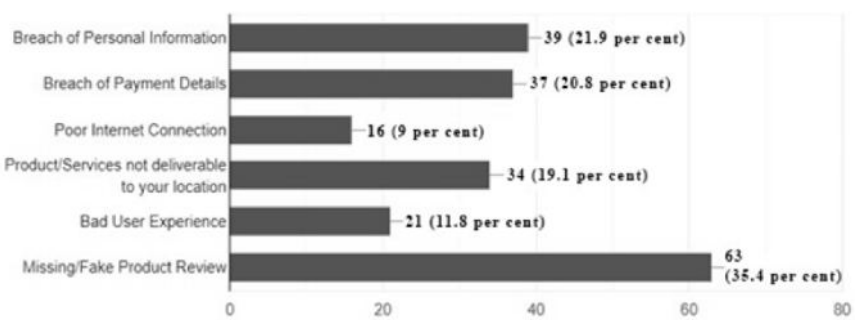

Figure 8: Graph Depicting the Factors which Should be Incorporated by Online Platforms in the Future (Source: Primary Data)

Interpretation

The key areas of improvement according to the audience seem to be missing or fake product reviews with 35.4 per cent of the respondents citing it as an area of concern. The other key factors include breach of personal information, breach of payment details, and products or services not being deliverable at the requested location.

Question 8 - Should online shopping platforms start using Augmented Reality (AR) in order to let their customers try on products virtually?



Figure 9: Pie-Chart Depicting the Respondent's View Toward the Idea of Using Augmented Reality in Online Shopping (Source: Primary Data)

Interpretation

In the survey, the audience has been quite receptive towards the idea of using AR with approximately 33.1 per cent of them being in favor of this idea. This could act as a good innovation in online shopping.

Question 9 - Since the pandemic, people have become more concerned about their hygiene and now are trying to opt for contactless delivery and payment. Do you think this has been a major boost for e-commerce platforms?

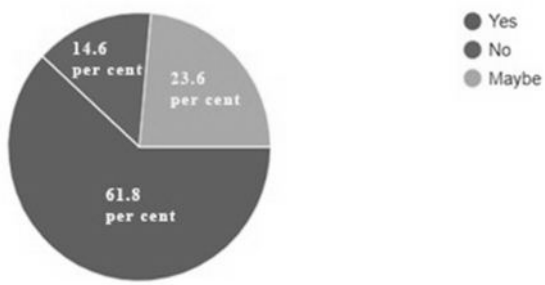

Figure 10: Pie-Chart Depicting the Respondent's View on the Importance of Contactless Delivery and Payment (Source: Primary Data)

Interpretation

Contactless delivery and payment systems are a well-appreciated feature of e-commerce platforms, with 61.8 per cent of respondents recognizing this as an important aspect.

Question 10- Whenever buying any product online, do they meet your expectations as compared to buying offline in most cases?

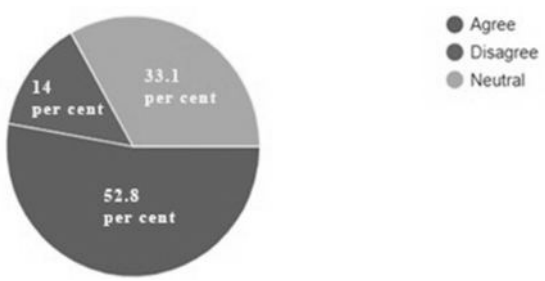

Figure 11: Pie-Chart Depicting the Respondents' Satisfaction Levels in Online Shopping Compared to Offline (Source: Primary Data)

Interpretation

In the survey, most of the respondents (52.8 per cent) agree that the products in online shopping meet their expectations as compared to offline buying.

Question 11- Is it easier to compare products online than offline?

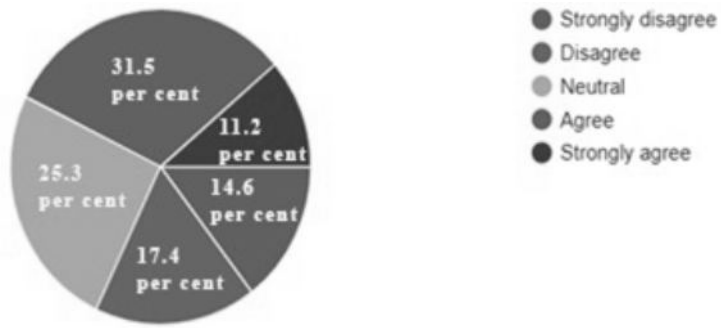

Figure 12: Pie-Chart Depicting the Ease of Product Comparison between Online and Offline Shopping (Source: Primary Data)

Interpretation

More than 30 per cent of the surveyed population agree that product comparison is an easy and important feature of online shopping. There are some who also disagree with this aspect.

Question 12- Do you think that you have started shopping online more frequently since COVID-19 started?

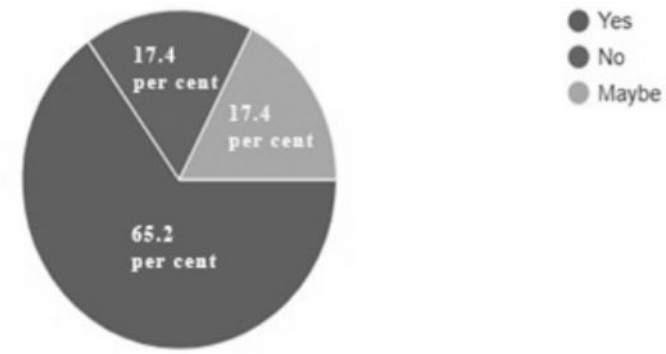

Figure 13: Impact of COVID-19 on E-Commerce (Source: Primary Data)

Interpretation

The impact of COVID-19 in promoting the e-commerce space and its usage is evident here with an approximately 65.2 per cent of the respondents agreeing to its increased usage after the pandemic.

Question 13- Do you think online is the way to go and it will slowly start replacing offline shops?

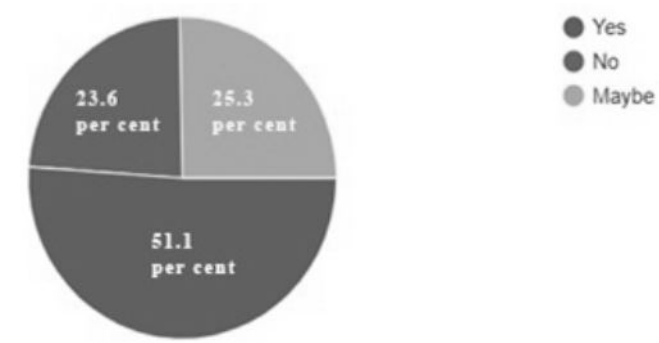

Figure 14: Pie-Chart Depicting the Respondent's Opinion on the Replacement of Online Shops with Offline Shops (Source: Primary Data)

Interpretation

In the survey, the audience has been divided on the future of online shopping and if it will be big enough to replace brick-and-mortar shops. From the above graph, approximately 51.1 per cent of the audience said yes, 23.6 per cent said no, and the rest were still undecided.

FINDINGS

In order to judge the consumer's perspective towards online shopping, we asked the following questions to our respondents:

1. How often do you shop online?
2. Which platform do you use most frequently for online shopping?
3. If you do shop online, what kind of products do you generally buy?
4. Do you also avail of any online services, like transferring of funds or data?
5. To what extent do you think you rely on online shopping

The results from the survey show that the majority of the respondents have been using e-commerce and online shopping platforms quite extensively. The majority of the respondents of approximately 36.5 per cent rated their reliance on online shopping platforms as quite high.

The frequency of usage varies from user to user but generally, it is in the range of multiple times per week to maybe once per quarter, depending on several factors, types of products, user demographics, etc.

The survey also revealed that Amazon emerges as the fastest growing and prevalent platform in usage amongst Indians, followed next by other platforms like Myntra, Flipkart, et al. The most common products people buy using online shopping mediums are shopping products like mobile phones, laptops, white goods, and convenience products.

Again, in order to identify the factors that led to the growth of e-commerce platforms in India, our respondents are asked to answer the following questions:

1. What according to you are the factors leading to the popularity of online shopping platforms?
2. Since the pandemic, people have become more concerned about their hygiene and now are trying to opt for contactless delivery and payment. Do you think this has been a major boost for e-commerce platforms?
3. Do you think you have started shopping online more frequently since COVID-19 started?
4. Whenever buying any product online do they meet your expectations as compared to buying offline (in most of the cases)?
5. Is it easier to compare products online or offline?

There are several factors that have led to the growth of e-commerce in India. Some of the significant ones as revealed by this survey are discounts, followed by wide availability of product options and convenience. Some other factors include free and fast shipping and increased internet penetration, availability of exciting and useful features like price comparisons, et al. amongst others.

The emergence of the pandemic has given a boost to the industry. Since the pandemic, people have become more concerned about their hygiene and now are trying to opt for contactless delivery and payment. Contactless delivery and payment systems is a well appreciated feature of ecommerce platforms with 61.8 per cent of respondents recognizing this as an important aspect.

To assess the future of e-commerce in India we put the following questions to answer to our respondents:

1. Do you think online is the way to go and it will slowly start replacing offline shops?
2. Should online shopping platforms start using AR in order to let their customers, try on products virtually?
3. What are the factors which online platforms should consider in the future and try to improve as soon as possible?

The future of the industry looks quite bright with more and more people appreciating it. E-Commerce has been reducing our dependence on brick-and-mortar shops to some extent and it will remain for us to see if it can become big enough to replace it altogether. For now, the survey audience has been divided in its opinion on this topic.

Whatever the case, the industry and ecommerce giants along with start-ups have been using new and improved technologies and concepts to boost the sector. The survey audience has been quite receptive to

the idea of using augmented reality. this could act as a good innovation in online shopping.

The key areas of improvement according to the audience seem to be missing or fake product reviews with 35.4 per cent of the respondents citing it as an area of concern. The other key factors include-breach of personal information, breach of payment details, and products or services not being deliverable at the requested location.

SUMMARY AND CONCLUSION

E-Commerce has completely changed the consumer perspective towards shopping. In the past few years, there has been a major increase in the emergence and growth of this industry. This growth has been supported significantly by factors such as increased smartphone and internet penetration, a rise in digital literacy, and the government's push towards digitalization. The pandemic has accelerated this shift towards online shopping and the emergence of further variants of the virus may continue to push people further towards online shopping.

The world of E-Commerce is changing continuously to accommodate customers' needs. Their end goal is to make every customer's shopping experience easier, enjoyable, and seamless. Many breakthroughs have been achieved and many exciting technologies are yet to come in the future.

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> The parallel economy is a significant part of the country's economic structure, operating outside the purview of government regulations and taxation.

Parallel Economy: A Big Menace to the Indian Economy

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ABSTRACT

The parallel economy, often overlooked but immensely significant, plays a pivotal role in shaping the country's fiscal dynamics. It exists beyond the formal economic structure, comprising small-scale vendors and individuals who, despite operating at a micro-level, constitute a substantial portion of India's revenue.

These individuals, instead of falling under the taxable income threshold, evade taxation due to their unregistered status, thereby creating a dual economy running alongside the formal one. This report aims to identify these

individuals who comprise the unrecognized sector and examine how they significantly impact our country's Gross Domestic Product (GDP). It also aims to shed light on the real magnitude of this parallel economy and the deep-seated foundations of its existence.

KEYWORDS: Parallel Economy, Unrecognized Sector, Indian Economy, Tax Evasion, Economic Informality, Unreported Income, India.

INTRODUCTION

India is one of the largest and fastest-growing economies in the world, with a GDP of over $2.65 trillion in 2022. However, the Indian economy has long been plagued by the problem of the parallel economy. Several factors contribute to the growth and persistence of the parallel economy in India. While the parallel economy has some benefits, it is also associated with several negative impacts on the Indian economy. The Indian Government has introduced a range of policies and initiatives aimed at reducing the size and impact of the parallel economy. However, the problem of the parallel economy remains a significant challenge for the Indian economy, and a comprehensive and nuanced approach is needed to address this issue.

RESEARCH METHODOLOGY

The study employs a mixed-methods approach, using both quantitative and qualitative methods to address the research questions.

Sources used areprimary data and secondary data.

Sampling Technique

A convenient sampling technique was used to select 75 individuals from the target population. This approach involved selecting individuals who were easily accessible and willing to participate in the study. The individuals selected for the study were interviewed in person, and the interviews were designed to collect data on their experiences.

Secondary Data Sources

Data from various reports published by International Monetary Fund (IMF), International Labour Organization (ILO), Women in Informal Employment: Globalizing and Organizing (WIEGO), JSTOR, Council of American Overseas Research Centers (CAORC), Reserve Bank of India (RBI) Bulletin, and the Indian Express has been used.

Method of Analysis

The data gathered was analyzed using qualitative analysis techniques. This involved identifying recurring themes and patterns in the responses, which enabled a deep understanding of the participants' experiences and views.

LITERATURE REVIEW

1. Turnbull (2022), in his article, 'Informal Economies in India' highlights recent studies estimating that two billion of the world's three billion workforce earns in the unregulated economy, which is a substantial majority (61 percent).
2. Williams et al. (2018), in their article, 'Informal Employment in Developed and Developing Economies: Perspectives and Policy Responses' attempted to present an in-depth analysis of how informality has been described and assessed, as well as chosen results on its scope and nature, and outlined contrasting viewpoints on its function in present-day economies and recommended solutions.
3. Menon, P. (2018), in her article 'The Rise of the Shadow Economy: An Indian Perspective,' established the significance of the parallel economy. She also sought to bring forth data from the previous years and relate them to the current scenario to comprehend the system.
4. Schneider et al. (2018), in their article, 'Shadow Economies Around the World: What Did We Learn Over the Last 20 Years?' conducted an extensive discussion of the most recent developments in existing and new estimation methods for the shadow economy, assessing the strengths and weaknesses of these methods and comparing and evaluating them.

5. Sarkar (2012), in his article, 'The Parallel Economy in India: Causes, Impacts, and Government Initiatives' sought to analyze the full picture of India's informal economy, including its origins, repercussions, and government operations.
6. Enste et al. (2000), in their article 'Shadow Economies: Size, Causes, and Consequences,' stated that rising taxation and social security contributions, combined with increasing state regulation, are the driving forces behind the growth of the shadow economy.

OBJECTIVES OF THE STUDY

1. To identify the unrecognized sector in the parallel economy.
2. To know the benefits of bringing the parallel economy at par with the main economic structure of India.
3. To examine the drivers of the parallel economy.
4. To quantify the size and scope of the parallel economy in India.
5. To assess the impact of the parallel economy on the formal economy.

WHAT IS PARALLEL ECONOMY?

The parallel economy, also known as the informal or shadow economy, involves economic activities that are not officially recognized or recorded by the government and are often associated with conspicuous consumption and corruption.

Figure 1: Criteria used in the ILO Definition of the Informal Employment (main job)

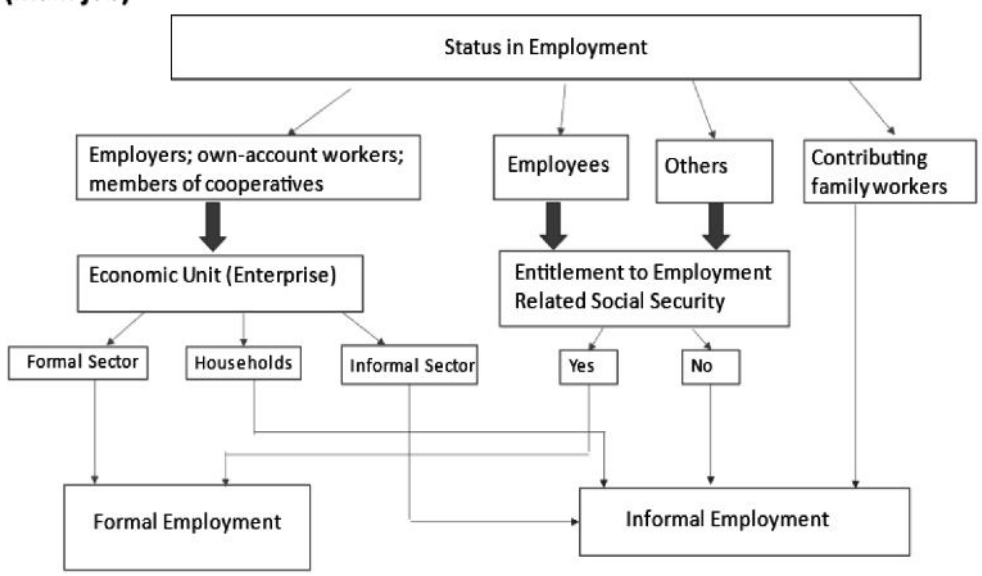

Figure : Criteria Used in the ILO Definition of Informal Employment (Source: International Labour Organization (2018))

It is important to acknowledge that country-specific factors can impact the descriptive figures presented. In the context of this data, individuals are classified as having informal employment if their work arrangement is not bound by national labour laws, taxes, social security benefits, or eligibility for additional employment benefits like paid sick leave or vacation time. As outlined by the Report of the Task Force on Employment Statistics, formal employment in India is defined as providing access to at least one social security benefit (Ministry of Labour and Employment, 2017).

PARALLEL ECONOMY VERSUS BLACK MONEY

The parallel economy and black money are two related but distinct concepts that have a significant impact on the Indian economy.

The parallel economy refers to the unregulated, informal sector of the economy that operates outside of the formal economy. The informal economy includes activities such as street vending, small-scale manufacturing, and unorganized services, all of which do not contribute to the formal economy or pay taxes.

Black money, on the other hand, refers to the money that is earned through illegal means such as smuggling, human trafficking, drug trafficking, and corruption. It is often held in cash and not reported to the government for tax purposes. Black money is generated through illegal activities and is not part of the parallel economy.

The parallel economy and black money are often interrelated. The unregulated nature of the parallel economy provides a conducive environment for the generation and circulation of black money. For example, a significant portion of black money is generated through tax evasion in the informal sector of the economy. Those who earn black money can easily launder their illicit funds through informal channels such as hawala, which is an informal value transfer system used to move money across borders.

The Indian Government has taken several measures to tackle both the parallel economy and black money:

1. The Government launched the Voluntary Disclosure of Income Scheme in 1997 to encourage people to declare their undeclared income and pay taxes.
2. In 2015, the Government also passed the Black Money (Undisclosed Foreign Income and Assets) and Imposition of Tax Act, which imposes harsh fines and punishment on people who disregard disclosing their overseas assets and income.
3. The Government amended the Benami Transactions (Prohibition) Act in 2016, to reduce the formation of illicit gains through benami operations, in which a property is purchased in the name of someone else to conceal the true benefactor.
4. The demonetization drive in 2016, which invalidated high-denomination banknotes in a bid to restrict the formation of black money, was a significant measure taken by the Indian government to combat black money.
5. The administration of the Goods and Services Tax (GST) in 2017 was aimed at simplifying the taxation system and bringing economic activity into the formal sector.

IDENTIFICATION OF THE UNRECOGNIZED SECTOR

The informal sector is a significant contributor to India's economy, providing employment opportunities for millions of people, particularly those from marginalized communities. However, it is also characterized by low wages, poor working conditions, and a lack of legal protection, leaving workers vulnerable to exploitation and abuse.

To identify the unrecognized sector among given professions, bifurcation has been done according to the three parameters namely, legal recognition, economic contribution, and social welfare measures.

These parameters have been adapted from the work of Sankaran and Madhav (2013) in their paper titled 'Legal and Policy Tools to Meet Informal Workers' Demands: Lessons from India,' published in Women in Informal Employment: Globalizing and Organizing. These

parameters serve as a foundation for the analysis, enabling a comprehensive examination of the unrecognized sector within the context of this study.

Profession	Legal recognition	Economic contribution	Social welfare measures
Roadside food stall vendors	Limited or non-existent	Limited	No social welfare measures
Pan stall owners	Limited or non-existent	Limited	No social welfare measures
Fruit Sellers	Limited	Significant	No or limited social welfare measures
Vegetable Sellers	Limited	Significant	No or limited social welfare measures
House Helps	Limited or non-existent	Limited	No or limited social welfare measures
General contractors	Limited	Significant	No or limited social welfare measures
Barbers	Some	Limited	No or limited social welfare measures
Beauticians	Some	Limited	Some social welfare measures may be available
Drivers	Some	Significant	Some social welfare measures may be available

Table 1: Professions Bifurcated on the Basis ofThree Parameters (Source: Primary Data)

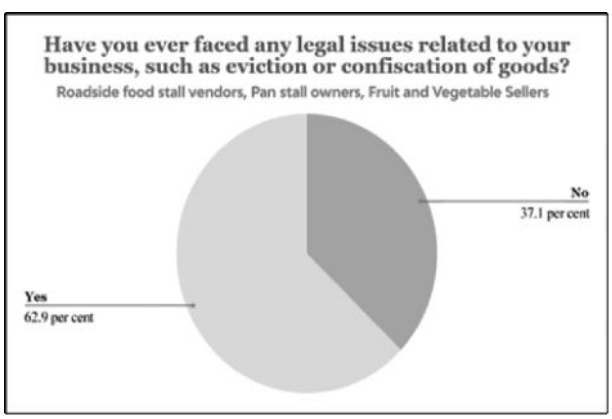

Figure 2: Whether Respondents Faced Any Legal Issues Related to Their Business (Source: Primary Data)

In terms of specific professions, such as roadside food stall vendors, pan stall owners, fruit sellers, and vegetable sellers, these are all common types of businesses within the informal sector. These businesses typically operate on the streets or in public spaces, often without formal permits or licenses, and are subject to harassment and extortion by local authorities. According to data from a survey conducted for the purpose of this paper, it was found that more than 62 percent of respondents, including roadside food stall vendors, pan stall owners, and fruit and vegetable sellers, have faced legal issues related to their occupations.

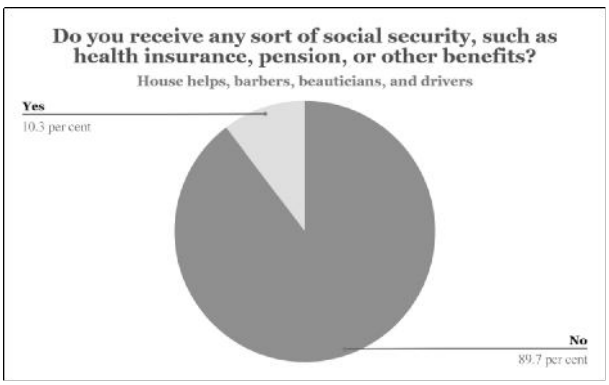

Figure 3: Whether House Helps, Barbers, Beauticians, and Drivers Received Any Sort of Social Security (Source: Primary Data)

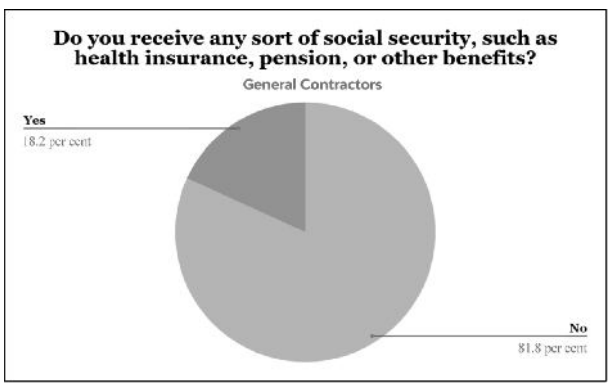

Figure 4: Whether General Contractors Received Any Sort of Social Security (Source: Primary Data)

House helps, barbers, beauticians, and drivers are also common occupations within the informal sector, often providing services to households or small businesses. These workers typically lack job security, social security benefits, and access to healthcare or other forms of support. According to data from a survey conducted for the purpose of this paper, it was found that only 10.3 percent of respondents belonging to the category of house helps, barbers, beauticians, and drivers have social security benefits.

Monthly Income	Count
Less than 10,000	2
10,000 - 20,000	11
20,000 - 30,000	25
30,000 - 40,000	10
40,000 - 50,000	10
50,000 - 60,000	4
60,000 - 70,000	4
70,000 - 80,000	2
80,000 - 90,000	2
90,000 - 1,00,000	0
1,00,000 - 1,10,000	3
1,10,000 - 1,20,000	2

Table 2: Monthly Income of Professionals/ Business Owners Based on the Survey (Source: Primary Data)

General contractors constitute another type of business within the informal sector, typically operating in the construction industry. These businesses often rely on subcontracting and casual labour, which can lead to a lack of job security and poor working conditions for their employees. According to data from a survey conducted for the purpose of this paper, it was found that only 18.2 per cent of respondents in the category of general contractors have access to social security benefits.

While the income earned by street vendors may contribute to the country's GDP, the lack of taxation on this income does have an impact on government revenue. The Government relies on taxes to fund public services and infrastructure, and when a significant portion of the economy operates outside the formal tax system, it can put a strain on government finances.

Based on the given data, it appears that the majority of the 75 surveyed respondents have a monthly income between ₹20,000 to ₹50,000, with the highest number of respondents falling in the ₹20,000 to ₹30,000

income brackets. This suggests that while some professionals/ business owners may earn high incomes, they are a minority among the surveyed population.

It is also worth noting that a significant portion of the surveyed professionals/business owners have a monthly income of less than ₹20,000, with only two respondents reporting a monthly income of less than ₹10,000. This highlights the fact that many professionals/business owners struggle to make ends meet and may face significant challenges in earning a decent income. Furthermore, it is important to recognize that the income earned by professionals/business owners belonging to the unrecognized sector is subject to a high degree of variability, depending on factors such as location, competition, and customer demand. This means that while some professionals/business owners may earn high incomes, others may struggle to earn a living wage.

Overall, the data suggests that while some professionals/business owners may earn high incomes, the majority of the surveyed population earns a modest income. Efforts to improve the economic status of professionals/business owners belonging to the unrecognized sector should focus on providing support and resources to help them increase their earning potential, such as access to credit, training and education, and legal recognition.

BENEFITS OF BRINGING PARALLEL ECONOMY AT PAR WITH THE MAIN ECONOMIC STRUCTURE

According to the National Sample Survey Office (NSSO) report, the informal sector accounts for around 90 per cent of employment and contributes around 50 per cent to India's GDP. Bringing the parallel economy at par with the main economic structure in India can provide various benefits. Here are some of them:

1. **Increased Tax Revenues**

   When informal economic activities become formalized, they become subject to taxation, and the government can collect taxes from these activities, which can contribute to increased tax revenues.

2. **Job Creation and Formalization**

   Formalizing the informal sector can help to improve wages, and working conditions, and provide legal protections for workers.

3. **Improved Economic Efficiency**

   The informal sector often operates with limited access to capital, technology, and skills, which can lead to lower productivity and inefficiencies. By formalizing the informal sector, these inefficiencies can be reduced, and productivity can be improved.

4. **Improved Social Welfare**

   The informal sector often operates outside of the formal legal and regulatory framework, leading to a lack of legal protections for workers. By formalizing the informal sector, legal protections can be extended to all workers, improving social welfare.

EXAMINING THE DRIVERS OF THE PARALLEL ECONOMY

Based on the study, factors such as labour market constraints, low skill levels, and increased competition from imports are driving the growth of informal work and the decline of formal employment opportunities. Although some argue that labour laws hinder hiring and firing practices, Table 3 compares the distribution of informal manufacturing workers by state with the labour reform index and shows that even in states such as Gujarat, where labour regulations were reduced, the jobs created were still informal. This was also observed in Uttar Pradesh and Andhra Pradesh. Thus, it is clear that labour reforms alone cannot address the issue of informal employment as nearly 90 per cent of industrial workers are informally employed in major states.

States	State share in all India manufacturing workforce	Labour reform index	Share of informal workforce in manufacturing in the state
Uttar Pradesh	14.44	58	77.45
Andhra Pradesh	7.08	56	91.16
Gujarat	8.71	53	74.29
Rajasthan	4.05	47	85.51
Punjab	3.19	46	93.12
Madhya Pradesh	3.33	46	77.03
Odisha	2.89	44	66.02
Karnataka	5.41	42	91.79
Tamil Nadu	11.11	41	98.54
Maharashtra	10.25	35	99.18
Kerala	2.98	32	78.67
Bihar	2.65	29	98.52
West Bengal	14.18	27	87.82

Note: (i) Selected states account for 90% share in all India manufacturing sector workforce. (ii) Labour reform index is taken from Sean Dougherty article "Labour regulations and employment dynamics at state level in India" (2018). The index may not capture the labour reform regulations that took place after 2008. The index reflects the extent to which procedural changes have reduced transactional costs through limiting the scope of regulations, providing greater clarity in their application, or simplifying compliance procedure. Lower value (on the scale of 1-100) index applied number of reforms carried out by state are few.

Table 3: Informal Employment Distribution by State Compared to the Labour Reform Index (in per cent) (Source: Confederation of Indian Industry)

Table 4 examines the skill set of the informal workers in the non-agricultural sector. In both 2004-2005 and 2011-2012, about 23 per cent of the workforce was determined to be illiterate. Nearly 48 per cent of the workforce had only completed high school.

Education level	2004-2005	2004-2005
Illiterate	22.65	22.97
Below primary	10.55	10.74
School education	48.19	48.23
Higher Secondary	7.18	7.72
Diploma/ Certification	2.30	1.46
Graduation and above	9.13	8.88

Table 4: Education Level of Informal Workforce in Non-Agricultural Sector (in per cent)
(Source: Confederation of Indian Industry)

(Note: Selected states account for 90 per cent share in all India manufacturing sector workforce. (ii) Labour reform index is taken from Sean Dougherty article 'Labour regulations and employment dynamics at state level in India' (2018). The index may not capture the labour reform regulations that took place after 2008. The index reflects the extent to which procedural changes have reduced transactional costs through limiting the scope of regulations providing greater clarity in their application, or simplifying compliance procedure. Lower value (on the scale of 1-100) index applied number of reforms carried out by state are few.)

Interestingly, the skill levels of the informal workforce appear to have remained unchanged between the two NSSO Rounds (2004-2005 and 2011-2012), exceptfor diploma holders and graduates. In these two groups, the proportion of individuals engaged in informal employment decreased from 2.30 percent to 1.46 percent and 9.13 percent to 8.88 percent, respectively. This could be attributed to the fact that individuals with higher levels of education aspire to formal employment. Due to their limited skills, a majority of the informally employed, work as self-employed or casual labourers, which means they are not protected by labour laws.

QUANTIFYING THE SIZE AND SCOPE OF THE PARALLEL ECONOMY IN INDIA

Table 5 illustrates how the formal and informal sectors contribute to the total Gross Value Added (GVA) in India. It is important to note that unincorporated businesses with accounts are considered quasi-corporates and are considered part of the formal sector. The table reveals that the informal/unorganized sector contributes more than 50 per cent of the total GVA in all years. However, when the quasi-sector is included, the proportion drops below 50 per cent. Agriculture has the highest per cent of the unorganized sector due to small and fragmented holdings. This is followed by trade, construction, real estate, professional services, and other services.

Industry	2011-12				2016-17				2017-18			
	Organized/ formal	Unorganized/ Informal		Total	Organized/ formal	unorganized/ informal		Total	Organized /formal	Unorganized /informal		Total
	Of which HH*				Of which HH*				Of which HH*			
Agriculture, forestry, and fishing	3.2	96.8	94.8	100.0	2.8	97.2	95.2	100.0	2.9	97.1	95.2	100.0
Mining and quarrying	77.4	22.6	22.6	100.0	77.4	22.6	22.6	100.0	77.5	22.5	22.5	100.0
Manufacturing	74.5	25.5	12.7	100.0	76.4	23.6	12.5	100.0	77.3	22.7	12.0	100.0
Electricity, gas, water supply & other utility services	95.7	4.3	3.2	100.0	95.0	5.0	5.0	100.0	94.7	5.3	5.3	100.0
Construction	23.6	76.4	76.4	100.0	26.6	73.4	73.4	100.0	25.5	74.5	74.5	100.0
Trade, repair, Accommodation and food services	13.4	86.6	56.0	100.0	13.4	86.6	55.8	100.0	13.4	86.6	55.8	100.0
Transport, storage, communication & services related to broadcasting	53.0	47.0	39.6	100.0	53.7	46.3	38.5	100.0	52.3	47.7	39.6	100.0
Financial services	90.7	9.3	0.0	100.0	88.1	11.9	0.0	100.0	88.1	11.9	0.0	100.0
Real estate, ownership of dwelling & professional services	36.9	63.1	57.2	100.0	46.8	53.2	46.7	100.0	47.2	52.8	46.0	100.0
Public administration and defence	100.0	0.0	0.0	100.0	100.0	0.0	0.0	100.0	100.0	0.0	0.0	100.0
Other services	58.8	41.2	22.6	100.0	52.7	47.3	24.4	100.0	52.1	47.9	24.3	100.0
TOTAL GVA at basic prices	46.1	53.9	45.5	100.0	47.3	52.7	43.6	100.0	47.6	52.4	43.1	100.0

Table 5: Share of Formal/Informal Sectors Across Broad Sectors to GVA (Source: IMF)

According to Table 6, the most significant group in the informal sector comprises self-employed individuals, accounting for 32.3 percent. They are followed by contributing family workers and other informal employees, each constituting 30.0 percent of the informal sector. Contributing family workers alone make up 17.9 percent.

Employment status	Informality	Production units			
		Formal sector enterprises	Informal sector enterprises	Households	Total
Own account workers	Informal		32.3	NA	32.3
	Formal	0.5			0.5
Employers	Informal		1.3		1.3
	Formal	0.1			0.1
Contributing family members	Informal	0.1	17.9		18.0
Employees	Informal	9.6	30.0	0.8	40.4
	Formal	7.0	0.4	0.01	7.4
Members of producers' cooperatives	Informal		NA		NA
	Formal				NA

Table 6: Distribution of Workers by Production Unit and Employment Status 2011-2012 (per cent) (Source: ILO)

(Note: Employed persons of all ages. Cells shaded in dark grey refer to jobs, which, by definition, do not exist in the type of production unit. Cells shaded in light grey refers to formal jobs. Unshaded cells represent various types of informal workers.)

ASSESSING THE IMPACT OF PARALLEL ECONOMY ON FORMAL ECONOMY

Figure 5 indicates that there is a positive correlation between the per cent of regular formal employment, which refers to those paid employees who have at least one social security benefit, and the per capita Net State Domestic Product (NSDP), which is the per capita income, among major states. On the other hand, Figure6 shows a negative relationship between the share of own account and self-employed workers in total employment and per capita income. This suggests that states with a lower level of informality tend to be richer, as they have a larger proportion of formal workers, while poorer states tend to have a higher share of informal workers in total employment.

Figure 4 (i): Share of formal-regular in total employment and per-capita NSDP across states (2017-18)

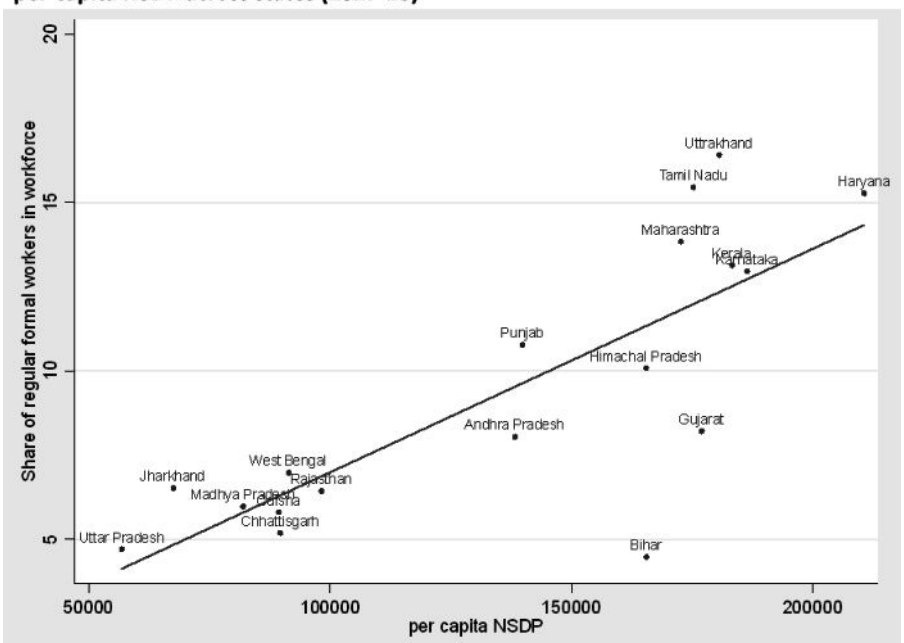

Figure 5: Share of Formal-regular in Total Employment and Per-capita NSDP Across States (2017-2018) (Source: The India Forum)

Figure 4 (ii): Share of self-employed workers in total employment and NSDP per-capita across states (2017-18)

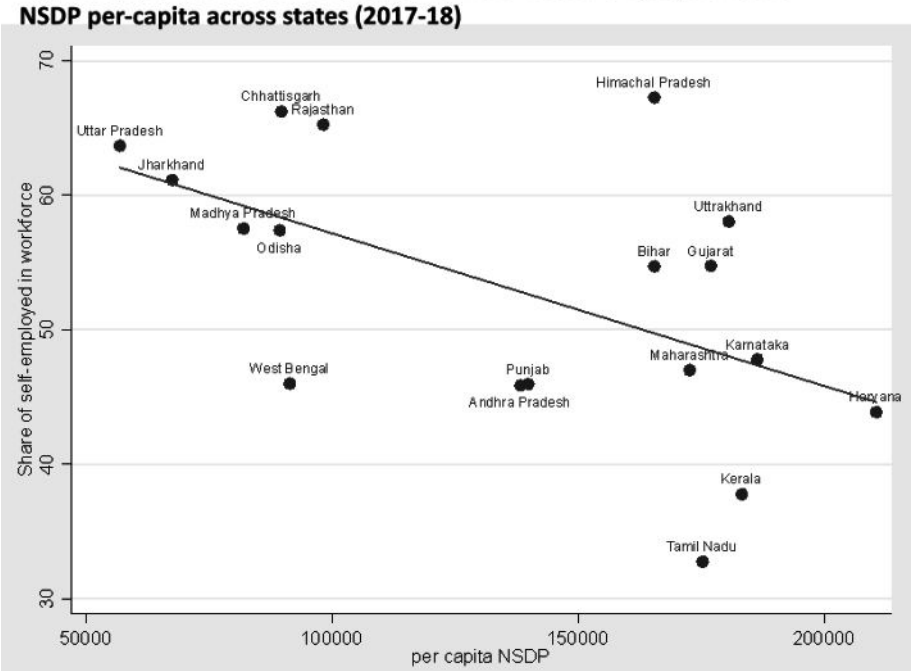

Figure 6: Share of Self-employed Workers in Total Employment and NSDP Per Capita Across States (2017-2018) (Source: The India Forum)

OBSERVATIONS & RECOMMENDATIONS

Based on the main findings and suggestions, the study concludes that the parallel economy is indeed a big menace to the Indian economy, and its negative impacts cannot be ignored. The project's key observations and recommendations are as follows:

Observations

1. The parallel economy in India is estimated to be a significant proportion of the country's GDP, which undermines the formal economy's growth and development.
2. The parallel economy's negative impacts include the loss of government revenue, distortions in market competition, incentives for corrupt practices and criminal activities, and a lack of transparency and accountability.
3. The Indian Government has implemented several measures to address the issue of the parallel economy, such as demonetization, digitalization of transactions, and improving tax compliance. However, the effectiveness of these measures is still a matter of debate.
4. A highly noteworthy issue with the informal sector has been observed, where a substantial portion of economic activities remains unrecognized by government authorities. This occurs mainly due to the limited use of digital payments, resulting in a low volume of transactions through digital systems. This paradoxical situation remains despite government efforts to encourage digitization. Rather than concentrating solely on the statistics related to digital payment adoption, the study aimed to underscore the broader implications of this phenomenon.

Recommendations

1. To tackle the issue of the parallel economy, the Government needs to adopt a comprehensive and multi-pronged approach that addresses its root causes.
2. The Government should also focus on improving tax compliance by simplifying tax procedures, introducing effective enforcement mechanisms, and reducing the burden of compliance on businesses.
3. Digitalization of transactions and the use of technology can effectively reduce the prevalence of the parallel economy. Complete digitalization of these sectors would enable comprehensive tracking of their revenue generation, providing valuable insights into their economic impact.
4. Finally, the Government needs to work closely with industry and civil society to raise awareness about the negative impacts of the parallel economy and promote ethical business practices.

CONCLUSION

The parallel economy is a significant part of the country's economic structure, operating outside the purview of government regulations and taxation.

It leads to a loss of revenue for the government, which in turn results in an inadequate provision of public goods and services. The unreported income generated by it can also lead to inflation and the erosion of the value of the Indian currency.

Moreover, it leads to a lack of transparency and accountability in business transactions, thereby hampering the growth and development of the formal economy. It also undermines the efforts of the government to create a level playing field for all businesses and encourages unfair practices like tax evasion and money laundering.

It is a big menace to the Indian economy, and the Government must take stringent measures to curb its growth and bring it under the formal economy's ambit. This can be achieved through measures like reducing tax evasion, creating more employment opportunities, promoting financial inclusion, and implementing policies to incentivize businesses to operate in the formal economy.

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> With such a burgeoning potential of gig work, the future would see a steep curve for freelance work and workers.

Analyzing the Growth and Scope of Gig Economy in India:

A Study on Freelancers and Their Working Perspectives

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ABSTRACT

Under the present domestic and globally competitive market, gig economy has emerged as a new paradigm in the world labour market. It has significant implications across various spheres due to the scalability, innovation, and agility that it offers. This study explores the growth and scope of the Gig

Economy in India and focuses on freelancers who mostly provide services in virtual work set-ups. The study is based on primary and secondary data. The primary data is collected by canvassing a questionnaire among 100 respondents across genders and age groups. This study has analyzed the future growth of this economy in India by identifying comprehensive perspectives and recommendations on various gig platforms and examining the financial credibility of this economy to create jobs for the present youth. The job-creating potential of the gig economy, awareness regarding the work, and identifying its demand across various industries are some of the aspects that have been studied.

Through this study, interpretations about the opportunities and challenges for workers in the sector, skill sets in demand for workers to enhance employment opportunities, the potential of gig work to replace traditional jobs and how it will be affected by the advent of Artificial Intelligence (AI), can be made. Which type of clients are more financially rewarding, and what are the most preferred ways of charging a client are some of the important results that can be inferred from this study. The study presents a methodical analysis of both the opportunities as well as challenges for workers in this sector.

KEYWORDS: Gig Economy, Digital Freelancing, Employment Opportunities, Skill Development, Career Advancement, Opportunities, Challenges.

INTRODUCTION

The gig economy is referred to as a labour market that is characterized by short-term contracts or freelance work, rather than permanent jobs. In a gig economy, workers typically perform specific tasks or projects for multiple clients and companies, often using online platforms that connect them with potential customers. Advocates of the gig economy argue that it offers greater flexibility and autonomy for workers, while also providing cost-effective solutions for businesses.

The gig economy is rapidly growing in India over the past few years. According to a report by Boston Consulting Group, the gig economy in India is expected to grow to $455 billion by 2023, accounting for over 15 per cent of the country's gross domestic product (GDP). In 2020-2021, it was estimated that 7.7 million workers were engaged in the gig economy. These workers comprise a population of 2.6 per cent of the non-agricultural workforce which is 1.5 per cent of the total workforce in India. The gig economy, still in its budding stage in India is yet to be studied comprehensively.

One of the main factors for the widespread growth of the Gig Economy in India is the widespread availability of affordable mobile services and internet connectivity. This has made it easier for workers to find gig opportunities through online platforms like Upwork, Freelancer, and LinkedIn. The digital boom has enabled the creation of new types of gig work, such as social media management, online tutoring, virtual assistance, and digital marketing. These gigs require specific digital skills which have made it attractive for workers who value flexibility and location independence. Gig or freelance work is expected to grow due to various possibilities and technological upgradation in numerous spheres of service and production-based business. At the same time, it will also provide the opportunity for workers to outstrip the limitations of time and space at work. With such a burgeoning potential of gig work, the future would see a steep curve for freelance work and workers.

Contribution of Freelancing in the Gig Economy

Freelancing is a significant contributor to the gig economy. It has become increasingly popular in recent years, offering workers more flexibility and autonomy than traditional employment. Freelancers can choose when and where they work, and they have the ability to work on a variety of projects and for multiple clients. The growth of the gig economy has been fueled by the rise of online platforms which provide a streamlined way for freelancers to work, communicate with clients, and receive payment for their services. Overall, freelancing is a significant contributor to the economy providing opportunities for workers to work in a variety of industries on a project basis and obtain work-life balance. Many millennials and Gen-Z workers prefer the flexibility and autonomy of freelance work over

traditional jobs. The concept of digital freelancing is gaining increased awareness and acceptance in India. People are realizing the potential of freelancing as a viable and profitable career option. This has led to an increase in the number of people choosing to work as freelancers, paving the way for more opportunities in this economy.

LITERATURE REVIEW

1. Dev, Pillai (2022). 'Dynamics of Gig Work Economy - An Investigation of Worker Perspectives on Gig Work' supplemented developing specific actions to accelerate the development of the gig economy to ensure worker protection and safety needs in creating an inclusive economy.
2. Gussek, and Wiesche (2021) in their study 'Gig Economy-Workers, Work, and Platform Perspective' examined the characteristics, the motivators, and the digital platforms that mediate the gig economy and the whole economy as a framework.
3. Allon, Cohen, and Sinchaisri (2018) studied 'The Impact of Behavioral and Economic Drivers on Gig Economy Workers.' - The study was done to find out the motivation factor that makes gig workers make decisions regarding the labour.
4. Gleim, Johnson, and Lawson (2019) 'Sharers and sellers- A Multi-Group Examination of Gig Economy Worker's Perceptions.' was a study done to find out the various perceptions of Gig economy workers.
5. Healy, Nicholson, and Pekarek (2017) studied the topic 'Should We Take the Gig Economy Seriously?' which focuses on how the gig economy has emerged rapidly as a form of service delivery that challenges existing business models, labour-management practices, and regulations. This paper, further studies whether the gig economy deserves to be a subject of employment relations scholarship, given its current dimensions and likely future.
6. Ashford, S. J., Caza, B. B., & Reid, E. M. (2018) in their paper 'From Surviving to Thriving in the Gig Economy-A Research Agenda for Individuals in the New World of Work. Research in Organizational Behaviour, 38, 23–41.' articulated the work and relational behaviours necessary for such thriving, and the cognitive and emotional capabilities that undergird them.

OBJECTIVES OF THE STUDY

1. To find out how freelancers, as well as non-freelancers, perceive this economy in terms of reasons for its rise, the advantages and disadvantages associated with it, the kind of services in demand, the skill sets required, various ways of acquiring clients, and how to charge clients in this economy.
2. To assess the preferences of the present generation towards freelancing in terms of the motivating factors, career options, and its replacement in the future due to AI.
3. To find out whether there is any linkage between people's intention to pursue freelancing full-time and their perception regarding the future of freelancing.

RESEARCH METHODOLOGY

The study is mostly descriptive in nature, a pinch of quantitative and qualitative methods are also used. A non-probability sampling technique was applied and participants of selected occupational statuses and age groups were selected as a sample. In this project, I have gathered primary data through a questionnaire using the Google Forms application the survey questionnaire consisted of 25 questions which were used to draw information about the participant's personal opinions about the growth and scope of the Gig Economy in India.

Sample Type

Non-probability sampling

Sample Size

100 people

Both freelancers and non-freelancers, and their working perspective, were taken into account. The secondary data is collected from previous studies and work related to the gig economy. The various sources of secondary include articles from the Internet about various surveys conducted earlier and journals and research papers that focus on this economy.

The tools used for data analysis include graphical representations, tables, and the hypothesis testing method (bivariate analysis – Chi-Square Test). Chi-square (χ^2) is used to find out whether there is a significant association between two categorical variables from our survey.

DEMOGRAPHIC DATA OF RESPONDENTS

Gender

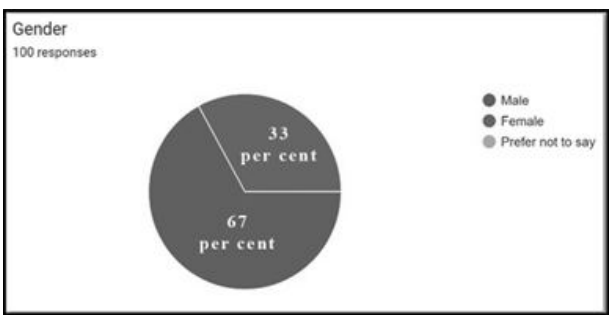


Figure 1: Pie-Chart Depicting the Demographic Data of the Respondents on the Basis of Gender (Source: Primary Data)

Months or Years of Experience



Figure 3: Pie-Chart Depicting the Demographic Data of the Respondents on the Basis of Months/ Years of Experience (Source: Primary Data)

Age

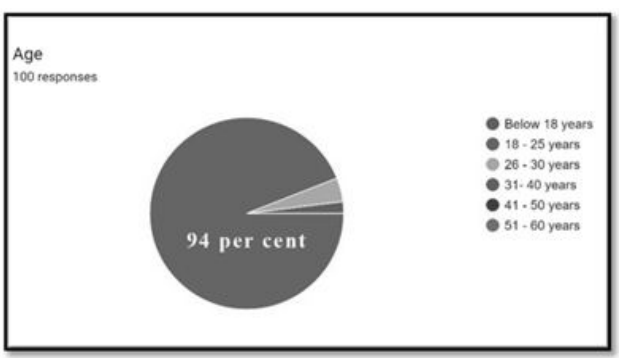


Figure 2: Pie-Chart Depicting the Demographic Data of the Respondents on the Basis of Age (Source: Primary Data)

Occupation

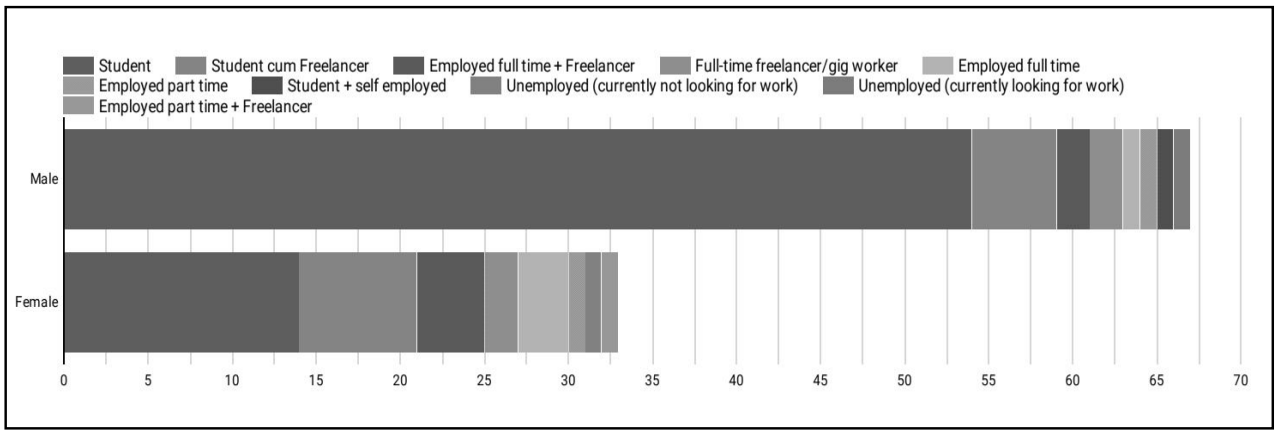


Figure 4: Pie-Chart Depicting the Demographic Data of the Respondents on the Basis of Occupation (Source: Primary Data)

Most of the respondents belonged to the age group of 18-25 years (94 per cent). 67 per cent were male respondents, while 33 per cent were female respondents. Of the sample size, 13 per cent of respondents had less than 6 months of experience as a freelancer, 8 per cent had 6-12 months of experience, 9 per cent had 1-2 years of experience while another 8 per cent had 2-3 years of experience as a freelancer. Of the male respondents, 54 per cent were students, while 5 per cent of respondents were students cum freelancers, and 2 per cent population were freelancers besides being employed full-time. Of the female respondents, 14 per cent were students, 7 per cent were students cum freelancers while 4 per cent were freelancers besides being employed full time.

DATA, ANALYSIS AND FINDINGS

Analysis 1

Reasons for the growth of the gig economy in India

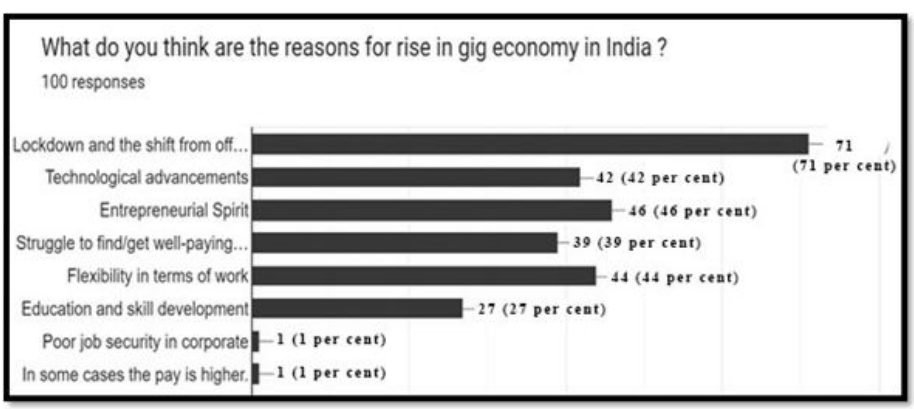


Figure 5: Graphs Depicting the Reasons for the Growth of the Gig Economy in India (Source: Primary Data)

Interpretation

The majority of the respondents are of the opinion that lockdown and shift from offline to online platforms is one of the biggest reasons for the rise of the Gig Economy in India. Apart from that entrepreneurial spirit, flexibility in terms of work and skill development are supported as reasons for the growth.

Analysis 2

Reasons for the growth of the gig economy in India

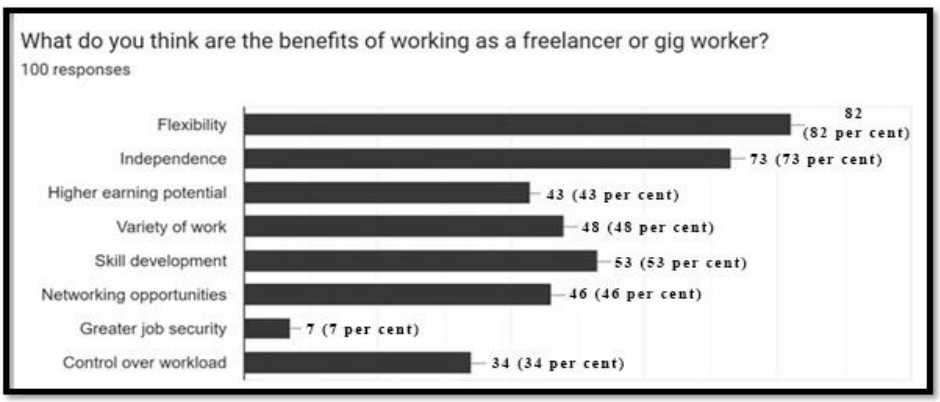


Figure 6: Graph Depicting the Benefits Associated with Freelancing in the Gig Economy (Source: Primary Data)

Upon asking what they perceive to be the benefits associated with the Gig Economy, 82 per cent of the respondents think flexibility in terms of work is a very crucial benefit associated with freelancing, followed by work independence which is supported by 73 per cent respondents. Respondents are also of the opinion that skill development, plethora of options in work, networking opportunities and higher earning potential are some of the other benefits which are they experienced/they perceive about freelancing.

Analysis 3

Services in demand for digital

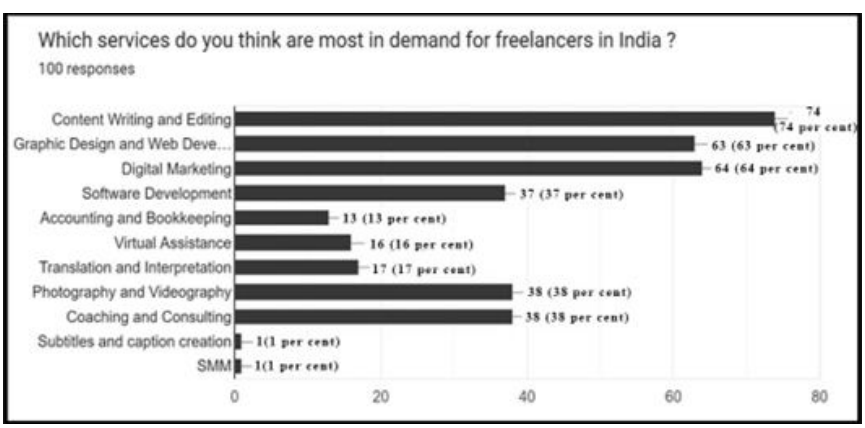


Figure 7: Graph Depicting the Services in Demand for Digital (Source: Primary Data)

Freelancers typically work remotely, using technology and communication tools to interact with their clients. Upon asking which kind of services, they think are most in demand for freelancers at present, the majority of respondents replied with content writing and editing as the most in-demand service for freelancers followed by graphic designing and digital marketing, along with software development, coaching, and consulting.

Analysis 4

Reasons for the growth of the gig economy in India

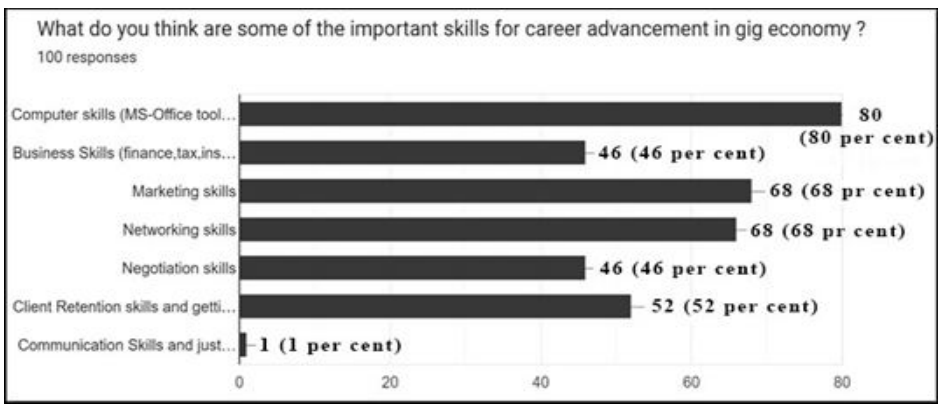


Figure 8: Graph Depicting the Important Skills for Career Advancement in Freelancing (Source: Primary Data)

Due to the variety of work in freelancing, freelancers have to do projects and fill roles on a requirement basis for their clients. For this, some of the skills are essentially required to make a sustainable living out of freelancing, especially in India as well as to advance one's career. Upon asking what are some of these skills, majority respondents (80 per cent) replied that knowledge of basic computer skills like Microsoft (MS) Office tools (MS-Excel, PowerPoint word), Photoshop, Canva are very essential, followed by several soft skills like Marketing skills, networking skills and negotiation skills.

Analysis 5

Client Acquisition Methods in Freelancing

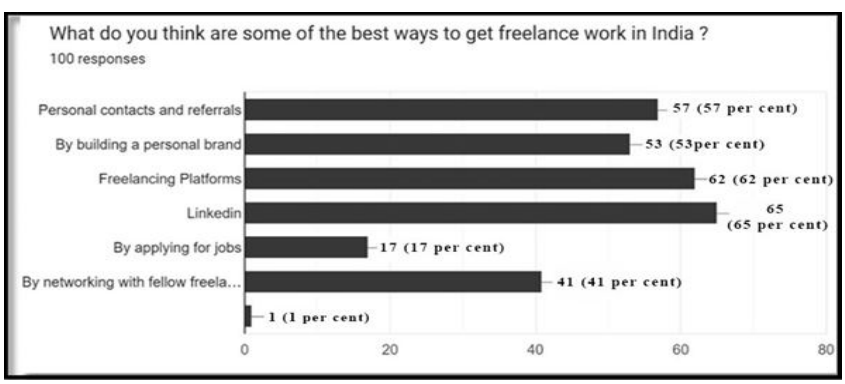


Figure 9: Graph Depicting the Client Acquisition Methods in Freelancing (Source: Primary Data)

In digital freelancing, clients are acquired mostly through dedicated platforms. Preference of respondents towards platforms to acquire clients for freelancing can be summarized as follows-LinkedIn - 65 per cent, Freelancing platforms - 62 per cent, Personal contacts and referrals- 57 per cent, Building a personal brand – 53 per cent, Networking– 41 per cent.

Analysis 6

Preferred ways of charging a client

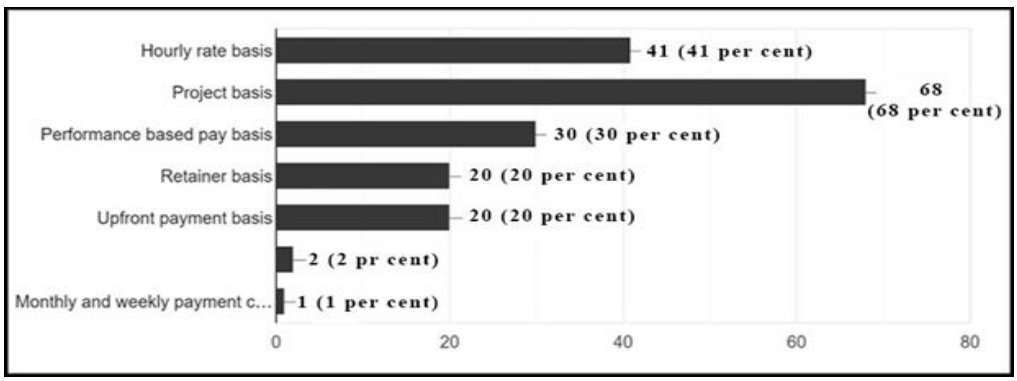


Figure 10: Preferred Ways of Charging a Client
(Source: Primary Data)

Respondents were also asked about the effectiveness of some of the platforms/methods for client acquisition. 68 per cent respondents chose payment on a project basis, 41 per cent respondents chose payments on an hourly rate basis and 30 per cent respondents think performance-based pay basis as the most preferred ways of charging a freelance client.

Analysis 7

Challenges of working as a freelancer

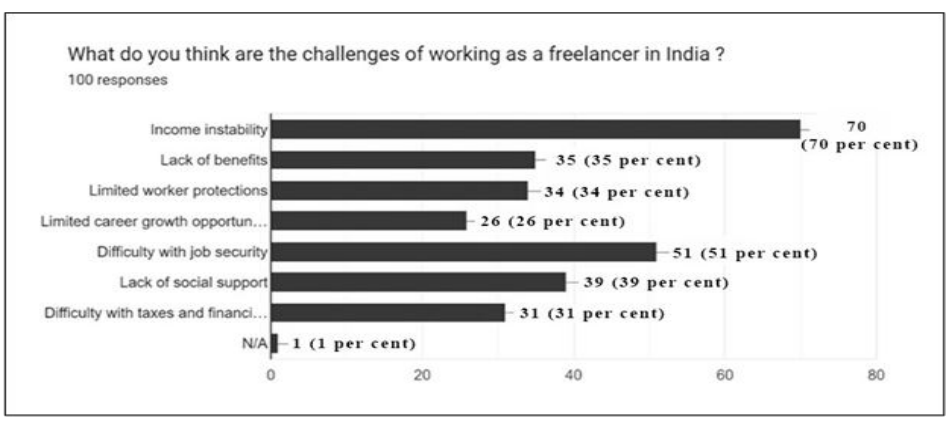


Figure 11: Graph Depicting the Challenges of Working as a Freelancer
(Source: Primary Data)

70 per cent of the respondents associate income instability as a major challenge of working as a freelancer besides difficulty with job security, lack of social support, limited worker protection, and lack of benefits as some of the other challenges that are being faced as a freelancer.

Analysis 8

Motivation behind working as a freelancer

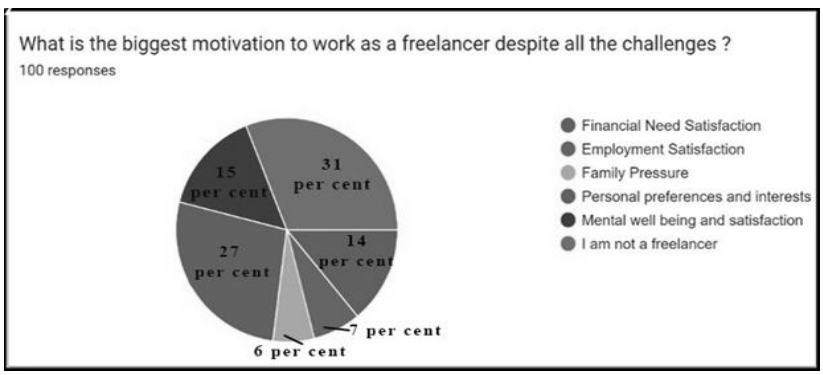


Figure 12: Pie-Chart Depicting the Motivation Behind Working as a Freelancer (Source: Primary Data)

People choose freelancing for a variety of reasons and this includes personal and family life, higher earning potential, and mental satisfaction. While most respondents in the population are not freelancers, the rest have associated personal preferences and interests, mental well-being and satisfaction, and financial need satisfaction as some of the biggest motivations behind pursuing freelancing.

Analysis 9

Freelancing as a full-time career option

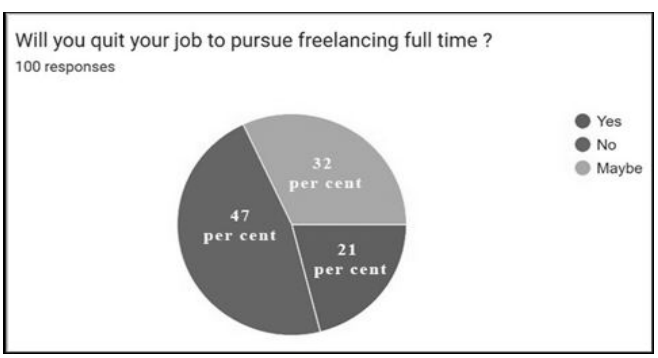
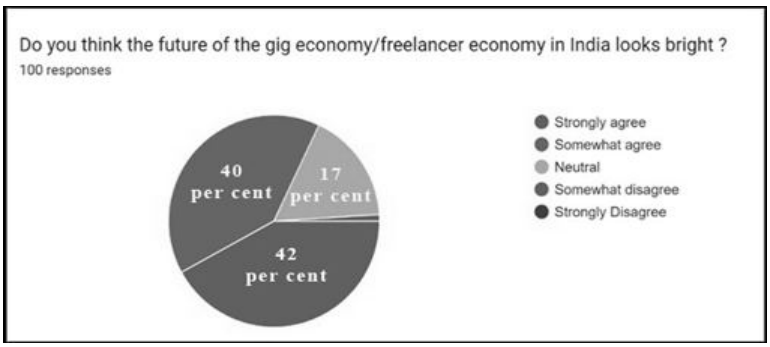


Figure 13: Pie-Chart Depicting Respondents' Views on Quitting their Jobs to Pursue Freelancing Full-Time (Source: Primary Data)

For this survey, upon asking whether they would consider freelancing full-time, 21 per cent of respondents replied that they intended to pursue freelancing full-time while 47 per cent of respondents were unlikely to pursue the same. 32 per cent of respondents might consider pursuing freelancing full-time.

Analysis 10

Perception regarding the bright future of gig economy in India

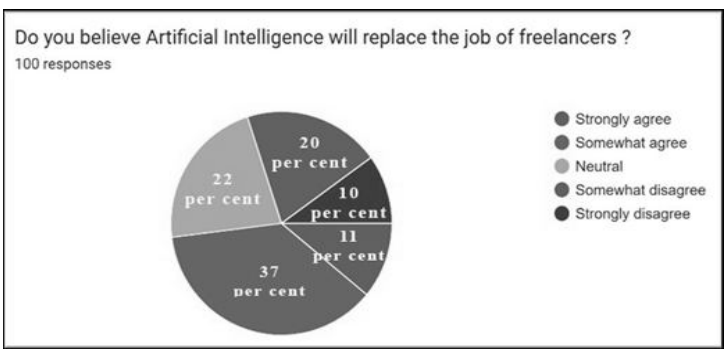


Respondents were asked about their perception about the future of the gig economy to which 42 per cent of respondents strongly agreed that the future looks bright, 40 per cent respondents somewhat agree to the statement, while 17 per cent are neutral in their opinion.

Figure 14: Pie-Chart Depicting the Respondents' Perception Regarding the Future of Gig Economy in India (Source: Primary Data)

Analysis 11

Is AI set to replace freelancers in gig economy in the near future?



With the advent of AI, various services which required human involvement are being replaced by AI-aided tools. Respondents were asked about their concerns regarding the same and if AI will replace the job of freelancers in the future, to which 37 per cent of respondents somewhat agreed, 20 per cent somewhat disagreed while 11 per cent strongly agreed and 10 per cent of the respondents strongly disagreed.

Figure 15: Pie Chart Depicting the Respondents' View on Whether AI is Set to Replace Freelancers in the Gig Economy in the Near Future (Source: Primary Data)

STATISTICAL ANALYSIS

From Analysis 9, we got to understand the intention of the respondents to pursue freelancing full-time. While the majority of the respondents are unwilling to pursue freelancing full-time, there is also a significant percentage of the population whose intentions differ. From Analysis 10, we tried to understand the respondents' perception regarding the future of Gig Economy in India and the responses were mixed, mostly skewed towards a bright future. As an objective of this study, we have henceforth tried to find out if there is any correlation between the respondents' perception regarding the future of freelancing and their intention to pursue freelancing full-time.

In order to find this association, a hypothesis testing method has been introduced. Chi-square (χ^2) is used (which a statistical test) to find out whether there is a significant association between the two categorical variables.

PEARSON'S CHI-SQUARE TEST

Perception regarding future versus intention to pursue freelancing full-time

H0- There is no significant association between respondents'

Perception about the future of gig economy in India and their intention to pursue freelancing full-time

H1- There is significant association between respondents'

Perception about the future of gig economy in India and their intention to pursue freelancing full-time

The observed frequency table is as follows -

Observed Frequency Table				
FREQUENCY	**Maybe**	**No**	**Yes**	**Grand Total**
Neutral	8	8	1	17
Somewhat Agree	11	25	3	39
Somewhat Disagree		1		1
Strongly Agree	13	13	17	43
Grand Total	32	47	21	100

The expected frequency table is as follows –

Expected Frequency Table				
FREQUENCY	**Maybe**	**No**	**Yes**	**Grand Total**
Neutral	5.44	7.99	3.57	17
Somewhat Agree	12.48	18.33	8.19	39
Somewhat Disagree	0.32	0.47	0.21	1
Strongly Agree	13.76	20.21	9.03	43
Grand Total	32	47	21	100

Degree of Freedom	6
p-Value	0.003850404

Interpretation

For the above chi-square test, the significance level is set at 5 per cent. The degree of freedom is 6 and the obtained p-value for the chi-square test is 0.00385, which is less

than the significance level of 0.05. This provides sufficient evidence to reject the null hypothesis (H0) for the entire sample. We hereby accept the alternate hypothesis(H1) and establish the fact that respondents' intention to pursue freelancing full-time is dependent on their strong perception of the bright future of the freelancer economy in India.

SUMMARY OF FINDINGS

The analysis above shows that the respondents, consisting of freelancers as wells as non- freelancers associate freelancing with flexibility and independence in terms of work, higher earning potential and skill development. There are many services in demand for freelancers and the demand may vary depending on the industry and region. Since the gig economy provides a diverse range of opportunities that workers can choose from, the study found out that some of the most in-demand services for freelancers in present time is content writing, graphic designing, web development, digital marketing, coaching and consulting. Some of the best ways to acquire clients are through LinkedIn, freelancing platforms, personal contacts, referrals, by building a personal brand and by networking with fellow freelancers.

The most preferred ways of charging clients in freelancing are on project basis, hourly rate basis and performance pay basis. Retainer basis and upfront payment basis are other popular methods. Career advancement in gig economy is directly proportional with the skills one possesses. These include knowledge regarding basic and essential computer skills, business skills as well as certain soft skills. The challenges associated with freelancing are income instability, limited worker protection, difficulty with job security and lack of social support and benefits. The study found that a significant percentage of the population consider it to be a safe career option. Based on the results of the survey, it is identified that most of the gig workers are motivated to join the gig economy in order to work as

per their personal interests and preferences. AI can automate certain tasks which require human involvement.

However, it cannot replace creativity, critical thinking and problem-solving skills that freelancers bring to their work. This is clearly interpreted from the survey results, which show that a significant percentage of the population are concerned with AI replacing freelancers while another percentage of population disagreeing that it would not replace the work of freelancers. Based on the survey results, most respondents opine that the future scope of gig economy and freelancing as a whole look bright. However, upon asking if they would like to pursue freelancing full time, the respondents were divided on their opinion with majority not willing to take up freelancing full time over a stable job. This is further supported by the statistical test which shows that the respondents who strongly favoured the future viability of freelancer economy in India are more likely to quit jobs and take up freelancing full time than the ones who do not. Thus, we concluded that there is significant association between respondents' perception about the future viability of this economy and their intention to pursue this career full time.

CONCLUSION

The gig economy is one of the most desired work-based trends in the present times. While freelancing in India is ever-growing, workers should be prepared to face new challenges such as lack of stability and benefits like full-time workers, besides enjoying the fruits of flexibility and independence. As the demand for specialized services are growing rapidly and so is the number of freelancers in the Indian economy, there is a crucial need for undertaking an exercise to estimate the size of the gig economy and the typical features of this work culture. During an enumeration exercise (such as a census), it is important to gather information relating to the nature of the contract between the freelancer and the job creator, the technology used in the work, etc. Against this backdrop, this research article attempts to identify and address issues from the perspectives of freelancers, specifically digital workers, and analyze the various dimensions of their work, so as to conclude on the growth and scope in this industry.

The research done among respondents belonging to various occupational status establish that even the non-freelancers who are not part of this eco-system are well aware of the various benefits and challenges that this economy offers. Due to this awareness and acceptance, people are realizing the potential of freelancing as a viable and profitable career option. This is a signal that a number of people are willing to work as freelancers in the future, as found in the survey results. This can also be related to the fact that India has a skilled and educated workforce, many of whom possess high-level technical and creative skills. Freelancing provides an opportunity for such individuals to monetize their skills and work on projects that interest them. With all this comes the challenges and problems which need to be addressed by the government and necessary policy actions would be beneficial. In the era of AI, it is important to understand the skills that are most in demand and are irreplaceable for this economy to emerge as a source of youth employment.

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> Carbon dioxide emission are one of the major causes of climate change, and comprehending the factors that lead to their production is critical in framing effective strategies to reduce them.

Increasing the Share of Manufacturing in Gross Domestic Product:
A Concern for the Environment?

Prof. Saswati Bagchi
Assistant Professor, Department of Commerce (Morning)

Ankit Keshri
Department of Commerce (Morning)

ABSTRACT

The emission of carbon dioxide (CO2) from increased economic activities have resulted in global warming, climate change, and ocean acidification. Rapid industrialization has been held responsible for increased levels of carbon dioxide emissions in the environment. Our study attempts to find evidence on factors responsible for rise in the level of carbon dioxide emissions across the various countries of the world. Using a panel data for selected countries between 1997 to 2020, we have estimated that value added due to manufacturing activities is a significant contributor of high levels of emissions across various countries of the world.

KEYWORDS: Industrialization, Value Added in Manufacturing, Global Warming, Panel Data.

INTRODUCTION

In 2019, the World Meteorological Organization (WMO) reported that greenhouse gases reached record levels in the atmosphere and that current levels of atmospheric CO2 are comparable to those of three million years ago, which represents a 3°C (degrees Celsius) increase in temperature. The factors that influence a country's carbon emissions can be complex and diverse and vary by country and specific circumstances. There are three broad categories of factors that can affect carbon emissions at the national level, namely: energy consumption, use of fossil fuels and manufacturing process. As a result of the urgency of this escalating emission of carbon dioxide, several international agreements such as Inter-Governmental Panel on Climate Change (IPCC) in 1988, United Nations Framework Convention on Climate Change (UNFCCC) in 1992and Kyoto Protocol in 1997 have been established to curb CO2 emissions and mitigate their effects. To reduce emission intensity India made a significant move by agreeing to reach net-zero emissions by 2070 from international finance support and technology transfer.

LITERATURE REVIEW

The extant literature highlights on the diverse factors and their impacts on carbon dioxide emissions. Azmin et al. (2022)tried to determine whether there is any relationship between the variables' energy consumption, macroeconomic factors, and CO2emissions in Association of Southeast Asian Nations (ASEAN) countries. It was found that carbon dioxide emissions in ASEAN countries are significantly influenced by Real Gross Domestic Product (RGDP) and Foreign Direct Investment(FDI). It was found by Huang et al. (2021) that as the amount of Foreign Direct Investment (FDI) increases, there is a corresponding increase in carbon dioxide emissions, indicating a positive relationship between FDI inflows and carbon emissions. In a study by Borga et al. (2022) it was observed that CO2 emissions are attributable to investment, production, and exports. Those companies that are owned by the investors in host countries contribute considerably to global carbon emissions. Bazarcheh et al. (2018) investigated the casual relationship between energy consumption, carbon emission and economic growth and concluded that the environment degradation and production inefficiency put a serious challenge to environment sustainability. We try to bridge the gap in the literature by identifying the role of value addition due to increase in the levels of manufacturing activity in recent times and openness to trade as being responsible for increased levels of carbon dioxide emissions.

MODEL

Our study investigates the intricate relationships among several key variables to gain a comprehensive understanding of environmental and economic dynamics. The dependent variable is carbon dioxide emission which is measured in terms of the carbon dioxide emissions produced per unit of economic output. Examining the factors influencing CO2 emissions, the study considers several independent variables. Foreign direct investment takes centre stage as a pivotal driver of economic globalization. It encapsulates investments made by entities from one country into businesses located in another, that

contribute to economic growth and, in turn, potentially impact emissions. Manufacturing value added (MVA) is a measure that represents the value of the goods produced by a country's manufacturing sector minus the cost of inputs used in the production process. It captures the net contribution of the manufacturing sector to the economy of a country. Trade openness measures a country's participation in international trade by calculating the flow of goods, services, and capital across borders. Depending on how closely a nation's economy is integrated with the global market, carbon emissions may be affected. To provide empirical evidence to support our claim a panel data between 1997 to 2020 was collected from the World Bank, facilitating a comprehensive comparative study.

The research incorporates data from 28 distinct countries for the analytical framework. This selection encompasses a diverse range of economies, including developed, developing, and the top 10 carbon-emitting nations. Among the countries analyzed are Australia, Brazil, Canada, China, France, Egypt, India, Indonesia, Italy, New Zealand, Pakistan, Qatar, Saudi Arabia, South Africa, Sri Lanka, Singapore, Spain, Bangladesh, Japan, Malaysia, Mauritius, Mexico, Russian Federation, Ukraine, United States, United Arab Emirates, United Kingdom, and Germany. This comprehensive approach allows for a thorough investigation of the trade and environmental dynamics across different contexts, ultimately contributing to a more holistic understanding of the subject matter. Before undertaking the analysis, we tried to study the trend of variables: carbon dioxide emissions, FDI and MVAfor India and the United States.

Figure 1 displays the trend line for carbon dioxide emission in India between 1997 and 2020. The trend line shows a downward movement, which suggests that the carbon emission kilograms (kg) per Purchasing Power Parity (PPP) of Gross Domestic Product (GDP) has decreased over time. A high R^2 (coefficient of determination) value of 0.9055 indicates that the trendline is a good fit for the estimated trendline values.

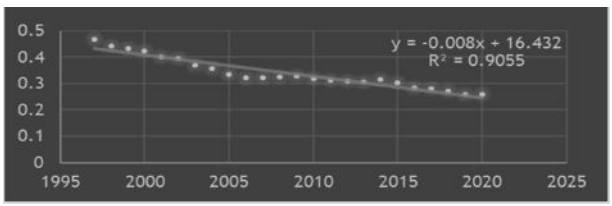

Figure 1: Carbon Dioxide Emission of India in kg per PPP $ of GDP (Source: Primary Data)

Figure 2 displays the trendline for foreign direct investment in India between 1997 and 2020. The trendline shows an upward movement, which suggests that the inflow of FDI as percentage of GDP has increased over time. A low R^2 value of 0.3193 indicates that the trendline is a not good fit.

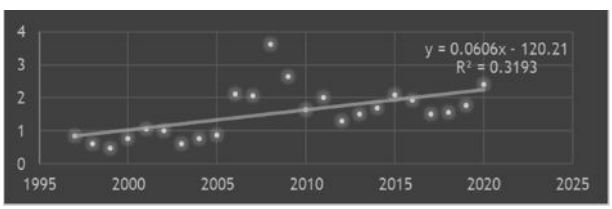

Figure 2: Foreign Direct Investment of India, Net Inflows asPer Cent of GDP (Source: Primary Data)

Figure 3 displays the trendline for Manufacturing Value Added of India between 1997 and 2020. The trendline shows an unsteady movement, which suggests that the manufacturing value added as percentage of GDP has been wavering over time. A low R^2 value of 0.2274 indicates that the trendline is not a good fit for the estimated trendline values.

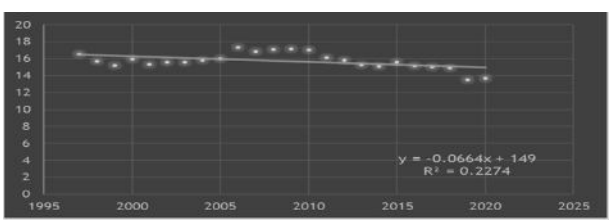

Figure 3: MVA as Per Cent of India's GDP (Source: Primary Data)

Figure 4 displays the trendline for carbon dioxideemission in the United States of America between 1997 and 2020. The trendline shows a downward movement, which suggests that the carbon emission kg per PPP of GDP has decreased over time. A high R^2 value of 0.9055 indicates that the trendline is a good fit.

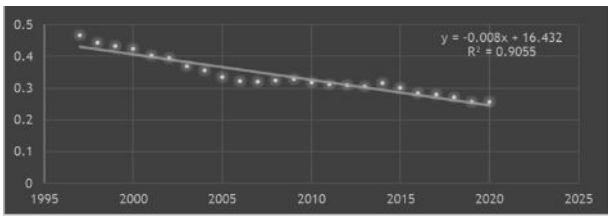

Figure 4: Carbon Dioxide Emission of the United States of America in kg per PPP$ of GDP (Source: Primary Data)

Figure 5 displays the trendline for Manufacturing Value Added of the USA between 1997 and 2020. The trendline shows a downward movement, which suggests that manufacturing has decreased as a percentage of GDP over time. A high R^2 value of 0.884 indicates that the trendline is a good fit.

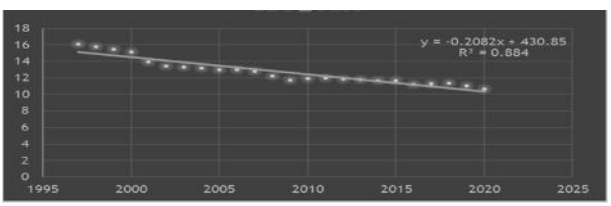

Figure 5: Manufacturing Value Added of the United States of America as Per Cent of GDP (Source: Primary Data)

Our empirical model for estimation is:

$$CO_{2_{it}} = \alpha + \beta * FDI_{it} + \gamma * VA_{it} + \delta * TO_{it} + u_{it} \quad \ldots\ldots\ldots\ldots\ldots\ldots (1)$$

To assess whether there is heterogeneity across countries, a pooled regression was initially run. The pooled regression method assumes that the relationship between the variables is the same across all countries. Since, the p value corresponding to the F statistic is less than 5 per cent, we fail to accept the null hypothesis. The results of the pooled regressions are presented in tables 1 and 2. We conclude that there is heterogeneity across countries and so we run a fixed and random effect model to identify the factors which are statistically significant in explaining changes in carbon dioxide emission across different countries.

Number of observations	672
F (3, 668)	3.42
Prob > F	0.0170
R-squared	0.0151
Adj R-squared	0.0107
Root MSE	.2448

Table 1: Table for Heterogeneity Test (Source: Primary Data)

CO_2Emission (KgperPPPofGDP)	**Coefficient**	**Standard Error**	**t**	**p>|t|**
Foreign Direct Investment	0.005612	0.0031604	1.78	0.076
Manufacturing Value Added	0.013605	0.0016659	1.82	0.069
Trade Openness	0.075660	0.0329937	2.29	0.022
Cons	0.2280152	0.0311784	7.31	0.000

Table2: Pooled Regression Model (Source: Primary Data)

The fixed effect model shows that manufacturing value added is statistically significant variable.The p value is less than 5 per cent and so we fail to accept null hypothesis and conclude that a 1 per cent rise in value added in manufacturing causes carbon dioxide emission to rise by 1.3 per cent. The fixed effect model is described in table 3.

CO_2Emission (KgperPPPofGDP)	Coefficient	Standard Error	t	p>|t|
Foreign Direct Investment	0.000794	0.0031685	0.25	0.802
Manufacturing Value Added	0.013605	0.0018036	7.54	0.000
Trade Openness	0.018807	0.024667	0.76	0.446
Cons	0.088602	0.0303316	2.92	0.004

Table3: Fixed Effect Model
(Source: Primary Data)

The estimated fixed effect model based on the above analysis is:

$$CO_{2_{it}} = 0.088602 + 0.000794FDI_{it} + 0.013605VA_{it} + 0.018807TO_{it}$$

Random effects model is a statistical method used to analyze data where the observations are not completely independent, but instead are grouped or clustered in some way. Therandom effect model shows that manufacturing value added is statistically significant variable. The p value is less than 5 per cent and therefore we fail to accept null hypothesis and conclude that a rise of1 per cent increase in manufacturing value added will cause a 1.28 per cent increase in carbon emission. The random effect model estimates are presented in table 4.

CO_2Emissions (KgperPPPofGDP)	Coefficient	Standard Error	z	p>|z|
Foreign Direct Investment	0.000246	0.0031125	0.08	0.937
Manufacturing Value Added	0.012812	0.0017627	7.27	0.000
Trade Openness	0.020979	0.0245777	0.85	0.393
Cons	0.100218	0.0477292	2.10	0.036

Table 4: Random Effect Model
(Source: Primary Data)

The estimated random effect model based on the above analysis is:

$$CO_{2_{it}} = 0.100218 + 0.000246\,FDI_{it} + 0.012812\,VA_{it} + 0.020979TO_{it}$$

The Hausman test is a statistical method used to compare the consistency and efficiency of estimators in regression models. Specifically, the test is used to determine whether the random effects or fixed effects model is more appropriate for a given dataset.Since the p value is less than 5 per cent then we confirm that fixed effect model is more appropriate for our analysis.

CONCLUSION

Carbon dioxideemission are one of the major causes of climate change, and comprehending the factors that lead to their production is critical in framing effective strategies to reduce them. Thispaper tried to examine various factors such as GDP, energy consumption, trade openness, manufacturing value-added that causes an impact on environment. As per the study, value-added in manufacturing came as significant factor affecting carbon emissions. Manufacturing valueadded was also found to have a positive impact on carbon emissions. Since the manufacturing process typically involves the use of energy and carbon-contained resources, itis likely to result in carbon emissions. Countries having higher levels of manufacturing activities have higher levels of carbon emissions. The outcomes highlight the importance of considering the environmental impact of manufacturing practices of a particular country on the environment. To reduce carbon emissions, countries need to implement measures that reduce the carbon footprint of manufacturing activities. This can be achieved using cleaner production technologies, energy-efficient transportation systems, and renewable energy sources. It is high time that countries should look to draft major policies on their own and try their best to achieve their nationally determined contribution as per the Paris Agreement to reducing carbon emissions, make significant progress towards mitigating the effects of climate change and creating a more sustainable future.

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> Understanding consumer behaviour is essential for businesses in the jewellery industry to effectively target their audience, create appealing products, and generate sales.

Comprehensive Study of the Trend, Trade, and Consumer Behaviour in India's Jewellery Industry

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ABSTRACT

India's jewellery market, the second largest in the world, boasts a rich history and holds high esteem. This industry has witnessed remarkable technological advancements and innovations, establishing itself as a vital sector that generates substantial income and offers significant employment opportunities. The sector's growth is anticipated to be propelled by established brands, expanded market access, relaxed gold import

restrictions, and accessible gold metal loans. The gems and jewellery sector play a pivotal role in India's exports, projected to reach a market size of $70 billion by 2025. Indian jewellers are actively engaging in global exhibitions, gaining insights into international market demands. The government has also introduced initiatives aimed at reducing dependence on imported gold and promoting gold deposits in banks. Overall, the Indian jewellery industry is dynamic and poised for robust growth owing to changing consumer preferences, urbanization, and evolving lifestyles.

The study showed that the majority of respondents fell within the 18-24 age group, closely followed by individuals aged 25-34, with respondents aged 35-54 also well represented. Only 5 per cent of the respondents were above 55 years old. An analysis of 110 respondents' data revealed that quality and material mattered the most to buyers (55.2 per cent), followed by design (51.7 per cent) and price (47.1 per cent). Brand reputation (29.9 per cent) and influencer endorsements (16.4 per cent) held lesser sway. Most prioritized affordability (39.1 per cent), with 20 per cent specifically valuing brand names. Buyers of branded jewellery primarily focused on quality (60.9 per cent), reputation, and exclusivity. Non-branded jewellery purchasers prioritized price, unique designs, and availability. Uniqueness significantly influenced buyers (71 per cent), while personalization had a milder effect on their choices. Physical stores were preferred (77.3 per cent) because customers desired to see, try, and trust the jewellery before purchase. Hallmark was deemed crucial for 73 out of the 110 respondents. Events significantly affected buying decisions for 25.5 per cent, moderately for 41.8 per cent, while 22.7 per cent prioritized style, quality, and cost over occasions.

KEYWORDS: Jewellery Industry, Branded Versus Non-branded, Consumer Preference, Import-Export Trend, Technology, Jewellery Acquisition.

INTRODUCTION

Jewellery, derived from the French word 'jouel,' originally meant 'plaything' and later came to refer to decorative ornaments made from precious materials. It encompasses various accessories like necklaces, bracelets, earrings, rings, and brooches. Jewellery serves as personal adornment, representing cultural, religious, or individual identity, and makes fashion statements. It has been significant throughout history, expressing personal expression, symbolizing status, and facilitating trade. Jewellery holds emotional value, symbolizing love, affection, and cultural significance. Moreover, jewellery bears significant cultural, social, and historical meaning, symbolizing wealth, power, and personal style. Studying it provides insight into diverse societies and eras. The global jewellery industry generates substantial annual revenue, contributing significantly to the economy. Furthermore, technological advancements in materials, manufacturing processes, and e-commerce have impacted the jewellery sector. Analyzing these advancements could help us comprehend how they shape the market and their overall impact. However, the jewellery industry often faces criticism regarding its environmental impact and labour practices. Studying this sector reveals its efforts to address these concerns, becoming more sustainable and socially responsible, despite the challenges it encounters in doing so. Additionally, it is important to note that consumer preferences and spending patterns in the jewellery sector are constantly changing. Therefore, understanding the dynamics offers insights into consumer behaviour, including the factors influencing spending and the trends fuelling demand for various types of jewellery. Thus, the study of the jewellery sector is important for gaining a deeper understanding of the cultural, economic, technological, and social factors that are shaping this dynamic and fascinating industry. In light of the foregoing, this study seeks to identify the various factors that impact jewellery acquisition and understand the consumer preference towards branded and non-branded jewellery. This study will also throw light on how technology is redefining the jewellery industry in India and thus analyze trends in imports and exports of gems and jewellery in India.

LITERATURE REVIEW

As per the study by Berad et al. (2015), when comparing consumer preferences for branded and non-branded jewellery, the majority of respondents favoured

branded jewellery due to factors like brand loyalty, perceived quality, prestige, and trustworthiness. However, pricing was also significant, with some respondents favoring non-branded jewellery for its affordability and uniqueness. Ramachandran and Karthick (2014) further discussed the transformation of the Indian jewellery market from unorganized to organized formats. They noted changing consumer preferences, including a growing demand for fashionable and lightweight jewellery, along with increased acceptance of branded jewellery (as discussed by Jyothi and Babu in 2014), considering it a symbol of social status and prestige. Branded jewellery is now seen as a symbol of quality, with customers, particularly the younger generation with disposable income, willing to pay a higher price for it. Brand reputation was the most important factor influencing consumers' preferences for branded jewellery, followed by product quality, design and style, and price. Gomathy and Devi (2015) in their study found that most respondents were aware of branded jewellery and considered it to be of higher quality than non-branded jewellery. However, price was a significant factor influencing their purchase decisions.

Regarding purchase decisions, Vadra and Malhotra (2014) claimed that quality, design, brand image, and price are the primary factors influencing purchase decisions. Customers perceive branded jewellery as having higher quality, unique designs, and a superior brand image compared to non-branded jewellery. Customers are willing to pay a premium for branded jewellery, associating it with trust, prestige, status, and lifestyle. Rawal (2015) aimed to identify factors influencing consumer buying behaviour when purchasing diamond jewellery from branded retailers. The study found that the most significant factor was product quality, followed by brand image and store atmosphere. Price and customer service were also important but less so than the other factors. Kala and Alok (2010), in their study, detailed that the gems and jewellery industry witnessed a 16 per cent expansion in the total export of gems and jewellery in 2009-2010. The industry contributes 13 per cent to India's merchandise exports. The data showed that India's diamond share in the world market increased from 60 to 70 per cent in value terms. The Unites States of America (USA) remained India's biggest customer of jewellery.

SAMPLE AND RESEARCH METHODOLOGY

A combination of primary and secondary data sources was utilized to gather information on the acquisition of jewellery and consumer preferences in India, focusing specifically on branded and non-branded jewellery, as well as the impact of technology on the industry. Primary data was collected through an electronic survey administered to 110 respondents. The survey captured information on various factors influencing jewellery acquisition and preferences. The collected data underwent analysis using relevant graphs and charts. It's essential to note that 73.6 per cent of the respondents were female, and 26.4 per cent were male, a factor considered while interpreting the results. Furthermore, secondary data was sourced from industry reports, company websites, and academic articles to complement the insights obtained.

FACTORS INFLUENCING CONSUMER BEHAVIOUR FOR PURCHASING JEWELLERY

Understanding consumer behaviour is essential for businesses in the jewellery industry to effectively target their audience, create appealing products, and generate sales. Consumers become highly involved in the purchasing process for high-priced and self-expressive items like jewellery, conducting research, comparing products, and seeking advice before deciding. Factors such as personal and cultural significance also play a role in motivating consumers. By analyzing consumer demographics and preferences, businesses can develop targeted marketing strategies and make informed decisions to cater to their target audience. Overall, understanding consumer behaviour is vital for success in the jewellery market. There are several factors that can influence consumer buying behaviour of jewellery including but not limited to:

1. **Personal factors-** These include the buyer's age, gender, income, education level, personal values, and lifestyle.

2. **Psychological factors-** These include perception, motivation, attitudes, beliefs, and personality traits.
3. **Social factors-** These include the influence of family, friends, peers, and cultural and societal norms.
4. **Cultural factors-** These include cultural traditions, beliefs, and values that shape the way people think about jewellery and the type of jewellery they prefer.
5. **Economic factors-** These include disposable income, economic conditions, and inflation.
6. **Technological factors-** These include the use of technology in the production, design, and distribution of jewellery, as well as the availability of online shopping and social media platforms.
7. **Environmental factors-** These include environmental sustainability, ethical sourcing, and concerns about the impact of mining and production processes on the environment.
8. **Legal factors-** These include laws and regulations related to the production, labelling, and sale of jewellery, such as regulations related to precious metals and gemstones.

All of these factors can interact and overlap, and the relative importance of each factor will vary depending on the specific product, the buyer, and the situation.

It is important to note that while branded jewellery may be of higher quality and more prestigious, non-branded jewellery can offer unique designs and personal touches that may appeal to consumers who are looking for something more individual and expressive.

REASONS FOR INDIA'S JEWELLERY EXPORTS AND IMPORTS

India's jewellery industry is a major exporter, known for skilled labour, cost-effective production, and unique designs. It benefits from low labour costs, availability of raw materials, and centuries of tradition. Growing demand in international markets drives exports, contributing to revenue, employment, and economic growth. The industry's success is driven by factors like low production costs, abundant materials, and distinct design aesthetics.

While importing jewellery can be cost-effective and offer unique designs, India's industry remains strong, and importing should be balanced to support local production and innovation. The industry has the potential for growth in design and craftsmanship, further contributing to economic development. Considerations of sustainability and the local industry's success are important when importing jewellery.

BRANDED JEWELLERY VERSUS NON-BRANDED JEWELLERY

Branded Jewellery	Non-Branded Jewellery
Carries brand identity and recognition.	Reflects individualistic style and uniqueness.
Follows established design and trends.	Embraces creative and experimental designs.
Offers consistent quality and craftsmanship.	Exhibits variable quality and craftsmanship.
Assures authenticity of materials.	May involve counterfeit or low-quality materials.
Provides warranty and customer service support.	Limited or absent warranty and customer service.
Falls into a higher price range.	Offers affordable and budget-friendly options.
Holds better resale value and market demand.	Lower resale value and limited market demand.
Establishes trust and reliability.	Provides flexibility and customization options.

Table 1: Branded Jewellery Versus Non-Branded Jewellery
(Source: International Journal of Allied Practice, Research and Review - www.ijaprr.com and www.researchgate.net)

TECHNICAL ADVANCEMENT IN JEWELLERY SECTOR

The jewellery sector has seen significant technological advancements in recent years. These technological advancements have enabled the jewellery industry to create new and innovative designs while also improving the efficiency and quality of manufacturing processes. Some of the key developments include-

1. **Three-Dimensional (3D) printing:**3D printing, or additive manufacturing, has revolutionized the jewellery industry by enabling the creation of intricate designs that were previously challenging or impossible. It allows for the quick production of prototypes, saving time and resources. Moreover, 3D printing reduces waste by using only the necessary materials, making it an environmentally sustainable option for jewellery manufacturing.
2. **Laser technology:** Laser technology has revolutionized the jewellery industry, enabling precise welding, engraving, and cutting. It has facilitated the creation of intricate designs that were previously unattainable. Laser technology enhances safety by eliminating the need for manual cutting tools and reducing the risk of injuries. Additionally, it produces minimal dust and debris, making it an environmentally friendly option for jewellery-making.
3. **Computer-Aided Design (CAD):** CAD software has revolutionized the jewellery industry by enabling designers to create and modify digital designs in a three-dimensional environment. It provides comprehensive visualization, identifies design flaws early, and saves time and resources. Digital designs can be easily shared with manufacturers, streamlining production, and reducing errors. CAD software empowers designers to create precise and intricate designs while facilitating collaboration with manufacturers.
4. **Augmented Reality (AR):** AR is utilized in the jewellery industry to offer customers a virtual try-on experience. Using their smartphones or other devices, customers can view jewellery in 3D, overlaid onto their own body or a virtual model. This technology allows customers to visualize how a piece of jewellery will look on them before making a purchase.
5. **Nanotechnology:** Nanotechnology is used to create new materials and enhance the properties of existing ones in the jewellery industry. It has led to the development of stronger metal alloys and improved the colour and lustre of gemstones.
6. **Blockchain technology:** Blockchain technology is used in the jewellery industry to track and record the journey of gemstones, ensuring transparency and accountability. Manufacturers and retailers create a digital record of each gemstone's origin, mining, cutting, polishing, certification, and sale on the blockchain. This tamper-proof record enables customers to verify the authenticity and provenance of gemstones,eliminating the risk of fraud and counterfeiting. Blockchain technology brings transparency to the supply chain and prevents double-spending, making it a valuable tool in the jewellery industry.

Tanishq, a leading jewellery brand in India, has embraced technology to transform its business. They utilize 3D printing for creating jewellery prototypes, reducing production time and costs. The brand has also integrated AR in its stores, allowing customers to virtually try on jewellery before buying. Tanishq has invested in digital marketing, including social media campaigns and influencer collaborations, to expand its reach. They offer an e-commerce platform for convenient online shopping. Overall, Tanishq's technology adoption has streamlined production, enhanced the customer experience, and broadened its audience through digital strategies and e-commerce.

ANALYSIS AND FINDINGS

As mentioned, data was primarily collected through a questionnaire administered to 110 respondents. It is important to note that 73.6 per cent of the respondents were female and 26.4 per cent were male, which was kept in mind while interpreting the results. The collected data was analyzed using relevant graphs and charts.

Age Range of Respondents

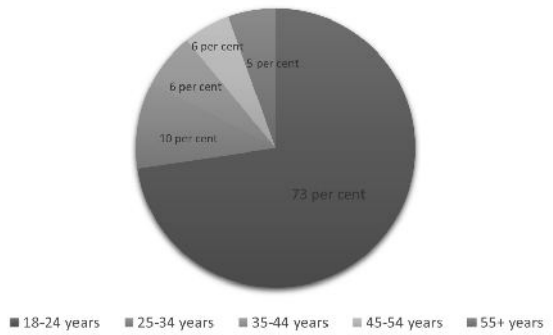

Figure 1: Pie-Chart Depicting Age Range of the Respondents
(Source: Primary Data)

The majority of the respondents, belonged to the 18-24 age group, followed by 25-34 and coming close were respondents in the age bracket of 35-54 years. Only 5 per cent of our respondents were above 55 years of age.

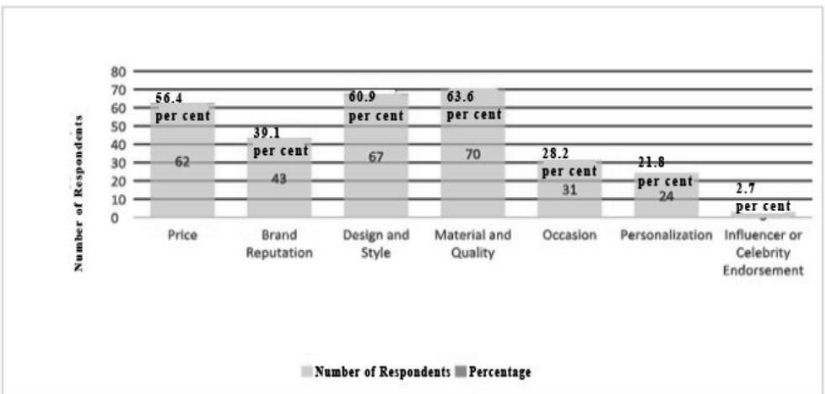

Figure 2: Graph Depicting the Impact of Different Factors on the Respondents while Purchasing Jewellery
(Source: Primary Data)

The Most Important Factor for You when Buying Jewellery

The survey revealed that material and quality were the top priority for buyers (55.2 per cent), followed by design and style (51.7 per cent) and price (47.1 per cent). Brand reputation was important to a lesser extent (29.9 per cent), while occasion, personalization, and influencer endorsements had less impact on purchasing decisions. Overall, Indian jewellery buyers value quality, style, and affordability, while brand reputation and endorsements have relatively less influence. This indicates that jewellery buyers in India place a high value on the quality of the materials used to make jewellery. This also suggests that buyers in the Indian market are drawn to jewellery that looks fashionable and stylish.

Overall, this data can be useful for businesses in the Indian jewellery sector to understand their customers' needs and preferences better and develop products and marketing strategies that cater to those needs.

Price to Be Spent on a Piece of Jewellery

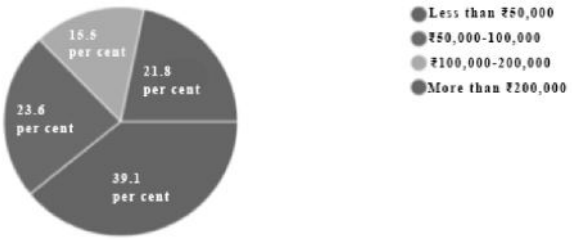

Figure 3: Pie-Chart Depicting the Price Spent on Jewellery by Indian Consumers (Source: Primary Data)

Indian consumers display diverse spending preferences for jewellery. A significant portion (39.1 per cent) prioritizes affordability, while others are willing to spend between ₹50,000-200,000, with 21.8 per cent open to spending over ₹200,000. Price sensitivity is influenced by factors like income levels and inflation, impacting purchasing power.

To cater to the market, retailers should offer reasonably priced options that align with Indian consumers' price sensitivity. Economic factors play a crucial role in shaping spending habits, necessitating retailers to consider them when developing pricing strategies.

Importance of Brand Name in the Purchase of Jewellery

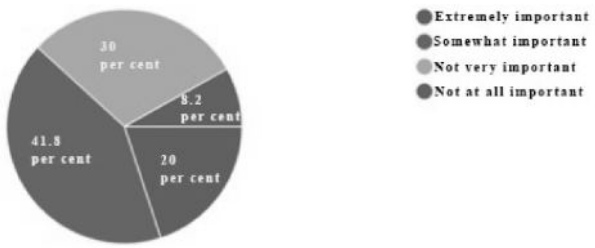

Figure 4: Pie-Chart Depicting the Importance of Brand Name in the Purchase of Jewellery (Source: Primary Data)

The concept of brand name is closely tied to the psychological concept of branding, which is a powerful tool for building consumer loyalty and trust. A strong brand name can evoke positive emotions, create a sense of prestige, and establish a reputation for quality and reliability.

In India, where social status and prestige are significant, brand name choice reflects these values. However, the data indicates that brand name is not the top priority for most buyers. While 20 per cent find it extremely important and 41.8 per cent somewhat important, 30 per cent consider it not very important and 8.2 per cent not at all important. Businesses should focus on factors like design, quality, and price, alongside brand reputation. Affordable options are in demand, but there are still segments willing to spend more. The brand name remains a significant factor for many buyers.

Motivation Behind the Purchase of Branded Jewellery

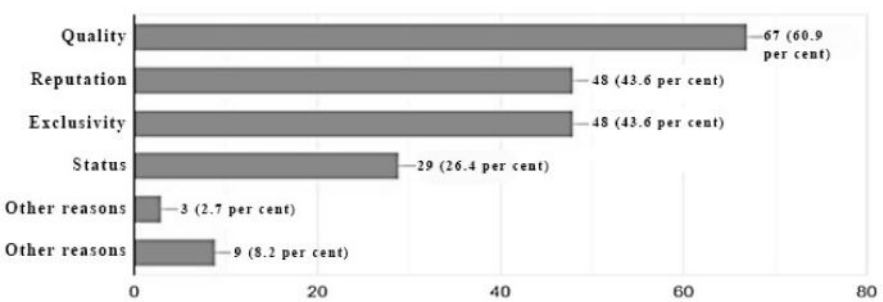

Figure 5: Graph Depicting the Motivation Behind the Purchase of Branded Jewellery (Source: Primary Data)

The data shows that the primary motivators for purchasing branded jewellery in India are quality, reputation, and exclusivity. 60.9 per cent of respondents indicated that quality was their top motivator, while 43.6 per cent cited both reputation and exclusivity as key factors. Status was found to be a less important motivator, with only 26.4 per cent of respondents indicating that it played a role in their purchasing decisions. Finally, 10.9 per cent of respondents mentioned other reasons for purchasing branded jewellery. Overall, the data highlights the importance of focusing on quality, reputation, and exclusivity when developing and marketing jewellery products in India.

The data presented on the motivators for purchasing branded jewellery in India reflects the psychological factor of consumer motivation. Understanding the key motivators for consumers can help businesses develop effective marketing strategies that align with consumer needs and preferences.

Motivation Behind the Purchase of Non-Branded Jewellery

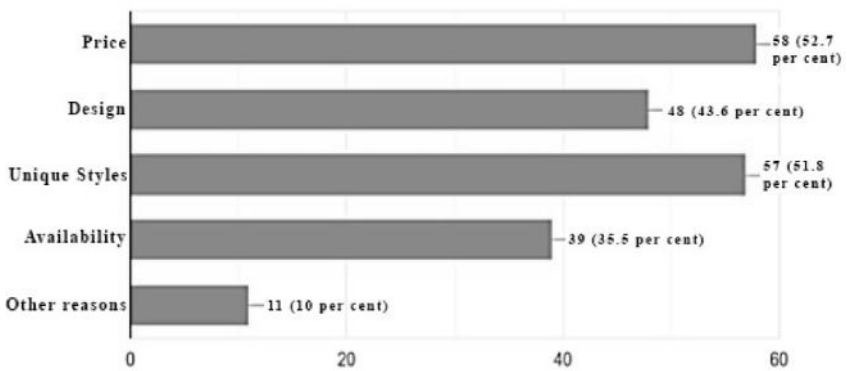

Figure 6: Graph Depicting the Motivation Behind the Purchase of Non-Branded Jewellery (Source: Primary Data)

The data indicates that price, design, unique styles, and availability are important factors for buyers when purchasing non-branded jewellery in India. Affordable options are highly valued, reflecting the price sensitivity of the market. Buyers also prioritize unique designs that reflect their personal style. Additionally, the availability and accessibility of non-branded jewellery play a significant role in purchasing decisions. Manufacturers should focus on creating affordable, unique designs and expanding distribution channels to effectively compete in the Indian market.

Value Perception of Branded Jewellery Versus Non-Branded Jewellery

The data reflects the personal and psychological factors influencing consumer buying behaviour of jewellery. The respondents' perception of the value of branded versus non-branded jewellery is shaped by their personal beliefs and experiences. The belief that branded jewellery is always more valuable may be influenced by psychological factors such as brand loyalty and prestige, while the belief that non-branded jewellery can be just as valuable may be influenced by personal experiences with high-quality non-branded products.

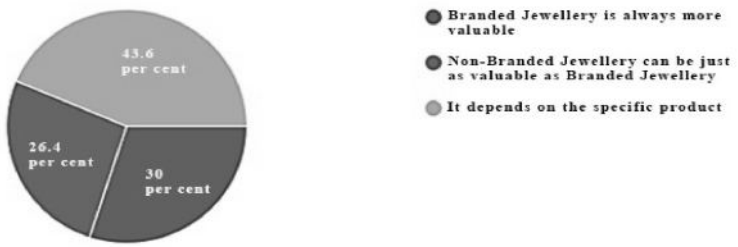

Figure 7: Pie-Chart Depicting the Value Perception of Branded Jewellery Versus Non-Branded Jewellery (Source: Primary Data)

The perception that the value of jewellery depends on the specific product suggests that consumers engage in a cognitive evaluation process when making purchasing decisions, which is influenced by personal and psychological factors such as the quality of the product, the design, the reputation of the brand or manufacturer, and the emotional connection that the consumer feels towards the product

Importance of Personalization when Considering Jewellery Purchase

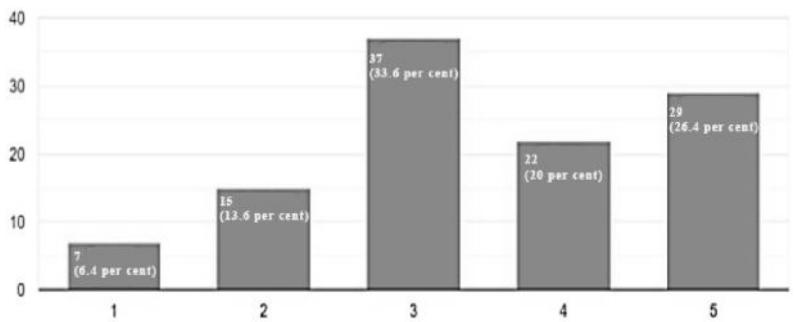

Figure 8: Graph Depicting the Importance of Personalization when Considering Jewellery Purchase (Source: Primary Data)

The survey indicates that personalization is somewhat important to consumers when considering purchasing jewellery, with the majority of respondents rating it a 3 or higher on a scale of 1 to 5. A significant portion of respondents (29) rated personalization as a 5, which indicates that it is an important factor for some consumers when buying jewellery. The ratings of 4 and 3 suggest that while personalization is not the most important factor for all consumers, it is still a consideration. The lower ratings (2 and 1) indicate that some consumers do not prioritize personalization when buying jewellery. Overall, it seems that personalization can be a moderately influential factor in the decision-making process for buying jewellery.

Extra Payment for Jewellery Personalization Services

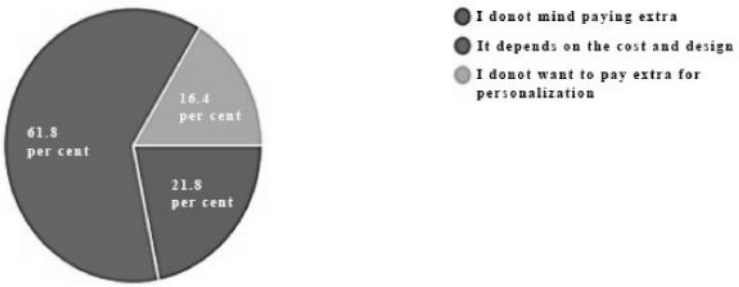

Figure 9: Pie-Chart Depicting the Respondent's View on Extra Payment for Jewellery Personalization Services (Source: Primary Data)

According to a majority of respondents (61.8 per cent), Personalization services for jewellery are not the primary factor influencing consumer purchasing decisions. Cost and design remain critical considerations. However, 21.8 per cent of respondents are willing to pay extra for personalization, as it adds perceived value and meaning to the jewellery. Conversely, 16.4 per cent of respondents do not want to pay extra for personalization, prioritizing other aspects like brand, material, or design.

Overall, personalization is important to some consumers, factors such as personal taste, cultural influences, and perceived quality also significantly impact the purchase decision of jewellery buyers.

Design Varieties as a Factor Affecting Buying Jewellery

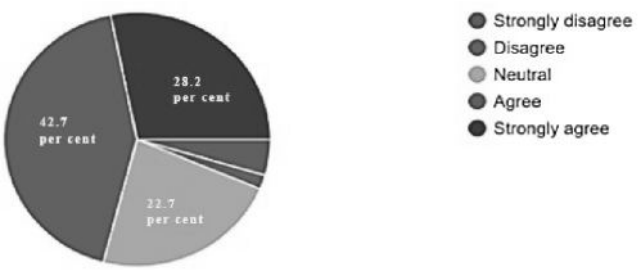

Figure 10: Pie-Chart Depicting the Respondent's View on the Importance of Variety of Designs while Buying Jewellery (Source: Primary Data)

Most respondents (71 per cent) agree or strongly agree that the variety of designs is important when buying jewellery. This indicates that having a wide range of design options significantly influences consumer decision-making. However, a portion of respondents (22.7 per cent) remain neutral on this statement, suggesting that design variety may not be a major factor for everyone.

The importance of design variety in jewellery buying is influenced by personal factors such as individual taste and preferences can affect how important design variety is for a particular buyer. For example, someone who values

uniqueness and wants to stand out from the crowd may place a higher importance on design variety.

Psychological factors such as perception, motivation, and attitudes can also influence the perceived importance of design variety in jewellery buying. For instance, a buyer who perceives design variety as a way of expressing their personality or enhancing their self-image may rate it a highly important factor.

Importance of Uniqueness of a Jewellery Design

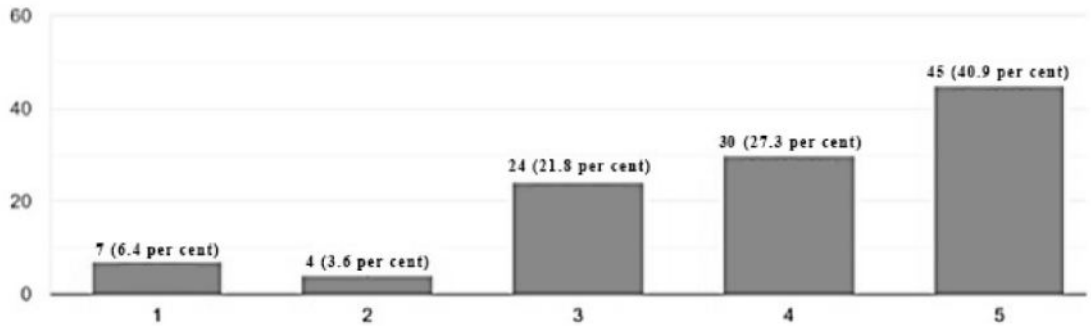

Figure 11: Graph Depicting theImportance of Uniqueness of a Jewellery Design (Source: Primary Data)

The data suggests that uniqueness is highly important to consumers when considering purchasing jewellery. Most respondents rated the uniqueness of a design with the highest score, indicating its crucial role in their buying behaviour. Even those who rated it slightly lower still considered uniqueness to be an important factor. This emphasizes that unique jewellery designs hold sentimental value, represent individuality, and are perceived as more valuable due to their exclusivity. Jewellery designers and manufacturers should focus on creating unique designs to meet consumer demands for individuality and exclusivity. The importance of uniqueness in jewellery design can be attributed to personal motives such as the desire to stand out and psychological factors related to self-expression and identity formation.

Purchase of Jewellery from a Physical Store Versus Purchase Online

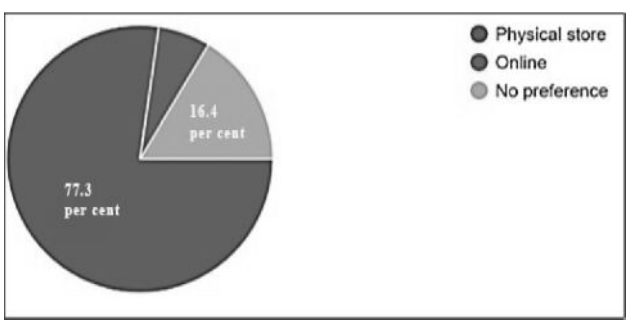

Figure 12: Pie-Chart Depicting the Respondent's Preference for Purchasing Jewellery from Physical Stores over Online (Source: Primary Data)

Most respondents (77.3 per cent) prefer purchasing jewellery from physical stores rather than online. Reasons for this preference include the desire to physically see and try on the jewellery, concerns about the authenticity of online purchases, and a preference for the overall in-store shopping experience. However, a small percentage (6.4 per cent) of respondents prefer buying jewellery online due to the convenience and wider selection available. The remaining respondents (16.4 per cent) had no strong preference, indicating they may be comfortable with either option or have neutral feelings towards it.

Overall, personal and psychological factors, such as individual shopping preferences, trust in online transactions, and the desire for a tactile shopping experience, can influence a buyer's decision between purchasing jewellery from a physical store or online.

Concerns when Purchasing Jewellery Online

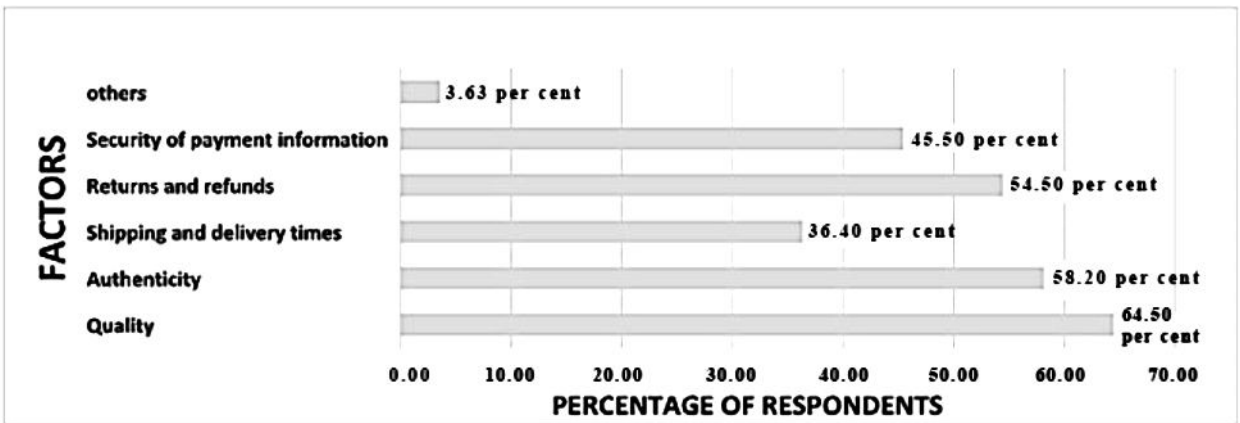

Figure 13: Graph Depicting the Concerns of Consumers while Purchasing Jewellery Online (Source: Primary Data)

The survey results indicate several concerns that consumers have when buying jewellery online. The most common concern is the quality of the jewellery, with 64.5 per cent of respondents expressing worry about the product's quality. Authenticity is also a significant concern, with 58.2 per cent of respondents worried about purchasing fake or counterfeit items. Return and refund processes are a common concern for 54.5 per cent of respondents, indicating their worries about the hassle of returning jewellery that does not meet their expectations. Security of payment information is a concern for 45.5 per cent of respondents, emphasizing the importance of safeguarding personal and financial data during online transactions. Shipping and delivery time is a factor for 36.4 per cent of respondents. These concerns highlight the importance of quality, authenticity, reliability, and security in online jewellery purchases, and consumers seek reassurance that their investment is worthwhile. Overall, these factors suggest that consumers may be more inclined to buy jewellery from physical stores but may consider purchasing online if their concerns regarding quality, authenticity, and security are adequately addressed.

Impact of the Occasion for which the Jewellery is being Purchased on the Decision to Buy

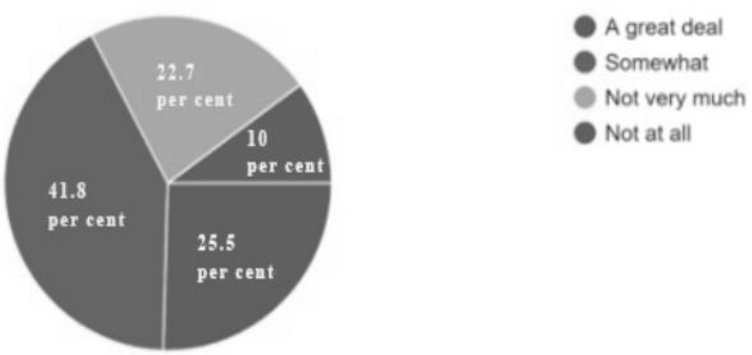

Figure 14: Pie-Chart Depicting the Impact of Events on Consumer's Decisions to Purchase Jewellery (Source: Primary Data)

The survey results show that events have varying degrees of influence on consumers' decisions to purchase jewellery. For 25.5 per cent of consumers, events like weddings and anniversaries significantly impact their buying decisions. Another 41.8 per cent consider events to have a moderate influence, even for occasions where jewellery is not traditionally expected. However,

22.7 per cent prioritize factors such as style, quality, and cost over the event itself. For 10 per cent of consumers, events have no such impact.

Psychological factors and individual perspectives towards the event or the recipient of the jewellery can also influence the decision-making process. Businesses can use this information to tailor their marketing strategies to different consumer segments and motivations. For example, emphasizing the emotional value of jewellery for special occasions or highlighting the quality and design to appeal to consumers less influenced by the event.

Purchase of Jewellery Based on an Influencer or Celebrity Endorsement

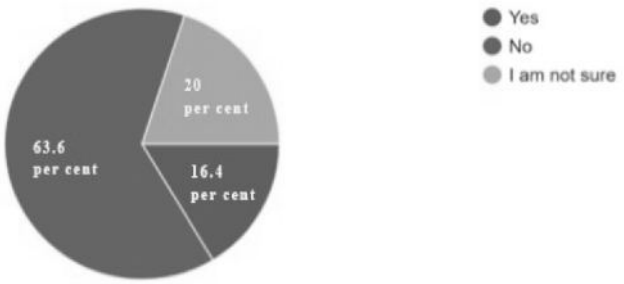

Figure 15: Pie-Chart Depicting Purchase of Jewellery Based on an Influencer or Celebrity Endorsement (Source: Primary Data)

Influencer and celebrity endorsements can shape consumer behaviour in the jewellery market, but their impact appears limited. Only 16.4 per cent of respondents made jewellery purchases based on such endorsements, while the majority (63.6 per cent) did not. Additionally, 20 per cent were unsure if their purchases were influenced by endorsements. These findings suggest that product quality, design, and price may hold greater significance in consumer purchasing decisions than influencer or celebrity endorsements.

Importance of Hallmarked Jewellery

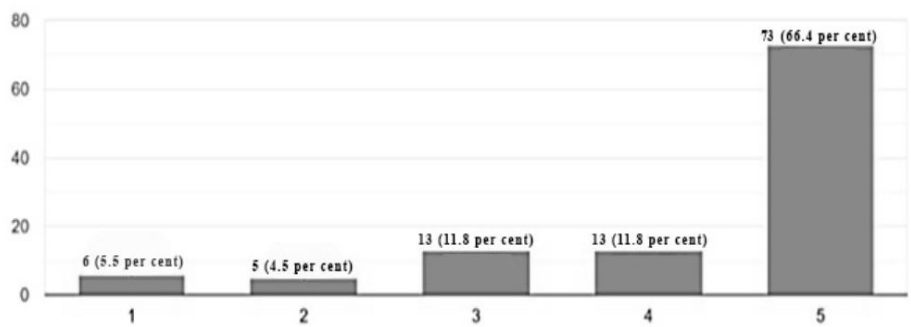

Figure 16: Graph Depicting the Importance of Hallmarked Jewellery (Source: Primary Data)

The hallmarking of jewellery is a legal requirement in many countries, aiming to protect consumers by ensuring a certain standard and quality of items. The survey results indicate that 73 respondents rated the importance of a hallmark as a 5, indicating their awareness of legal requirements and the value they place on the assurance of quality and authenticity that a hallmark provides. An additional 13 respondents who rated it as a 4 or 3 also show a significant level of importance placed on this legal aspect. However, it is important to note that not all consumers may be aware of the legal requirements for hallmarking or may prioritize other factors when making a purchase decision. Some consumers may value the design or emotional significance of a piece of jewellery, even without a hallmark. Therefore, while the importance of a hallmark aligns with legal factors for consumers, it is just one of many factors that can influence purchasing behaviour.

Export Trend of Jewellery in India

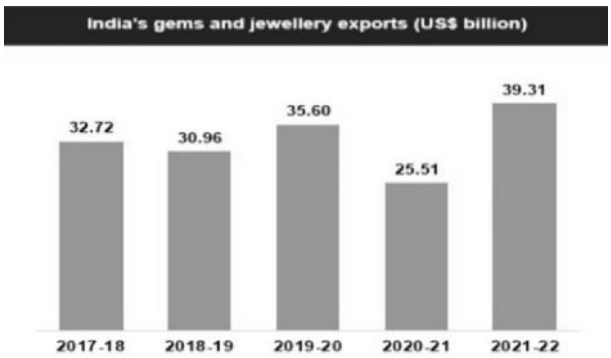

Figure 17: Graph Depicting the Export Trend of Jewellery in India (Source: Gems Jewellery Export Promotion Council (GJEPC))

The jewellery industry contributes significantly to global trade through its exports. Countries like Italy, India, Switzerland, Thailand, and China are major players in the jewellery export market, known for their craftsmanship and design excellence. Factors driving jewellery exports include consumer demand, emerging markets, and advancements in manufacturing technology. The industry constantly introduces new products, designs, and materials to cater to changing trends.

The government has implemented measures to promote investment, upgrade technology and skills, and establish the Indian brand in the global market. Initiatives such as allowing 100 per cent Foreign Direct Investment (FDI) and signing Comprehensive Economic Partnership Agreements (CEPAs) with countries like the United Arab Emirates (UAE) facilitate increased jewellery exports. For instance, the recent CEPA with the UAE grants duty-free access to the Indian jewellery and gems industry. The GJEPC aims to significantly boost its exports to the UAE following the CEPA.

Commodity (values in $ million)	2019-2020	2020-2021	2021-2022
Pearl, precious, semi-precious stones	20,692.46	18,149.09	27,679.32
Gold	1,364.05	553.78	76.71
Silver	9.60	464.04	49.19
Other precious and base metals	87.15	230.04	235.10
Gold and other precious metal jewellery	13,745.22	6,625.87	11,058.79
Total gem and jewellery export	35,898.49	26,022.82	39,099.11

Table 2: Trade Statistics of Gem and Jewellery Products for the year 2019-2020, 2020-2021 and 2021-2022 (Source: Gems Jewellery Export Promotion Council (GJEPC))

Export values for pearl, precious, and semi-precious stones decreased from $20,692.46 million in 2019-2020 to $18,149.09 million in 2020-2021 but significantly increased to $27,679.32 million in 2021-2022, indicating a positive trend in demand.

Gold exports declined from $1,364.05 million in 2019-2020 to $553.78 million in 2020-2021 and further to $76.71 million in 2021-2022, indicating a negative trend.

Silver exports increased from $9.60 million in 2019-20 to $464.04 million in 2020-2021 but decreased to $49.19 million in 2021-2022.

Other precious and base metals exports steadily increased from $87.15 million in 2019-2020 to $235.10 million in 2021-2022.

Gold and other precious metal jewellery exports declined from $13,745.22 million in 2019-2020 to $6,625.87 million in 2020-2021 but significantly increased to $11,058.79 million in 2021-2022, indicating a positive trend.

The total export value of gem and jewellery products decreased from $35,898.49 million in 2019-2020 to $26,022.82 million in 2020-2021 but increased significantly to $39,099.11 million in 2021-2022.

The overall trend in the export value of gem and jewellery products indicates a significant increase in 2021-2022, which is a positive sign for the industry.

The COVID-19 pandemic had a significant impact on the gem and jewellery industry, particularly in the year 2020-2021 when countries implemented lockdowns and restrictions. During this period, most categories of jewellery exports, except for silver, experienced a significant decline compared to the previous year. Gold and other precious metal jewellery exports were hit the hardest, with a decline of over 50 per cent. However, in the following year, 2021-2022, there was a strong recovery and exports in most categories exceeded pre-pandemic levels. This recovery can be attributed to the easing of restrictions and the rebound in global demand as the world began to recover from the pandemic. The industry demonstrated resilience and adaptability in bouncing back from the challenges posed by COVID-19.

In conclusion, the analysis shows that the export value of gem and jewellery products has fluctuated over the years, with a significant increase in 2021-2022 for most categories. However, gold is the only category that shows a significant decrease in the export value in 2021-2022. Overall, the trend in the export value of gem and jewellery products is positive, indicating a growing demand for these products.

COUNTRY-WISE SHARE OF INDIA'S GEMS AND JEWELLERY EXPORTS

India's gems and jewellery industry has showcased strong performance in the international market, despite the COVID-19 pandemic. In 2021-2022, the USA remained the largest importer, purchasing jewellery worth $14.5 billion from India. Hong Kong and UAE were also significant importers, contributing 23.7 per cent and 14.5 per cent of the total exports, respectively. Other countries such as Israel, Thailand, and the Netherlands experienced substantial growth with exports valued at $1.5 billion, $1.2 billion, and $694.6 million, respectively.

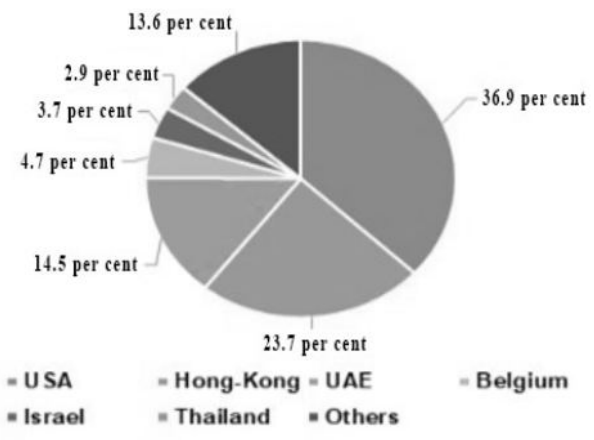

Figure 18: Pie-Chart Depicting Country-wise Share of India's Gems and Jewellery Exports (Source: GJEPC)

This growth can be attributed to the resumption of pre-pandemic consumer spending patterns and the relaxation of COVID-19 restrictions. The industry's ability to adapt to the new normal by embracing technology and e-commerce platforms has played a crucial role in maintaining its competitiveness and attracting new customers. Overall, the robust growth in Indian jewellery exports in 2021-2022 reflects the industry's resilience, adaptability, and contribution to the Indian economy.

Import Trend of Jewellery in India

Financial year	Values in $ million	Previous financial year	Values in $ million	Per cent growth (year-over-year)
2021-2022	1987842.7	2020-2021	1213261.1	63.84
2020-2021	1213261.1	2019-2020	1736563	-30.13
2019-2020	1736563	2018-2019	1851452.6	-6.21

Table 3: Growth in the Import Trend (Source: Gems Jewellery Export Promotion Council (GJEPC))

The import of jewellery in India has surged due to factors like a rising middle class, higher disposable incomes, global exposure, and a preference for contemporary and international designs. Gold jewellery remains popular, while diamond and platinum imports are increasing.

E-commerce has expanded access to diverse jewellery options. However, concerns about ethics and sustainability have led to a demand for responsibly sourced and eco-friendly jewellery. This import trend is projected to grow in the future, driven by India's growing economy, consumer spending, and evolving design preferences.

Import of jewellery in India has shown significant fluctuations in recent years. In 2021-2022, imports reached $198,7842.7 million, a 63.84 per cent increase from the previous year's imports of $121,3261.1 million. However, in 2020-2021, imports decreased by 30.13 per cent compared to the previous year. The fluctuations can be attributed to factors like the COVID-19 pandemic's impact on the global economy and changes in consumer preferences and government policies. Monitoring future import trends will help assess the long-term effects of the pandemic.

The increase in imports in 2021-2022 indicates a positive recovery from the pandemic's impact on the global economy. Monitoring future import trends will help assess the long-term effects of the pandemic on the industry.A decrease in jewellery imports can have both positive and negative impacts on the Indian economy. It may indicate increased domestic production and consumption, reducing the trade deficit. However, it could also suggest reduced domestic demand, negatively affecting the industry, employment, revenue, and government collections. The overall impact of negative import growth on India depends on various factors and its influence on the economy.

POLICY RECOMMENDATION

Based on the data and trends presented regarding the jewellery industry in India, here are some policy recommendations-

1. Promote quality and hallmarking standards- The importance of quality and hallmarking is evident from the survey. The government should continue to enforce and strengthen hallmarking standards to ensure that consumers have confidence in the quality and authenticity of jewellery products. Stricter penalties for non-compliance should be implemented.
2. Support jewellery exports- Given the positive export trends, the government should further support the jewellery export industry by simplifying export procedures, providing incentives for jewellery manufacturers and exporters, and facilitating collaborations with international markets.
3. Consumer awareness campaigns- The government and industry associations should collaborate on consumer awareness campaigns regarding hallmarking, quality standards, and the importance of buying from trusted sources. These campaigns can help educate consumers and improve their confidence in the jewellery market.
4. Skill development and training- Invest in skill development programs to enhance the craftsmanship and design skills of jewellery artisans and manufacturers. This can help maintain India's reputation for craftsmanship and design excellence in the global market.
5. E-Commerce regulation- With the increasing importance of online jewellery sales, the government should consider regulations that protect consumers from counterfeit products and ensure secure online transactions. Encouraging online platforms to verify sellers and products can enhance consumer trust.
6. Financial inclusion- Promote financial inclusion by providing access to credit and financial services to jewellery artisans and small businesses. This can help them invest in their businesses and improve product quality.
7. Reduce import duties- To support the domestic jewellery manufacturing industry and reduce the trade deficit, consider reducing import duties on

raw materials used in jewellery production. This can make jewellery manufacturing more competitive domestically.

8. Research and development- Invest in research and development to explore innovative materials and techniques for jewellery manufacturing. This can lead to the creation of new products and processes that enhance competitiveness.
9. Promote Indian brands- Encourage the growth of Indian jewellery brands by providing incentives for branding and marketing initiatives. This can help Indian brands compete effectively in both domestic and international markets.
10. Regular market studies- Conduct regular market studies and consumer surveys to track changing consumer preferences and market trends. This information can be used to adapt policies and strategies to evolving market dynamics.

These policy recommendations aim to foster a healthy and competitive jewellery industry in India, enhance consumer confidence, and capitalize on the growing global demand for Indian jewellery products.

CONCLUSION

The study's findings indicate that material and quality, design and style, and price are the most important factors for jewellery buyers in India. Brand reputation and influencer endorsements have less impact. While affordability is a key consideration for most buyers, there are also segments willing to spend more on jewellery. Design variety is highly valued, reflecting the influence of personal and psychological factors on consumer behaviour. Many respondents prefer purchasing from physical stores due to authenticity concerns and the desire for a tactile shopping experience. However, a small percentage opt for online shopping for convenience and a wider range of options.

Overall, the trend in the gems and jewellery industry in India has been positive, with steady growth in both imports and exports. However, the industry is highly competitive, and companies face challenges such as fluctuating commodity prices, changing consumer preferences, and rising labour costs. Despite these challenges, the industry is expected to continue to grow in the coming years, driven by increasing demand for high-quality jewellery products both domestically and globally.

Technology has significantly impacted the jewellery industry in recent years, including 3D printing, laser technology, CAD, AR, Nanotechnology, and Blockchain. These advancements have enabled jewellery designers to create intricate and complex designs while reducing waste and increasing efficiency.

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> The smooth delivery of house loans made possible by HDFC Bank will take advantage of the bank's massive customer base of over 68 million people and, among other things, quicken the rate of credit expansion in the economy.

Housing Development Finance Corporation (HDFC)-HDFC Bank: Merger of All Mergers

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Saptamita Roy
Department of Commerce (Evening)

ABSTRACT

Mergers and Acquisitions (M&As) are transactions in which two or more businesses are combined to form a single organization. The desire for businesses to grow and expand, as well as a favourable economic and regulatory climate, have all contributed to a major rise in M&A activity in India in recent years. Overall, M&A activity has been a major force behind India's growth and development, and it is anticipated that it will continue to have a major impact on how the Indian economy is shaped in the years to come. This study is completely focused on the details of the following mentioned acquisition:

The largest private sector bank in India, Housing Development Finance Corporation (HDFC) Bank, and India's largest housing finance company, HDFC Limited, merged on April 4, 2022. Over the past 45 years, HDFC has created one of the best product offerings, delivered in a timely and cost-effective manner, positioning it as a leader in the housing finance industry. The smooth delivery of house loans made possible by HDFC Bank will take advantage of the bank's massive customer base of over 68 million people and, among other things, quicken the rate of credit expansion in the economy. Hence, discussing this merger would surely come in handy for investors and other prospective bodies and individuals who hold substantial interest in the merged body.

KEYWORDS: Merger, HDFC Bank, Ratios, Analysis, Financials.

INTRODUCTION

The merger happened very recently so there are not many studies that have been carried out to outline areas like post-merger efficiency of HDFC Bank's overall performance, the expansion of customer base as a whole and some other factors like its advantages and disadvantages with regard to many aspects.

Furthermore, this study has provided an extremely detailed analysis of the pre-merger and post-merger financial performance, fundamentals, interest rates, their pros and cons, the risks and advantages, and many more. M&Asbetween companies can be complex and require a lot of analysis, due diligence, and regulatory approvals. Hence, such a study based on a merger that is aimed to be extremely successful in near future would definitely be beneficial.

LITERATURE REVIEW

Jash Chhabria (2023), who made a paper on swap ratio determination that recommends a suitable share exchange ratio between the two companies, HDFC Limited and HDFC Bank. In this study, many approaches were utilized to determine an appropriate exchange ratio. The results were very beneficial to my research considering the stock price fluctuations and everything surrounding the area. This information not only helps in forecasting future growth but also helps other businesses in making good takeover decisions.

Rajesh Tiwari (2022), made a research study titled 'Role of Leadership for Sustainability in Indian Banking: A Case of HDFC Bank'. It deals with the following. The daily returns before and after the merger announcement are used to assess the effect of the merger announcement on stock price. It was discovered that the visionary Mr. Aditya Puri's HDFC Bank has integrated sustainability into its corporate culture. After the merger announcement, the daily returns of both HDFC Bank and HDFC's stock prices significantly decreased. Long-term sustainable inclusive growth could result from the combination.

Shweta Yadav and Jonghag Jang (2021),made an analysis on the case study of HDFC Bank Limited titled 'Impact of Merger on HDFC Bank Financial Performance'.This study's major goal is to assess the influence the hypothesis based on Capital adequacy, Assets, Management Capability, Earnings, Liquidity, Sensitivity (CAMEL) analysis which had an effect on HDFC Bank's financial performance before and after the merger with Centurion Bank of Punjab and to examine the impact that the merger had on that performance. The study's secondary data set spans a total of 10 years, including the five years leading up to the merger (2003 - 2008) and the five years following the merger (2009 - 2014).

Tiwari, R., Chauhan, A. S., and Praveen Singh, H.(2022),worked on a study titled 'Role of Leadership for Sustainability in Indian Banking'. With reference to HDFC Bank, the article analyses how leadership affects sustainability in Indian banking. With reference to the founding managing director of HDFC Bank and public sources, the leadership strategy for sustainability is examined. The daily returns before and after the merger announcement are used to assess the effect of the merger announcement on stock price.

Sharma, M; Shukla, SK (2019), made a study on 'Beginning of Consolidation in Indian Banking Sector: Measuring Operating Feasibility against Standard Benchmark: A Case Study of HDFC Bank Acquisition of

Centurion Bank of Punjab' that deals with the results of HDFC Bank's $2.4 billion brown field acquisition of Centurion Bank of Punjab in India, which used an inorganic expansion strategy.

Kumar Suresh (2014),worked on a project titled 'Post Merger Efficiency of banks in India: A Case Study on HDFC Bank and Centurion Bank of Punjab'. This dealt with comparing the pre-merger and post-merger performance by using a lot of parameters like Bollinger Band Position (BBP), Paycheck Protection Program (PPP), return on assets and much more.

Nishith Desai Associates (2022), worked on research titled 'HDFC-HDFC Bank: Merger of Giant HDFC Twins' which deals with the starting of the contract/deal and its execution till the end of regulatory approvals received and a healthy forecast regarding its healthy performance in the future.

Kirti Ranjan Swain (2009), worked on 'Corporate Governance in India: A case of HDFC Bank' which examines the current Corporate Governance (CG) laws in India. A case study methodology is used to investigate the CG structures and practices in HDFC Bank. In order to examine how well CG codes may be adapted to the Indian environment, it employs both primary and secondary data.

Debi Prasad Satapathy and Dr. Pramod Kumar Patjoshi (2022), worked on 'Effect of Mergers and Acquisitions on Efficiency of Indian Acquiring Banks: Evidence from India'. This study work uses the tobit regression model to assess several efficiency indicators for the acquiring organization and to identify the factors that influence the acquiring firm. This article examines the effects of 10 sample listed firms that conducted M&As between 2010 and 2017.

Borthakur Mrigakshi (2022), worked on 'The Service Marketing mix of HDFC Bank' which deals with how the bank places the right products at the right places at the right time. This was very informative when it came down to assessing how a major player in the banking industry handles its products and services.

OBJECTIVES

1) To conduct CAMEL Analysis on the basis of ratios.
2) To compare the pre-merger and post-merger effect on financial performance HDFC Bank using a few fundamental figures.
3) To observe the change in interest rates like Fixed Deposit (FD) and housing loan and its impact.

RESEARCH METHODOLOGY

Data Collection

1. Source of data

The data that will be used in this study is solely of secondary nature which means that the analysis will be based on all data collected from annual reports of the bank and different journals and articles written by people.

2. Data analysis tools and methods

- Percentage, statistical measures from excel
- CAMEL analysis and ratios

CAMEL analysis is a framework used by financial institutions to assess the risk level of a banking organization.

Statistical Tools

Graphs, charts, tables, percentage, volume difference, magnitude measurement.

Period of Study

Financial Year (FY) 2021 - End of the quarter and months on 14 January, 2023.

CURRENT SCENARIO OF HDFC BANK AND HDFC LIMITED

Cut to April, 2022, the merger of HDFC Limited and HDFC Bank, known as the 'Mother of all M&A Deals' is regarded as the largest business deal in India's corporate history. This transaction is estimated to be worth $40 billion. The Indian financial services industry is anticipated to be shaken up by this massive merger in the banking sector.

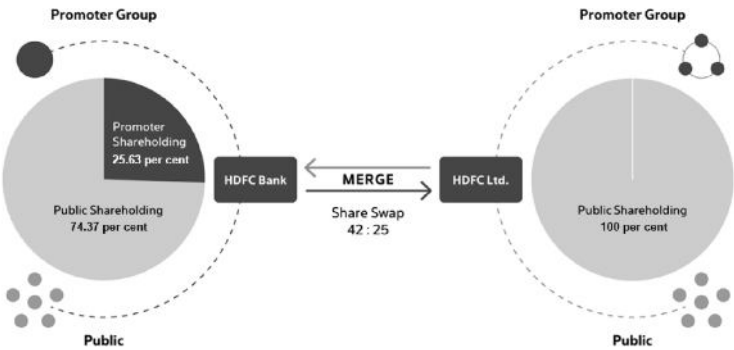

Figure 1: Pre-merger Shareholding
(Source: Nishith Desai Associates M&A report)

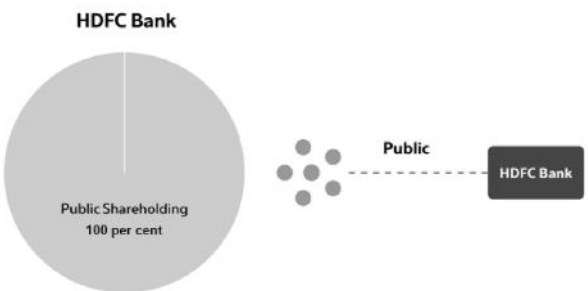

Figure 2: Post-merger Shareholding
(Source: Nishith Desai Associates M&A report)

With the help of this deal, HDFC Bank would be able to access the substantial client base of HDFC Limited's housing portfolio, making HDFC Bank the second-largest bank in India by market capitalization. On the other hand, the merger will also help the entire housing finance industry because it will have easier access to its clients thanks to the network of HDFC Bank.

REASONS BEHIND THE MERGER

Deepak Parekh, the chairman of HDFC, claims that one of the causes of the merger is the stricter Reserve Bank of India (RBI) restrictions of non-banks, which have made it difficult for Non-banking Financial Companies (NBFCs) to get capital. The regulatory advantage that NBFCs enjoyed over banks has also disappeared as a result of the central bank's tightening of regulations, according to Parekh.

The combined company will be worth $12.8 billion and have a balance sheet worth $17.87 billion. Under the transaction, HDFC Bank would be able to grow up its underwriting.

Separately, HDFC Bank had advances totalling ₹12,700,000 million, while HDFC had ₹5,250,000 million. 77 per cent of HDFC's loans go under the category of individual loans out of its overall advance book. The benefit of having HDFC home loan borrowers become bank customers goes to HDFC Bank, which has 26 per cent of its loan book in corporate and 28 per cent in retail.

DATA ANALYSIS

Camel Analysis

1. The 'Capital Adequacy' component of CAMEL analysis evaluates a bank's ability to absorb potential losses by assessing its Capital Adequacy Ratio (CAR). The CAR is calculated as the ratio of the bank's tier one capital to its risk-weighted assets. The tier one capital consists of equity capital and disclosed reserves, while risk-weighted assets are the assets weighted by their level of risk.

CAPITAL ADEQUACY	RATIOS	PRE MERGER	POST MERGER
	CAPITAL ADEQUACY RATIO	19.5	19.4
	ADVANCES TO TOTAL ASSETS	65.050	65.647

Table 1:Capital Adequacy Ratios
(Source: Author's Compilation)

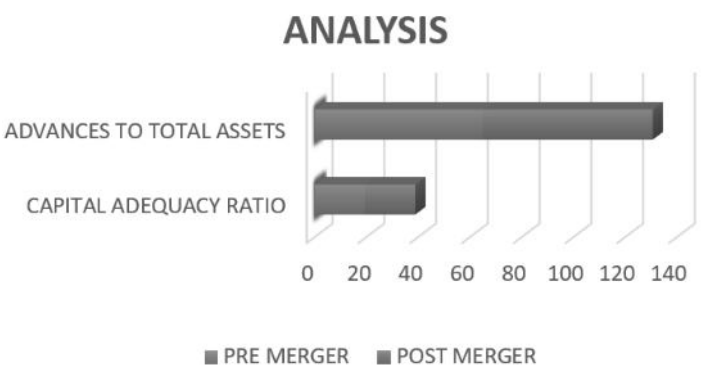

Figure 3:Capital Adequacy Analysis
(Source: Author's Compilation)

From the analysis presented in Table1and Figure 3, we can easily say that the CAR is fairly acceptable since it is above 12, both pre-merger and post-merger. Now, when it comes to their existing a significant difference between the ratios, there is almost none. Since the merger has just taken place last year, it will take some more time to bring the forecasted increase of CAR to life.

Advances to total assets also remain quite the same when compared to both the numbers so as long as the bank is not being too aggressive internally in giving out excess advances out of its own assets just to earn sky high profits, we can declare it healthy.

2. The 'Asset Quality' component assesses the quality of a bank's assets, such as loans and investments. Non-performing loans are loans that are more than 90 days past due or are in default. The acceptable range for Asset Quality Review (AQR) is less than 5 per cent, with a ratio of 2 per cent or lower being the most desirable.

ASSET QUALITY	RATIOS	PRE MERGER	POST MERGER
	GROSS NPA TO GROSS ADVANCES	1.26	1.23
	NET NPA TO NET ADVANCES	0.32	0.33

Table 2: Asset Quality Ratios
(Source: Author's Compilation)

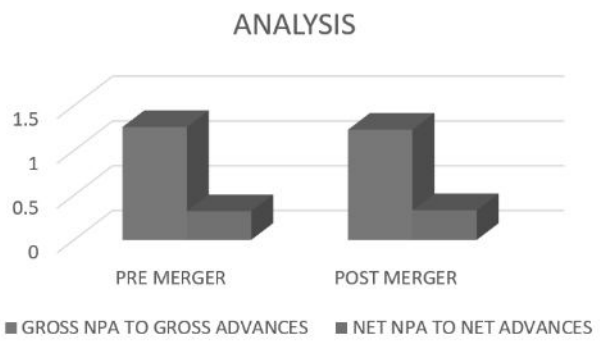

Figure 4: Asset Quality Analysis
(Source: Author's Compilation)

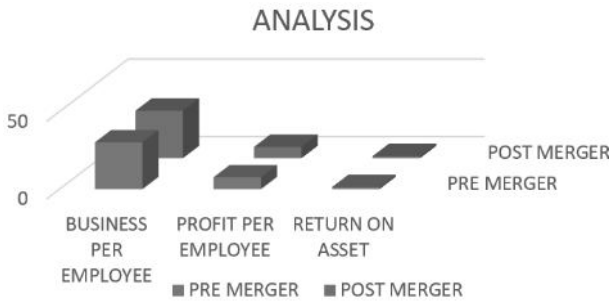

Figure 5:Management Efficiency Analysis
(Source: Author's Compilation)

From the analysis presented in Table 2 and Figure 4, we can say that the gross Non-Performing Assets (NPA) to gross advances ratio is fairly acceptable since it is low and for an entity to have low NPAs is very beneficial both in the short-run and long-run credit management. Similarly, the same can be said about thenet NPA to net advances ratio as well.

When it comes to comparing, it is very evident that there has not been such a significant shift but the gross ratio is seen to be decreasing which is good but the net ratio seems to have increased by a negligible amount which can easily be taken care of.

3. The 'Management Efficiency' evaluates the bank's governance structure, management practices, and overall effectiveness. It is calculated by dividing the bank's non-interest expenses by its total assets. Non-interest expenses include operating expenses such as salaries and rent. The acceptable range for MER(Management Expense Ratio) is less than 60 per cent, with a ratio of 50 per cent or lower being the most desirable.

The company has been maintaining a good track record of Return on Equity (ROE) of 16 per cent and above for three years and even post-merger based on the information available on the National Stock Exchange (NSE). Therefore, analysis has been carried out for only those ratios that needed to be calculated and analysed separately.

When it comes to other ratios, we can see that BPP has increased which ultimately indicates a good post-merger situation so far.

Profit per employee however has absorbed a little setback while on the other hand return to assets has endured a little jump from 1.38 to 1.39 and it is a sign that HDFC has been carefully putting its assets to use to generate income.

4. The 'Earnings Efficiency' examines the bank's profitability and its ability to generate income. It is calculated by dividing the bank's net income by its total assets. The acceptable range for ER is between one per cent and two per cent, with a ratio of two per cent or higher being the most desirable.

MANAGEMENT EFFICIENCY	RATIOS	PRE MERGER	POST MERGER
	BUSINESS PER EMPLOYEE	30.24	30.68
	PROFIT PER EMPLOYEE	**7.69**	**7.34**
	RETURN ON ASSET	1.388	1.397

Table 3:Management Efficiency Ratios
(Source: Author's Compilation)

EARNING MANAGEMENT	RATIOS	PRE MERGER	POST MERGER
	OPERATING PROFIT TO TOTAL ASSET	2.462	2.256
	NET PROFIT TO TOTAL ASSET	**1.388**	**1.397**

Table 4:Earnings Efficiency Ratios
(Source: Author's Compilation)

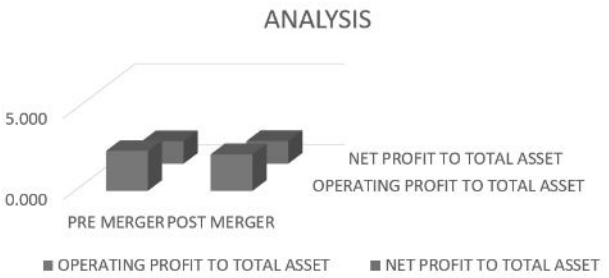

Figure 6: Earnings Efficiency Analysis
(Source: Author's Compilation)

According to the data represented in Table 4, we can see that the operating efficiency of HDFC has taken a significant fall from 2.4 to 2.2 from pre-merger performance to post-merger performance, hence that should be duly noted and taken care of by the internal control. Even though it is well within the acceptable minimum range, the bank should take a closer look at the falls of the same.

On the other hand, the net profit to total asset ratio has taken a little jump which is healthy and depicts a significant leftover profit after deducting taxes and interests.

5. The 'Liquidity Position' evaluates the bank's ability to meet its short-term financial obligations, such as deposits and loans. This component is crucial as it ensures that the bank has sufficient funds to meet its obligations and continue its operations without facing liquidity crises.

It is to be duly noted that to conduct this analysis, the liquidity position has been measured using cash and balances with the RBI and balances with banks and money at call and short notice and other required financials from the recent report published by HDFC Bank Limited on January, 2023.

According to the data presented in Table 5, we can see that both of the ratios have taken a significant fall after the merger, i.e., April, 2022. Hence, the bank cannot be declared to be in a healthy liquid position to clear off its depositors' needs and other expenses. Although it is expected to go up once the merger process is completely wrapped up.

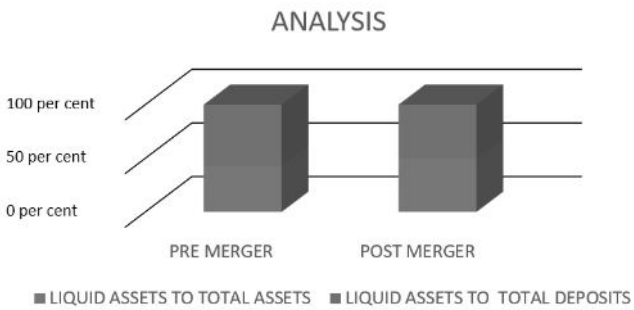

Figure 7: Liquidity Position Analysis
(Source: Author's Compilation)

LIQUIDITY POSITION	RATIOS	PRE MERGER	POST MERGER
	LIQUID ASSETS TO TOTAL ASSETS	8.689	5.193
	LIQUID ASSETS TO TOTAL DEPOSITS	**11.648**	**5.193**

Table 5: Liquidity ratios
(Source: Author's Compilation)

ANALYSIS OF A FEW FUNDEMENTALS AS A WHOLE

PARTICULARS	YEAR ENDED 31st December 2021	YEAR ENDED 31st December 2022
ADVANCES	126086284	150680931
TOTAL ASSETS	**193828595**	**229530532**
NET INCOME	2690615	3206126
TOTAL INCOME	**11617723**	**13894984**
NO. OF EMPLOYEES	134412	166890
DEPOSITS	**144591811**	**173320398**
OPERATING PROFIT	4772027	5178408
CAPITAL	**55424**	**55768**
LIQUID ASSETS	16842638	11919826
RISK WEIGHTED ASSETS	**1267426**	**1536272**

Table 6: Financials
(Source: Financials Published by HDFC on 14 January, 2023)

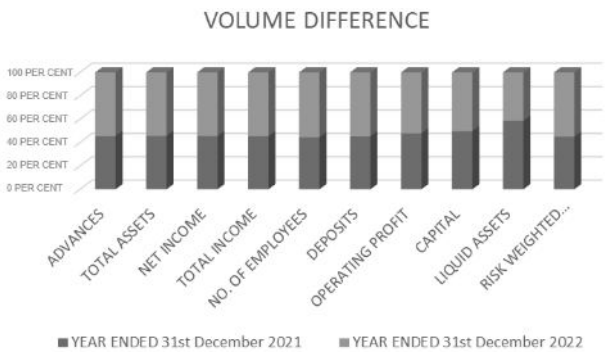

Figure 8: Volume Difference Analysis of Financials (Source: Author's Compilation)

The volume difference analysis shows how much of the total amount is borne by the pre-merger and post-merger performances. And thus, we can see that with this ongoing merger, not much of a visible difference has taken place as yet except for liquid assets which is in congruence with the CAMEL ratio analysis study since both these studies showed a significant fall in the liquidity of HDFC Bank Limited more as compared to other ratios and figures.

The magnitude of change table (Table 7) depicts the differences between the pre-merger and post-merger performance figures in the form of percentages which ultimately shows that even though the figures look a lot alike when they are displayed in their true form but even the most minor difference in a digit might take a major shift in the magnitude of change. And as concluded from the above studies, the liquidity of the firm has taken a major hit here as well.

PARTICULARS	MAGNITUDE OF CHANGE
ADVANCES	19.506 per cent
TOTAL ASSETS	18.419 per cent
NET INCOME	19.160 per cent
TOTAL INCOME	19.602 per cent
NO. OF EMPLOYEES	24.163 per cent
DEPOSITS	19.869 per cent
OPERATING PROFIT	8.516 per cent
CAPITAL	0.621 per cent
LIQUID ASSETS	-29.228 per cent
RISK WEIGHTED ASSETS	21.212 per cent

Table 7:Percentage Change of Financials (Source: Author's Compilation)

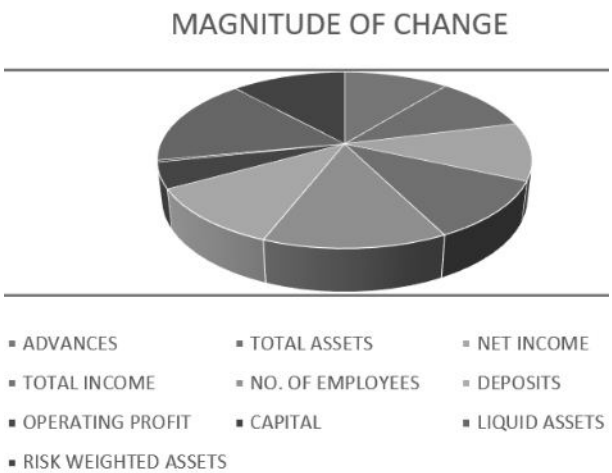

Figure 9: Pictorial representation of the Magnitude of Change (Source: Author's Compilation)

OVERALL REPRESENTATION OF PRE-MERGER AND POST-MERGER PERFORMANCE

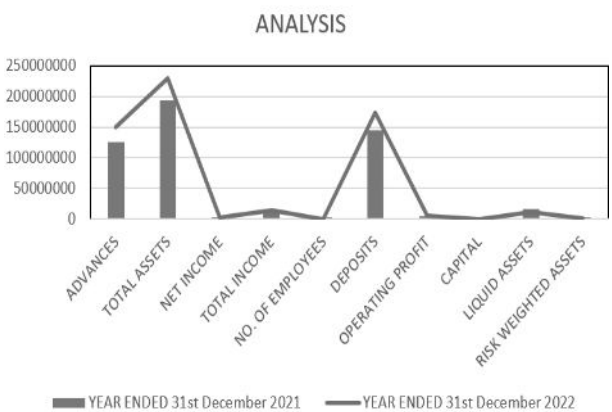

Figure 10: Performance Analysis (Source: Author's Compilation)

CHANGE OF FIXED AND HOUSING INTEREST RATES

The Union Government and the RBI are tasked with preserving and advancing the economy of our nation. As a result, RBI takes the lead in shaping the country's monetary policy. A benchmark for banks, NBFCs, and other financial institutions is the repo rate (repurchase rate) set by the RBI. The interest rate at which the RBI lends money to the country's financial institutions is

called the repo rate. As a result, an increase in the Fixed Deposits (FD) interest rate typically follows an increase in the repo rate. Simply, the RBI raises repo rates during an inflationary period to absorb market liquidity and control credit availability.

FIXED DEPOSIT INTEREST RATES	
PRE MERGER	POST MERGER
HDFC BANK (5.6 per cent)	7 per cent
HDFC Ltd. (6.55 per cent)	
Percentage change (increase)	25 per cent

Table 8: FD Interest Rates
(Source: Rates fromWebsite, Author's Compilation)

In such a situation, an increase in FD rate is inevitable as banks treat public borrowing as their last resort. The impact in case of a bear run, will just be the opposite of this, the RBI will decrease the repo rate to release liquidity and increase the credit availability. This explains the difference in the interest rates of HDFC pre-merger and post-merger.

Consequently, banks boost the interest rates on term loans including home loans, personal loans, vehicle loans, and education loans, among others, in order to pass through the effects of a hike in the repo rate. Thus, the difference between housing loan interest rates pre-merger and post-merger is also understood.

HOUSING LOAN INTEREST RATES	
PRE MERGER	POST MERGER
HDFC Ltd. (6.75 - 7.25) per cent	(8.45 - 8.95) per cent
Percentage change (increase)	23.45 per cent

Table 9: Housing Loan Interest Rates
(Source: Rates fromWebsite, Author's Compilation)

MAJOR FINDINGS

1. When it comes, there exists a significant difference between the CAR and total advances to total assets, there is almost none comparing post-merger with pre-merger.
2. The gross NPA to gross advances ratio is fairly acceptable since it is low and for an entity to have low NPAs is very beneficial both in the short run and long run credit management. The gross ratio seems to have decreased but the net ratio seems to have increased a little.
3. The company has been maintaining a good track record of ROE of 16 per cent and above for three years and even post-merger based on the information available on NSE. The business per employee and return on assets have increased whereas profit per employee has taken a little hit.
4. Operating profit ratio has fallen which means that the operating efficiency of HDFC has observed a significant fall but the net profit to total assets ratio has increased.
5. Both of the ratios, i.e., liquid assets to total assets and liquid assets to total deposits have taken a significant fall after April, 2022. Hence, the bank cannot be declared to be in a healthy liquid position to clear off its depositors' needs and other expenses. Although it is expected to go up once the merger process is completely wrapped up.
6. With this ongoing merger, not much of a visible difference has taken place as yet except for liquid assets which is in congruence with the CAMEL ratio analysis study since both these studies showed a significant fall in the liquidity of HDFC Bank Limited more as compared to other ratios and figures, hence the percentage change in the same was negative which correctly displays the current scenario.
7. FD interest rates increased by 25 per cent and housing loan interest rates by 23.45 per cent.

RECOMMENDATIONS

1. CAMEL analysisis an essential tool for assessing the financial soundness of banks. Therefore, CAMEL analysis should be regularly used to monitor the financial health of banks and identify potential problems early on, reducing the risk of default and financial crises. From the analysis conducted as a part of this research, we can say that the liquidity position of the bank is one of the major portions that needs attention even though it is expected to rise significantly shortly.
2. Overall fundamental analyses align extraordinarily well with the CAMEL analysis indicating the same

dungeon point, which is liquidity position, and also measures the magnitude of percentage change as catered to each one of the following fundamentals, liquidity position still being the major one in need of attention at the moment.

3. Impact of interest rates changes on customers

- **Depositors:** Fixed deposit holders with HDFC Limited should initially confirm whether their FD investment is made via auto-renewal. Under automatic renewal, the FD is automatically renewed on the maturity date for the same amount of time at the applicable interest rate. If there is no auto-renewal mandate, the maturity amount of the FD is credited into the FD holder's bank account on the maturity date. Yet, compared to the analysis conducted, a significant rise in FD interest rates by 25 per centhas been witnessed.
- **Borrowers:** The disclosure of interest rate changes to floating-rate loan borrowers will be improved. Keep in mind that beginning in October, 2019, banks will be required to lock interest rates on all floating-rate retail loans to an external benchmark. The external benchmark may be repo rates, 3-moths or 6-months treasury bills issued by the Indian government, or any other market-linked benchmark made available by Financial Benchmarks India PrivateLimited. Also, when compared to the analysis conducted, an increase of 23.45 per cent is observed.

CONCLUSION

The combination of HDFC Limited and HDFC Bank is one of the most significant and intrinsic mergers that this country has ever seen. HDFC Bank and HDFC Limited are not separate entities anymore in the stock market and is set to change the motion of Indian Housing finance because HDFC Limited is already at the forefront of housing finance and HDFC Bank is a pioneer in digital banking. After the completion of this financial mega-merger, it will not only rank as the 6th largest lender in the world by market capitalization also become the largest private bank in India. Not to jinx but it is indeed very close to its goal.

This is the first step for Indian financial institutions to enter the competitive international markets. After receiving letters of approval from the RBI, Pension Fund Regulatory and Development Authority (PFRDA), Bombay Stock Exchange (BSE), NSEand other regulatory authorities, the deal appears to have passed important regulatory milestones. It is already doing quite good when it comes to the financials published by the bank as updated till December 2022 and it is soon expected to show more imminent results arising from the merger. The prediction trajectory is set so high that it even eliminates the question of any other mergers surpassing this one.

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FEATURE
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LOOKING BACK
TRIBUTE AND FUN SECTION







> As businesses compete for survival, unconventional means of advertising comes to life based on continuous research and development which even resulted to the proliferation of black markets and fake products.

Efficacy of Non-traditional Marketing Strategies on Consumer Engagement and Brand Awareness: A Comparative Study

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ABSTRACT

The essence of any marketing strategy is basically to create a profound consumer awareness, engage the consumers related to the intricacies of the product and also promote the brand in the minds of the consumers. Over the years, traditional marketing techniques have been followed for meeting the requirements of strong consumer engagement and creation of brand awareness for the same, until the modern era has adopted the non-traditional marketing strategies for the same purpose. The main objective of the present study is to explore the effectiveness of non-traditional marketing strategies on consumer engagement and brand awareness, where the essence lies in side-by-side comparison with the traditional marketing strategies. The findings of the study reveal that viral marketing was the most popular non-traditional marketing campaign which consumers have been exposed to and made their purchasing decision on the basis of this. Additionally, it also helped them garner positive image about the brand or product.

KEYWORDS: Non-Traditional Marketing, Consumer Engagement, Brand Awareness, Purchase Decisions.

INTRODUCTION

The modern era has made each consumer experience a newer concept of marketing communication in his continuing quest for satisfying needs and wants. Such communication process involves various tools which marketers utilize to attract attention using newspapers, tabloids, magazines, television, billboards, radio and the internet. Also included among the modern marketing techniques are direct marketing and person-to-person marketing. In most companies, these activities are combined into one Integrate Marketing Communication (IMC), one that supplants the traditional marketing strategy with inter-company cooperation and interaction such as outsourcing and retailing. As businesses compete for survival, unconventional means of advertising comes to life based on continuous research and development which even resulted to the proliferation of black markets and fake products.

Traditional marketing methods such as television advertisements, billboards, and print advertisements have been in use for decades to reach target audiences and promote products or services. However, as technology has advanced, new forms of marketing have emerged that are more cost-effective and engaging for consumers. Non-traditional marketing, also known as guerrilla marketing, refers to innovative and unconventional marketing techniques that use creativity and surprise to grab the attention of consumers.

Non-traditional marketing methods often rely on social media platforms and viral marketing to spread the word about a product or service. Companies may use influencers or micro-influencers on social media to promote their products or services.

They may also engage in experiential marketing, which involves creating an immersive experience that allows consumers to interact with a product or service in a unique way.

The origins of non-traditional marketing can be traced back to the 1980s, when Jay Conrad Levinson first coined the term 'guerrilla marketing' in his book of the same name. The term was inspired by the unconventional tactics used by guerrilla fighters in warfare, who relied on surprise and stealth to achieve their objectives.

RATIONALE FOR THE STUDY

As traditional marketing methods have become saturated, expensive, and less effective, businesses are increasingly turning to non-traditional methods to capture the attention of their target audience. Non-traditional marketing can be more cost-effective, creative, and targeted, and can provide businesses with a competitive advantage in the marketplace.

Secondly, non-traditional marketing has become more accessible and measurable due to the rise of digital technologies and social media. This has enabled businesses of all sizes to reach their target audience in new and innovative ways, and to track the effectiveness of their marketing efforts with greater accuracy.

There is a growing interest in the role of non-traditional marketing in promoting social and environmental causes, as well as in advancing social justice and equity. As consumers become more conscious of their purchasing decisions and demand more transparency and authenticity from brands, non-traditional marketing can be a powerful tool for businesses to build trust and loyalty with their target audience.

Overall, researching non-traditional marketing can provide valuable insights into emerging trends, best practices, and opportunities for businesses to engage with their audience in new and meaningful ways. It can also help to inform the development of marketing strategies that are effective, ethical, and socially responsible.

LITERATURE REVIEW

1. Coffey and Atkinson (1996): Understanding and finding new ways of coping with continuous and unpredictable changes have become necessary in the field of marketing of new products. Marketers are now able to anticipate, cope with and adapt themselves to changes in the external environment. In a stable and predictable business environment, this coping and adapting is relatively easy, but as the environment becomes more complex, and changes happen more rapidly, coping and adapting becomes more problematic and difficult. In order to find new ways of coping with this volatility is by applying theories from outside the field of marketing in order to obtain a fresh insight into the problem.
2. Prasanna D. and Raju V. (2013): Advertising plays a very efficient role in consumer decision making. Advertising is a type of communication which manipulate the viewers by providing a useful information about the product or a service which helps the customer to make a certain decision because mostly buyers act on the partial information in which they can faced unexpected risk. A buying decision can be measured as an optimization procedure which help the buyers to find the brand or a product that yield the maximum satisfaction.
3. Mahmooditavana M., Somi B. & Baghbaniyazdi S. (2014): Guerrilla marketing has a great effect on entrepreneurship development. Organizational entrepreneurship is very important factor for the success and growth of every organization. Establishing individual credibility and innovation are important tools for the economic progress of developing countries. Guerrilla marketing is an approach that facilitate the company to develop marketing entrepreneurship and get the maximum output in limited resources. Innovation, creation of job, technological level and technical knowledge are the most significant aspects of entrepreneurship development. To make the position for entrepreneurship development the advisors of apparel industry should concentrate on work flexibility and quickness and as well as employing strong consultants.

OBJECTIVE OF THE STUDY

1. To find out the different ways of non-traditional marketing.
2. To find out which companies have used them effectively.
3. Influence of non-traditional marketing on consumer buying behaviour.

RESEARCH METHODOLOGY

Primary Data

It includes data collected directly from the residents of Kolkata city so as to meet the direct requirements of the investigation at hand. The research is done through a Google Form.

Secondary Data

It includes data from marketing campaigns broadcasted on the television and the internet, websites and reference books. With the help of case studies popular campaigns are analysed.

Primary Data Analysis

For the purpose of this study, the primary data is

confined to the city of Kolkata and its respondents fall in the age group of 18 to 60.

This survey is conducted to find out the impact of non-traditional forms of marketing on the consumer's mind.

Sample Size

A sample size of 142 respondents between the age of 18 to 60 years were interviewed through the interactive methodology.

Statistical Tools Used for Analyzing the Data

1. Percentage method
2. Graphical representation using figures and bar diagram

FINDINGS

Out of the 142 individuals that were interviewed 100 per cent of them responded positively when asked if they had been exposed to any type of non-traditional marketing campaigns, which clearly proves about its popularity and the preference of brands for choosing non-traditional forms of marketing over the traditional forms.

When asked to choose from the various types of marketing campaigns that they had been exposed to, viral marketing was chosen by 42 per cent of the respondents and influencer marketing was chosen by 31 per cent of the respondents. This is due to the fact that most of the interviewees were from Generation Z who spend most of their times on the internet and on social media networks and were hence more prone to experience such campaigns.

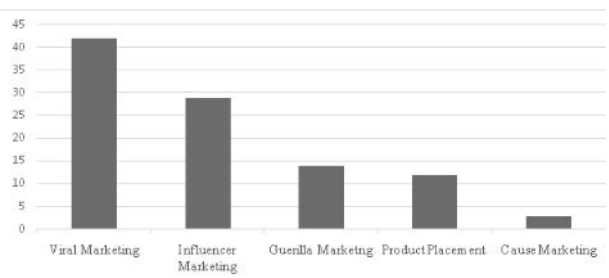

Figure 1: Specify the Type of Non-traditional Marketing Campaign You Were Exposed to (Source: Primary Data)

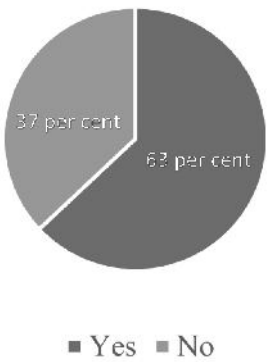

Figure 2: Did the Non-traditional Marketing Campaign Influence Your Purchasing Decision? (Source: Primary Source)

Non-traditional marketing campaigns often leverage various channels and tactics that are not typically used in traditional marketing campaigns, such as social media, influencer marketing, experiential marketing, guerrilla marketing, and content marketing. These channels and tactics can help brands reach consumers in new ways, providing a unique and memorable experience that resonates with consumers and can ultimately influence their purchasing decision.

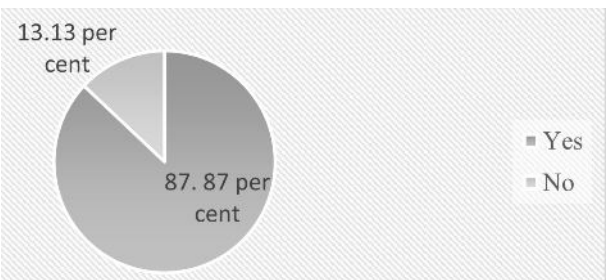

Figure 3: Have You Ever Purchased a Product or Service because of a Non-Traditional Marketing Campaign? (Source: Primary Source)

For example, a brand might use experiential marketing to create a memorable event that allows consumers to interact with the brand's products or services, which can help to build a positive association with the brand and create a sense of excitement and enthusiasm among consumers. Similarly, influencer marketing can be used to tap into the credibility and influence of social media influencers, who can promote a brand's products or services to their followers, potentially leading to increased sales.

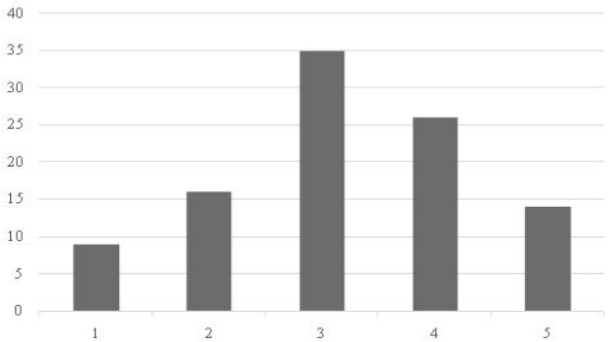

Figure 4: Rating the Effectiveness of Non-Traditional Forms of Marketing (Source: Primary Source)

When asked to rate on a scale of 1 to 5, how likely are you to engage with a brand after being exposed to a non-traditional marketing campaign, the most common answer was 3.

Discussing about the future of non-traditional forms of marketing, it was found out that the people would like to see more non-traditional marketing campaigns since they offer a refreshing change from traditional forms of advertising. Many consumers have become desensitized to traditional advertising methods, such as Television commercials or print advertisements, and they may be more likely to pay attention to a campaign that is more creative and unexpected. Non-traditional marketing campaigns often involve unique experiences or interactive elements, which can capture people's attention and generate excitement around a brand or product.

Which is the reason why 65 per cent of the respondents said 'Yes' when asked if they would prefer seeing more non-traditional marketing campaigns in the future, as these campaigns offer a refreshing change from traditional forms of advertising, they can be more personalized and targeted, and they can be more shareable and viral. As technology continues to evolve and new marketing techniques emerge, it is likely that we will see even more innovative and exciting non-traditional marketing campaigns in the years to come.

LIMITATIONS OF THE STUDY

1. Study is restricted to the people who have access to the internet.

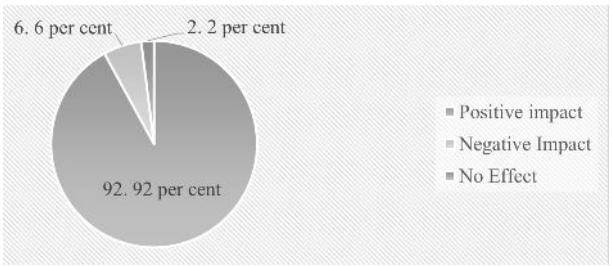

Figure 5: How Does Encountering a Non-Traditional Marketing Campaign Make You Feel About the Brand? (Source: Primary Source)

2. Limited period of survey.
3. There were customers who gave vague as well as no responses to get complete information needed for the research study.

SECONDARY DATA ANALYSIS

To understand the impact of non-traditional forms of marketing popular advertising campaigns have been used as case studies and a detailed analysis is done.

Case Study of Red Bull's Stratos Campaign

Red Bull is a brand known for its unique and daring marketing strategies, and one of its most memorable campaigns is the Red Bull Stratos mission that took place in 2012. The campaign was designed to break the world record for the highest-ever skydive, and it featured Austrian skydiver Felix Baumgartner jumping from a height of 39 kilometres above the Earth's surface. The mission was a massive success, and it broke several world records, making headlines around the world.

The marketing strategy behind the Red Bull Stratos mission was based on creating a story that would capture the imagination of people around the world. Red Bull created a series of videos and documentaries about the project, which were shared on social media and other platforms, generating millions of views and creating a buzz around the campaign. Red Bull also created an interactive website that allowed people to follow the progress of the mission and provided them with detailed information about the project.

The company created high-quality videos and documentaries that not only documented the mission

but also provided viewers with an in-depth look at the science and technology behind the project.

Another critical element of Red Bull's marketing strategy for the Red Bull Stratos mission was to create a word-of-mouth marketing campaign. The mission generated massive media coverage, and people around the world shared the news and videos about the mission on social media, generating further interest and buzz around the project. Red Bull's approach helped the brand to create a global conversation around the mission and generate immense brand awareness.

Case Study of Kolkata Knight Riders

Kolkata Knight Riders (KKR) is known for its innovative and non-traditional marketing strategies, which have helped the franchise to create a unique identity among fans and sponsors. One of KKR's most successful marketing strategies is its focus on social media. The franchise has a strong presence on social media platforms such as Facebook, Twitter, and Instagram. KKR uses social media to engage with fans and promote its brand.

Another unique marketing strategy used by KKR is its 'Korbo, Lorbo, Jeetbo Re' campaign. This campaign was launched in 2014 and is based on the Bengali chant 'Korbo, Lorbo, Jeetbo Re', which means 'we will do it, fight for it, and win it'. This campaign has become synonymous with KKR and has helped to create a sense of pride and ownership among fans. The team also uses this campaign to engage with fans on social media, merchandise, and advertising campaigns.

KKR has also utilized celebrity endorsements to promote its brand. In addition to social media and celebrity endorsements, KKR has also used experiential marketing to engage with fans. The team has launched several initiatives such as the 'Fan Wall', where fans can upload their photos and messages to be displayed on the stadium screen during matches.

In conclusion, KKR has been successful in using non-traditional marketing strategies to promote its brand and engage with fans. The franchise's focus on social media, celebrity endorsements, experiential marketing, and cultural relevance has helped it to stand out from its competitors and create a loyal fan base. As a marketer, there are many lessons that can be learned from KKR's innovative and creative approach to marketing.

RECOMMENDATIONS

Promote Sustainability and Social Causes

Non-traditional marketing campaigns can be used to promote sustainability and social causes, which can build brand loyalty and create a positive impact on society. Brands can use their marketing campaigns to showcase their commitment to sustainability, support social causes, and create a better world for all.

Focus on Authenticity

Consumers are increasingly looking for authentic experiences and connections with brands. Non-traditional marketing campaigns that focus on authenticity and transparency can build trust with consumers and create a strong emotional connection to the brand.

Use Social Media Effectively

Social media is a powerful tool for non-traditional marketing campaigns. Brands can leverage social media platforms to engage with their audience, create shareable content, and build a community around their brand.

Utilize Experiential Marketing

Experiential marketing campaigns can create unique and memorable experiences for consumers, which can lead to increased brand recognition and loyalty. Brands can use experiential marketing to showcase their products, connect with consumers in-person, and create a lasting impression.

Leverage Influencer Marketing

Influencer marketing can be a highly effective way to promote products and services, especially on social media. Brands can partner with social media influencers who have a strong following in their niche to promote their products, which can lead to increased sales and brand awareness.

Overall, non-traditional marketing can be a highly

effective way for brands to connect with their audience and promote their products and services. By focusing on authenticity, utilizing social media, leveraging experiential marketing, partnering with influencers, and promoting sustainability and social causes, brands can create memorable experiences and build a loyal following.

CONCLUSION

These case studies demonstrate how non-traditional forms of marketing can be effective in engaging audiences and driving business results. To conduct a detailed analysis of non-traditional marketing campaigns, businesses should consider the following steps:

1. Gain a holistic understanding of everything happening in your industry and prepare to navigate it.
2. Investigate competitors to know who the big players are and how you can differentiate your brand.
3. Identify market gaps and find unsolved problems and unmet desires in your market.
4. Define your target market and use effective means of distribution to communicate with the masses.

The mission of marketing today is not to disrupt and convince but to connect, satisfy and motivate the customers. It needs to make people attentive of how they recognized and meet their necessities.

Moreover, the study also entails that consumer buying behaviour can be improved with the rich customer loyalty and innovative advertisements and by making positive consumer behaviour through the help of a strong marketing techniques such as guerrilla marketing. The study also proves that social media and word of mouth marketing are significant and has influence on the usability of guerrilla marketing. The result also revealed that trust has a great influence on customer loyalty as it is the fundamental part of any business.

In conclusion, non-traditional forms of marketing have become increasingly prevalent in our daily lives, and they can have a significant impact on consumer behaviour, brand loyalty, and even society as a whole. Non-traditional marketing campaigns can reach consumers through multiple channels, including social media, mobile devices, experiential marketing, influencer marketing and more.

By focusing on authenticity, utilizing social media effectively, leveraging experiential marketing, partnering with influencers, and promoting sustainability and social causes, brands can create unique and memorable experiences for consumers and build a solid emotional connection with the audience/consumers.However, it is important to note that non-traditional marketing campaigns can also raise privacy concerns and may not always be well-received by consumers. Therefore, it is crucial for brands to approach non-traditional marketing with sensitivity and respect for consumer privacy. Overall, non-traditional marketing can be a highly effective way for brands to connect with their audience and promote their products and services in a creative, engaging, and targeted manner.

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> GST was created to reduce indirect taxes, end tax evasion, and streamline business in India.

An Analysis of Impact of Goods and Services Tax on Buying Behaviour of Selected Consumers in Fast Moving Consumer Goods Sector - An Empirical Analysis on Personal Care Products

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ABSTRACT

This study explored how GST affected the purchasing behaviour of the consumers of Fast-Moving Consumer Goods (FMCG), especially personal care items. The research investigated the impact of GST on customer preferences, price sensitivity, brand loyalty, and decision-making. A cohort of residents of Kolkata and Hazaribagh participated in the study, and a standardized questionnaire and Google Forms were used to ensure a broad sample representing various geographical, gender, and economic levels. The data was examined using IBM Statistical Package for Social Sciences (SPSS) Statistics Version 20 and Microsoft Excel, accessible through Microsoft 365. Various tests, including Kendall tau-b, Kendall W, Kruskal-Wallis H, and Mann Whitney U, were utilized to analyze the data. The study examined GST as a factor influencing consumer behaviour, including shopping habits, price responsiveness, brand loyalties, and decision-making.

The results showed how the influence of GST in the FMCG industry changed customer behaviour. It revealed whether consumers were more inclined to try new products due to price sensitivity and how they actively compared prices and product features to determine value for money and quality trade-offs. The study provided valuable insights for companies and policymakers to understand how GST affected consumers of personal care items. It may be useful for the stakeholders in developing marketing strategies and policy decisions to respond to changing consumer preferences and capitalize on GST benefits in the FMCG industry.

KEYWORDS: GST, Consumer's Buying Behaviour, Personal Care Products, FMCG.

INTRODUCTION

This study helps to understand how the influence of GST has affected consumer purchasing patterns in the FMCG industry with an emphasis on personal care goods. It attempts to offer empirical understanding of how customer preferences, price sensitivity, brand loyalty, and decision-making processes have been impacted by the adoption of GST. In India, GST was initiated on 1st July, 2017.

It is a comprehensive indirect tax that replaced Excise Duty, Service Tax, Value-Added Tax (VAT), and Central Sales Tax (CST). GST is a destination-based tax on products and services that is collected at every stage of the supply chain, from the producer to the customer. Companies can offset sales tax with purchase tax. GST rates are set by the GST Council, a central-state government body. GST tax brackets are five per cent, 12 per cent, 18 per cent, and 28 per cent. Many products and services, like food, healthcare, and education et al., are exempt from GST. The GST was created to reduce indirect taxes, end tax evasion, and streamline business in India. It should boost the economy and raise tax collection. The GST Network (GSTN) interface initially had troubles, and businesses were confused about the new tax structure.

SIGNIFICANCE

This study would be useful to the government, businesses, and consumers in many ways. Some of them are as follows:

Government

1. The study would help the government in reforming the current tax policies in the FMCG Sector.
2. As the personal care products provide significant contribution to the Indian economy, the government may use the results of the study to analyze the broader economic implications of this sector.
3. Policymakers can make use of this study in assessing policies, protecting consumer interest, and refining GST regulations.

Business Stakeholders

1. Manufacturers, distributors, and retailers of personal care products can use this study to determine the price sensitivity of the various products they deal with.

2. It will be beneficial for them to optimize their operations, which includes pricing of the product and developing innovative marketing strategies.
3. The empirical analysis of the study would also help them in the inventory management.

Consumers

1. Consumers can make use of the results of this study to make informed decision about the proper allocation of their income to the personal care products by keeping in mind the impact of GST.
2. By knowing how the market reacts because of taxes, the consumers can also contribute to develop the GST policies for the sake of their benefit.

BRIEF REVIEW OF LITERATURE

Jaganathan and Sakthivel, (2021), mentioned that FMCGshold significant importance in the business sector due to their predominant share in customer expenditure and market demand. The reason for the high demand of boxed items is due to their essential nature for individuals. The primary function of FMCG in the market is to ensure a consistent provision of such goods.

Gowtham, (2018),explained that to stimulate economic activity: Though the economic activity is increasing over the years, it has not contributed significantly to our Gross Domestic Product (GDP) when we compare ourselves with developed nations like the United States. Due to differentiated tax system, some sectors look attractive compared to others. Thus, when GST comes into effect it is expected that economic activity will increase at higher rate. When economic activity increases, we can expect an increase in development activities in the country.

Sharma and Arora, (2018), identifies under the previous indirect tax framework in India, a complicated system impeded the sale of products across state lines. On each occasion, it was necessary to manage a wide variety of taxation and their complex documentation. Small businesses that lacked the financial means to hire a tax expert perceived the possibility of additional revenue to be outweighed by the inconvenience.

Sehrawat and Dhanda, (2015), mentions that after the implementation of GST, there will not be any cascading effects of taxes, and both the national government and state governments will use the same base to figure out their taxes. At first, state governments would get less tax revenue because taxable value of goods will be worth less. However, as more cheap goods become available in the future, the number of taxpayers would rise.Thus, the states will receive more taxes generally. This rise in taxable income will lead to economic reform, which is what the Indian economy needs right now.

Jisana, (2014), explains that the analysis of consumer behaviour is a complex and comprehensive field of study. Understanding the clientele and grasping consumer behaviour are intricate notions. Predicting consumer behaviour with precision can be a challenging task. The objective of every marketing campaign is to influence customer behaviour towards the desired direction. The outcome of this endeavour determines whether it is deemed successful or unsuccessful.

Blundell, (1988), explained that a comprehensive understanding of consumer behaviour is imperative in most aspects of economic planning. The interdependence of theoretical and empirical elements, coupled with the rapid expansion of diverse data types, has sustained the significance of investigating customer behaviour analysis as a compelling area of academic inquiry.

IDENTIFICATION OF RESEARCH GAP

The literature review offers valuable insights into the importance of FMCGs and the impact of GST on India's economic activity. However, there remains a significant research gap concerning the specific influence of GST on consumer behaviour within the FMCG sector. While some studies acknowledge the economic benefits of GST implementation and the elimination of cascading tax effects, a comprehensive understanding of how GST precisely affects consumers' purchasing decisions for FMCGs, particularly in personal care products, is lacking. It is essential to explore the behavioural changes, preferences, and perceptions of consumers in

response to the introduction of GST in the FMCG market. This knowledge is vital for businesses and policymakers to develop effective strategies that cater to consumers' needs and leverage the economic reforms. Additionally, the interplay between psychological factors triggered by indirect taxes like GST and their interaction with product-centric aspects is an under-researched area, significantly shaping consumers' buying choices.

OBJECTIVE

1. To investigate the relationship between gender and consumption pattern of personal care products with implementation of GST.
2. To evaluate the relationship between annual income and consumption pattern of personal care products with implementation of GST.
3. To analyze the relationship between area of residence and consumption pattern of personal care products with implementation of GST.

RESEARCH METHODOLOGY

The research mainly utilises the primary sources of information for data analysis and used convenience sampling. Qualitative statistical analysis is be utilised to investigate the relationship in consumer buying behaviour, as well as to analyze decision-making and purchasing behaviour preferences.

Area of the Study

Study Area- Commerce, Consumer behaviour and GST.

Location: - Kolkata, West Bengal and Hazaribagh, Jharkhand.

Type of Study

The study is empirical and explorative in nature where mostly categorical data is used because customer intention, awareness and knowledge are taken into consideration.

Tools for data collection

Questionnaire is used with the help of a Google Form for covering wider range of customers in terms of area of residence, gender, and income.

Software used for Data Analysis

IBM SPSS Statistics Version 20 and Microsoft Excel (with Microsoft 365 subscription) have been used to analyze the data for the completion of the project.

Sample Size

The sample size in the study is 148.

Period of the study

Period of the study is January 2023 to March 2023.

Sampling Method

The sampling method used for the collection of the sample for the fulfilment of the research was convenience sampling followed by snowball sampling due to time constraint.

Analysis and Research Findings

Following are the tools to be used for the analysis of collected data:

1. Kendall tau-b Test
2. Kendall W Test
3. Kruskal- Wallis H Test
4. Mann Whitney U Test

DATA ANALYSIS AND FINDINGS

Description of Collected Data

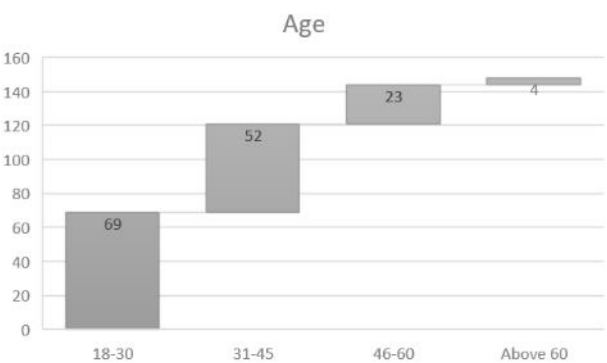

Figure 1: Ages within the Respondents (Source: Primary Data)



Figure 2: Gender within the Respondents (Source: Primary Data)



Figure 3: Educational Qualification of the Respondents (Source: Primary Data)



Figure 4: Marital Status of the Respondents (Source: Primary Data)

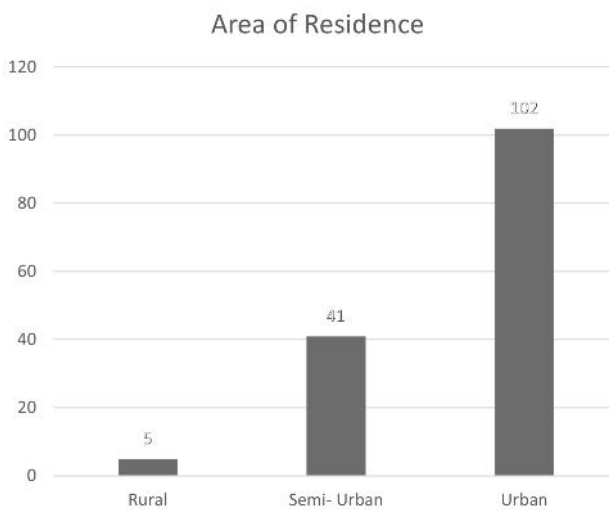

Figure 5: Area of Residence of the Respondents (Source: Primary Data)

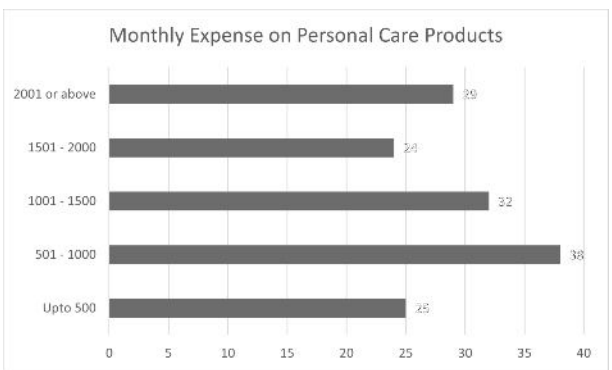

Figure 6: Monthly Expense on Personal Care Products (Source: Primary Data)

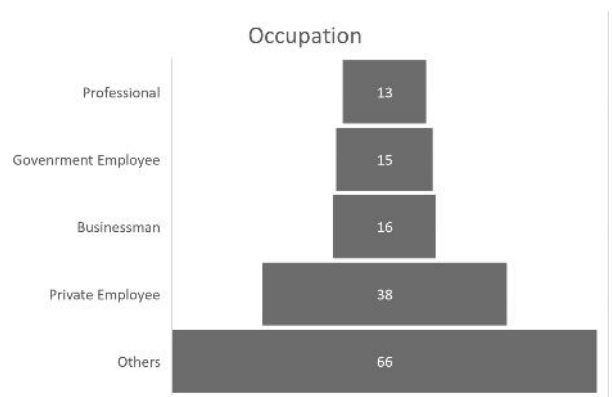

Figure 7: Occupation of the Respondents (Source: Primary Data)

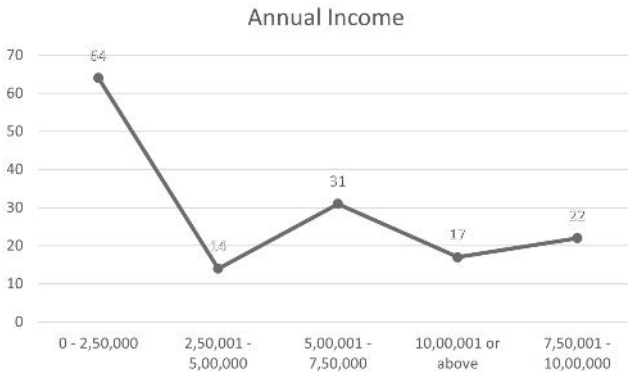

Figure 8: Annual Income of the Respondents (Source: Primary Data)

Contingency Tables

Gender				
Annual Income	**Male**	**Female**	**Total**	
0 - 250,000	47	17	64	43per cent
250,001 - 500,000	10	4	14	9per cent
500,001 - 750,000	8	23	31	21per cent
750,001 – 1,000,000	5	17	22	15per cent
1,000,001 or above	15	2	17	11per cent
Total	85	63	148	

Table 1: Gender and Annual Income (Source: Author's Compilation)

Among the respondents highest belongs to ₹0 to ₹25,000brackets totalling to 64 (43per cent) and 21per cent from ₹500,001 to ₹750,000 are 31 (21per cent).

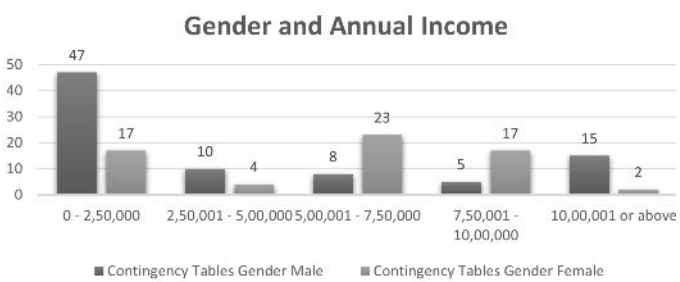

Figure 9: Gender and Annual Income of the Respondents (Source: Author's Compilation)

	Area of Residence				
Gender	**Urban**	**Semi-Urban**	**Rural**	**Total**	**Percent**
Male	64	19	2	85	57per cent
Female	38	22	3	63	43per cent
Total	102	41	5	148	

Table 2: Gender and Area of Residence (Source: Author's Compilation)

The questionnaire's respondents are 57per cent male and 43per cent female. Among the respondents, 69per cent live in an urban area, 28per cent live in a semi-urban area and 3per cent live in a rural area.

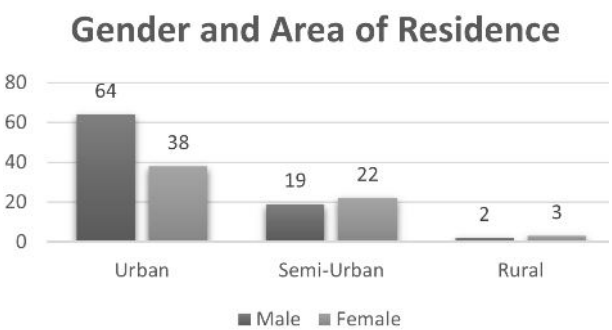

Figure 10: Gender and Area of Residence (Source: Author's Compilation)

Test of Concordance for the Likelihood of the Factors Affecting the Spending Ability of the Respondents

	Mean Rank
Liklihd_spdng_Fam__Str	2.62
Liklihd_spdng_Location	2.86
Liklihd_spdng_Emp@Stts	3.28
Liklihd_spdng_infl	3.05
Liklihd_spdng_Tst_Pref	3.2

Table 3: Kendall W Test on Likelihood of Factors Affecting Spending Ability (Source: Author's Compilation)

Test Statistics

N	148
Kendall's W[a]	0.042
Chi-Square	24.866
df	4
Asymp. Sig.	.000

Table 4: Kendall W Test Statistics
(Source: Author's Compilation)
(Note: a. Kendall's Coefficient of Concordance)

Interpretation-

A Kendall W test statistic of 0.042 shows that there is little agreement or consensus among the respondents in analyzing the likelihood of factors affecting their spending ability. Also, $p<0.05$, i.e., $p=0.000$ shown in table 4, which indicates that there is significant difference in the order assigned by the respondents to the likelihood of the factors affecting their spending ability.

Analysis of Influence of Gender, Annual Income and Location on Perception of Price of Different Personal Care Products

			Gender	Annual Income	Location
		df	**p**		
Prcpt_GST_Toothpste	9.736	4	0.0098	0.0451	0.4898
Prcpt_GST_Soap	7.629	4	0.4255	0.1062	0.5369
Prcpt_GST_Shampoo	8.274	4	0.2076	0.082	0.0354
Prcpt_GST_Body_Lotion	4.684	4	0.8479	0.3212	0.2085
Prcpt_GST_Hair_Oil	4.703	4	0.8347	0.3192	0.0603
Prcpt_GST_Deodrant	5.833	4	0.2992	0.212	0.1776
Prcpt_GST_Talcum_Powder	3.184	4	0.2504`	0.5275	0.5294
Prcpt_GST_Comb	12.037	4	0.0656	0.0171	0.5703
Prcpt_GST_Nail_Cutter	11.186	4	0.2132	0.0246	0.2099
Prcpt_GST_Shoe_Care	1.806	4	0.5779	0.7714	0.0138

Table 5: Kruskal Wallis Test on Perception of Change in Price with Gender, Annual Income and Area of Residence
(Source: Author's Compilation)

Interpretation-

After analyzing the p values of the Gender, Annual Income and Location corresponding to the change in the perception of the price of different personal care products, it is found that Gender has significant impact on the perception of change in the price of Toothpaste, Annual Income has significant impact on the perception of change in the price of Toothpaste, Comb and Nail Cutter and Location has significant impact on the perception of change in the price of Shampoo and Shoe Care among the respondents.

Analysis of Impact of Gender, Annual Income and Location on Change in Consumption Pattern of Personal Care Products

Gender

Ranks				
	Gender	N	Mean Rank	Sum of Ranks
Change in Consumption Pattern after GST	Male	85	68.5	5822.5
	Female	63	82.6	5203.5
	Total	148		

Test Statistics [a,b]

	Change in Consumption Pattern after GST
Mann-Whitney U	2167.500
Wilcoxon W	5822.500
Z	-2.369
Asymp. Sig. (2-tailed)	.018

Table 6: Mann-Whitney on Gender and Change in Consumption Pattern (Source: Author's Compilation) (Note: Grouping Variable: Gender)

Interpretation-

The Mann-Whitney U test statistic= 2167.500, $p<0.05$ i.e., $0.018<0.05$ shown in Table 6indicates that there is significant impact of Gender on change in consumption pattern of personal care products at 5per cent ($\alpha=0.05$) level of significance. Therefore, the null hypothesis may be rejected.

Annual Income

Ranks			
	Annual Income	N	Mean Rank
Change in Consumption Pattern after GST	0 - 250,000	64	70.58
	250,001 - 500,000	14	64.07
	500,001 - 750,000	31	86.34
	750,001 – 1,000,000	22	83.91
	1,000,001 or above	17	64.09
	Total	148	

	Change in Consumption Pattern after GST
Chi-Square	8.308
Df	4
Asymp. Sig.	.081

Table 7: Test Statisticsa, bof Kruskal Wallis Test on Annual Income and Change in Consumption Pattern (Source: Author's Compilation) (Note: a. Kruskal Wallis Test and b. Grouping Variable: Annual Income)

Interpretation-

The Chi Square Valueχ^2 (df=4, N= 48) = 8.308, $p>0.05$ i.e., $0.081>0.05$ shown in Table 7 indicates that there is no significant impact of Annual Income on change in consumption pattern of personal care products at 5per cent ($\alpha=0.05$) level of significance. Therefore, the null hypothesis is failed to be rejected.

Area of Residence

Ranks			
	Area of residence	N	Mean Rank
Change in Consumption Pattern after GST	Urban	102	73.03
	Semi- Urban	41	77.45
	Rural	5	80.30
	Total	148	

	Change in Consumption Pattern after GST
Chi-Square	.582
Df	2
Asymp. Sig.	.747

Table 8: Test Statisticsa, b of Kruskal Wallis Test on Area of Residence and Change in Consumption Pattern (Source: Author's Compilation) (Note: a. Kruskal Wallis Test and b. Grouping Variable: Area of Residence)

Interpretation-

The Chi Square Value χ^2 (df=4, N= 148) = 0.582, p>0.05 i.e., 0.747>0.05, α=0.05 shown in Table 8 indicates that there is no significant impact of the Area of Residence on the change in consumption pattern of personal care products at 5per cent level of significance (α=0.05). Therefore, the null hypothesis is failed to be rejected.

HYPOTHESIS

1. H01

There is no significant relationship between Gender and Consumption Pattern of personal care product with implementation of GST.

2. H02

There is no significant relationship between Annual Income and Consumption Pattern of personal care product with implementation of GST.

3. H03

There is no significant relationship between Area of Residence and Consumption pattern of personal care product with implementation of GST.

ANALYSIS OF HYPOTHESIS

1. H01

There is no significant relationship between Gender and Consumption Pattern of personal care product with implementation of GST.

			Change in Consumption Pattern after GST
Kendall's tau_b	Change in Consumption Pattern after GST	Correlation Coefficient	1.000
		Sig. (2-tailed)	
		N	148
	Gender	Correlation Coefficient	.192*
		Sig. (2-tailed)	.018
		N	148

Table 9: Kendall's Tau-b on Gender and Change in Consumption (Source: Author's Compilation)

Interpretation-

The correlation coefficient between Gender and Consumption Pattern of personal care product with implementation of GST is 0.192 shows a weak and positive relationship. As, the p<0.05, i.e., p=0.018, there is significant relationship between the Gender and Consumption Pattern of personal care product with implementation of GST. Therefore, the null hypothesis may be rejected.

1. H02

There is no significant relationship between Annual Income and Consumption Pattern of personal care product with implementation of GST.

			Change in Consumption Pattern after GST
Kendall's tau_b	Change in Consumption Pattern after GST	Correlation Coefficient	1.000
		Sig. (2-tailed)	
		N	148
	Annual Income	Correlation Coefficient	.068*
		Sig. (2-tailed)	.360
		N	148

Table 10: Kendall's Tau-b on Annual Income and Change in Consumption (Source: Author's Compilation)

Interpretation:

The correlation coefficient between Annual Income and Consumption Pattern of personal care product with implementation of GST is 0.068 shows a very weak and positive relationship. As, the $p>0.05$, i.e., $p=0.360$, there is no significant relationship between the Annual Income and Consumption Pattern of personal care product with implementation of GST. Therefore, the null hypothesis is failed to be rejected.

3. H03

There is no significant relationship between Area of Residence and Consumption pattern of personal care product with implementation of GST.

of vendors' anticipation and planning for tax implications are crucial considerations. Moreover, the presence of refunds or tax benefits can further influence consumers' choices.

The study also highlights the vital role of psychological factors in shaping consumer preferences. Emotions, cognitive biases, self-perception, and the influence of social standards all play a part in determining which personal care products, consumers are inclined to buy. Understanding these psychological aspects is essential to comprehend the complexities of consumers' decision-making.

Furthermore, product-centric factors have a strong

			Change in Consumption Pattern after GST
Kendall's tau_b	Change in Consumption Pattern after GST	Correlation Coefficient	1.000
		Sig. (2-tailed)	
		N	148
	Area of Residence	Correlation Coefficient	.060
		Sig. (2-tailed)	.449
		N	148

Table 11: Kendall's Tau-b on Area of Residence and Change in Consumption (Source: Author's Compilation)

Interpretation:

The correlation coefficient between Area of Residence and Consumption Pattern of personal care product with implementation of GST is 0.060 shows a very weak and positive relationship. As, the $p>0.05$, i.e., $p=0.449$, there is no significant relationship between the Gender and Consumption Pattern of personal care product with implementation of GST. Therefore, the null hypothesis isfailed to be rejected.

CONCLUSION

In conclusion, this study sheds light on the significant factors that influence consumers' decision-making process when it comes to purchasing personal care products under the influence of GST. The impact of taxes on buyers' disposable income and the importance

impact on consumers' choices. The quality of goods or services, cost and perceived worth, uniqueness, and brand reputation are key factors that shape consumer preferences in the personal care product market.

LIMITATIONS AND RECOMMENDATIONS

Limitations

1. The study narrows down to personal care products within FMCG sectors taking into consideration only few products.
2. For the sake of understanding the impact of GST in better way, quantitative measures could have been taken into consideration such price elasticity, demand analysis, consumer expenditure analysis et al.

3. The future perspective of the study holds immense significance in terms the unexplored area of the study which includes the longitudinal analysis, comparative analysis, regional analysis et al.
4. The results could have been more accurate if the more respondents would have participated in the study, but the lack of time could not make it possible.

Recommendations

Based on the research findings, the study proposes some essential recommendations for the FMCG sector and GST implementation:

1. Simplify Taxation Procedures: Focus on streamlining the GST filing process and providing necessary support, particularly for small businesses, to enhance compliance and facilitate growth.
2. Conduct Consumer Awareness Campaigns: Empower consumers with knowledge about the impact of GST on personal care products to make informed purchasing decisions.
3. Incentivize FMCG Manufacturers: Offer tax benefits and incentives, especially to those providing essential goods, to stimulate economic growth and promote local production.
4. Monitor Consumer Preferences: Closely analyze post-GST consumer preferences using data analytics to align products more effectively and devise successful marketing strategies.

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> Service quality can be perceived as the difference between expectation and performance along the important quality dimensions.

Passengers Satisfaction Regarding the Quality of Service of the Indian Railways: An Assessment Study

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ABSTRACT

The objective of economic development is to enhance the well-being of the people through providing them quality products and services within their affordable limits. The Indian Railways (IR) is the largest service sector industry in India. It has been providing goods and passengers transportation for more

than two centuries. Under the globalized market, service quality appears as a key to competitive opportunity and the service provider organizations are giving greatest emphasize on customer-focused improvement in quality of their services. Based on primary data, collected from 92 respondents, this study is an endeavor to assess the quality of IR's services. Data have been collected in the five-point Likert scale format and the SERVQUAL model is used to assess passengers' satisfaction. The study reveals that the services' quality of IR is neither bad nor commendable. IR needs to improve its quality of services for its own survival in the present competitive market.

KEYWORDS: Reliability, Assurance, Tangibility, Empathy, Responsiveness.

INTRODUCTION

Organizational performance principally depends on the quality of goods or services it delivers into the markets. Under the present competitive global markets, service quality appears as a key to competitive opportunity. Over the last three decades significant growth of service sectors like transport and communication, information technology, health, education etc. has been observed in almost all the economics of the world and India is not an exception (Fatmaet al., 2005). As a result, service quality becomes an important subject that gains considerable interest of both the academicians and the service providers. The service provider organizations have started giving their optimum effort towards customer-focused improvement of service quality. Hence assessing service quality of various service-based industries has become one of the widely used research areas in marketing.

Indian railways were started its first journey from Mumbai to Thane (33km journey) on 16April, 1853 and has now become one of the biggest service sector industries in India. At present it is the fourth most extensive network globally, having1,15,000 km of track length and meeting the needs of over 23 million passengers per day on average. In addition to passenger trains, Indian Railways also provides freight, parcel services, and tourism. At present Indian railways has 2,93,077 freight wagons, 12,729 locomotives, 76,608 passenger coaches, and 1.3 million employees (Indian Railways Year-Book-2019-1020).Raghuram et al., (W.P. No. 2008-07-05, 200) in their working paper argued that about 25 per cent of gross domestic product (GDP) is contributed by the Indian Railways. Nowadays air transport appears as a competitor of railway transport for inland long journey. This happens because air fare has become affordable for the passengers. In this situation passengers are giving greater emphasize to the quality of services and convenience while travelling by train or air. Facing this competition, Indian railways has already taken up several initiatives to satisfy the passengers by providing quality services in terms of ticketing, reservation, convenient seating and berth facilities, catering in the train, and cleanliness, and so on. But, despite the several initiatives undertaken by the Indian railways to enhance amenities and facilities, complaints from passengers have become a regular feature. Some complaints include a lack of cleanliness in washrooms, unhygienic conditions, safety, and overcrowding (Devi Prasad et al., 2010,Kumaret al., 2017, Priyadharshini et. al., 2017). Some passengers also complain about seat conditions, spacing between the seats, behavior of railway staff, and so on. These complaints indicate that the passengers were unsatisfied with the service quality's tangibility and empathy dimensions (Balakrishnan, 2012).

RESEARCH GAP

In spite of persisting grievances among the railway passengers regarding the quality of services providing by the Indian railways, a group of researchers are in the opinion that service quality of Indian railways has attained much improvement. These apparently two opposite views regarding the assessment of the service quality of the railways are persisting due to the intricacy in the concept of the term 'satisfaction'. Satisfaction is an attribute and consumers' level of satisfaction in respect to a certain quality of product or service differs in accordance with individual' own perception and which differs due to the differences in their economic, social and cultural traits. This study is an endeavor to assess the quality of services provided by the Indian

railways to its passengers from the passengers' satisfaction point of view.

LITERATURE REVIEW

Measuring service quality is one of the most persisting important topics in management literature. Customer perception plays the key role in measuring service quality and that determined the performance of the service provider. In reality, superior quality of services helps to gain customer's satisfaction and loyalty and that in turn enhance service provider's market share, productivity and performance(Hadikoemoro, 2002,Yoon, et al., 2004).

The literatures on public transport dealt with various quality-dimensions perceived by the customers (passengers) about the public transport. In the public transport, the factors considered as important for the evaluation of its service quality are reliability, timing, frequency and fare(Kang et al. 2004,Tyrinopoulos, et al., 2008), transport network and coverage which includes the stoppages (Kang et al., 2004, Eboli, et al., 2007), safety issue (Eriksson, et al., 2009, Smith, et al., 2000) and information system (Fellesson, et al., 2008).The trend of evaluating the customer (passengers) requirements and delivering services according to their requirements has now been seen in India.

Customer's expectation serves as a foundation for evaluating service quality because, quality is high when performance exceeds expectation and quality is low when performance does not meet their expectation. Therefore, service quality can be perceived as the difference between expectation and performance along the important quality dimensions. Parasuraman et al., (1988) point out that expectation is viewed differently in both satisfaction literature and service quality literature. In satisfaction literature, expectations are considered as 'predictions' by customers about what is likely to happen during a particular transaction. In service quality literature, they are viewed as desires or wants of consumers, that is, what they feel a service provider 'should' offer rather than 'would' offer.

Parasuraman et al.(1985) identified ten dimensions useful for passengers' evaluation of the quality of services, like reliability, responsiveness, tangibles, information, assurance, empathy, food plazas, timeliness, understanding the passengers and service accessibility. Zeithaml, et al. (1990) proposed a quality scale (SERVEQUAL), a generic instrument that has five dimensions of service quality: reliability, responsiveness, assurance, empathy and tangibles, the constructs were found to have high correlation. Over the past more than two decades researchers have applied service quality dimensions to customer satisfaction in assessing quality of services provided by the various service industries (Yilmaz et al., 2018,Sofyaniet al., 2020,Shaineshet al., 2020).

OBJECTIVES OF THE STUDY

1. To study the passenger's satisfaction regarding the services provided by Indian Railways.
2. To identify the areas where improvement deemed necessary towards providing better quality services.

RESEARCH METHODOLOGY

This study is based on primary data. The data are primarily collected by way of canvassing a structured questionnaire via Google Forms among all my acquaintances, friends and family members. The questionnaire was developed on the basis of SERVQUAL model. There are altogether 26 questions in the questionnaire of which four are related to demographic aspects of the respondent and the rest 22 questions are, in the five-point Likert-scale format, related to various quality dimensions of services. The questionnaire was sent to 2,350 people but only 92 filled-in questionnaires were received in reply. The data are usually presented in statistical tabular format. In this study respondents' (passengers') average level of satisfaction was calculated with respect to every dimension which they revealed in the questionnaire. This study also tried to make an assessment of the service quality of the Indian Railways using SERVQUAL model frame work which is briefly presented below.

ANALYSIS

SERVQUAL Model Frame Work

According to the SERVQUAL model, a service provider must be able to provide the following five critical elements of service which are positively related to passenger satisfaction.

1. Reliability: Reliability means the degree to which a service can be relied upon to produce the desired result or outcome at any given time. This measures the consistency of services provided by an organization. If an organization offers consistent services, then it will have high reliability.
2. Assurance: Assurance means the level of confidence that a customer has about the quality of service.
3. Tangibility: Tangibility means the physical appearance of the product or service provided by the organization. It includes things like cleanliness, neatness, and appearance.
4. Empathy: Empathy means the ability of an organization to understand what its customers want and need.
5. Responsiveness: Responsiveness refers to how quickly a service responds to customers' needs.

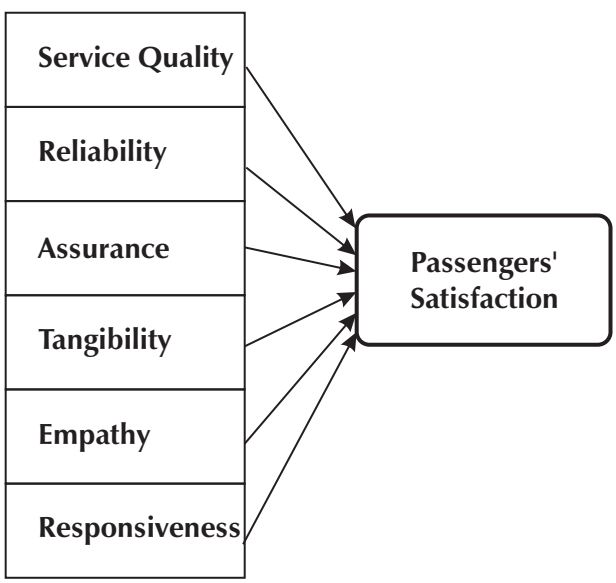

Figure 1: SERVQUAL Model Frame Work
(Source: Researchgate.net)

FINDINGS AND OBSERVATIONS

Altogether there are 92 respondents of whom 78 are male and 14 are female. Among the respondents 76 per cent belong to 18-25 age groups. Our respondents comprise of different professional categories, like businessmen (7.6 per cent), salaried individuals (15.3 per cent), students (71.7 per cent) and housewives (5.4 per cent). It is observed from the frequency of travel by train point of view that on an average 79.3 per cent of our respondents have travelled less than five times and only 6.5 per cent travelled more than fifteen. Around 60 per cent of our respondents' annual household income is five lakh or less. It also appears that around 86 per cent of respondent among those who travelled 'less than five times' by train had made their journey during their vacations (see Descriptive statistics).

In order to assess the quality of different services provided by the Indian Railways, we stated eight statements with respect to eight dimensions of services and requested the respondents to express their individual opinion on the five-point Likert scale (see Table 2). The eight different dimensions are:

1. Cleanliness of railway stations and trains
2. Passenger safety measures
3. Nature of services provide by the service counters to passengers
4. Availability of porters and trolleys in the railway stations
5. Railways' staffs response to problems/ complains of passengers
6. Promptness regarding information to the passengers if a train is delayed or cancelled
7. Maintenance with clarity the information given in the time table and display boards
8. Indian railways as the best service provider to the passengers.

Distribution of respondents by their characteristics					
A. Gender	Number of respondents				
Male	78				
Female	14				
Total	92				
B. Age Group (in years)					
Below 18	2				
18 – 25	70				
25 – 40	17				
40 – 60	3				
Total	92				
C. Household's Annual Income and Profession					
Annual Household Income	Profession				
	Business	Salary	Student	House wife	Total
Below ₹250000	2	3	12	1	18
₹250000 – ₹500000	3	6	25	3	37
₹500000 – ₹10,00000	2	4	14	0	20
Above ₹10,00000	0	1	15	1	17
Total	7	14	66	5	92
D. Purpose and Frequency of Travel by Train					
Purpose of journey by train	Frequency of Travel by Train				
	Less than 5 times	5-10 times	10-15 times	More then 15 times	Total
Business/\works	7	2	1	0	10
Vacation	63	8	1	1	73
Daily communication	0	0	0	5	5
Other Purposes	3	1	0	0	4
Total	73	11	2	6	92

Table 1: Descriptive Statistics
(Source: Primary Data)

In response to the above statements on eight service dimensions, 19.5 per cent of our respondents have expressed their disagreement (either marginally or strongly), about 43 per cent keeps themselves neutral, (i.e.,neitheragree nor disagree) and around 37.5 percent respondent express their agreement (either marginally or strongly) with theabove statements (see Table2).

Query	Respondents Responses					Total
	Strongly Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Strongly Agree	
1. Do you agree that Railway stations and trains are adequately clean?	6	18	42	19	7	92
2. Do you agree that adequate passengers' safety measures are there in the railway stations?	11	18	38	16	9	92
3. Do you agree that Railway service counters always provide helpful services to passengers?	2	14	45	26	5	92
4. Do you agree that there is adequate availability of porters and trolleys in the Railway stations?	3	4	21	32	32	92
5. Do you agree that Indian Railway staffs always response to problems/ complains of passengers with interest?	7	11	47	22	5	92
6. Do you agree that Indian Railways promptly inform the passengers if a train is delayed or cancelled?	14	14	34	19	11	92
7. Do you agree that the information given in the time table and displayed boards are maintained with clarity?	0	9	37	38	8	92
8. Do you agree that the Indian Railway does everything to provide best services to the passengers?	1	12	52	25	2	92

Table 2: Respondents Assessment of Quality of Different Services Provided by the Indian Railways (Source: Primary Data)

It is observed that about 70 per cent of our respondent expresses their confirmatory opinion in response tothe statement that there are 'adequate availability of porters and trolleys in the railway stations'. However, on the other hand, in response to the statements 'cleanliness of railway stations and trains' and 'adequate passengers safety measures are there in the railway stations' only 28 per cent and 27 per cent respondents respectively express their confirmatory opinion (see Table 2).

Query	Respondents Responses					Total
	Very Bad	Low	Neutral	Good	Very Good	
1. Behavior shown by the Railway staffs towards passengers in the train.	3	18	44	25	2	92
2. Knowledge of Railway staffs to provide proper information to the queries of passengers.	1	21	37	26	7	92
3. Assessment regarding Indian Railways Complaint Handling System	8	21	44	17	2	92
4. Assessment regarding food facilities/quality provided by the Indian Railway	19	32	27	12	2	92
Query	**Respondents' Opinion**					
	Highly Unlikely	**Unlikely**	**Neutral**	**Likely**	**Very Likely**	**Total**
5. Do you think Railways provides on-time train services?	5	21	38	19	9	92
Query	**Respondents' Opinion**					
	Least user-friendly	**Less user-friendly**	**Some extent user-friendly**	**User-friendly**	**Highly user-friendly**	**Total**
Do you think Indian Railway's e-ticket booking portal is user-friendly?	0	4	14	44	30	92

Table 3: Respondents Assessment of the Nature of Quality Services Provided by the Indian Railways Staffs (Source: Primary Data)

Query	Respondents' opinion			Total
	Yes	No	Maybe	
1. Do you think Indian Railway gives adequate personal attention?	8	38	46	92
2. Do you think Indian Railways have adequate passenger trains?	47	45	-	92

Table 4: Respondents' Response Regarding Personal Attention to Passengers Provided by Indian Railways and Availability of Adequate Number of Passenger Trains (Source: Primary Data)

In this study we also tried to assess the quality of six important dimensions of services where the behavior and responsibility of railway staffs play the major role. We enquired about:

1. Behavior of railway staffs towards passengers in the train
2. Knowledge of railway staffs to provide proper information to the passengers
3. Indian Railways' complaint handling system
4. Food facilities/ quality provided by the IR
5. On-time train services
6. E-ticket booking portal and requested the respondents to express their individual assessment on the five-point Likert scale (see Table3).

The quality assessment of the first four above mentioned services by our respondents reveals that about 41 per cent of our respondents are in the impartial state, that is, to them the quality of these four services is neither bad nor commendable. On the other hand, it is revealed that among our respondents, around 34 per cent of respondents are dissatisfied (either marginally or strongly) and only 25 per cent are satisfied (either marginally or strongly) with the four services mentioned. Our respondents' opinion regarding 'on-time train services' are: 41 per cent remain neutral (neither bad nor good), 28 per cent perceive it as bad (either marginally or strongly) and 31 per cent perceive it as good (either marginally or strongly). It is interesting to note that about 96 per cent of our respondents consider the e-ticket portal as user-friendly (see Table3).We also observed that only eight respondents have the opinion that the railways provide adequate personal attention to passengers and nearly half of the total respondents have the opinion that Indian Railways do not have adequate number of passenger trains (see Table4).

In this study we have also assessed the respondents' average satisfaction level derived from 14 different dimensions of services that are providing by the Indian Railway. In accordance with the 5point Likert scale we have classified the respondents' satisfaction level (SL) as follows:

$1 \leq SL < 2 \Rightarrow$ Highly Unsatisfied

$2 \leq SL \leq 2.5 \Rightarrow$ Unsatisfied

$2.6 \leq SL < 3 \Rightarrow$ Marginally Unsatisfied

$3 < SL \leq 3.5 \Rightarrow$ Marginally Satisfied

$3.6 < SL \leq 4 \Rightarrow$ Satisfied

$4 \leq SL \leq 5 \Rightarrow$ Highly Satisfied

Dimensions of Services	Average Level of Satisfaction	Remarks
1. Cleanliness of railway stations and trains	3.03	Satisfied (Marginally)
2. Adequate safety of passengers	2.93	Unsatisfied (Marginally)
3. Railway service counters always provide helpful services to passengers	3.20	Satisfied(Marginally)
4. Availability of porters and trolleys in the stations	3.93	Satisfied
5. Railway staffs' response to problems/ complaints of passengers.	3.08	Satisfied(Marginally)
6. Prompt information to passengers if a train is delayed or cancelled.	2.99	Unsatisfied (Marginally)
7. Information given in the time table and displayed boards are maintained with clarity.	3.49	Satisfied
8. Indian Railways does everything to providethe best possible services to the passengers.	3.16	Satisfied (Marginally)
9. Behavior shown by the railway staffs towards passengers in the train.	3.05	Satisfied (Marginally)
10. Knowledge of railway staffs to provide proper information to the queries of passengers.	3.18	Satisfied (Marginally)
11. Indian Railways' complaint handling system	2.83	Unsatisfied (Marginally)
12. Food facilities/quality provided by the Indian Railways	2.41	Unsatisfied
13. On-time train services	3.07	Satisfied (Marginally)
14. Indian Railways' user-friendlye-ticket booking portal	4.09	Satisfied(Highly)

Table 5: Respondents Average Level of Satisfaction from Different Services Provided by the Indian Railways (Source: Primary Data)

We have estimated respondents' average level perceived satisfaction of each of the 14 different dimensions of services that are providing by the Indian Railways. It appears from the estimated level of satisfaction that 10 out of 14 dimensions are in the respondents' satisfactory domain and the remaining four dimensions are in the un-satisfactory domain. With respect to seven dimensions of services in the satisfactory domain, (that is cleanliness of railway stations and trains (SL= 3.03), service counters always provide helpful services to passengers (SL= 3.20), railway staffs' response to problems/ complains of passengers (SL= 3.08), Indian Railways does everything to provide best services

to the passengers (SL=3.16), behavior shown by the railway staffs towards passengers in the train (SL= 3.05),knowledge of railway staffs to provide proper information to the queries of passengers (SL= 3.18) and on-time train services (SL= 3.07)) the respondents are marginally satisfied. The remaining two dimensions of services (that is availability of porters and trolleys in the Railway stations (SL = 3.93) and information given in the time table and displayed boards are maintained with clarity (SL= 3.49)) the respondents are satisfied. However, with respect to only one dimension of service in the satisfactory domain, (that is railway's user-friendly e-ticket booking portal (SL= 4.09)) respondents are highly satisfied (see Table5).

On the other hand, in the three dimension of services out of the four dimensions of the un-satisfaction domain (that is adequate safety of passengers (SL= 2.93), prompt information to passengers if a train is delayed or cancelled (SL=2.99) and Indian Railways' complaint handling system (SL= 2.83)), the respondents are marginally unsatisfied. But in one dimension of service in the un-satisfactory domain (i.e., food facilities/quality provided by the Indian railway (SL= 2.41)) respondents are unsatisfied (see Table5).

Queries	Dimensions
On-time train services (3.07)	Reliability (3.2)
Prompt information to passengers if a train is delayed or cancelled (2.99)	
Information given in the time table and displayed boards are maintained with clarity (3.49)	
Indian Railways does everything to provide best services to the passengers.(3.16)	Assurance (2.8)
Indian Railways Complaint Handling System (2.83)	
Food facilities/quality provided by the Indian Railway (2.41)	
Cleanliness of Railway stations and trains (3.03)	Transitivity (3.4)
Availability of porters and trolleys in the Railway stations (3.93)	
Service counters always provide helpful services to passengers (3.20)	
Railway staffs' response to problems/complaintsof passengers (3.08)	Empathy (3.1)
Adequate safetyof passengers (2.93)	Responsiveness (3.3)
Behavior shown by the Railway staffs towards passengers in the train (3.05)	
Knowledge of railway staffs to provide proper information to the queries of passengers (3.18)	
Indian Railways' user-friendly e-ticket booking portal(4.09)	



Figure 2: Passenger's Average Level of Satisfaction in Five Different Quality Dimensions and the Level of Overall Satisfaction from the Five Critical Elements of Service
(Source: Primary Data)
(Note: Figure in the parenthesis indicates average level of satisfaction)

In this study, we also estimate the quality of services of the Indian Railways by using SERVQUAL model frame work. This model is based on five critical elements of service which are positively related to passengers' satisfaction. The five critical elements are: Reliability, Assurance, Transitivity, Empathy and Responsiveness. Altogether we have considered 14 dimensions of services and these dimensions are classified into five critical elements as given below:

SERVQUAL Elements / Dimensions

Reliability

1. On-time train services
2. Prompt information to passengers if a train is delayed or cancelled
3. Information given in the time table and displayed boards are maintained with clarity

Assurance

1. Indian Railways does everything to provide best services to the passengers
2. Indian Railways' complaint handling system
3. Food facilities and quality provided by the Indian Railways

Transitivity

1. Cleanliness of Railway stations and trains
2. Availability of porters and trolleys in the Railway stations
3. Service counters always provide helpful services to passengers

Empathy

1. Railway staffs' response to problems or complains of passengers

Responsiveness

1. Adequate safety of passengers
2. Behavior shown by the railway staffs towards passengers in the train
3. Knowledge of railway staffs to provide proper information to the queries of passengers
4. Indian Railways' user-friendly e--ticket booking portal

It is revealed that with respect to four critical elements of the SERVQUAL model (e.g. Reliability (SL=3.2), Transitivity (SL=3.4), Empathy (SL=3.1) and Responsiveness (SL=3.3)) our respondents are marginally satisfied. But with respect to Assurance (SL=2.8) respondents are marginally unsatisfied. As a whole, respondents are marginally satisfied (overall (SL=3.2). This implies that the Indian Railways' overall quality of services is not bad at all but not commendable and is lagging far behind in global competitive race (see Figure2).

RECOMMENDATIONS

This study, after assessing the quality of railway services to passengers, reveals that the quality of its services is never be considered as bad and at the same time not at all commendable. Therefore, in order to retain or enhance Indian Railways' competitive advantage it becomes necessary to upgrade the quality of its services.

CONCLUSION

Service sector is one of the leading sectors of the present competitive globalized economy and service quality appears as a key to competitive opportunity.Indian railways has the fourth most extensive network globally, meeting the needs of over 23 million passengers per day on average and provides employment to 1.3 million people. Italso provides freight, parcel and tourism services. Now, air fare is also in the affordable range of the common people and so air transport appears as a competitor of the railway transport, especially forlong inland journeys. One of the major limitations of this study is its small sample size. The study also fails to cover well distributed samples size in different age-groups (it becomes biased towards the 18 to 25 age groups which constitute 76 per cent). In this study some important dimensions of services are not taken into account, e.g., availability of wheel chair for physically challenged or patient passengers in the stations, passengers assigned numerical weights to five categories of service quality

dimensions are absent in the estimation level of satisfaction by using SERVQUAL model. Due to resource and time constraints these limitations are there in this study.

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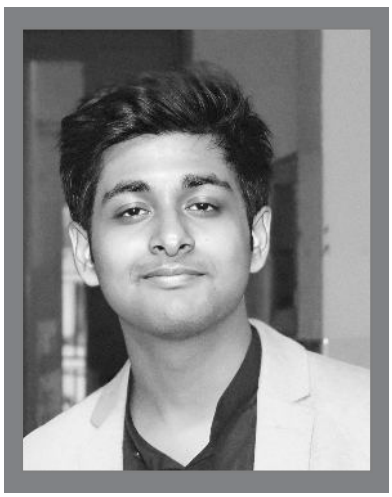

> Social disconnectedness has emerged as a pressing issue in contemporary societies, with potential far reaching consequences for individuals, communities, and economies.

Economic Cost of Social Disconnectedness – A Case Study

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ABSTRACT

Social disconnectedness has emerged as a pressing issue in contemporary societies, with potential far reaching consequences for individuals, communities, and economies. This research aims to quantitatively analyze the economic cost associated with social disconnectedness to better understand its impact on various aspects of society. Using a multi-faceted approach, the study incorporates data from diverse sources, including economic indicators, social surveys, and academic studies, to construct a comprehensive framework for assessment.

The research examines the link between social disconnectedness and key economic factors, such as productivity, labour market outcomes, healthcare costs, and public expenditure. Additionally, it delves into the influence of social isolation on mental health, crime rates, and educational attainment, which can all significantly impact economic dynamics. By employing advanced econometric models and statistical techniques, the study seeks to identify both direct and indirect pathways through which social disconnectedness affects economic well-being.

The findings from this research will have significant implications for policymakers, economists, and social scientists alike, as it sheds light on the hidden costs of social isolation and underlines the importance of fostering social cohesion and community engagement. By recognizing the economic consequences of social disconnectedness, society can develop targeted interventions and strategies to mitigate its effects and promote a more inclusive and prosperous future for all.

KEYWORDS: Economic Cost, Quantitative, Multi-faceted, Factors, Well-being, Hidden Costs, Cohesion.

INTRODUCTION

Social disconnectedness is the act of preventing oneself from interacting or socializing with other people. Generally, the participation rate of a socially disconnected individual is very less to nil in activities that involve people. However, it is different from loneliness in general.

There are many personal and non-personal factors that influence a person to be socially disconnected.

Personal factors like family pressure, inadequacy of financial resources, physical disability (health problems), sleep disturbances and low life satisfaction have been crucial in making an individual aloof from his society.

A working individual or a student is disturbed by a lot of non-personal factors as well. Factors like work pressure, workplace competitiveness, societal pressure, migration affect, bullying, ragging and harassment can act as a catalyst to make an individual socially disconnected.

SCOPE OF STUDY

The scope of a study on the economic cost of social disconnectedness will depend on the research questions being addressed and the specific population being studied. Some possible areas of focus could include:

The Impact of Social Disconnectedness on Productivity

A study could examine the relationship between social disconnectedness and productivity in the workplace, including how much productivity is lost due to social disconnectedness and how this impacts the overall economy.

The Impact of Social Disconnectedness on Healthcare Costs

A study could examine how social disconnectedness leads to an increased risk of chronic disease and premature mortality, and how this translates into higher healthcare costs for individuals and society.

The Impact of Social Disconnectedness on Criminal Justice Costs

A study could examine the relationship between social disconnectedness and criminal behaviour, including the economic costs associated with increased crime rates and criminal justice system expenses.

The Impact of Social Disconnectedness on Social Services Costs

A study could examine how social disconnectedness leads to higher rates of welfare use and unemployment, and how this translates into higher social services costs for society.

The Cost-Effectiveness of Interventions

A study could examine the economic benefits of interventions aimed at addressing social disconnectedness, including the cost-effectiveness of community-based programs, support groups, and other interventions.

The Long-Term Economic Impacts of Social Disconnectedness

A study could examine how social disconnectedness

impacts an individual's earning potential overtime and the long-term economic implications for society.

LITERATURE REVIEW

Holt-Lunstad, Smith and Layton, (2010) in the article 'Social relationships and mortality risk: A meta-analytic review' postulated that social disconnectedness leads to a decrease in productivity as much as 10 per cent of income. This translates to a significant cost to both individuals and organizations.

Pickett and Wilkinson, (2015) in the article 'Income inequality and health: a causal review' studied that social disconnectedness is associated with higher rates of welfare use and unemployment.

RESEARCH METHODOLOGY

The following research methodology was used for my project on the economic cost of social disconnectedness:

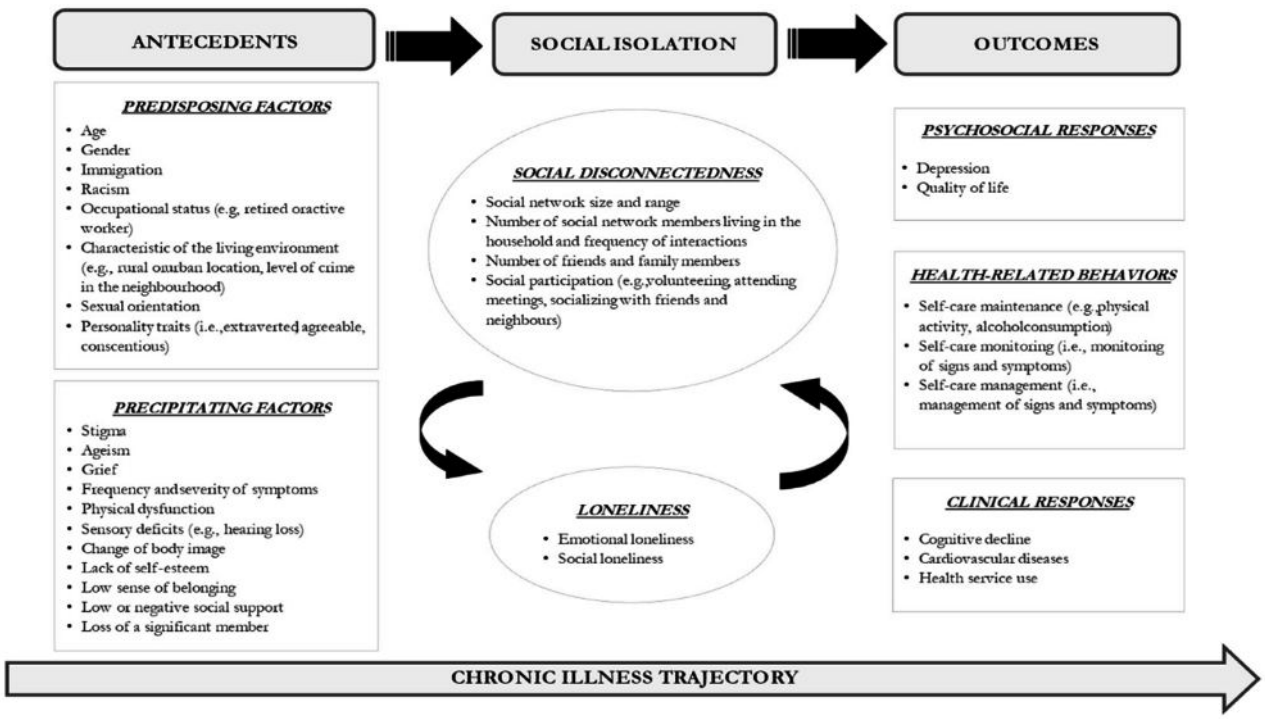

Figure 1: Pictorial Model of the Middle-Range Theory of Social Isolation in Chronic Illness which Sums Up All the Factors (Source: A Middle-Range Theory of Social Isolation in Chronic Illness by Pablo Lovino, Ercole Vellone, Nadia Cedrone and Barbara Reigel)

Holt-Lunstad, Smith and Baker, (2015) in the article 'Loneliness and social isolation as risk factors for mortality: a meta-analytic review' studied that social disconnectedness is associated with an increased risk of premature mortality, which can lead to significant economic costs related to healthcare expenditures.

Sampson, Raudenbush and Earls, (1997) in the article 'Neighbourhoods and violent crime: a multilevel study of collective efficacy' found that social disconnectedness is a strong predictor of violent crime rates in urban neighbourhoods.

Determination of the Research Questions

The first step was to identify the research questions that the questionnaire aimed to answer. These questions were focused on the economic costs of social disconnectedness and included topics such as the demographics, and impact of personal and non-personal factors. The questionnaire was developed on Google forms.

Identification of the Target Population

The target population for the study was identified. This

included students, working professionals from different sectors and retired professionals.

Pilot Test the Questionnaire

The questionnaire was pilot tested on a small sample of the target population to ensure that the questions are clear, concise, and relevant.

Distribution of the Questionnaire

The questionnaire was distributed to the full sample using various methods such as email and various social media platforms.

Collection and Analysis of the Data

Once the questionnaire was completed, the data was collected and analyzed. The data was analyzed on Microsoft Excel. The findings were presented in a clear and concise manner, and the limitations or biases of the study were acknowledged.

Number of Respondents - 180

Conclusions and Recommendations

Based on the findings, conclusions were drawn about the economic costs of social disconnectedness. These conclusions were used to make recommendations for interventions or policies that could help mitigate the economic costs of social disconnectedness.

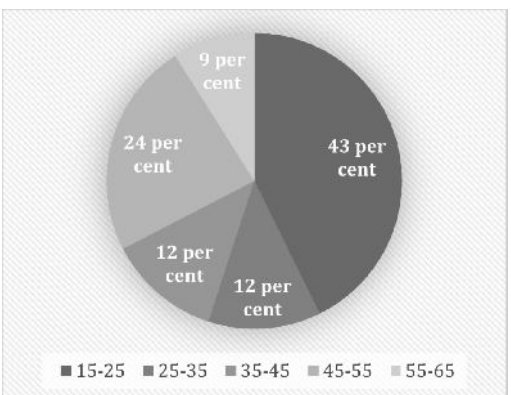

Figure 2: Pie Chart Representing the Age Groups of the Respondents (Source: Author's Compilation)

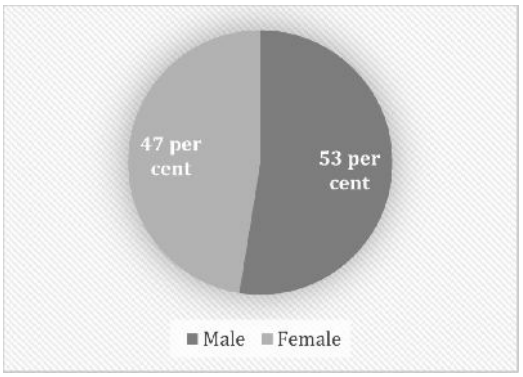

Figure 3: Pie Chart Showing the Gender Distribution of the Respondents (Source: Author's Compilation)

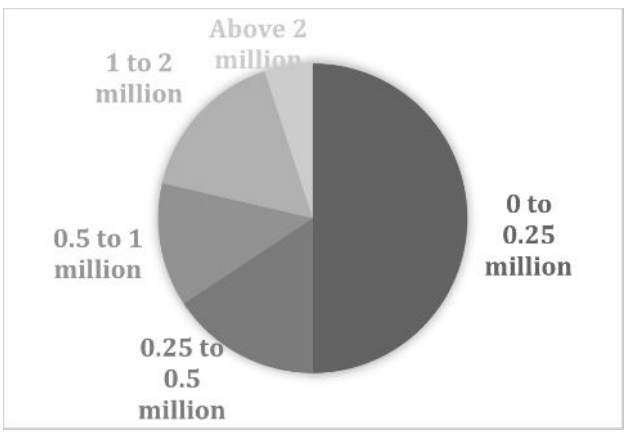

Figure 4: Pie Chart Representing the Income Range of the Respondents (Source: Author's Compilation)

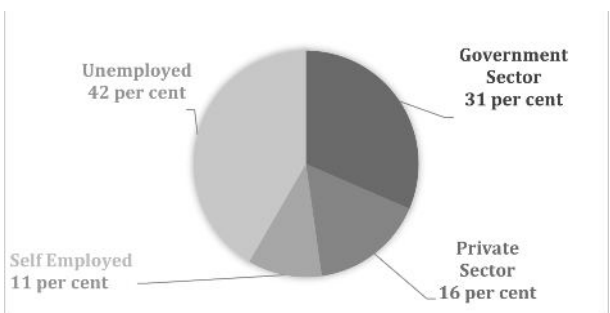

Figure 5: Pie Chart Showing the Occupation of the Respondents (Source: Author's Compilation)

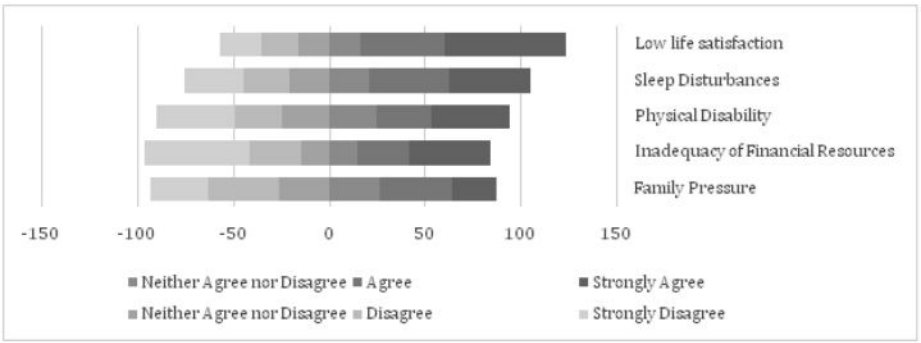

Figure 6: Stacked Bar Chart Shows the Contribution of the Following Personal Factors to Social Disconnectedness (Source: Author's Compilation)

ANALYSIS

Five personal causes were put forward to the respondents for analyzing the same. The same has been represented via Table 1 and Figure 6.

Figure 6 was developed from Table 1.

We can find that 53 respondents were neutral on the fact that family pressure affects social disconnectedness. Whereas 43 respondents believed financial resources do play a big role in social connectedness of an individual. We find out that 41 respondents believed health problems do not affect the social disconnectedness. Ironically the same number of respondents voted against it!

However, since most of the respondents were of age 15-25 years, this data cannot be trusted fully. Nearly 57 percent of the respondents were below 35 years of age. Five non-personal causes were also put forward to the respondents for analyzing the same. The same has been represented via Table 2 and Figure 7.

Figure 7 was developed from Table 2.

Here is what they had to tell:

Most of the respondents believed that work pressure and workplace competitiveness does play an important role in increasing their social disconnectedness.

More focus on work does put them away from interacting with people.

The fact that competition among peers for promotion and other incremental benefits also deteriorate their social life cycle.

But since most of the respondents had an income below 0.25 million indicates that mostly students have a bad social life as compared to working professionals.

Migration to another place is not significantly affecting the social life as most of the respondents were from city and they had mainly migrated to another city for job or for further educational purposes only.

However, there was a neutral opinion about the impact of societal pressure on social disconnectedness. Most of the respondents had a strong opinion, or they strongly agreed that all the above costs i.e., social service cost, physical health cost and cost incurred due to low productivity in work have increased due to social disconnectedness.

And therefore, we can find out that an unemployed male with an average salary between 0-0.25 million residing in a city tends to be the most socially disconnected.

Low life satisfaction and work pressure are the most dominant personal and non-personal causes respectively.

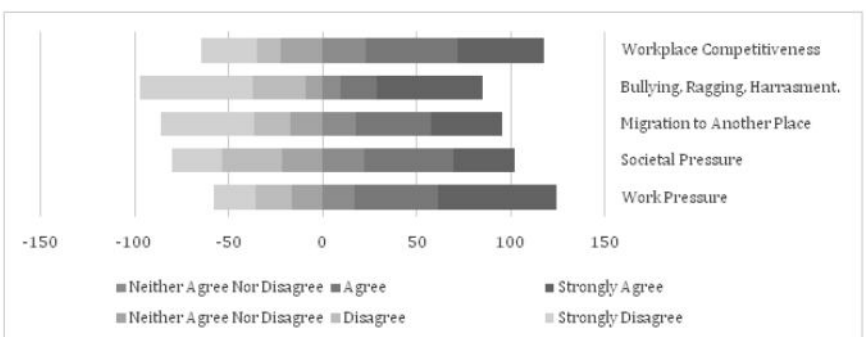

Figure 7: Stacked Bar Chart Shows the Contribution of the Following Non-Personal Factors to Social Disconnectedness (Source: Author's Compilation)

	Family Pressure	Inadequacy of Financial Resources	Health Problems	Sleep Disturbances	Low Life Satisfaction
Strongly Agree	23	43	41	42	63
Agree	38	27	29	42	44
Neither Agree Nor Disagree	53	29	49	42	33
Disagree	37	27	25	24	19
Strongly Disagree	30	55	41	31	22

Table 1: Responses of People to Whom the Form Was Circulated Regarding the Degree to Which the Personal Factors Affected Them (Source: Author's Compilation)

	Work Pressure	Societal Pressure	Migration to Another Place	Bullying, Ragging and Harassment	Workplace Competitiveness
Strongly Agree	63	33	38	56	46
Agree	44	47	40	19	49
Neither Agree Nor Disagree	34	44	35	19	45
Disagree	19	32	19	28	13
Strongly Disagree	22	26	50	60	29

Table 2: Responses of People to Whom the Form Was Circulated Regarding the Degree to Which the Non-Personal Factors Affected Them (Source: Author's Compilation)

LIMITATIONS

There are several limitations to studying the economic cost of social disconnectedness, including:

Difficulty in Measuring Social Disconnectedness

Social disconnectedness is a complex and multifaceted concept that is difficult to measure. It can be influenced by factors such as social isolation, loneliness, and lack of

social support, which can be subjective and difficult to quantify.

Limited Data

There is limited data available on social disconnectedness, which makes it challenging to accurately estimate its economic costs. Most studies rely on self-reported measures of social support and isolation, which can be subject to bias.

Causality

It is challenging to establish a causal relationship between social disconnectedness and economic outcomes. Social disconnectedness may be a result of economic factors such as poverty or unemployment, rather than the cause of them.

Heterogeneity of Populations

Social disconnectedness can affect different populations in different ways, and its economic costs may vary depending on the demographic group being studied. This can make it challenging to generalize findings across different populations.

Context-Dependence

The economic cost of social disconnectedness can depend on the context in which it occurs, such as the level of social support provided by the government or the community. Therefore, the economic costs may vary across different regions or countries.

CONCLUSION

Therefore, we can say that, the economic cost of social disconnectedness can be significant. Research has shown that social isolation and loneliness can have a negative impact on individuals' physical and mental health, which can in turn affect their ability to work and contribute to the economy. For example, people who are socially isolated may be more likely to experience depression, anxiety, and other mental health issues, which can lead to decreased productivity and increased absenteeism.

In addition, social disconnectedness can have a broader impact on society. Communities with high levels of social isolation may experience lower levels of trust and cooperation, which can make it more difficult to form partnerships and collaborations that are necessary for economic growth and development.

Moreover, social disconnectedness can result in increased healthcare costs, as individuals who lack social support may be more likely to experience health problems and require medical treatment.

Overall, the economic cost of social disconnectedness can be significant, both at the individual and societal levels. Policies and initiatives that aim to promote social connectedness and combat social isolation can therefore have important economic benefits.

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> Football infrastructure investments, such as stadium construction and refurbishment, provide a boost to local economies by creating job opportunities, generating revenue, and attracting tourists.

A Study on The Economic Impact of Top Four European Football Leagues

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ABSTRACT

Football is a game that is loved and watched by millions of people across the world. It has become a source of entertainment and a source of income for many people as well. This dissertation aims to explore the economic impact of the top four European football leagues, namely the English Premier League

(EPL), La Liga, Bundesliga and Serie A. The study will investigate the economic contributions of these leagues to their respective countries and will also highlight the research gap that currently exists in this field. The top four European football leagues, namely the EPL (England), La Liga (Spain), Bundesliga (Germany) and Serie A (Italy),are among the most popular and lucrative sports leagues globally. These leagues generate enormous revenues for their respective countries and contribute significantly to the economic growth and development of the regions where they operate. In this paper, we examine the economic impact of these leagues and how they contribute to the growth of the European economy.

KEYWORDS: Football, Economy, Revenue, Leagues, Clubs.

INTRODUCTION

Football, or soccer as it is called in some parts of the world, is the most popular sport on the planet. It is estimated that over four billion people are fans of the game, making it one of the most widely watched and followed activities in the world. In Europe, football is not just a sport but a cultural phenomenon that has a significant economic impact on the continent. The top four European football leagues - EPL, the Spanish La Liga, the German Bundesliga, and the Italian Serie A - are home to some of the biggest football clubs in the world. These leagues generate billions of euros in revenue every year, contributing significantly to the economies of their respective countries.

The English Premier League is the most-watched football league in the world, with a global audience of over three billion people. The league's economic impact is immense, generating approximately €3.3 billion in revenue for the 2019 - 2020 season. The league's popularity has led to a surge in tourism, with fans travelling from all over the world to watch their favourite teams play. The Premier League also employs tens of thousands of people in various sectors, including broadcasting, hospitality, and merchandising.

La Liga, the Spanish football league, is home to two of the biggest football clubs in the world- Real Madrid and Barcelona. The league generates approximately €4 billion in revenue every year, making it one of the most lucrative football leagues in the world. The league's success has also had a significant impact on the Spanish economy, with tourism and other related sectors benefiting greatly from the influx of football fans.

The German Bundesliga is known for its fan-friendly policies, including affordable ticket prices and fan ownership of clubs. The league's economic impact is estimated to be around €4 billion per year, with ticket sales, merchandising, and broadcasting contributing significantly to its revenue. The league also has a reputation for developing young talent, with many of its clubs investing heavily in youth academies.

The Italian Serie A is home to some of the most historic and successful football clubs in the world, including Juventus, Associazione Calcio (AC) Milan, and Inter Milan. The league generates approximately €2 billion in revenue every year, with broadcasting and sponsorship deals contributing significantly to its revenue. The league's success has also had a positive impact on the Italian economy, with tourism and other related sectors benefiting greatly from the influx of football fans.

These leagues generate billions of euros in revenue every year, providing employment opportunities and contributing significantly to the economies of their respective countries. With the growing popularity of football around the world, it is clear that the economic impact of these leagues will only continue to grow in the coming years.

LITERATURE REVIEW

Kieran Maguire (2020): Kieran Maguire's book 'The price of football' provides an in-depth analysis of the financial aspects of football. The book covers a range of topics, including the sources of football club revenue, player wages, transfer fees, and stadium construction costs.

Garcia-del-Barrio, P., and Pujol, F. (2016): In their 2016 article 'The economic impact of football: An analysis of the European football market', Garcia-del-Barrio and Pujol provide an overview of the economic impact of football on the European market. The authors

highlight the importance of football as a source of revenue and employment, both within the industry and in related sectors such as hospitality and retail.

Szymanski, S. (2019): Stefan Szymanski's book, 'Money and football: A soccernomics guide' provides an insightful analysis of the relationship between money and football. The book covers a range of topics, including the impact of money on football success, the business of football clubs, the role of agents and the impact of financial fair play regulations.

Dobson, S., and Goddard, J. (2011): Dobson and Goddard's 'The economics of football' is a comprehensive overview of the economic aspects of football. The book provides a wide-ranging analysis of the football industry, covering topics such as player salaries, transfer fees, club finances, and the role of broadcasting and sponsorship.

Gonzalez-Gomez, F., and Picazo-Tadeo, A. J. (2019): Gonzalez-Gomez and Picazo-Tadeo's study 'The economic impact of football in Spain' examines the economic impact of professional football on the Spanish economy. The study analyses the impact of football on employment, Gross Domestic Product (GDP), and tax revenue, using data from the period 2009-2015.

Késenne, S. (2014): Késenne's article 'The economic impact of professional football in Europe' provides an overview of the economic impact of professional football on the European economy. The author examines the various ways in which football generates economic activity, including the impact of stadium construction and renovation, player transfers, and broadcasting rights.

RESEARCH OBJECTIVES

1. To analyze the economic impact of European football on the local and global economy, including its impact on employment, tourism, and local businesses.
2. To examine the impact of football infrastructure and investment, such as stadium construction and refurbishment, on the local economy.
3. To evaluate the economic impact of player transfers and salaries on the European football market and the local economy.
4. To study the impact of fantasy football on the European Top Four Leagues, including its impact on fan engagement and revenue generation.

RESEARCH METHODOLOGY

1. The study will use secondary data from academic journals, books, and audit reports to analyze the economic impact of the football leagues, stadiums, and associated industries such as broadcasting, tourism, and merchandising.
2. This requires content analysis which involves examining news articles, reports, and other relevant sources to identify key trends, issues, and themes related to the economic impact of the European Top Four Leagues.
3. The data analysis has been conducted using graphical representation and tables.

ANALYSIS AND FINDINGS

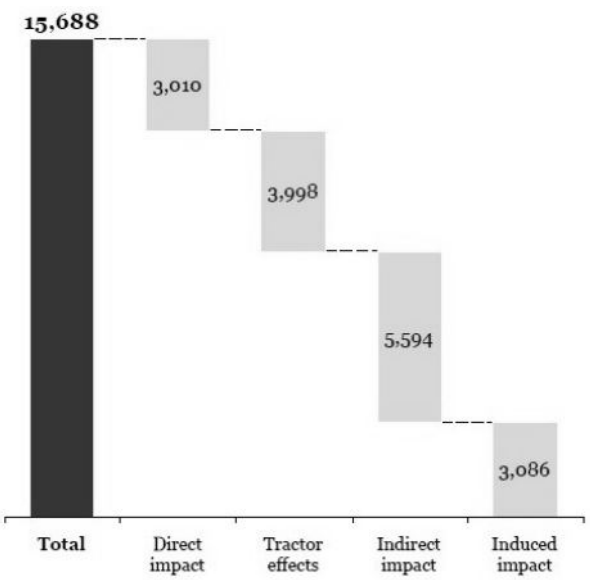

Figure 1: Contribution to National Production by Type of Impact (€Million) (Source: Price Waterhouse and Coopers)

The total income generated by the professional football industry in Spain during the 2016 - 2017 season exceeded €15,688 million, representing 1.37 per cent of GDP. For every € of LaLiga's revenue, an additional €4.2 was generated in the rest of the economy.

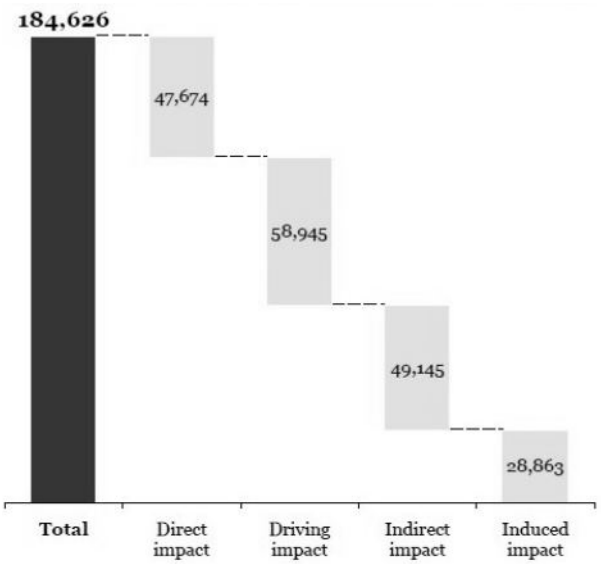

Figure 2: Contribution to Employment by Type of Impact (€Million)
(Source: Price Waterhouse and Coopers)

The total contribution of professional football in terms of employment, which includes direct, driving, indirect and induced impact, was 184,626 people. For every direct job generated by LaLiga around four other jobs were created in Spain.

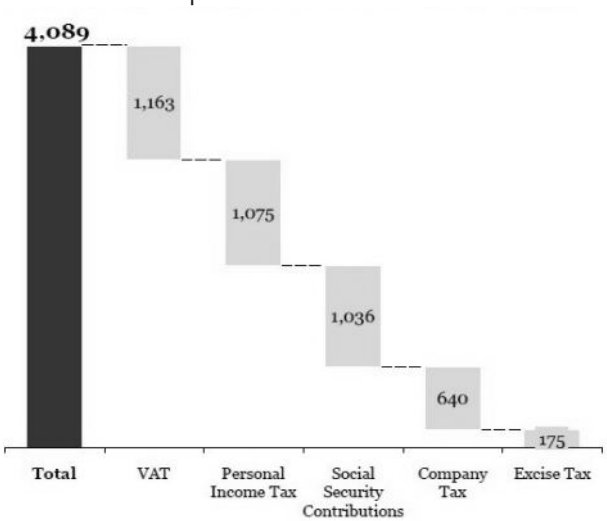

Figure 3: La Liga Tax Contribution and Activities by Tax Type (€Million)
(Source: Price Waterhouse and Coopers)

Football betting in Spain generated €261 million in revenue and supported over 4,000 jobs. During the 2016-2017 season, football-related sports betting in Spain totalled €3,000 million. This resulted in a betting margin of approximately €261 million (amount of money bet minus amount of prizes given). The consumption around the stadium, as well as the expenses incurred by fans for travel and lodging to attend LaLiga matches, brought €1,072 million to bars and created approximately 16,336 jobs. In addition to the impact generated by stadium attendees, LaLiga match broadcasting helped Spanish bars earn approximately €1,226 million and create 19,415 jobs. The attendance of national fans at stadiums throughout the country resulted in an additional €100 million in tourist consumption and the creation of 1,585 jobs in Spain. LaLiga's media impact generates €561 million in revenue and creates 2,900 jobs. Professional football videogame and app sales totalled approximately €217 million, resulting in the creation of 5,700 jobs.

English Premier League

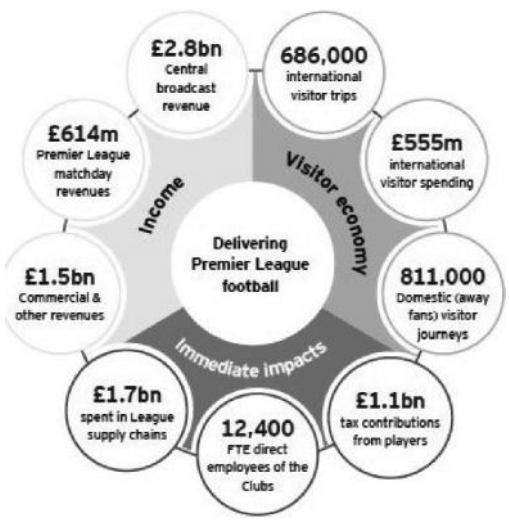

Figure 4: The Economic Impact of Premier League
(Source: Ernst and Young)

The popularity of Premier League football drives substantial economic activity across the United Kingdom(UK). This is supported by the commercial relationships and supply chains that underpin the

League, the visitor economy it sustains and the fiscal contributions it makes.

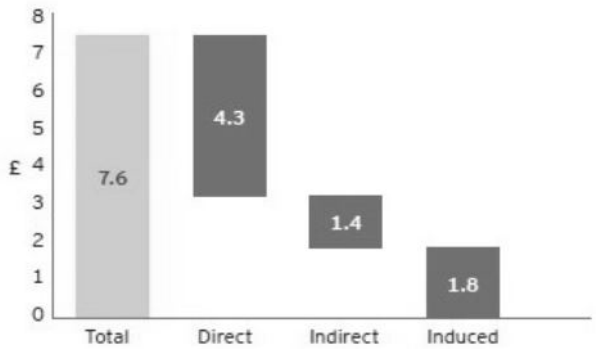

Figure 5: Total Gross Value Added (GVA)Impact of the League, 2016-17 (€Billion) (Source: Ernst and Young)

The League's contribution to the UK's GDPcan be estimated through the Gross Value Added (GVA) it generates. In 2016-2017 this reached €7.6 billion, with the majority (€7.2 billion) resulting from Clubs' operations. This represents a 50 per cent increase since 2013-2014. The chart (Figure 5) illustrates how this GVA contribution is generated through direct, indirect and induced impacts. In 2016-2017, the League directly contributed a total of €4.3 billion in GVA to the UK economy, representing 57 per cent of the total GVA impact. A further €3.2 billion was generated via indirect (€1.4 billion) and induced (€1.8 billion) impacts. A substantial level of economic activity is therefore supported through the supply chains of the League, as other businesses contribute to, and share in the success of Premier League football.

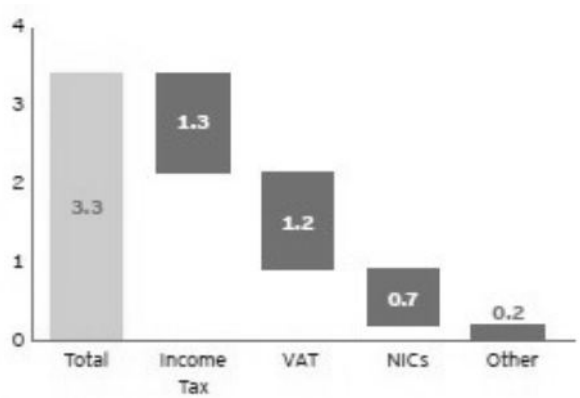

Figure 6: Total Fiscal Impact of the League, 2016 - 2017 (€ Billion) (Source: Ernst and Young)

The diagram depicts how this tax contribution is distributed among major tax revenue sources. The League's tax contribution was largely financed by the players themselves. In total, players are estimated to contribute €1.1 billion in tax, or 34 per cent of the total for 2016-2017, the vast majority of this contribution was made through income-related taxes, which include income tax and national insurance contributions. The next largest tax revenue channel is net Value Added Tax (VAT) payments, which are largely supported by VAT-applicable club revenues, including that applied to broadcast rights agreements.

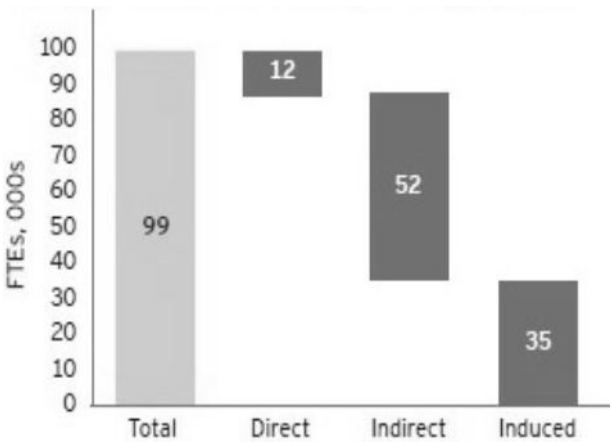

Figure 7: Total Employment Impact of the League, 2016 - 2017, Full Time Equivalent (FTE) Jobs (Source: Ernst and Young)

In 2016-2017, the League's activities supported nearly 100,000 FTE jobs across the UK. This represents a 30 per cent increase over the previous year. Majority of these jobs were supported by the League's extensive supply chains, which accounted for 87,000 jobs both indirectly (52,000) and directly (35,000). Clubs supported 90,300 of the total employment impact, with the Premier League supporting the remainder (8,800).

Bundesliga

CORPORATE TAXES AND DUTIES		
VAT (excluding input tax) as at 31 st December, 2020		480,898,109
Corporate Income Tax		3,956,795
Trade Tax		9,087,754
Other Taxes and Duties		1,944,390
TOTAL	495,887,047	
PERSONAL TAXES AND DUTIES		
Income tax on wages and salaries		745,861,369
Church tax and solidarity surcharge		50,440,025
Social security (pension, unemployment, health insurance)		94,398,781
Social insurance against occupational accidents		30,199,799
TOTAL	920,899,974	
Total corporate and personal taxes and duties minus input tax refunded as at 31st December, 2020 (input tax is an indicator of the company's willingness to invest)	278,401,378	
Outflow of funds from taxes and duties	1,138,385,643	

Table 1: Taxes and Duties (in €)
(Source: DFL)

In the 2020-2021 season, the 18 clubs and limited companies paid more than €1.1 billion in taxes and duties to the financial authorities and social security institutions.

LICENSES	2019-20	2020-21
Full-time staff	4,119	4,381
Trainees	58	56
Part-time staff	1,143	1,238
Temporary workers	5,631	4,609
TOTAL	10,951	10,284

SUBSIDIARIES	2019-20	2020-21
Full-time staff	752	1,079
Trainees	23	26
Part-time staff	560	537
Temporary workers	2,511	2,479
TOTAL	3,846	4,121

CONTRACTORS	2019-20	2020-21
Security companies	8,302	1,224
Caterers	8,044	608
Medical services	997	271
Other	2,919	614
TOTAL	20,262	2,717
GRAND TOTAL	35,059	17,122

Table 2: Number of Staff
(Source: DFL)

The fact that majority of matches in the 2020-2021 season had to be played behind closed doors due to the corona virus pandemic had a significant impact on the number of people employed in professional football. The clubs directly employed 10,284 people. A further 4,121 people were employed at the clubs' subsidiaries, for a total of 17,122 people directly employed in German professional football. In other words, the number of people directly employed in professional football remained relatively stable in comparison to previous years. However, there was a noticeable decrease in the number of indirect employees, the majority of whom are involved in and around the matches. With stadiums largely remaining empty, significantly fewer people were required in areas such as security and catering in particular.

Serie A

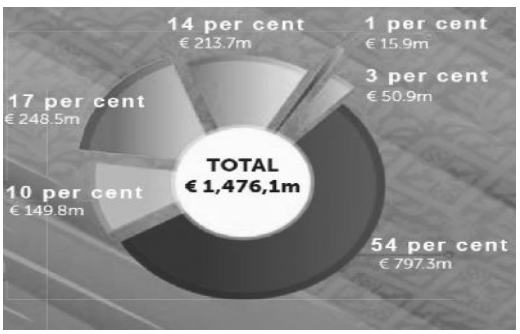

Figure 8:Tax and Social Security Contributions (Source: PWC Report Calcio)

The growth of the aggregate tax and social security contribution of Italian professional football continues, in 2019, it came close to €1.5 billion, up 5.5 per cent compared to 2018. The highest item continues to be withholding taxes, which weigh in at 54 per cent of the total (compared to 51 per cent in 2018), amounting to €797.3 million. The growth in employee income also continued, rising between 2018 and 2019 by 11.9 per cent to over €1.9 billion, while the number of taxpayers decreased (12,055, compared to 12,345 in 2018). The number of employees with incomes above €200,000 reached 1,150. Professional football continues to represent the main sports system from the point of view of tax contributions, accounting for 68.7 per cent of the total revenue generated by the Italian sports sector, a figure that is up from the 68.1 per cent recorded in 2018. Moreover, the significant growth of the Instituto Nazionale Previdenza Sociale (INPS) social security contribution continues, more than doubling between 2006 and 2020 (from €74.2 to €156.5 million).

From 2016 to 2021, tax revenue from football showed steady growth, increasing from €132.5 million to €303 million. This represents an average annual growth rate of 28.2 per cent.

The betting margin generated by football amounted to approximately €261 million, which contributed to creating 4,118 jobs.

Betting

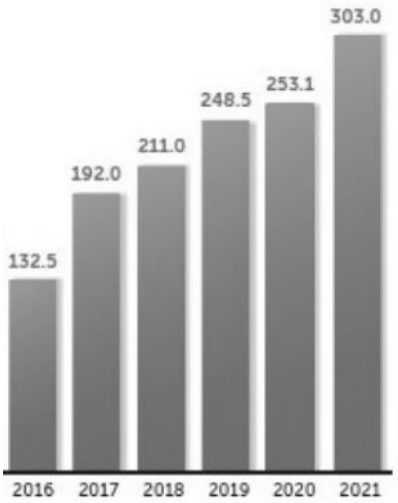

Figure 9: Tax Revenue from Betting on Football (€ Million) (Source: PWC Report Calcio)

CONCLUSION

With such a rich history and a passionate fan base, European football continues to captivate and inspire people around the world. The economic impact of the top four European football leagues is significant, both locally and globally. Through the analysis of various factors such as football infrastructure, player transfers and salaries, and the impact of fantasy football, it is evident that the European football market plays a vital role in the overall economic activity of the region.

Football infrastructure investments, such as stadium construction and refurbishment, provide a boost to local economies by creating job opportunities, generating revenue, and attracting tourists. The transfer of players and payment of high salaries not only supports the growth of the European football market but also generates a spillover effect on local economies through increased spending on goods and services. Moreover, the rise of fantasy football has increased fan engagement and revenue generation for the European Top Four Leagues. This has not only created new

revenue streams but also served to strengthen the bond between football fans and their teams, boosting local economies and the wider football industry as a whole. The continued growth and success of the European football market will only further solidify its importance as a key economic driver in the region and beyond.

RECOMMENDATIONS

1. Balancing wage structures- Implement wage structures that align with club revenues. Clubs should exercise restraint in offering exorbitant player wages, ensuring financial stability while retaining the ability to attract top talent.
2. Global expansion with local relevance- While expanding globally, maintain a strong connection with local communities. Engaging fans in different regions through localized events, social media, and merchandise can create new revenue streams.
3. Transparency and governance- Clubs should adopt transparent financial reporting practices. Enhanced transparency not only builds trust with fans and stakeholders but also attracts potential investors and partners.

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> The significance of digital marketing for businesses is the ability to customize the marketing strategy to fit the budget and effectively reach a larger audience for less money.

Analyzing Consumer Perception towards Digital Marketing:
Empirical Insights from Kolkata Metropolis

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ABSTRACT

The market potential for electronic commerce (e-commerce) is said to have a huge reservoir as can be examined via close observation into the exponential expansion of key players which thrive in the milieu of e-commerce. In this light, it has been observed that digital marketing has influenced the lifestyle of the modern society. The present research study seeks to examine and analyze the perceptions of consumers towards digital marketing through the

application of 'Technology Acceptance Model' (TAM). To this end, a survey among 262 respondents in the metropolitan setting of Kolkata has been conducted and their responses analyzed by the use of Statistical Package for the Social Sciences(SPSS). The findings reveal positive perception among the surveyed consumers towards digital marketing.

KEYWORDS: Digital Marketing, Technology Acceptance Model, Attitudes and Behaviour, Kolkata.

PREFATORY OBSERVATIONS

As of January 2023, India had a population of over 1,417 million, thereby becoming one of the world's most populated countries. The penetration of Internet in India is around 50 per cent which makes around 692 million internet users and gives India a global rank of two among the internet users worldwide. This rise of internet penetration in India has led to a significant growth of various digital industries like e-commerce, digital advertising, et al. which has induced the Indian market place to shift to the digital platform. These statistics simply give a glimpse of how substantial the target audience is in India and these numbers can keep increasing with time for digital marketing companies in India. Let us now look at how digital marketing works with the help of the picture given (Figure 1).



Figure 1: How Digital Marketing Works (Source: Simplilearn.com)

Digital marketing means the promotion of products, services, and brands on digital platforms like social media sites, search engines, emails, and other electronic media. The significance of digital marketing for businesses is the ability to customise the marketing strategy to fit the budget and effectively reach a larger audience for less money. Even approximately 10 years ago, marketing a small company's goods was a highly challenging undertaking. Most expensive marketing strategies were simply out of their price range, leaving them with little choice except to use low-level strategies with virtually little guarantee of success.

However, after most small businesses established an online presence in order to improve their marketing, they were able to not only reach a larger target market but also measure the conversion rate, the proportion of interested consumers who view their ads or visit their website and turn into leads, subscribers, and ultimately buyers, in real time. Additionally, at a much lower cost, they could offer better customer service, get customer feedback more quickly, and become highly accessible to their audience.

REVIEW OF BACKGROUND LITERATURE

Ramesh and Vidhya (2020), discovered a considerable effect of customer perception on digital marketing, as well as the effectiveness of digital marketing on online consumer purchasing behaviour. It was also shown that content marketing is the most favoured digital marketing method for influencing consumers to make online purchasing decisions.

Sharma (2020), studied the difficulties and viewpoints of internet marketing as a result of COVID-19. This study looked at the impact of the epidemic on everything from toilet paper to baby gear, pet food, and many other daily necessities. However, some businesses were able to operate using social commerce, which is marketing through e-commerce and social media, 46 percent of the users stated that social networks are crucial for knowledge exchange and product selection.

Verma (2018), advocated that digital marketing techniques such as search engine optimization (SEO),

search engine marketing (SEM), content marketing, influencer marketing, content automation, e-commerce marketing, campaign marketing, and social media marketing can significantly benefit businesses. It has been proved that we are all connected via WhatsApp and Facebook, and the increased use of social media is offering new potential for digital marketers to attract customers via digital platforms. Understanding the intentions of consumers is crucial because it provides a greater knowledge of what motivates users to publish content about a brand or store.

Zeeshan and Imam (2016),focused on the factors which online buyers take into consideration while shopping online. It aided in determining the impact of the e-market on customers' purchasing patterns, as well as how their security and privacy concerns about online marketing influence their online shopping behaviour. The study also included several critical inputs that prepared marketers to make online marketing more profitable and secure by adding value to existing offerings.

Dara (2016), claimed digital marketing is limitless. If user needs are prioritised, digital marketing may be more successful. All digital marketing initiatives should be centred around the guiding principles of 'test, learn, and evolve.' To determine the best strategy for improving digital marketing performance, businesses should develop creative customer experiences and targeted media strategies.

Thakur (2015), advocated that internet is one of the ways which is changing the consumers shopping and buying behaviour. Because most consumers utilise the internet to buy products and compare costs and features, e-companies should comprehend the internet users' attitudes regarding online shopping. The potential of online marketing is becoming more popular in India as internet literacy grows. Among the internet retail companies are Flipkart, Snapdeal, Amazon.com, and eBay.

In the present research study, an attempt has been made to study the attitudes and behaviour of consumers towards digital marketing and hence it is almost imperative to discuss about TAM. TAM is an extension of TRA (Theory of Reasoned Action), which was brought into existence by Ajzen and Fishbein (1975). The TAM is 'an amelioration over TRA' as it is rooted on dimensions like 'Perceived Usefulness' (PU), 'Perceived Ease of Use' (PEOU) and Behavioural Intention (BI), all the three concepts defined by Fred Davis from 1989 to 1993. TAM also includes'Attitude towards Usage' (ATU) which was first coined by Ajzen and Fishbein (2000). TAM also offers a real flexibility to include independent constructs most notably 'Subjective Norm', which was first introduced by Taylor and Todd (1995). Besides, the addition of the construct of COVID-19 would add novelty to the research model of TAM.

OBJECTIVES OF THE STUDY

1. To examine the attitude and behaviour of customers towards digital marketing.
2. To explore whether perception of consumers towards digital marketing are dependent upon demographic variables.

THEORETICAL FRAMEWORK AND HYPOTHESIS FORMULATIONS

Figure 2 represents the TAM. The research model comprises of four constructs, which has been developed and presented below.

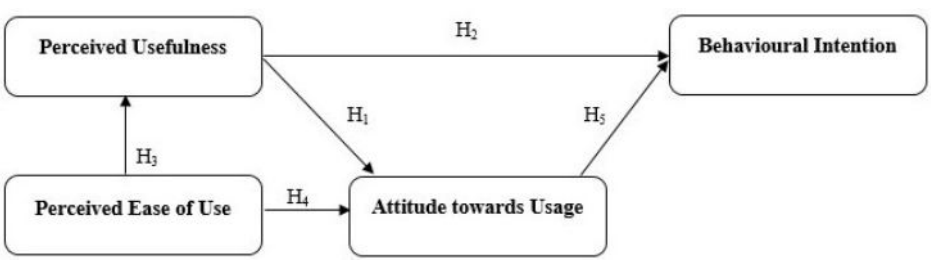

Figure 2: Research Model
(Source:Author's Compilation)

The current research study purports to develop a research framework for the perception of consumers towards digital marketing, pillared on a conventional TAM. For this purpose, the following hypotheses have been developed and substantiated through the research model represented in Figure 2.

H_1- 'Perceived Usefulness has a positive influence on Attitude towards Usage'

H_2- 'Perceived Usefulness has a positive influence on Behavioural Intention'

H_3- 'Perceived Ease of Use has a positive influence on Perceived Usefulness'

H_4- 'Perceived Ease of Use has a positive influence on Attitude towards Usage'

H_5- 'Attitude towards Usage has a positive influence on Behavioural Intention'

RESEARCH METHODOLOGY

The data methodology consists of the use of both primary and secondary data. Secondary data has been used by accessing various authentic and reliable databases like Indian Citation Index (ICI), 'Basically Available, Soft State, and Eventual Consistency'(BASE), Elton B. Stephens Company (EBSCO) and Google Scholar. The process of primary data collection has been done through a structured questionnaire, wherein a survey has been conducted among 270 customers who are all residents living in different regions of Kolkata. The questions in the questionnaire have been adopted from previous researches (Mitra et al., 2021-2022). The questionnaire contained 16 questions under four segments, namely PU, PEOU, ATU and 'Behavioural Intention' (BI). A 'Five-point Likert scale', where '(5=Strongly Agree; 4=Somewhat Agree; 3=Neutral; 2=Somewhat Disagree and 1=Strongly Disagree)' has been used to measure the concepts. Eight responses were rejected due to minor errors and incomplete responses, after which the final valid responses stood at 262.SPSS version 23 has been used in performing the analysis.

ANALYSIS AND PRESENTATION OF DATA

Demographic Statistics

Figure 3 represents the various demographic variables of the respondents like gender, age, income and occupation and their break up.

Demographic Construct	Classification	Population Statistics	Percentage
Gender	Male	144	0.55
	Female	118	0.45
	TOTAL	**262**	**1.00**
Age	Below 18	2	0.01
	18-24	92	0.35
	25-34	63	0.24
	35-44	56	0.21
	45-55	49	0.19
	TOTAL	**262**	**1.00**
Current Occupation	Student	87	0.33
	Service	90	0.34
	Business	51	0.20
	Others	34	0.13
	TOTAL	**262**	**1.00**
Monthly Income	Less than 10000	4	0.01
	10001-25000	55	0.21
	25001-50000	78	0.30
	50001-100000	68	0.26
	Above 100000	57	0.22
	TOTAL	**262**	**1.00**

Figure 3: Demographic Statistics
(Source: Primary Data)

It is observed that the number of male respondents exceed the number of female respondents. Most of the respondents belong to a very young age group in the age bracket of 18-24 years and 25-34 years. A major chunk of the respondents is either students or engaged in various services and have a moderate level of income.

Reliability Analysis

A reliability analysis has been conducted to check the internal validity and consistency of the items used for each factor. For conducting reliability statistics, International Business Machines (IBM) SPSS version 23 has been used. As per Nunnally (1978), 'questionnaire for various factors is judged to well reliable measurement instrument, with Cronbach's Alpha scores being all above 0.6.' The reliability statistics prove that the 'Cronbach's Alpha' score were above the standard value of 0.6, thus, validating that all the 16 items fit perfectly in our questionnaire and support our proposed research model. Cronbach's Alpha is actually a measure of internal consistency of items, implying the related closeness of a set of items as a group. In the present study, it serves as a basis for measuring the scale reliability of the items used in the questionnaire.

Cronbach's Alpha	Cronbach's Alpha based on Standardized Items	Number of items
0.852	0.852	16

Table 1: Reliability Statistics for All Variables (n=16)
(Source: Primary Data)
Correlation Analysis

Factor		PEOU	PU	ATU	BI
PEOU	Pearson Correlation Sig. (2-tailed) N	1	0.749** .000 262	0.773** .000 262	0.692** .000 262
PU	Pearson Correlation Sig. (2-tailed) N	0.749** .000 262	1	0.788** .000 262	0.728** .000 262
ATU	Pearson Correlation Sig. (2-tailed) N	0.773** .000 262	0.788** .000 262	1	0.705** .000 262
BI	Pearson Correlation Sig. (2-tailed) N	0.692** .000 262	0.728** .000 262	0.705** .000 262	1

Figure 4: Representation of Correlation Matrix
(Source: Primary Data)
Regression Analysis

After conducting the reliability analysis, it is vital to find out the relationship between the six factors as well as to examine the hypotheses of our proposed research model. To serve this purpose, we have conducted a correlation test by using SPSS version 23. The figure shows that the correlation between PEOU, PU, ATU, and BI are positive and significant, thereby, confirming, our original hypotheses made in the literature related to TAM. The correlation statistics has been presented in Figure 4.

To further bolster our research findings, we have also conducted a regression statistic to test the different proposed hypothesis. First, we examine the relationship between H_1 and H_4.

Table: Predictors: PU & PEOU → Dependent Variable: ATU

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of Estimate
1	.876[a]	.717	.713	.60436

a. Predictors: (Constant), PEOU, PU

Coefficients[a]

Model	Unstandardized Coefficients		Standard Coefficients		
	B	Std. Error	Beta	t	Sig.
1 (Constant)	.378	.193		1.534	.143
PEOU	.363	.050	.381	6.826	.000
PU	.587	.057	.553	10.342	.000

a. Dependent Variable: ATU

Figure 5: Regression Statistics
(Source: Primary Data)

Asit can be evidenced from Figure 5, the value of R square indicates that the two predictors (PU, PEOU) explain 71.7 per cent variations in ATU. It explains the rationality of this model, albeit there might be other oblivious factors having an impact on the respondents' ATU. The standardized coefficients (β) show that PU (β=0.553) has a larger impact than PEOU (β=0.381). Also, the Sigma (Sig.) indicates that both of the predictors have a significant and positive impact on ATU scores being less than 0.001 level.

Predictors: PU & ATU → Dependent Variable: BI

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of Estimate
1	.895[a]	.724	.707	.57964

a. Predictors (Constant), PU, ATU

Coefficients[a]

Model	Unstandardized Coefficients		Standard Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	.319	.186		1.770	.093
PU	.599	.072	0.558	8.768	.000
ATU	.383	.067	0.394	6.425	.000

a. Dependent Variable: BI

Figure 6: Regression Statistics (Source: Primary Data)

In Figure 6,it is confirmed that all the four predictors namely PU and ATU had a significant and positive influence on BI, with (β=0.558) and (β=0.394) respectively for each predictor. Each of the four predictors have Sig.=0.

Finally, we conduct a regression analysis to examine H_3.

Table: Predictors: PEOU → Dependent Variable: PU

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of Estimate
1	.809[a]	.687	.690	.56438

a. Predictors: (Constant), PEOU

Coefficients[a]

Model	Unstandardized Coefficients		Standard Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	.378	.193		1.534	.143
PEOU	.363	.050	.381	6.826	.000

a. Dependent Variable: PU

Figure 7: Regression Statistics (Source: Primary Data)

Finally, one more determination of a regression model was done to test our fourth hypothesis, i.e., influence of PEOU on PU. As evidenced from Figure 7, the value of R Square is 0.687 which represents that PEOU explains 68.7 per cent variations in PU. We also notice that Standard Coefficient value is (β=0.381), PEOU had a significant and positive impact on PU. Hence, our proposed research model along with the hypotheses are rightly proven correct as evidenced by the robust examination and analysis.

Chi-Square Test

It is an important objective of our current research study to explore the relationship between various demographic variables of consumers and their perception towards digital marketing. Chi-Square Test would help us to see whether the observed frequencies in the data results are supporting the relationships or not.

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	2.331[a]	4	.782
Likelihood Ratio	2.377	4	.769
Linear-by-Linear Association	1.634	1	.843
N of Valid Cases	334		

Figure 8: Gender and Perception of Consumers towards Digital Marketing (Source: Primary Data)

As evidenced in Figure 8, the value of Chi-Square (p=0.782) which is greater than the acceptable value of 0.05. This would mean that there is no relationship between gender and perception of consumers towards digital marketing and thus, gender does not have any significant impact on attitudes and behaviour of consumers towards digital marketing.

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	21.933[a]	2	.000
Likelihood Ratio	27.616	2	.000
Linear-by-Linear Association	17.280	1	.000
N of Valid Cases	334		

Figure 9: Age and Perception of Consumers towards Digital Marketing (Source: Primary Data)

Figure 9 shows us the association between age and consumers perception towards digital marketing. We see that $p<0.05$ ($p=0.000$) which implies that there exists a significant relationship between the two.

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	16.372[a]	2	.000
Likelihood Ratio	17.823	2	.000
Linear-by-Linear Association	5.764	1	.000
N of Valid Cases	334		

Figure 10: Monthly Income and Perception of Consumers towards Digital Marketing (Source: Primary Data)

Figure 10 is the representation of the association between income and perception of consumers towards digital marketing. We see that $p<0.05$($p=0.000$) which implies that there exists a significant relationship between the two.

DELIBERATION OF RESEARCH FINDINGS

According to the research findings, PU had a significant impact on ATU. It was also observed that PU was significantly related to BI. PEOU was significantly related to ATU. The findings of the present research study also proved that PEOU had a strong influence on PU. Ultimately, it was also arrived at that ATUhas been prodigious in shaping up the BI of consumers.

CONCLUSIVE REMARKS

Digital techniques in marketing have become a vital part of the promotional strategies of many companies, even for small business owners. There are many highly economical and efficient ways to promote a company's products or services. Digital marketing has no boundaries and allows the business to use any devices such as smart-phones, tablets, laptops, digital billboards, and social media platforms like social networking sites, SEO, videos, content, e-mail, and a lot more to promote the company itself and its products and services. Digital marketing may succeed more if it considers user needs and the shopping experience of the user as a top priority.

It is important to remember that instant results from digital marketing will not come without a proper attempt or without proper trial and error over a reasonable period. The key here is to 'test, learn and evolve,' which should be at the heart of all digital marketing initiatives. Companies should try to create new and innovative customer experiences, keep trying specific strategies for media to identify the best promotional method and most importantly keep updating themselves with the latest trends and discoveries in marketing technology.

RECOMMENDATIONS AND SUGGESTIONS

1. Target Application Marketing- It has also been seen that mobile marketing is an area where companies need to target as 91.9 per cent of our respondents said that they access the internet through their smartphones. If the company is not focusing on launching a mobile-friendly application or even making their websites mobile-friendly, then they will be missing out on a massive amount of traffic generated from cell phone users. Application marketing (App marketing) is another digital marketing tool that is gathering a lot of interest and can prove to be a vital digital marketing tool in the near future.
2. Targeting the Right Customers- The efficiency of the mobile marketing technique is very effective and essential as it gives rapid growth. However, the main thing on which the marketers should focus is

finding the right customers. This target can be achieved with ease by digital marketing tools. For the past two years, there has been a lot of talk about dynamic content and its value for the marketing industry. It is expected that there will be continuous changes and new shaping of the general perception of information. In today's world, quality is much more important than quantity. Digital marketing in the near future aims to resolve that and much more.

FUTURE SCOPE

One of the primary constraints that any researcher may face is the technical understanding of the term 'digital marketing' among participants. As a result, a proper explanation of technical and key terms needs to be stated in the questionnaire to the respondents. As the individuals' responses could not be solicited in-person, there is a potential that their behaviour could not have been as accurately analyzed. This could be countered by direct face to face interviews as well as more qualitative research like personal and focus group interviews. The study has been conducted in selected areas of Kolkata only. It does not touch upon the global aspect and thus provides a restricted viewpoint. Furthermore, the sample size may be inadequate to represent the entire population and bring out the nature of the topic, which can be increased by surveying a large pool of participants, which will ensure enhancement of the present research endeavour.

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> A space where we can grow, prosper, and have fun at the same time is the other name for the Metaverse.

A Study on Metaverse and Its Application in the Banking Sector

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ABSTRACT

The paper attempts to gain insight into a futuristic concept called Metaverse that would be eventually adopted by us, enabling an element of simplicity and fun in our day-to-day activities. Imagine running late for a very important meeting because the traffic has taken a toll or a bad network interrupting your video calls with your loved ones. Now imagine a platform that would

enable you to conduct that meeting or chat with your loved ones on a real-time basis, the only difference being that our avatars would meet in Virtual Reality (VR) with the help of VR headsets and would interact as if we were together. This article includes the basics of Metaverse, how it will reshape the world, and how the banking sector, which has several voluminous transactions every day, will benefit from it.

KEYWORDS: Meta, Kiyaverse, VR Headsets.

INTRODUCTION

The Metaverse is a VR platform that is believed to have huge potential in the future. It can be defined as a parallel universe, where avatars would replace our physical selves and the activities would be conducted in a virtual mode. The Metaverse is a system rather than a place. It has the scope of continuous growth and presents opportunities to increase interaction among people. The next major question that arises would be, 'How is Metaverse created and how will it affect our lives?' The use of various technologies and the labour put behind the development of Metaverse makes it what it is at the present date.

LITERATURE REVIEW

Metaverse and Banking Industry (2023) The Year of Metaverse Adoption, 2022: An article by Vivek Dubey, Azher Mokashi, Saumya Ranjan Pradhan, Paresh Gupta and Rohit Walimbe

The article describes Metaverse as an interconnected virtual world that uses the concept of avatars, making it quite different from the internet. It emphasizes the importance of Metaverse in banking, how large chunks of data can be managed efficiently, and how security breaches can be minimized. It also states that it will lead to the growth of Artificial Intelligence (AI) and Robotics, thus changing the outlook of people towards the world of Augmented Reality (AR) and Virtual Reality. AI Robots, who would assist us in texting and communicating with the other person through our virtual selves, may replace the present-day Short Message Service (SMS), online texts and chatbots.

TechTarget: What is the Metaverse? An Explanation and In-Depth Guide,2022: An article by Linda Tucci

The article describes Metaverse as the inevitable solution of the internet. It aims to explain where the nascent technology stands in the present day and where it is headed. The term became a household name when Facebook rebranded its corporate identity to Meta and announced plans to invest ₹830 billion in the new technology. The article has brought up the critical question of whether people would be willing to spend hours a day in a headset and visiting the virtual world. The article also states how the term Metaverse was first introduced in the book Snow Crash, a science fiction novel by Neal Stephenson in 1992, that discussed the concept of virtual reality and how our lives would be affected by the adoption of Metaverse.

Snow Crash (1992), a novel by Neal Stephenson, is set in a dystopian future, where the world was recovering right after an economic downfall. The story is based on a virus and a person who tries to save the world from it. The villain Bob Rife creates a narcotic called Snow Crash, and at the same time, creates a virus in real life that has the same destructive abilities. Snow Crash uses an ancient language that can reprogramme the human brain, which is how Bob wishes to control the world, by spreading the virus and taking control. The people who used Snow Crash in the virtual world would end up getting hurt in the real world as well. That is how the author established a connection between both worlds and how one world could negatively influence the other.

OBJECTIVES OF THE STUDY

1. To undertake a study on the concept of Metaverse and its uses.
2. To study the involvement of companies towards the investment and development of Metaverse.
3. To study the application of Metaverse in banking, the risks and benefits associated and how it would change the conventional form of banking.
4. To take up a case study on Kiyaverse- the Metaverse lounge of Kiya.ai.

RESEARCH METHODOLOGY

Sources of Data

Primary Data

1. Structured Questionnaire
2. Use of Pie Charts, Tables, Graphs
3. Multiple choice questions

Secondary Data

1. Articles
2. Websites
3. Novel

CONCEPTUAL FRAMEWORK

Basic Concepts

Metaverse allows us to conduct real-life activities like attending meetings, and concerts, conducting businesses with virtual currency, opening and closing accounts, and visiting places all through the virtual mode. Presently, we have platforms like Google Meet, Zoom, WhatsApp, et al. which allow us to meet and communicate with many others online. But these platforms also have their own limitations like network connectivity issues, insufficient bandwidth, monotonous ways of conducting meetings, et al. In the Metaverse, this scenario would be different. With the help of AR, which combines the virtual world with real life, and VR, which is a virtual space that can be accessed through technology, Metaverse would allow our avatars, virtual representations of our physical selves, to interact with the avatars of others in a virtual universe. Some people have also predicted that Metaverse has the potential to be a trillion-dollar company, which is bigger than the Gross Domestic Product (GDP) of some of the major developing nations. With such a big statement, it thus becomes important for us to know the resources required to create the Metaverse:

1. **VR**

It can be described as a parallel universe with the difference being that everything would be present in the online mode. We can talk, play games, buy groceries et al. all with the help of VR glasses and our avatars. Games like Axie Infinity, Minecraft, Grand Theft Auto, et al. have all leveraged this concept to their benefit. It allows us to visit numerous places all within the span of a few seconds.

2. **AR**

It can be described as a blend of the virtual world and the real world. Games where we can see the virtual characters or the objects in our real world are examples of AR where the game makes use of our surrounding to operate.

3. **Blockchains and Cryptocurrencies**

Since the Metaverse will be different from reality, we cannot use the physical currencies that we use presently. Blockchains and cryptocurrencies can be deemed as major assets to the Metaverse. A blockchain is a form of storage that uses a trusted and decentralized software for storing data linked in such a way that making changes in any one block of data ultimately leads to the alteration of the entire blockchain. This is a systematic and reliable form of data storage that minimizes data breaches. Cryptocurrencies are a form of digital currency that would replace physical money in the Metaverse.

USE CASES OF METAVERSE

Shopping

The current shopping options that we have are either visiting the store physically or buying the product online. Both of these things would require us travelling to the real store or log in to the application or the website of the store. In the Metaverse, we can access the product in real time. With the help of simulations, we can even touch or feel the product.

Video Games

Axie Infinity is one such popular video game that uses the concept of Metaverse to enable the players to visit the virtual world and enjoy the game. The gaming industry is leveraging this concept largely and companies are investing huge amounts to gain the upper hand in this technology.

Banking Activities

The banking activities such as withdrawal and deposition of money, account opening and closing, loan inquiry, interest rate queries that are currently being performed in the physical branches, apps and websites of banks can now be performed through the Metaverse. Employees can interact with the customers through the virtual world with the help of their avatars and the customers too can login with their credentials, which again would be stored in a decentralized format in the blockchain. These credentials would not be shared with anyone, thus minimizing the chances of data breach or leak.

HOW ARE VARIOUS COMPANIES RECOGNIZING THE POTENTIAL OF METAVERSE?

1. Microsoft- It is one of the largest companies and is investing hugely in Metaverse. In the month of January 2022, it announced that it would be acquiring Activision Blizzard, a major game developer, which has created games like 'Call of Duty' (COD). This would mark the beginning of the willingness of the company to approve of the upcoming technology.
2. Meta- Meta, which was previously known as Facebook, announced in the year 2021 its revolutionary decision of renaming itself to Meta. It was done to gain an upper hand on the budding technology and welcome the virtual reality. Meta has invested a total of ₹830 billion into acquiring and developing both hardware and software that will be used to provide VR capabilities within the Metaverse. The company also plans to invest in AR, another emerging technology with a promising future. However, some people are questioning their data safety as allowing Meta to keep a track of their activities which would mean that it has the discretion to collect information on the user and use it to its benefit and market its products later on.

METAVERSE IN THE BANKING SECTOR AND HOW ITS APPLICATION CAN INFLUENCE BANKING ACTIVITIES

Concept

Metaverse in the Banking sector gives it an edge over the increasing competition. Just like the Centralised Banking System (CBS), the Metaverse would enhance the storage, retrieval, transfer, and management of data. There are many customers of the bank for whom it is not possible to visit the physical branches of the banks because of their busy schedules. In Metaverse, with just the click of a button, these customers can access these banks virtually, and with the help of the login credentials, they can conduct banking transactions with ease. Sensitive personal data like login credentials and passwords are kept safe in the virtual world.

A CASE STUDY ON KIYAVERSE - THE METAVERSE LOUNGE OF KIYA.AI

Concept

Kiyaverse has been developed by Kiya.ai, a financial technology(FinTech) company. It provides digital solutions to governments and financial institutions. With the help of VR headsets, it has enabled a 360-degree view of the banks in the virtual world from wherever we are. In order to avail the banking services online, we need to create our own avatars, which would represent us virtually and have their own login credentials that would ensure a secure digital banking experience.

The Functioning of the Kiyaverse

The Kiyaverse mainly functions in two phases:

a. The first phase will allow banks to extend their services to their clients, employees and partners and would include services like relationship manager, peer avatars and robot advisors. It will take advantage of the AI technology so that virtual assistants can guide us in the banks.

b. In the second phase, which is a more futuristic one, it plans to create their own tokens, Non-Fungible Tokens (NFTs) and blockchain-based payment systems. NFTs can be described as unique digital identifiers, which use the concept of blockchain to store data among thousands of computers in such a way that the information is not controlled by any one system but is spread across all the systems. NFTs cannot be copied or substituted, and they authenticate the user's actions in the bank.

Functions Offered by the Kiyaverse

1. Services like opening and closing of accounts without visiting the branch physically.
2. Keeping a track of our spending habits as these virtual banks would provide assistants who would advise us on finance related matters.
3. Checking our credit scores and account balance.

DATA, ANALYSIS, AND FINDINGS

Gender

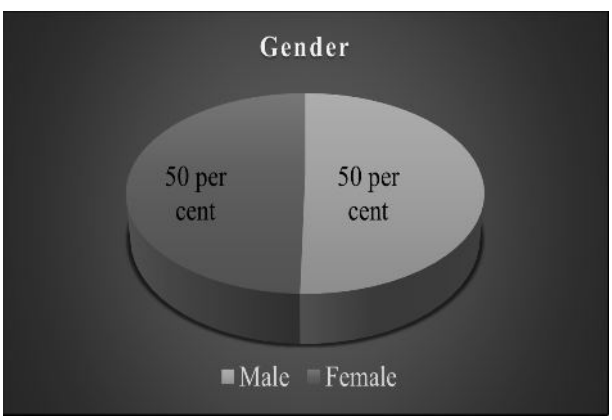

Figure 1: Pie-Chart Depicting the Gender Ratio of the Respondents (Source: Primary Data)

A total of 131 respondents were selected for the survey. Out of them 50 per cent were male and 50 per cent were female.

Age of the Respondents

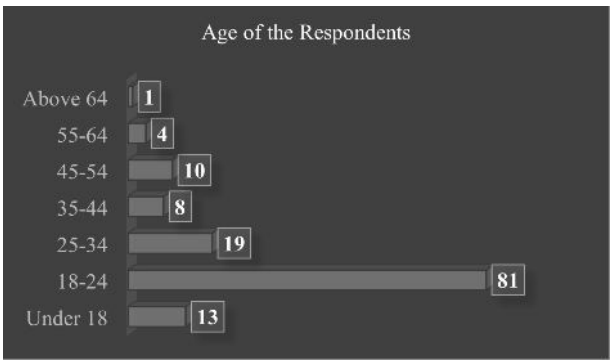

Figure 2: Graph Depicting the Age of the Respondents (Source: Primary Data)

59.56 per cent of the respondents fall in the age group of 18-24, 13.97 per cent fall in the age group of 25-34, 9.56per cent fall under 18, 7.35 per cent fall between 45-54, 5.88per cent fall under 35-44, 2.94 per cent fall under 55-64, and 0.74 per cent falls under the category of above 64.

Awareness about the Concept and Its Related Technology

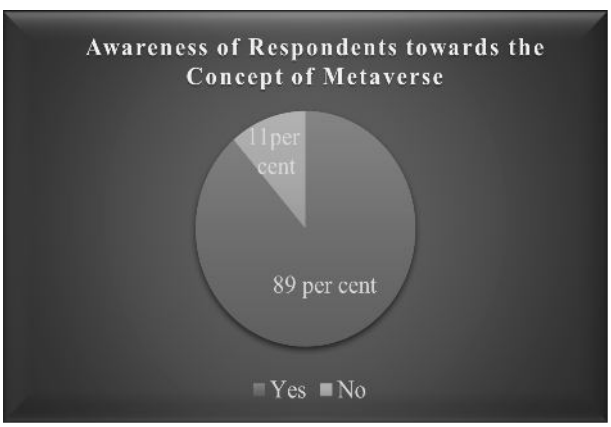

Figure 3: Pie-Chart Depicting the Awareness of Respondents about the Concept of Metaverse (Source: Primary Data)

We can understand that 89 per cent of the people were familiar with the concept of Metaverse while 11 per cent were not aware about it.

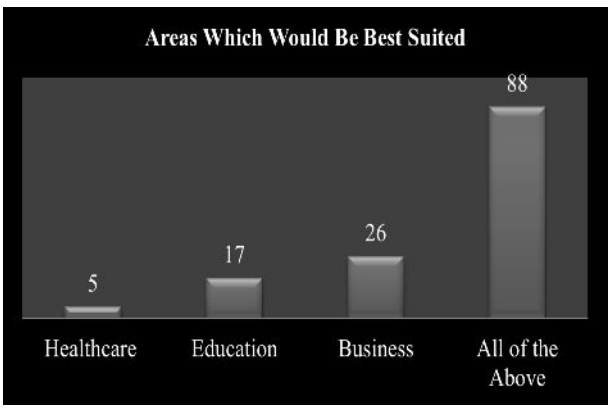

Figure 4: Graph Depicting the Respondents' Opinions on the Best Suited Area of Metaverse (Source: Primary Data)

From the above graph, we can interpret that 64.71 per cent of the people think that Metaverse would suit all of the given areas, 19.12 per cent think that it would aid in the business activities, 12.50 per cent think that it would suit the education sector most and 3.68 per cent think so about its contribution in the healthcare sector.

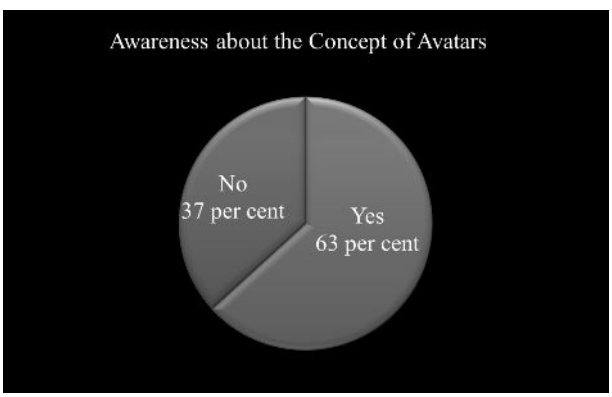

Figure 5: Pie-Chart Depicting the Respondents' Awareness about the Concept of Avatars (Source: Primary Data)

It is evident that 63 per cent of the respondents know about the concept of avatars in Metaverse while 37 per cent do not know about it. This shows that the concept is alien to a large chunk of people.

Barriers in Metaverse

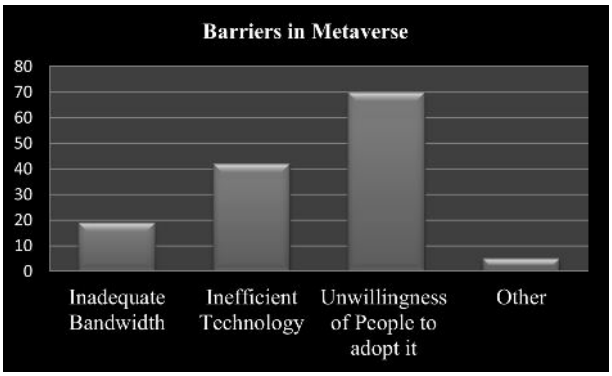

Figure 6: Graph Depicting the Respondents' Opinions on Barriers in Metaverse (Source: Primary Data)

51.47 per cent of the people think that unwillingness of people to adopt the concept would be a major barrier in Metaverse.

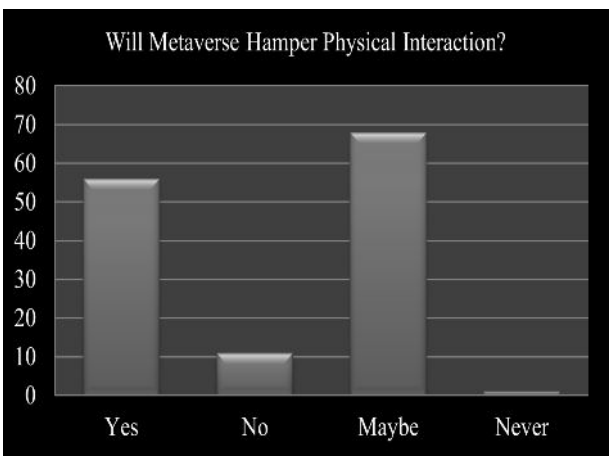

Figure 7: Graph Depicting the Respondents' Opinions on Metaverse Hampering Physical Interaction (Source: Primary Data)

From the graph, it can be interpreted that 50 per cent of the respondents have conflicted opinions and have replied maybe, 41.18 per cent think that the Metaverse will not hamper physical interaction, 8.09 per cent think the contrary, and 0.74 per cent consider that it can never hamper physical interaction.

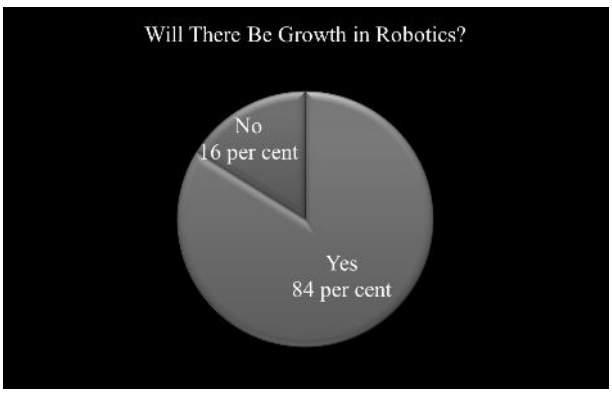

Figure 8: Pie-Chart Depicting the Respondents' Opinions on Growth in Robotics (Source: Primary Data)

We can infer that 84 per cent of the respondents think that there will be growth of robotics in Metaverse while 16per cent think the contrary. This shows that several are aware about the advancing technology and its implications on our lives.

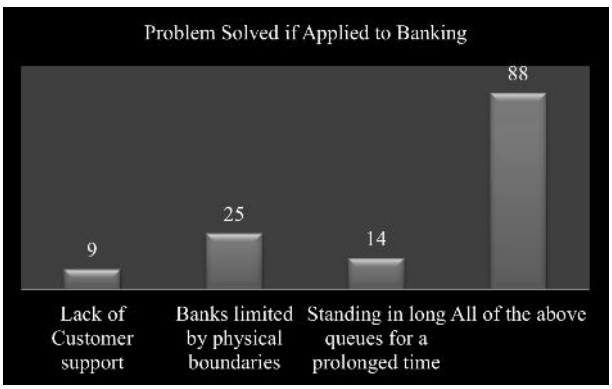

Figure 10: Graph Depicting the Respondents' Opinion on Problem Solved by Metaverse If Applied to Banking (Source: Primary Data)

64.71 per cent of the respondents think that all of the given problems will be solved if Metaverse is applied to banking, 18.38 per cent think that it will solve the issue of banks being limited by physical systems, 10.29 per cent think that the problem of standing in long queues will be solved, and 6.62 per cent think that the problem of lack of customer support will be solved.

Metaverse in Banking

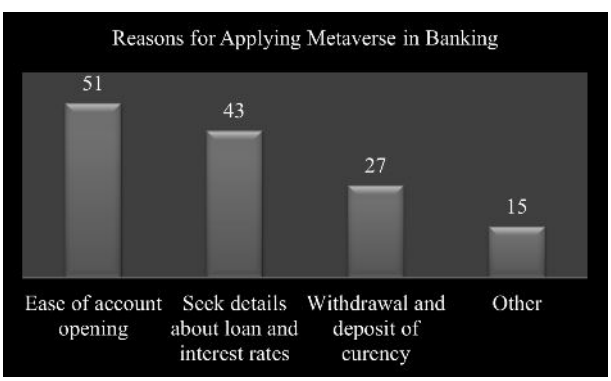

Figure 9: Graph Depicting the Respondents' Opinions on Reasons for Applying Metaverse in Banking (Source: Primary Data)

37.5 per cent of the respondents think that ease of account opening is the prime reason for application of Metaverse in banking, 31.62 per cent think that seeking details about loan and interest rates is the reason, 19.85 per cent think that withdrawal and deposit of currency is the reason, and 11.03 per cent think that there are other reasons that could lead to the application.

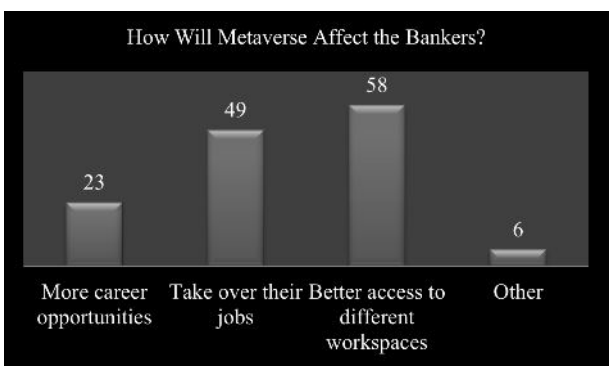

Figure 11: Graph Depicting the Respondents' Opinion on How Will Metaverse Affect the Bankers (Source: Primary Data)

42.65 per cent of the respondents think that the bankers will face better access to workspaces, 36.03 per cent think that it will have a negative impact by taking over their jobs, 16.91 per cent think that it will lead to more career opportunities, and 4.41 per cent think that there will be other reasons as well.

Research Findings

1. The research shows that there are several people who are now aware about the concept of Metaverse, be its uses, cases, or the avatars. Thus, they are aware about the areas where it may be used and how it would benefit the same.
2. The research also shows that the quite a few respondents also think that it would take some time to adapt to the evolving era and accept the change.
3. Towards the end, it has been found out that the respondents have thought quite positively about the role that Metaverse would play in the banking sector as it would solve many customer-related issues, bring about new opportunities for the bankers, and ease the banking process.

CONCLUSION AND RECOMMENDATIONS

From the research, it is evident that the Metaverse is a budding platform and has a plethora of opportunities. The only thing that is holding it back is the awareness among people and the required investment towards its development. A space where we can grow, prosper, and have fun at the same time is the other name for the Metaverse. As there is a clear shift from the paper to the paperless era, the Metaverse ensures a promising future. The only thing that is still holding this highly profitable concept back is the concrete plan of the government, banks, and other authorities to adopt it in the banks and other financial institutions. It would hugely reduce compliances, increase transparency, reduce frauds, ensure better connectivity between nations, and much more.

As an article from Chatham House quotes, 'The metaverse is a vision of how the next generation of the internet will operate.' The Metaverse is all about a path to the development of a much-needed platform where the connectivity would be as efficient as we want it to be. The dire need for educating the people and preparing them for the upcoming changes is most important. More than half of the population does not know about the Metaverse, and those who do only associate it with Facebook.

The Metaverse continues to hold significant promise for driving creativity and economic opportunities around the world. Maximizing its potential will depend on maintaining effective openness throughout the Metaverse ecosystem while ensuring appropriate safeguards for users as they engage with immersive experiences. Doing so will require the continued cooperation and collaboration of technological companies, policymakers, academics, and civil society globally.

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> It is evident that a significant portion of investors prioritize long-term wealth generation and exhibit a conservative approach by diversifying their portfolios with a mix of government and other securities.

Perception and Financial Awareness of 'RBI Retail Direct Scheme': An Empirical Analysis on Selected Retail Investors

Prof. Ayan Banerjee
Assistant Professor, Department of Commerce (Morning)

Harsh Singhi
Department of Commerce (Morning)

ABSTRACT

Investors are attracted to government securities because they are considered low-risk investments, but the ownership was centralized to banks and institutional investors. To facilitate retail participation of investors in both

primary and secondary markets the 'Reserve Bank of India (RBI) Retail Direct Scheme' was launched on 12 November, 2021. Thus, to know investor's perception and preference towards this scheme, this study was conducted. This study reveals that investors are making investments for long-term generation of wealth, it also reveals that female respondents (17 per cent) are considering investments for short-term growth as compared to male respondents (6 per cent) which indicates that females have high degree of skill, discipline, and risk management while evaluating their investment options. Most of the investors highly prefer own research and internet while making investment decisions which concludes that investments are made on their own capability. With an increase in age, there is a decrease in the risk tolerance level of the investors as they are more focused on government securities. This study also reveals that investors' willingness to park their funds in government securities through the RBI Retail Direct Gilt (RDG) account has significantly increased after considering the benefits of it.

KEYWORDS: Government Securities, RBI Retail Direct Scheme, Investors, Retail Participation, Long-term Investment, Female Respondents, Risk Tolerance.

INTRODUCTION

Investment refers to allocation of resources or money with the expectation of generating income or profit in the future. Investments can take many forms, including buying stocks, bonds, mutual funds, real estate, or other assets with the hope of gaining a Return on Investment (ROI) over time.

In general, investments are made with the goal of achieving financial growth, whether that be through earning interest, dividends, or capital appreciation. The level of risk associated with an investment varies depending on the type of investment, as well as market conditions and other factors.

Investing is an important part of financial planning and can be used to build wealth over the long-term. However, it's important to understand the risks and benefits of different types of investments before making any decisions.

DIFFERENT VARIETIES OF INSTRUMENT

There are several types of investment options available in India, which include stocks, mutual funds, Fixed Deposits (FD) , real estate, gold, bonds, Exchange Traded Funds (ETFs), National Pension System (NPS), Public Provident Fund (PPF), National Saving Certificates (NSCs), Monthly Income Scheme (MIS), Sukanya Samriddhi Yojana (SSY), government securities which further includes treasury bills, notes, bonds, Sovereign Gold Bonds (SGB), Government of India (GOI) Bonds, state development loans, Inflation-indexed bonds (IIBs), Floating-rate bonds (FRBs), and Cash Management Bills (CMBs).

The RBI Retail Direct Scheme, introduced by the RBI, serves as a convenient one-stop solution for individual investors to invest in government securities by directly opening an RBI Retail Direct Gilt account with the central bank. Like opening a bank account, the only distinction is that in an RDG account, government securities are credited or debited instead of money, and the account can only be opened through online processing. Launched on November 12th, 2021, by the RBI, this platform facilitates the trading of government securities for entities and individuals, enabling retail participation in both primary and secondary markets. The main objective of this scheme is to centralize ownership of government securities beyond banks and institutional investors. With a decrease in processing cost and increase in automation while trading government securities retail participation tends to increase over time.

Investors are attracted to government securities because they are considered low-risk investments. The creditworthiness of a government is generally considered to be high, which means that the likelihood of default on these securities is low. Additionally, government securities are often used as benchmarks for interest rates and bond yields in financial markets.

LITERATURE REVIEW

Chris Veld, et. al (2008) in their article titled 'The Risk Perceptions of Individual Investors' explored the complex and multifaceted nature of individual

investors' perceptions of risk. Through a comprehensive analysis of various risk perception theories, as well as an empirical study involving a large sample of individual investors, the authors highlight the importance of individual differences in risk perception, as well as the role of subjective factors such as cognitive biases, emotions, and social influence.

Golaka C. Nath, et.al (2013) in the paper titled 'Constituent Deals in the Indian Government Securities Market' reveals that such deals are influenced by factors such as the securities liquidity, the volatility of the market, and the presence of large investors. Overall, the study also adds to the existing body of knowledge regarding the operation of bond markets in developing nations.

RBI (2014), in its paper titled 'Making, Retail Direct Scheme - Market' describes the introduction of the Retail Direct scheme as a significant step towards promoting a more direct and efficient relationship between retail investors and the government securities market. The scheme allows investors to directly purchase government securities from the RBI, without the need for a broker or intermediary. This has resulted in reduced transaction costs and increased transparency in the market. The scheme also allows for greater participation of retail investors in the government securities market, providing them with access to a safe and secure investment option. Overall, the Retail Direct Scheme is a welcome move by the RBI towards creating a more inclusive and accessible financial market for all.

Seema Saggar (2016), et al, in the paper titled 'Trading activity in the Indian government bond market' concluded that the trading activity in the Indian government bond market is highly active, with a significant trading volume, and has shown steady growth over the years. The study identifies that various factors such as interest rate movements, macroeconomic conditions, and market sentiment impact the trading activity in the government bond market. Overall, the study emphasizes the importance of a well-functioning and liquid government bond market in promoting a stable and sustainable financial system in India.

OBJECTIVES

1. Perception and financial awareness of the RBI - Retail Direct Scheme.
2. To study the investment pattern of the selected sample before and after introduction of the scheme.
3. To analyse behaviour of the investors based on their demographic details.

RESEARCH METHODOLOGY

The research is conducted on primary data. Convenience sampling is used as per the nature of the study. Primary data was collected in the month of February and March, 2023 through circulation of questionnaire with the help of Google Forms which were circulated to the primary sources. Qualitative and descriptive type of research was adopted as my research methodology in this paper.

Area of Study

Study Area - Financial awareness among investors and different types of investments.

Location - Kolkata, West Bengal.

Type of Study

The study is empirical and explorative in nature where mostly categorical data is used because customer intention, awareness and knowledge are taken into consideration.

Tools for Data Collection

Questionnaire is used with the help of Google form for covering wider range of customers in terms of area of residence, gender, and income.

Software Use for Data Analysis

The International Business Machines - Statistical Package for the Social Sciences(IBM SPSS) Statistics Version 20 and Microsoft Excel with Microsoft 365 subscription has been used to analyse the data for the completion of the project.

Sample Size

The sample size in the study is 220.

Period of Study

Period of the study is from January, 2023 to March, 2023.

Sampling Method

The sampling method used for the collection of the sample for the fulfilment of the research was convenience sampling followed by snowball sampling due to time constraint.

Analysis and Research Findings

Following are the tools to be used for the analysis of collected data:

1. Kendall tau-b Test
2. Kendall W Test
3. Kruskal- Wallis H Test
4. Mann Whitney U Test

The following are the null hypothesis which are to be tested in the study:

1. H0(1): There is no statistically significant relationship between the different objectives of investment across gender, age, occupation, and yearly income.
2. H0(2): There is no statistically significant difference between the distributions of investment choices prior to the launch of RBI Retail Direct Scheme among the respondents (RBI Retail Direct Scheme was launched on12 November, 2021).
3. H0(3): There is no statistically significant difference between the distributions of investment choices after the launch of RBI Retail Direct Scheme among the respondents.
4. H0(4): There is no statistically significant difference between the benefits of RBI Retail Direct Scheme that influenced the respondents to invest in government securities after the launch of this scheme across annual income, age, occupation, and gender.

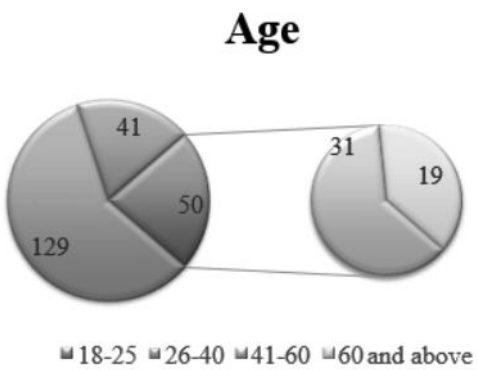

Figure 1: Age
(Source: Primary Data)

The above pie chart i.e., Figure1 shows that 58.6 per cent of the respondents belong to age group 18 to 25, 18.6 per cent fall between the age group from 26 to 40, 14.1 per cent fall between the age group from 41 to 60 and 8.6 per cent respondents were of age group above 60 years.

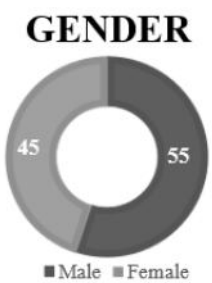

Figure 2: Gender
(Source: Primary Data)

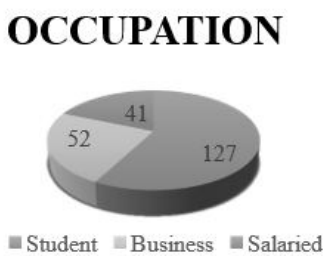

Figure 3: Occupation
(Source: Primary Data)

The above pie diagram i.e., Figure 2 depicts that 55 per cent of the respondents are male and whereas 45 per cent of the respondents are female.

The above pie chart i.e., Figure 3 indicates the occupation profile representing 23.6 per cent respondents belongs to business, 18.6 per cent respondents belong to salaried individuals and the rest are students.

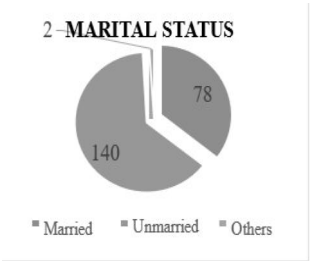

Figure 4: Marital Status (Source: Primary Data)



Figure 5: Yearly Income (in millions) (Source: Primary Data)

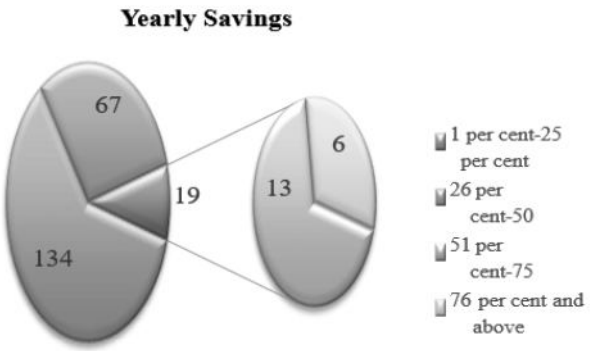

Figure 6: Yearly Savings (Source: Primary Data)

The above pie diagram i.e., Figure 4, shows that 63.6 per cent of the respondents are married, 35.5 per cent of the respondents are unmarried whereas 0.9 per cent of the respondents belongs to other class. The above pie chart i.e., Figure 5, shows yearly income profile of the respondents depicting 26.8 per cent of the respondents in lower income group, 25.5 per cent of the respondents fall in ₹ 0.2 million - ₹ 0.5 million income group, 24.5 per cent of the respondents fall in ₹ 0.5 million - ₹ 1 million income group and 23.2 per cent of the respondents fall in higher

The above pie chart i.e., Figure 6, shows yearly savings of the respondents indicating 60.9 per cent respondents belong to one per cent - 25 per cent income saving group, 30.5 per cent respondents belong to one per cent - 25 per cent income saving group, 5.9 per cent respondents belong to one per cent - 25 per cent income saving group whereas the rest of the respondent belongs to 76 per cent and above income saving group.

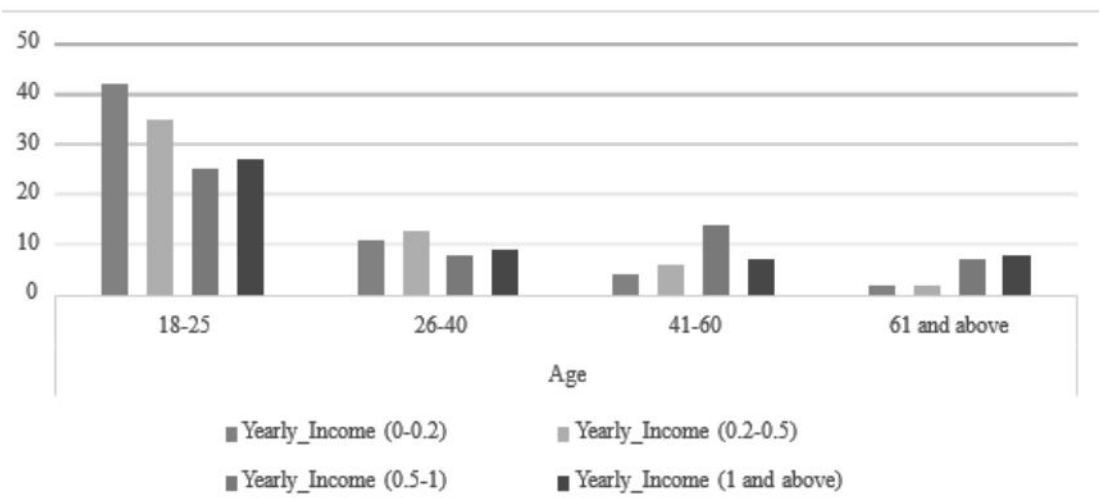

Figure 7: Age and Annual Income (in millions) (Source: Primary Data)

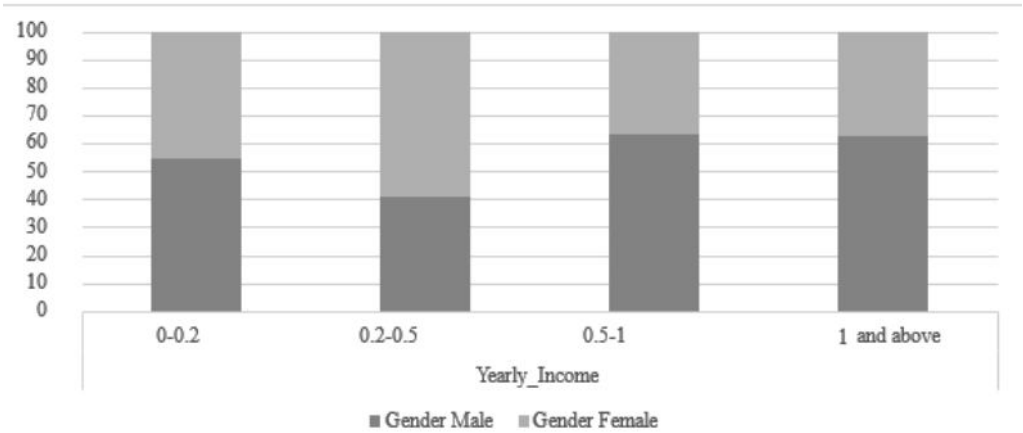

Figure 8: Gender and Annual Income (in millions)
(Source: Primary Data)

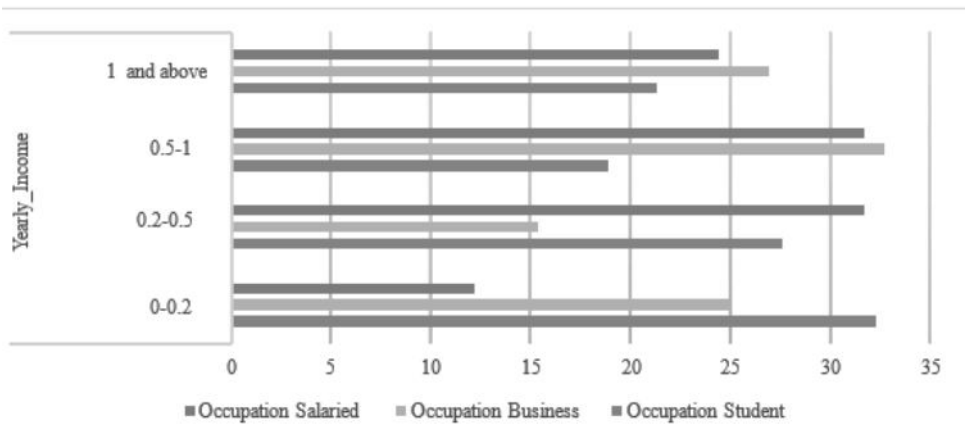

Figure 9: Occupation and Annual Income (in millions)
(Source: Primary Data)

ANALYSIS ON PERCEPTION OF INVESTORS AND INVESTMENT PATTERNS

Purpose of Investment

The primary survey clearly portrays from gender perspective that about 67 per cent of the male respondents and 53.5 per cent of the female respondents have the objective of wealth creation while making investment. While around 27 per cent of the male respondents and 29 per cent of the female respondents prefer investments as a new source of income. It is to be noted that only six per cent of male respondents make investments for short-term growth as compared to 17 per cent for the female respondents (See Table 1).

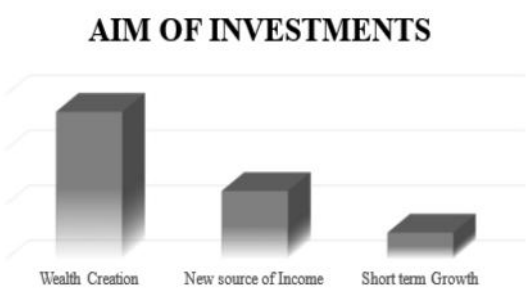

Figure 10: Aim of Investments
(Source: Primary Data)

Particulars		Invst_Pur			Total
		Wealth Creation	New source of Income	Short term Growth	
Gender	Male	81	33	7	**121**
	Female	53	29	17	**99**
Total		**134**	**62**	**24**	**220**

Table 1: Relationship Between Aim of Investment and Gender
(Source: Author's Compilation)

Future Investments

The primary survey clearly depicts from gender perspective that about 82 per cent of the male respondents and 72.75 per cent of the female respondents prefer combination of both Govt. securities and other securities as their future investment. While around 7.50 per cent of the male respondents and six per cent of the female respondents prefer 100 per cent other securities as their future investment. It is to be noted that only 10.50 per cent of male respondents prefer 100 per centgovernment securities as their future investment as compared to 21.25 per cent for the female respondents. While considering from age perspective we conclude that reliability on 100 per cent government securities increases with an increase in age group whereas the reliability on combination of both government securities and other securities reduces with an increase in age group (see Table 2).

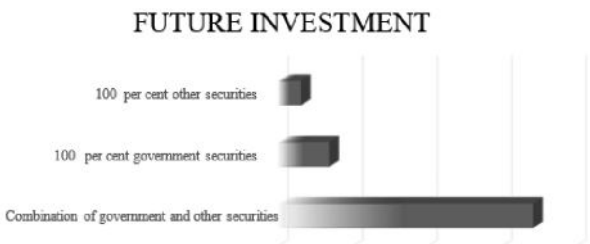

Figure 11: Future Investments
(Source: Primary Data)

Particulars		Invst_Fut			Total
		Combination of government and other Securities	100 per cent government securities	100 per cent other securities	
Age	18-25	114	12	3	**129**
	26-40	32	6	3	**41**
	41-60	18	8	5	**31**
	61and above	7	8	4	**19**
Total		**171**	**34**	**15**	**220**
Gender	Male	99	13	9	**121**
	Female	72	21	6	**99**
Total		**171**	**34**	**15**	**220**

Table 2: Relationship between Future Investment Across Gender and Age
(Source: Author's Compilation)

Is There Any Statistically Significant Relationship Between the Different Objectives of Investment Across Gender, Age, Occupation and Yearly Income?

After performing Kendall's tau_b test it is observed that there is no correlation between different objectives of investment across age and occupation. There is low positive correlation between different objectives of investment across gender whereas there exists a negative correlation between different objectives of investment across annual income. Hence, there exists statistically significant relationship between gender and annual income. Thus, in case of gender and annual income the null hypothesis is rejected whereas in case of age and occupation the null hypothesis is retained (See Table 3, 4, 5 and 6).

Particulars			Invst_Pur	Gender
Kendall's tau_b	Invst_Pur	Correlation Coefficient	1.000	.157*
		Sig. (2-tailed)		.016
		N	220	220
	Gender	Correlation Coefficient	.157*	1.000
		Sig. (2-tailed)	.016	
		N	220	220

Table 3: Correlations between Purpose of Investment and Gender
(Source: Author's Compilation)

Particulars			Invst_Pur	Age
Kendall'stau_b	Invst_Pur	Correlation Coefficient	1.000	.068
		Sig. (2-tailed)		.269
		N	220	220
	Age	Correlation Coefficient	.068	1.000
		Sig. (2-tailed)	.269	
		N	220	220

Table 4: Correlations between Purpose of Investment and Age
(Source: Author's Compilation)

Particulars			Invst_Pur	Occupation
Kendall's tau_b	Invst_Pur	Correlation Coefficient	1.000	.085
		Sig. (2-tailed)		.171
		N	220	220
	Occupation	Correlation Coefficient	.085	1.000
		Sig. (2-tailed)	.171	
		N	220	220

Table 5: Correlations between Purpose of Investment and Occupation
(Source: Author's Compilation)

Particulars			Invst_Pur	Yearly_Income
Kendall's tau_b	**Invst_Pur**	**Correlation Coefficient**	1.000	-.121*
		Sig. (2-tailed)		.042
		N	220	220
	Yearly_Income	**Correlation Coefficient**	-.121*	1.000
		Sig. (2-tailed)	.042	
		N	220	220

Table 6: Correlations between Purpose of Investment and Annual Income (Source: Author's Compilation)

Is There Any Statistically Significant Difference Between the Distributions of Investment Choices Prior to the Launch of RBI Retail Direct Scheme Among the Respondents (RBI Retail Direct Scheme Was Launched on 12 November, 2021)?

To know whether there is any statistically significant difference between the distributions of investment choices prior to the launch of RBI Retail Direct Scheme among the respondents, Kendall's W Test or Kendall's Coefficient of Concordance was performed and significance (p) value was determined at four degrees of freedom which is 0.000. As $p<0.05$ there is no scope for accepting the null hypothesis. Hence, after the test it is concluded that there are statistically significant differences between the distributions of investment choices prior to the launch of RBI Retail Direct Scheme among the respondents. It is to be noted that mutual funds were preferred the most among the respondents whereas government securities through brokers was least preferred (See Table 7 and 8).

Particulars	Mean Score	Rank
Q12_a (Bank Deposits)	2.97	4
Q12_b (Gold and Other Precious Metals)	3.04	3
Q12_c (Mutual Funds)	3.21	1
Q12_d (Shares, Bonds and Debentures)	3.10	2
Q12_e (Government Securities through Brokers)	2.69	5

Table 7: Ranking of Investment Options Prior to the Introduction of RBI Retail Direct Scheme Among the Respondent (Source: Author's Compilation)

Particulars	Test Statistics
N	220
Kendall's W[a]	.023
Chi-Square	20.589
df	4
Asymp. Sig.	.000

Table 8: Is There Any Statistically Significant Difference Between the Distributions of Investment Choices Prior to the Launch of RBI Retail Direct Scheme Among the Respondents? (Source: Author's Compilation)

Is There Any Statistically Significant Difference Between the Distributions of Investment Choices After the Launch of RBI Retail Direct Scheme Among the Respondents?

To know whether there is any statistically significant difference between the distributions of investment choices after the launch of RBI Retail Direct Scheme among the respondents, Kendall's W Test or Kendall's Coefficient of Concordance was performed and significance value (p) was determined at four degrees of freedom which is 0.052. As $p>0.05$ the null hypothesis is accepted. Hence, after the test it is concluded that there are no statistically significant differences between the distributions of investment choices after the launch of RBI Retail Direct Scheme among the respondents. It is to be noted that government securities through RBI Retail Direct Scheme was most preferred followed by shares, bonds and debentures, gold and other precious metals and mutual funds respectively whereas bank deposits was least preferred (See Table 9 and 10).

Particulars	Mean Score	Rank
Q14_a (Bank Deposits)	2.83	5
Q14_b (Gold and Other Precious Metals)	2.98	3.5
Q14_c (Mutual Funds)	2.98	3.5
Q14_d (Shares, Bonds and Debentures)	3.03	2
Q14_e (Government Securities through RBI Retail Direct Scheme)	3.18	1

Table 9: Ranking of Investment Options After the Introduction of RBI Retail Direct Scheme Among the Respondents (Source: Author's Compilation)

Particulars	Test Statistics
N	220
Kendall's W[a]	.011
Chi-Square	9.393
df	4
Asymp. Sig.	.052

Table 10: Is There Any Statistically Significant Difference Between the Distributions of Investment Choices Prior to After the launch of RBI Retail Direct Scheme Among the Respondents? (Source: Author's Compilation)

Is There Any Statistically Significant Difference Between the Benefits of the RBI Retail Direct Scheme that Influenced the Respondents to Invest in Government Securities After the Launch of This Scheme Across Annual Income, Age, Occupation, and Gender?

The Kruskal-Wallis H-test was performed to know there is any statistically significant difference between the benefits of RBI Retail Direct Scheme that influenced the respondents to invest in government securities after the launch of this scheme across annual income, age and occupation whereas Mann-Whitney U-test was conducted across gender. After performing the test, it is to be noted that there is no statistically significant difference between the benefits of RBI Retail Direct Scheme that influenced the respondents to invest in government securities after the launch of this scheme across age, occupation and gender whereas when the test was performed across annual income there exhibits statistically significant difference between the benefits of RBI Retail Direct Scheme. (See Table 11, 12, 13, 14, 15, 16, 17 and 18)

Age		N	Mean Rank
Q13_a (Affordability)	18-25	129	109.98
	26-40	41	102.05
	41-60	31	115.55
	61 and above	19	124.00
	Total	**220**	
Q13_b (Safe and Consistent Returns)	18-25	129	106.81
	26-40	41	104.24
	41-60	31	124.00
	61 and above	19	127.00
	Total	**220**	
Q13_c (Low Processing Cost)	18-25	129	103.79
	26-40	41	108.95
	41-60	31	121.15
	61 and above	19	142.05
	Total	**220**	
Q13_d (Automation in Overall Process)	18-25	129	110.86
	26-40	41	114.49
	41-60	31	108.52
	61 and above	19	102.66
	Total	**220**	

Table 11: Ranking of Benefits of RBI Retail Direct Scheme Across Age
(Source: Author's Compilation)

Particulars	Q13_a	Q13_b	Q13_c	Q13_d
Chi-Square	1.915	3.696	7.399	.512
df	3	3	3	3
Asymp. Sig.	.590	.296	.060	.916

Table 12: Is There Any Statistically Significant Difference Between the Benefits of RBI Retail Direct Scheme Across Age?
(Source: Author's Compilation)

Occupation		N	Mean Rank
Q13_a (Affordability)	Student	127	109.27
	Business	52	114.35
	Salaried	41	109.43
	Total	**220**	
Q13_b (Safe and Consistent Returns)	Student	127	106.11
	Business	52	112.27
	Salaried	41	121.84
	Total	**220**	
Q13_c (Low Processing Cost)	Student	127	104.44
	Business	52	117.29
	Salaried	41	120.65
	Total	**220**	
Q13_d (Automation in Overall Process)	Student	127	110.57
	Business	52	103.99
	Salaried	41	118.52
	Total	**220**	

Table 13: Ranking of Benefits of RBI Retail Direct Scheme Across Occupation
(Source: Author's Compilation)

Particulars	Q13_a	Q13_b	Q13_c	Q13_d
Chi-Square	.268	2.054	2.943	1.266
df	2	2	2	2
Asymp. Sig.	.875	.358	.230	.531

Table 14: Is There Any Statistically Significant Difference Between the Benefits of RBI Retail Direct Scheme Across Occupation?
(Source: Author's Compilation)

Yearly_Income		N	Mean Rank
Q13_a (Affordability)	0-200000	59	100.66
	200001-500000	56	98.38
	500001-1000000	54	114.96
	1000001 and above	51	130.46
	Total	**220**	
Q13_b (Safe and Consistent Returns)	0-200000	59	95.64
	200001-500000	56	100.98
	500001-1000000	54	122.67
	1000001 and above	51	125.25
	Total	**220**	
Q13_c (Low Processing Cost)	0-200000	59	103.61
	200001-500000	56	96.22
	500001-1000000	54	117.48
	1000001 and above	51	126.75
	Total	**220**	
Q13_d (Automation in Overall Process)	0-200000	59	106.00
	200001-500000	56	105.39
	500001-1000000	54	111.06
	1000001 and above	51	120.73
	Total	**220**	

Table 15: Ranking of Benefits of RBI Retail Direct Scheme Across Annual Income
(Source: Author's Compilation)

Particulars	Q13_a	Q13_b	Q13_c	Q13_d
Chi-Square	9.378	9.693	7.916	2.093
df	3	3	3	3
Asymp. Sig.	.025	.021	.048	.553

Table 16: Is There Any Statistically Significant Difference Between the Benefits of RBI Retail Direct Scheme Across Annual Income?
(Source: Author's Compilation)

Gender		N	Mean Rank	Sum of Ranks
Q13_a (Affordability)	Male	121	113.41	13722.50
	Female	99	106.94	10587.50
	Total	**220**		
Q13_b (Safe and Consistent Returns)	Male	121	112.36	13595.50
	Female	99	108.23	10714.50
	Total	**220**		
Q13_c (Low Processing Cost)	Male	121	109.81	13286.50
	Female	99	111.35	11023.50
	Total	**220**		
Q13_d (Automation in Overall Process)	Male	121	112.52	13615.00
	Female	99	108.03	10695.00
	Total	**220**		

Table 17: Ranking of Benefits of RBI Retail Direct Scheme Across Gender
(Source: Author's Compilation)

Particulars	Q13_a	Q13_b	Q13_c	Q13_d
Mann-Whitney U	**5637.500**	**5764.500**	**5905.500**	**5745.000**
Wilcoxon W	**10587.500**	**10714.500**	**13286.500**	**10695.000**
Z	**-.777**	**-.492**	**-.184**	**-.536**
Asymp. Sig. (2-tailed)	**.437**	**.623**	**.854**	**.592**

Table18: Is There Any Statistically Significant Difference Between the Benefits of RBI Retail Direct Scheme Across Gender?
(Source: Author's Compilation)

LIMITATIONS OF THE STUDY

1. Due to limited time the sample size of this research study may not be representing the entire population, leading to biased or unreliable results.
2. It is to be noted that around 58 per cent of the respondents belongs to the age group of 18-25 years which may lead to biased or unreliable results.
3. The validity of the findings of this research study is limited by the study design, instrumentation, or other factors.
4. This study did not cover an elongated period to capture the fluctuations in the investors' purchasing habits and preferences which may prove the findings inappropriate to consider it to be valid.

FINDINGS

1. This study reveals that investors are making investments for long-term generation of wealth and opts for a combination of both government and other securities which concludes that investors are conservative and aims for consistency in returns while investing.
2. It also reveals that female respondents (17 per cent) are considering investments for short-term growth as compared to male respondents (6 per cent) which indicates that females have high degree of skill, discipline, and risk management while evaluating their investment options.
3. This study also reveals that investors prefer to park their funds prior to introduction of benefits of RBI Retail Direct Scheme in avenues like mutual funds followed by stocks followed by gold and other precious metals followed by bank deposits. Government securities through brokers are least preferred may be due to brokerage and commission paid to brokers while trading government securities.
4. This study also reveals that investor's willingness to park their funds in government securities through RBI RDG account has been significantly increased after considering the benefits of it.

CONCLUSION

In conclusion, this study provides valuable insights into the investment behaviour and preferences of individuals. It is evident that a significant portion of investors prioritize long-term wealth generation and exhibit a conservative approach by diversifying their portfolios with a mix of government and other securities. This suggests a preference for consistency in returns and a desire to minimize risk.

Moreover, the study highlights the importance of self-reliance among investors, with the majority relying on their own research and internet resources when making investment decisions. Age appears to influence risk tolerance, with older investors showing a preference for safer investments such as government securities.

Interestingly, a gender-based analysis indicates that female investors tend to focus on short-term growth opportunities more than their male counterparts. This suggests that female investors may possess a higher degree of skill, discipline, and risk management when evaluating their investment options.

Notably, prior to the introduction of the RBI Retail Direct Scheme, investors favoured parking their funds in avenues like mutual funds, stocks, gold, and bank deposits. Government securities through brokers were the least preferred option, possibly due to associated brokerage and commission fees. However, the study indicates a significant increase in investors' willingness to invest in government securities through the RBI RDG account after considering its benefits.

Overall, this study shed light on the diverse strategies and preferences of investors, highlighting the importance of understanding individual needs and risk profiles when making investment decisions.

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> The success of rainbow marketing campaigns may vary depending on the nature of the brand and the specific messaging and creative execution of the campaign.

A Study on Rainbow Marketing and its Effect on Consumer Buying Behaviour

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ABSTRACT

Rainbow marketing is a marketing strategy that involves the use of rainbow colours, symbols, and messages to appeal to the Lesbian, Gay, Bisexual, Transgender, Queer, Intersex, and Asexual (LGBTQIA+) community. The purpose of this strategy is to create an emotional connection with this community and promote inclusivity. The research found that while rainbow marketing can be an effective tool to target the LGBTQIA+ community, it is important for companies to ensure that their actions align with their values and practices. While rainbow marketing can be an effective tool for

companies to promote inclusivity and target the LGBTQIA+ community, companies need to approach it with authenticity, transparency, and a genuine commitment to promoting diversity and inclusion in their practices and policies.

KEYWORDS: Rainbow Marketing, LGBTQIA+, Authenticity, Consumer Buying Behaviour, Pink Capitalism.

INTRODUCTION

Rainbow marketing refers to marketing efforts by companies mainly targeted toward LGBTQIA+ community. This type of marketing mainly seeks to engage itself in supporting, representing and, promoting products and services that cater to LGBTQIA+ interests and needs. They use messages and images that resonate with the LGBTQIA+ audience. Rainbow marketing strategy can take many forms which include advertising campaigns, events, the use of LGBTQIA+ influencers, and related sponsorships. It includes content creation about to rainbow-coloured merchandise or the use of languages that are inclusive of genuine support towards the LGBTQIA+ committee.

Pink capitalism or rainbow marketing has been criticized for being a form of exploitation, in which companies use LGBTQIA+ identities and issues to sell products without actually contributing to or supporting the community. This can lead to a backlash from consumers who feel that the company is not being genuine or sincere in its support of LGBTQIA+ rights. On the other hand, companies that genuinely support the community and donate to LGBTQIA+ causes may see an increase in brand preference from consumers who value corporate social responsibility and ethical business practices.

NATURE OF THE PROBLEM

Rainbow marketing, commonly seen during events like Pride Month, involves brands using LGBTQIA+ themes and symbols to promote their products or services. While some argue that it raises awareness and supports the community, many people view it as pink washing, a superficial attempt to appear socially conscious without providing genuine support. Companies often engage in rainbow marketing without understanding the meaning and significance of the symbols used, which can disrespect the LGBTQIA+ community unintentionally. This form of marketing is criticized for being profit-driven and lacking genuine support. Furthermore, rainbow marketing may exclude certain segments of the LGBTQIA+ community, leading to feelings of exclusion. It can also be seen as tokenism, where companies use LGBTQIA+ themes to project diversity without addressing systemic issues faced by the community.

LITERATURE REVIEW

1. Krista M. McLauchlan and Courtney D. N. K. McCluney (2019) in their research paper 'The Effectiveness of Rainbow Marketing: An Analysis of Consumer Attitudes and Perception' stated that rainbow marketing can be effective in promoting diversity and inclusion, but only when brands approach such campaigns with authenticity and sensitivity. Participants expressed a desire for brands to go beyond simply using rainbow imagery and to actively support the LGBTQ+ community through donations and partnerships with LGBTQ+ organizations.
2. Anna-Maria Urde and Christian Koch (2017) in their paper 'Rainbow marketing: Leveraging corporate support for LGBT rights' found that the perceived authenticity of rainbow marketing messages had a significant impact on consumer behaviour. The effectiveness of rainbow marketing depends on the authenticity of the marketing message.
3. Jae Sevelius (2019) in 'Rainbow Capitalism: The Commodification of Queer Identities in Corporate America', argues that while this type of marketing may seem inclusive and supportive of the LGBTQ+ community, it can serve to exploit and profit off of queer identities, without necessarily advocating for or contributing to social justice

efforts. Sevelius argues that while some forms of rainbow marketing can be positive, such as when companies use their influence to advocate for LGBTQ+ rights and support social justice initiatives, the commodification of queer identities for profit can reinforce existing power structures and detract from more meaningful forms of allyship and support for marginalized communities.

4. Singh and Biswas (2020) in 'The Influence of Message Framing and Brand Reputation on Consumer Responses to Cause-Related Marketing Campaigns' found that rainbow marketing can also impact consumer attitudes toward social issues. Exposure to rainbow marketing positively influenced consumers' attitudes towards the LGBTQ+ community, which in turn positively impacted their purchase intention and brand loyalty. One of the key findings of their research is that brand reputation plays a significant role in how consumers respond to cause-related marketing campaigns.

5. Cowper and Fischer (2018) in 'LGBT Advertising and Marketing' discuss the challenges and controversies that can arise in LGBTQ+ advertising and marketing, such as accusations of 'pink washing' or tokenism, as well as the importance of authenticity and representation inthese campaigns.

6. Andrew Ross (2011) examines the ways in which corporations and capitalist systems have co-opted and commoditized queer identities and culture, while simultaneously erasing and marginalizing queer voices and experiences. Ross also explores the concept of 'liminal queer subjects,' which refers to individuals who occupy the margins of society due to their sexuality, gender identity, or other factors. He argues that these individuals are often excluded from mainstream LGBTQ+ movements and activism, and that their experiences and perspectives are often overlooked in discussions of queer politics and representation. The authors argue that to be effective and meaningful, LGBTQ+ advertising and marketing campaigns must be informed by a deep understanding of the experiences and perspectives of LGBTQ+ consumersand must be rooted in a commitment to social justice and equality.

7. Trusov, Bucklin, and Pauwels (2016) in 'The Impact of LGBT-friendly Advertising on Firm Value' suggested that being perceived as LGBT-friendly can have financial benefits for companies, including higher firm value. However, companies to ensure that their support for the LGBTQ+ community is authentic and backed up by actions to avoid backlash and maintain their brand reputation.

OBJECTIVES OF THE STUDY

The objective of the study is as follows-

1. To find out the meaning of social cause marketing through the lenses of pink capitalism.
2. To assess if rainbow marketing has any impact on consumer's brand preference.
3. To examine how the target audience reacts to different types of rainbow marketing.
4. To find out whether rainbow marketing has done any damage to the LGBTQIA+ movement.
5. To identify solutions to mitigate the errors of rainbow marketing.

RESEARCH METHODOLOGY

Research Design

The sampling method being used in the research is the collection of primary data. In this study the data has been sent and collected from over 250 respondents who are assumed to be the representative of the overall population. A primary source of data collection is information that is collected directly from the source, without relying on intermediaries or secondary sources. The questionnaire in for this research was sent online though a form. It consisted of 28 questions in total which helped in collecting information for further

studies of this research.

Data and Sample

1. Sampling Method

a) The sample is divided into strata of different age groups and genders.

b) The age strata are divided into five groups and gender is divided into four different strata.

c) The number of each sample per strata is unequal.

2. Sample Location

a) The respondents are mainly from West Bengal. However, the digital questionnaire was circulated over Whatsapp, Telegram, Instagram and Linkedin. Thus, the respondents are from pan-India.

3. Sample Size

a) There are total of 260 respondents of this project.

b) Out of the provided samples there are 49 per cent males, 48 per cent females, 2 per cent transgender and 1 per cent of undisclosed respondents.

4. Data Type

The data selected is both qualitative and quantitative. Details for so can be clearly seen in the questionnaire. A questionnaire was designed which consisted of 28 questions covering the different aspects of the study that helped in collection of information.

ANALYSIS

Demographic Statistics

On studying the demography, it was found that the ratio between the male and the female respondents was equal, being 48 per cent female respondents and 49 per cent of male respondents. Most of the respondents were between the ages of 18 to 24 years old, i.e., 79 per cent. However, there were also 11 per cent respondents between the ages of 25 to 34 years. Among the available respondents 35 per cent of them knew about rainbow marketing.

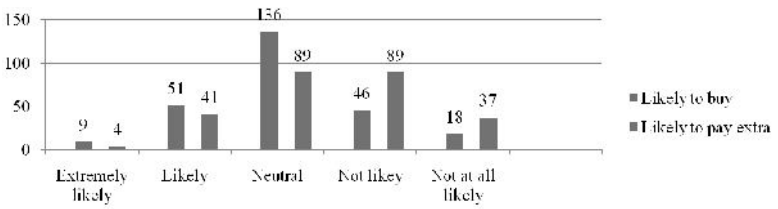


Figure 1: Likely to Buy and/or Pay Extra for Rainbow Edition Products (Source: Primary Data)

The data proves that rainbow marketing indeed does influence buyers from different segments and induce them to buy rainbow edition products. Katherine N. Lemon, Megan G. Adams and Zachary T. Davis in their research paper stated that the practice of incorporating LGBTQ+ themes and imagery into advertising campaigns has become increasingly popular among brands seeking to appeal to socially conscious consumers. This has also been proven by the response of the above respondents.

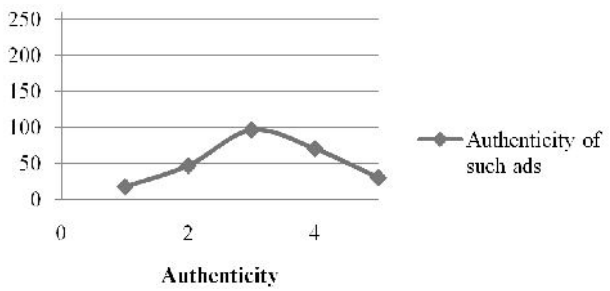


Figure 2: How Authentic Does the Population Find Such Advertisements (Source: Primary Data)

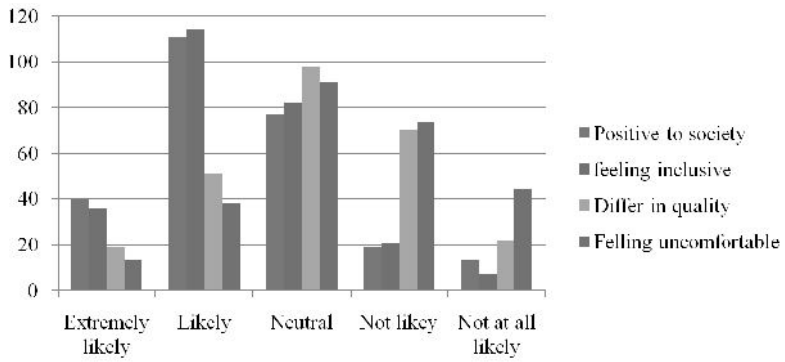
The responses are on a scale of 1 to 5, where 1 represents inauthentic and 5 represents authentic.

The mean score of the responses is calculated as follows:

(117 + 247 + 396 + 470 + 5*30) /
(17+47+96+70+30) = 3.14

The mean score of 3.14 indicates that the population on average finds the advertisements related to rainbow marketing to be slightly above average in terms of authenticity. However, the distribution of responses also suggests that opinions on the authenticity of the advertisements are fairlydivided. It can be concluded

that the population is somewhat sceptical about the authenticity of the advertisements, but not entirely dismissive of them.



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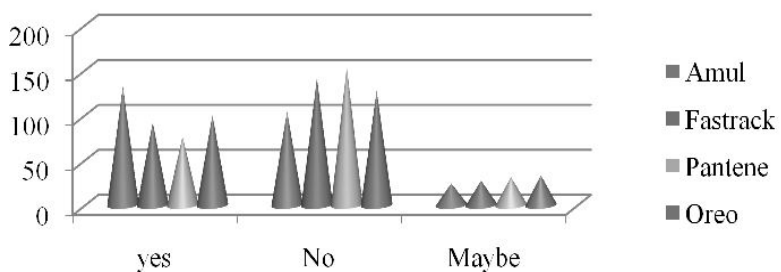

Figure 4: Identification of Various Advertisements (Source: Primary Data)

These numbers suggest that rainbow marketing campaigns have been successful in creating brand awareness and recognition among consumers. The fact that a significant number of respondents were able to identify the rainbow-themed advertisements for each brand indicates that these campaigns were memorable and impactful.

Amul have been able to strengthen its connection with consumers who value diversity and inclusivity. Oreo has an international recognition and the fact that it has a broad consumer base. It has been able to use its strength to implement successful rainbow advertising all over the world.

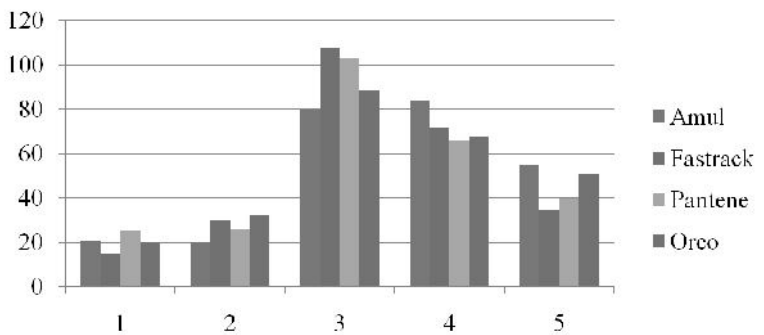

Figure 5: Authenticity of Various Advertisements (Source: Primary Data)

Here are the results of descriptive statistic of each brand:

- Amul: mean=3.62, median=4, mode=4, standard deviation=1.14
- Fastrack: mean=3.41, median=3, mode=3, standard deviation=1.20
- Pantene: mean=3.41, median=3, mode=3, standard deviation=1.18
- Oreo: mean=3.41, median=3, mode=3, standard deviation=1.19

We can see that the mean, median, and mode values for all brands are close to three, indicating that the majority of

respondents rated the advertisements as moderately authentic. The standard deviation values suggest that there is some variation in the responses, with Amul having the highest standard deviation (1.14) and Fast Track having the highest minimum rating (1).

From the above information, one can conclude that a brand that has a long-standing commitment to diversity and inclusivity may have an advantage in implementing a successful rainbow marketing campaign. Consumers may already associate the brand with these values, which could make it easier for the brand to connect with the LGBTQ+ community through its marketing efforts.

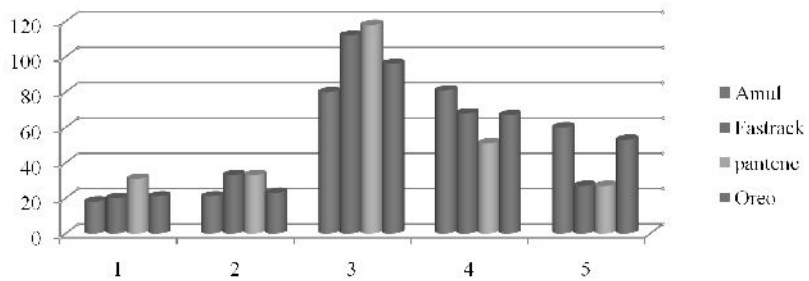

Figure 6: Likely to Buy
(Source: Primary Data)

The results indicate that the respondents' likelihood to buy from the brands based on their rainbow marketing varied across the four brands. Amul and Oreo had a higher mean and median score, indicating that respondents were more likely to buy from these brands based on their rainbow marketing compared to Fast Track and Pantene. It is interesting to note that while Fast Track had the highest score for authenticity; it had the lowest score for likelihood to buy from the brand based on their rainbow marketing. This may suggest that while authenticity is important, it may not be the only factor that influences consumer behaviour.

Overall, the results of this study suggest that rainbow marketing can have an impact on consumers' likelihood to buy from a brand, with Amul and Oreo being the most effective at this type of marketing. However, it is important to note that this study only examined one aspect of the brands' marketing strategies, and other factors such as product quality, price, and overall brand reputation may also play a role in consumer behaviour.

FINDINGS AND OBSERVATIONS

Rainbow marketing, also known as LGBTQ+ marketing, is a marketing strategy that targets the LGBTQ+ community. This marketing approach has gained attention in recent years as more companies are seeking to appeal to socially conscious consumers who value diversity and inclusion. In a study by Lemon, Adams, and Davis (2015), they found that companies that include LGBTQ+ themes and imagery in their advertising campaigns can positively impact consumer attitudes towards the brand. The results of the analysis done above suggest that companies need to be aware of the potential pitfalls of rainbow marketing, such as being seen as insincere or inauthentic. The mean score of the responses suggests that most respondents did not strongly agree or disagree with either statement; more respondents said they were likely to buy a rainbow edition of a product than those who said they were not likely or not at all likely. It is also worth noting that a higher number of respondents said they were not likely or not at all likely to pay extra for a rainbow edition product compared to those who said they were likely or extremely likely to pay extra. It is understood that though the population sees the rainbow edition products as a positive step towards the progression of the LGBTQIA+ committee, they are not likely to pay extra for the same kind and quality products. Consumers associate the brand with its values, which could make it easier for the brand to connect with the LGBTQ+ community through its marketing efforts. It can also be observed that the advertisements launched on the social media platform tend to gain more recognition than the others. The specific messaging and creative execution of a rainbow marketing campaign may also play a role in its effectiveness.

RECOMMENDATIONS

Rainbow marketing is a marketing strategy that targets the LGBTQ+ community. If a company wants to engage in rainbow marketing, there are several

recommendations to consider:

1) Be authentic and genuine: A company needs to show that it genuinely supports the LGBTQ+ community and is not just using rainbow marketing as a way to make a profit.

2) Understand the LGBTQ+ community: Companies need to understand the needs, wants, and values of the LGBTQ+ community. This includes understanding the diversity within the community and avoiding stereotypes.

3) Use inclusive language and imagery: Companies should use language and imagery that is inclusive of all genders and sexual orientations. This includes avoiding gendered language and using imagery that represents the diversity of the LGBTQ+ community.

4) Support LGBTQ+ causes: Companies can demonstrate their commitment to the LGBTQ+ community by supporting causes that are important to the community, such as LGBTQ+ rights, equality, and inclusion.

CONCLUSION

Based on the findings of the research on rainbow marketing, it can be concluded that this type of marketing can have a significant impact on consumer behaviour, particularly in terms of brand perception, authenticity, and likelihood to buy from the brand. The results suggest that brands with a long-standing commitment to diversity and inclusivity may have an advantage in implementing successful rainbow marketing campaigns, as consumers may already associate the brand with these values, making it easier for the brand to connect with the LGBTQ+ community through its marketing efforts. This can be achieved through making a history of inclusive practices, a diverse workforce, and messaging that is inclusive and resonates with the LGBTQ+ community.

The research suggests that rainbow marketing can be an effective tool for brands to connect with the LGBTQ+ community and demonstrate their commitment to diversity and inclusivity. However, brands must approach this type of marketing with authenticity, sensitivity, and a clear understanding of their target audience's values and preferences to be successful. The success of rainbow marketing campaigns may vary depending on the nature of the brand and the specific messaging and creative execution of the campaign.

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> Visual merchandising is often labelled as the 'Art of Retailing'. It is how retailers present their products before customers.

Impact of Visual Merchandising on Impulse Buying Behaviour of Consumers:

A Study on Clothing Retail Stores in Kolkata

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Department of Commerce (Evening)

ABSTRACT

Retailers are suffering greatly as a result of the problem of similarity in merchandise in today's ultra-competitive retail environment. Due to the intense competition, many businesses are now using 'visual merchandising' tools to set themselves apart from their competitors and increase the appeal of their goods. The primary objective of the study is to evaluate the key factors that affect 'visual merchandising' and analyze how it affects customer's'impulse buying behaviour' in the context of the clothing retail outlets in the setting of Kolkata. Besides, the current study also sheds light on the types of 'visual merchandising' that can affect consumer's impulsive purchasingdecisions and whether those decisions vary depending on demographic factorslike gender, age and income.

KEYWORDS: Visual Merchandising,Impulse Buying Behaviour, Clothing Retail Stores, Consumer Demographics.

INTRODUCTION

Visual merchandising is often labelled as the 'Art of Retailing'. It is how retailers present their products before customers. The sole objective is to ensure that customers enter their store, associate the quality of the products on a first-hand touch-and-feel experience with the retail brand identity.

The Indian consumer of fashion is evolving and quickly catching up with global fashion trends. The shifts in consumer purchase behaviour are being driven by increased disposable incomes, exposure to global events and fashion icons, and confidence levels.

Retailers in India are primarily concerned with impactful 'VisualMerchandising', which can directly impact the performance of any retailer byboosting 'customer walk-ins', 'sales conversion', expanding the amount of'average customer billing' and finally ensuring 'higher recall value' in the customer's mind, thus, creating a loyal chunk of customers in the country which keeps rising.

REVIEW OF BACKGROUND

Iberahim et al. (2020), explored that promotional signage is the most important factor of visual merchandising which has the highest impact on impulse purchases.

Basu et al. (2022), discussed the close relationship between visual merchandising and store atmospherics in the context of product-driven display function.

Lashin et al. (2022), argued that window display is dependent upon visual merchandising would make a better impression on customers.

Datta et al. (2022), examined that mannequin displays significantly influences buying attention and attitudes of customers who procure on impulse.

Tlapana (2021), identified that both store interior as well as store layout was pivotal in influencing impulse buying behaviour.

Li et al. (2020),anlayzed that theme or colour helps in creating attractiveness, generating interest and furnishing comfortable ambience.

Laski et al. (2020), explained that consumers observed significantly more items under bright lightning conditions which boost consumer purchases.

Kim & Bachman (2019), opined that cleanliness is an important factor that might generate a strong image of the retail store along with motoring the sales.

Iberahim et al. (2020), asserted that promotional signage has a very strong and positive influence on impulse purchase of the customers.

OBJECTIVES OF THE STUDY

1. Exploring the most popular shopping malls in Kolkata as per the choice and preferences of shoppers of Kolkata.
2. Analyzing the important factors of visual merchandising that influence impulse purchases among shoppers of Kolkata.
3. Examining the impact of window displays, mannequin displays, floor merchandising,

promotional signage and cross-merchandising on impulse buying behaviour of consumers in Kolkata.

4. Determining the moderating effect of demographic variables of the consumers on impulse purchases.

CONCEPTUALFRAMEWORK

The conceptual or theoretical framework of the present study has been captured with a research model which comprises the different variables under constructs like independent, dependent and control.

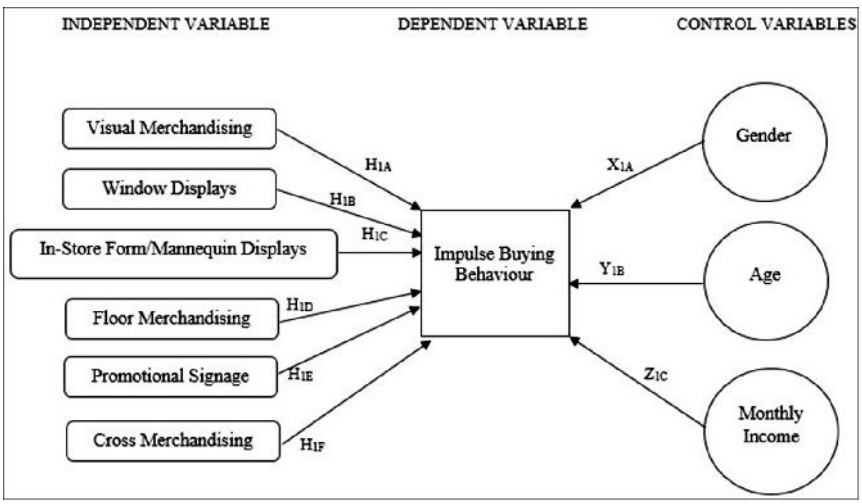

Figure 1: Research Model for the Present Study
(Source: Author's Self-Conception)

RESEARCH METHODOLOGY

Hypotheses Formulations

The alternate hypothesis (H1) for all the objectives can be framed as follows-

1. **H1A-** 'Visual merchandising has an impact on consumers who make impulse purchases.'
2. **H1B-** 'Window displays have an impact on consumers who buy things on impulse.'
3. **H1C-** 'In-store form and mannequin display have an impact on consumers who make impulsive purchases.'
4. **H1D-** 'Floor merchandising has an impact on consumers who buy things on impulse'.
5. **H1E-** 'Promotional signage has an impact on consumers who buy things on impulse'
6. **H1F-** 'Cross merchandising has an impact on consumers who buy things on impulse'
7. **H1X-** 'The respondent's gender has a big impact on their impulsive purchases.'
8. **H1Y-** 'The respondent's age has a big impact on their impulsive purchases.'
9. **H1Z-** 'The respondent's income has a big impact on their impulsive purchases.'

Sampling Design

Sample Frame- The present research study uses randomly chosen respondents directed contacted at South City Mall, Quest Mall and Avani Riverside.

Sample Size- The sample size as discussed is 303 respondents of which the male-female constitution accumulated to 157 and 146 respectively.

Sampling Method- The broad 'sampling technique' used is 'Multi-Stage Sampling' and the narrow 'sampling technique' used is'Simple Random Sampling'.

Sampling Analysis- The responses collected in this study have been processed by the use of International Business Machines' (IBM)Statistical Package for Social Sciences (SPSS v. 23) to analyze the data collected.

Table 1 shows the scales which have been adopted in the present research study.

Visual Merchandising	Mitra et al. (2020)
Window Displays	Darden (1983), Tullman and Rose (2004), Omar (1999); Kim (2003).
In-Store Form/Mannequin Displays	Kotler (1974), McGoldrick (1990), Bitner (1992); Kim (2003)
Floor Merchandising	Rook and Fisher (1995), Levi and Weitz (1996); Dua and Karolia (2008).
Promotional Signage	Loudon and Della (1993), Kerfoot and Ward (2003), Kim (2003); Clark (2007)
Cross Merchandising	Moayery et al. (2014).
Impulse Buying	Walters and White (1987), Han (1987), Mills et al. (1995); Varnie et al (2009)

Table 1: Sources of Scales from Previous Researches
(Sources: Author's Compilation of Sources)

DATA ANALYSIS AND INTERPRETATION OF FINDINGS

This section discusses the analysis of data which would be helpful to gain additional insights for the study.

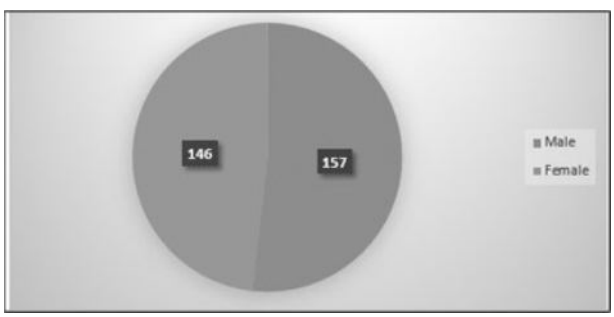

Figure2: Gender Distribution across Respondents
(Source: Author's Compilation)

Table 3 represents the frequency statistics for income distribution.

	Frequency	Valid Percentage	Cumulative Percentage
Below 20 (0-19)	22	7.3	7.3
20-25	107	35.3	42.6
26-40	79	26.1	68.7
41-55	52	17.2	85.9
Above 55	43	14.1	100.0
Total	303	100.0	

Table 3: Frequency Statistics for Age Classification
(Source: Primary Data)

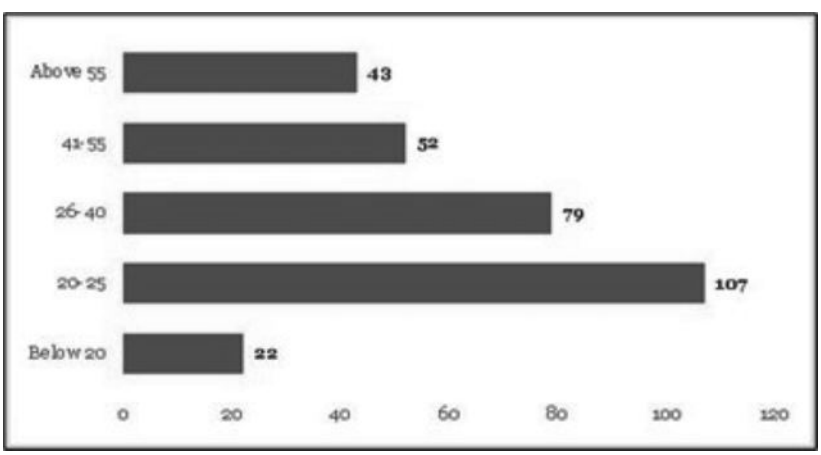

Figure3: Age Distribution across Respondents
(Source: Author's Compilation)

	Frequency	Valid Percentage	Cumulative Percentage
Below Rs.10000	75	24.8	24.8
Rs.10001 – Rs.25000	63	20.7	45.5
Rs.25001 – Rs.50000	64	21.1	66.6
Rs.50001 – Rs.100000	49	16.2	82.8
Above Rs.100000	52	17.2	100.0
Total	303	100.0	

Table 4: Frequency Statistics for Income Classification
(Source: Primary Data)

The graphical illustration is portrayed in Figure 4.

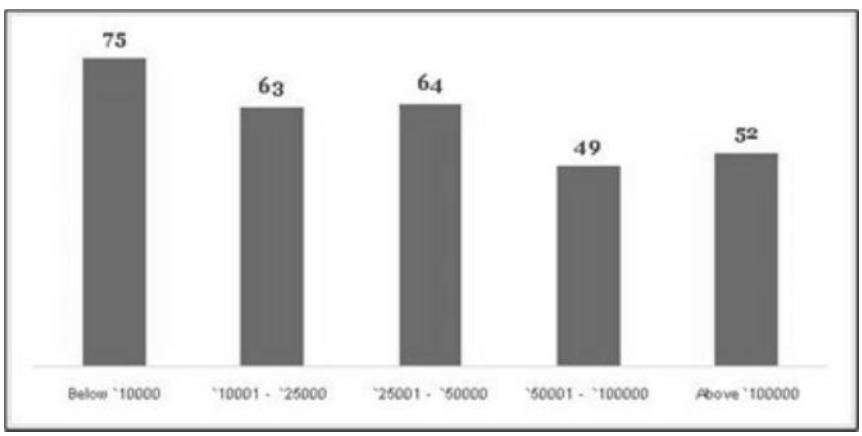

Figure 4: Monthly Income Classification among the Respondents
(Source: Author's Compilation)

ObjectiveI: Identifying the Most Popular Shopping Mall

The most popular shopping destination for consumers of Kolkata has been obtained, wherein, it is seen respondents opting for choices not mentioned in the questionnaire. Stores such as Brand Factory, Vero Moda, Blackberry's, Pepe, and Lifestyle among others.

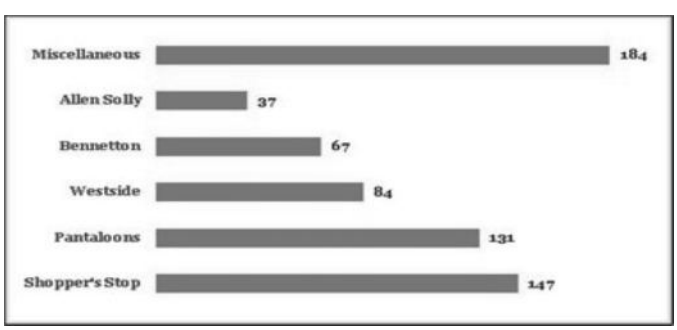

Figure 5: Popularity of Retail Stores Visited across India
(Source: Primary Data)

ObjectiveII: Analyzing the Important Factors of Visual Merchandising that Influences Impulse Purchases among Shoppers of Kolkata

The study's primary goal is to identify the most important variables affecting 'visual merchandising' among consumers. To this end, a factor analysis has been done to determine the key elements influencing 'visual merchandising'.

In order to check for enough sample size, it has been utilized by the Kaiser-Meyer-Olkin (KMO) and the Bartlett Test of Sphericity. In Table 5, this is illustrated.

The KMO Test verifies that factor analysis is appropriate. The KMO test coefficient is 0.872 and is significant at the 5 per cent level. The nine visual merchandising variables should therefore be subjected to a factor analysis.

The Bartlett's Test and KMO have been succeeded with the 'Total Variance Explained Test' (TVE). Due to the fact that the Eigen Values for the others are less than unity and are not provided in this way, two factors are produced.

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		0.872
Bartlett's Test of Sphericity	**Approx. Chi-Square**	937.627
	df	36
	Sig.	0.000

Table 5: KMO Bartlett's Test of Sphericity
(Source: Author's Computation)

Component	Initial Eigenvalues			Loadings		
	Total	percentage of var	cum percentage	Total	percentage of var	cum percentage
1	4.136	45.960	45.960	3.036	33.738	33.738
2	1.133	12.590	58.550	2.233	24.812	58.550
3	0.830	9.224	67.774			
4	0.680	7.555	75.329			
5	0.528	5.861	81.191			
6	0.514	5.716	86.907			
7	0.428	4.754	91.661			
8	0.399	4.437	96.098			
9	0.351	3.902	100.000			
Extraction Method: Principal Component Analysis						

Table 6: Total Variance Explained
(Source: Author's Computation)

With the use of 'Principal Component Analysis', we have isolated thevariable that meets the following criteria: 'Eigenvalues'> 1.

The Scree Plot (Cattell, 1966) is also represented.

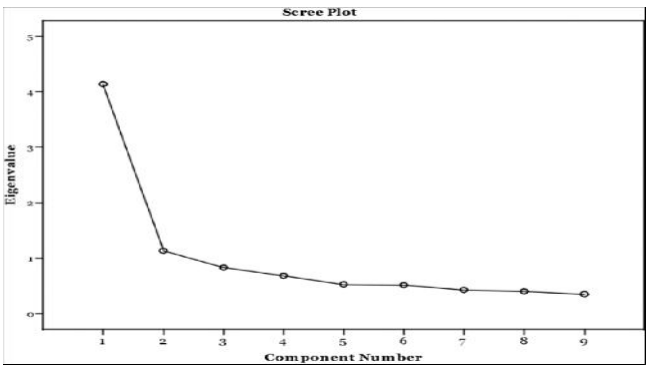

Figure6: The Scree Plot of Factors with Eigen Values Greater Than 1 is Shown in the Figure
(Source: Author's Computation)

The 'Rotated Component Matrix' (RCM) in Table 7 follows the Scree Plot, which states that the variables will be taken into account by the factors based on their factor loadings.

	Component	
	1	2
Store Display	0.783	0.113
Store Interior	0.798	0.160
Promotional Signage	0.528	0.331
Store Layout	0.585	0.381
Lighting System	0.480	0.495
Background Music	-0.007	0.867
Fragrance	0.275	0.732
Theme/ Colour	0.419	0.614
Cleanliness	0.827	0.172
Extraction Method: Principal Component Analysis Rotation Method: Varimax with Kaiser Normalization		
a. Rotation converged in 3 iterations.		

Table 7: Rotated Component Matrix
(Source: Author's Computation)

Component 1	Component 2
Store Display	Lighting System
Store Interior	Background Music
Promotional Signage	Theme/ Colour
Store Layout	
Cleanliness	

Table 8:Division of Rotated Component
(Source: Author's Compilation)

Three iterations of 'Varimax with Kaiser Normalization' were used to rotate the object. The following configuration of the parts is possible, as shown in Table 8.

The list of nine variables that can be observed is divided into two parts. Factor 1 can be renamed as Store Designand Factor 2 as Store Atmospherics.

Objective III: Examining the Impact of Window Displays, Mannequin Displays, Floor Merchandising, Promotional Signage and Cross-Merchandising on Impulse Buying Behaviour of Consumers in Kolkata

Regression Analysis

A regression test helps in analyzing the degree and direction of the relationship which exists between the 'independent variables' and 'dependent variable'.

Predictors: VM, WD, IF_MD, FM, PS & CM → Dependent Variable: IBB

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of Estimate
1	.796[a]	.756	.712	.72432

a. Predictors (Constant), VM, WD, IF_MD, FM, PS, CM

Coefficients[a]

Model	Unstandardized Coefficients		Standard Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	.579	.198		1.993	.096
VM	.698	.072	0.717	8.567	.000
WD	.658	.068	0.701	7.132	.000
IF_MD	.592	.057	0.622	6.409	.000
FM	.451	.049	0.414	4.105	.000
PS	.603	.062	0.598	6.198	.000
CM	.575	.054	0.563	6.024	.000

a. Dependent Variable: IBB

Table 9: Regression Statistics
(Source: Author's Computation)

Objective IV: Determining the Moderating Effect of Demographic Variables of the Consumers on Impulse Purchases

Chi-Square Test

The Chi-Square test is used to determine whether there is any correlation between the respondents' various demographic factors—including gender, age, and income—and their propensity to make impulsive purchases.

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	2.331[a]	4	.782
Likelihood Ratio	2.377	4	.769
Linear-by-Linear Association	1.634	1	.843
N of Valid Cases	303		

Table 10: Gender and Impulse Buying Behaviour
(Source: Author's Computation)

Table 10 shows a Chi-Square value of 0.782 (>0.05) which proves no association between gender and the 'impulse buying behaviour' of consumers.

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	21.933[a]	2	.000
Likelihood Ratio	27.616	2	.000
Linear-by-Linear Association	17.280	1	.000
N of Valid Cases	303		

Table 11: Age and Impulse Buying Behaviour
(Source: Author's Computation)

Table 11 shows Chi-Square value 0 which is significant proving existence of an association between age and 'impulse buying behaviour'.

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	16.372[a]	2	.000
Likelihood Ratio	17.823	2	.000
Linear-by-Linear Association	5.764	1	.000
N of Valid Cases	303		

Table 12: Income and Impulse Buying Behaviour
(Source: Author's Computation)

Table 12 shows Chi-Square value of 0, which proves existence of association between income and 'impulse buying behaviour'.

ANALYSIS AND DISCUSSION OF FINDINGS

The study explored nine of the pivotal factors of visual merchandising shaping impulse purchases among consumers. Besides, popular shopping destinations for consumers were also explored along with the demographic variables of consumers and their association with impulse buying.

LIMITATIONS OF THE STUDY

1. The size of the sample is only 303.
2. A larger sample would have given more insightful results.
3. The study has been conducted only in the metropolitan setting of Kolkata.

CONCLUSION AND RECOMMENDATIONS

More research in this area is advised because impulse buying is a phenomenon in contemporary culture. Further research with diverse 'demographic groups' and 'geographicgroups' and the impact of 'visual merchandising' across numerous 'non-store formats' are also advised. Also, it is important to survey a bigger sample and carry out in-depth research on a few additional 'visual merchandising' criteria.

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> Online shopping for daily essentials has become increasingly popular in India due to the convenience, wider selection of products, cost savings, and safety considerations.

Quick E-Commerce Applications Supplying Daily Essentials in Kolkata:

Consumer Analysis and Business Growth Strategies

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ABSTRACT

This article aims to explore potential strategies for quick electronic commerce (e-commerce) applications supplying daily essentials to expand their business in Kolkata, India. The focus is on understanding the perception of consumers in Kolkata towards these applications and identifying key areas for growth.

The study adopts a mixed-methods approach, combining quantitative surveys and qualitative interviews to gather comprehensive insights from consumers. The data is collected from a diverse sample of Kolkata residents, including different age groups, income levels, and areas of residence.

The article concludes by emphasizing the importance of understanding consumer perception and behaviour to drive business growth in the dynamic e-commerce market. By aligning their services with the preferences and needs of consumers in Kolkata, quick e-commerce applications can establish a strong presence, enhance customer satisfaction, and increase market share in the city's daily essentials segment.

KEYWORDS: Quick E-Commerce Applications, Daily Essentials, Kolkata, Consumer Analysis, Business Growth Strategies.

INTRODUCTION

The rapid growth of e-commerce has revolutionized the way people shop for daily essentials, and quick e-commerce applications have emerged as convenient platforms for consumers in Kolkata, India. This article focuses on exploring the landscape of quick e-commerce applications supplying daily essentials in Kolkata and their impact on consumer behaviour. Kolkata, with its vibrant consumer market, presents a unique opportunity for businesses in this sector. By analyzing consumer preferences, shopping patterns, and application usage, this article aims to provide valuable insights into the market dynamics. Additionally, it aims to uncover effective strategies for quick e-commerce applications to thrive in Kolkata's competitive marketplace, catering to the ever-increasing demand for daily essentials through digital platforms.

OBJECTIVES

1. To find out ways in which the e-commerce applications supplying daily essentials following the quick delivery model can expand their business as per the consumers of Kolkata.
2. To analyze the perception of consumers in Kolkata regarding different applications offering the quick delivery model.

LITERATURE REVIEW

1. Chatterjee and Bhaumik (2018) highlight the importance of application design and user experience in shaping consumer perceptions and satisfaction with e-commerce applications. A well-designed and user-friendly application interface can enhance the overall experience for consumers, leading to higher levels of satisfaction and increased likelihood of repeat usage. This suggests that e-commerce businesses need to prioritize application design and user experience to create positive consumer perceptions and build customer loyalty.
2. Ghosh and Choudhury (2019) conducted a study that examined the impact of various factors on consumer satisfaction and loyalty towards e-commerce applications. Their findings indicate that factors such as product range, delivery speed, and pricing significantly influence consumer satisfaction and loyalty. Consumers value a wide range of products to choose from, fast and reliable delivery services, and competitive pricing. E-commerce businesses should therefore focus on optimizing these factors to enhance consumer satisfaction and foster long-term loyalty.
3. Basu and Ghosh (2020) conducted a research study in Kolkata to explore consumer preferences regarding e-commerce application features. Their findings emphasize the significance of easy navigation, personalized recommendations, secure payment options, and responsive customer support. Consumers value applications that offer seamless navigation, allowing them to browse and search for products effortlessly. Personalized

recommendations based on their preferences and previous interactions enhance the shopping experience. Secure payment options enhance trust in consumers and alleviate concerns regarding online transactions. Additionally, prompt and responsive customer support is highly valued by consumers, as it provides reassurance and assistance when needed.

4. Majumder and Chatterjee (2019) examined the shopping behaviour of consumers in Kolkata and uncovered insights into their preferences and decision-making process when using e-commerce applications. They found that there is a growing trend of purchasing daily essentials through e-commerce applications, indicating the increasing reliance on digital platforms for routine purchases. The study also revealed that consumers have specific time preferences for making purchases, suggesting that businesses can optimize their marketing efforts to target consumers during these peak times. Furthermore, discounts and offers were found to significantly influence buying decisions, highlighting the importance of promotional strategies in driving consumer behaviour.

5. Biswas et al. (2020) proposed effective strategies for e-commerce businesses to expand their market share. Their study suggests that optimizing product range and availability, improving delivery systems, and enhancing customer engagement initiatives are crucial for success in the e-commerce industry. Offering a diverse range of products and ensuring their availability helps cater to the varied needs and preferences of consumers. Moreover, a reliable and efficient delivery system is vital to ensure timely and satisfactory delivery experiences. Finally, active customer engagement initiatives, such as personalized recommendations and targeted promotions, can enhance customer satisfaction and encourage repeat purchases.

RESEARCH METHODOLOGY

After thorough examination of the various past researches in this field and keeping in view the growth rate of this industry, this research is being conducted to attain the above-mentioned objective. Detailed insights of this topic are mentioned in the next chapter.

Sample Size and Period of Study

Data has been collected from people have different income levels, age groups and educational background. The sample size is 200. The study has been conducted over three months. This time has been utilized for the purpose of deciding the scope of study, fixing the objectives, framing the questionnaire, collecting the responses from the respondents, analysis the data, and writing the report.

Area of the Study and Type of Study

An attempt has been made to procure responses from all over Kolkata. Respondents have been gathered from both urban and rural areas. However, a clear bias can be seen. This bias is due to time constraints and lack of experience in collecting primary data.

The study is mostly qualitative in nature because it ismarketing oriented. However, the frequencies have been used to covert the data into a quantitative form so that statistical tests like correlation, weighted average and graphical representation are possible.

Tools for Data Collection

The questionnaire comprises a series of close ended questions (MCQ or multiple-choice question). This was done to ensure uniformity in responses. Close ended questions also facilitate rigorous quantitative analysis through software like Microsoft(MS) Excel.

However, to ensure the obtain accurate data, most of the MCQs had an option 'Others', wherein the respondent is free to type in his own personalized answer.

The questionnaire had a few open-ended questions as well. This was done because it is not possible to capture all answers via the options of multiple-choice questions.

Dichotomous scales and Likert scale have been used in the questionnaire wherever required.

A dichotomous scale is atwo-point scale that presents options that are absolutely opposite each other. Examples: Yes – No; a true or false statement. A response scale of this type does not allow the

respondent to be neutral. However, to serve the purpose of the study, a question overlooks this principle of dichotomous scale.

A Likert scale is a unidimensional scale that researchers use to collect respondents' attitudes, beliefs and opinions. In order to understand how consumers, view a brand, product, or target market, researchers use a psychometric scale.

Tools of Data Analysis

Data has been analyzed using two tools. They are as follows:

1. MS Excel

The most commonly used spreadsheet on personal computers (PCs) is Excel. Excel is often pre-installed on newly purchased computers. This program allows us to do a variety of calculations, includes a collection of statistical functions and includes a Data Analysis ToolPak. Therefore, it proved to be an obvious option.

2. Weighted Average

The survey responses were entered into an Excel spreadsheet, with each feature in a separate column and each response in a separate row. The importance ratings were entered into a separate column next to each feature.

To calculate the weighted average, we used the SUMPRODUCT and SUM functions in Excel. We first multiplied each feature rating by its corresponding weight, and then added up the results for all features. We then divided the sum of the weighted feature ratings by the sum of the weights to get the weighted average.

3. Graphical Representation

Visual aids can be helpful in making data easier to understand. Google Forms offers a simple pie chart for novice researchers, while Google Sheets allows for more complex and adaptable pie charts for presentations. Pie charts are a quick way to identify common outcomes and understand broad patterns, as our brains are wired to interpret information visually. On the other hand, tables can make it difficult to understand data meaningfully.

DATA ANALYSIS AND INTERPRETATION

Quick E-Commerce Application Wise Analysis

The following parameters have been given appropriate weights keeping in view the key factors influencing consumer preference in this industry:

1. Delivery Services -30 per cent weight

The most important factor that differentiates this industry with other is the 10-minute delivery model. Hence, maximum weight has been assigned to it. The term delivery service is inclusive of both delivery speed and delivery charge.

2. Product Variety -20 per cent weight

This parameter covers the purview of goods that are available on these applications. It is also inclusive of the answer to the question: Do I get everything I need on these applications?

3. User Interface - 20 per centweight

This parameter explains how customer friendly is the front end of the applications. It elaborates on which application is the easiest to use for the customers.

4. Customer Complaint Redressal Mechanism - 20 per centweight

This refers to how quick are customer complaints adhered to and solved by the application's management. It evaluates:

i. Customer handling techniques

ii. Customer complaint turnover

iii. Bad experience faced by any of the respondents

5. Subscription Schemes - 10 per centweight

All these applications offer various paid customer subscription schemes which enable customers to avail free delivery, additional discounts, priority delivery and so on. However, this parameter has been given the least weight because the respondents belong to a developing country like India where financial literacy ratio is very poor and people are afraid to spend on such schemes.

Parameter	Weights	Blinkit	Instamart	JioMart	Amazon Fresh	BigBasket	Zepto
Delivery Service	30 per cent	86	11	7	20	19	18
Product Variety	20 per cent	71	10	13	24	25	6
User Interface	20 per cent	67	10	8	26	20	7
Customer Complaint Redressal Mechanism	20 per cent	59	14	7	28	24	7
Subscription Schemes	10 per cent	39	15	6	30	18	3
Weighted Average Score		**69.1**	**11.6**	**8.3**	**24.6**	**21.3**	**9.7**

Table 1: Weighted Average Analysis for Different Applications
(Source: Primary Data)

Interpretation

As per Table 1, the ranking of the applications are as follows:

1. Blinkit
2. Amazon Fresh
3. BigBasket
4. Instamart
5. Zepto
6. JioMart

In the Indian e-commerce market, Blinkit was the first e-commerce company to enter the market, which gave them an early advantage in terms of brand recognition, customer acquisition, and market share. However, new entrants like Instamart and others have been able to gain traction by offering unique value propositions and leveraging their existing brand and customer base. Ultimately, the success of a quick e-commerce application in India depends on its ability to meet the needs and preferences of Indian consumers, regardless of whether they are a first mover or a new entrant.

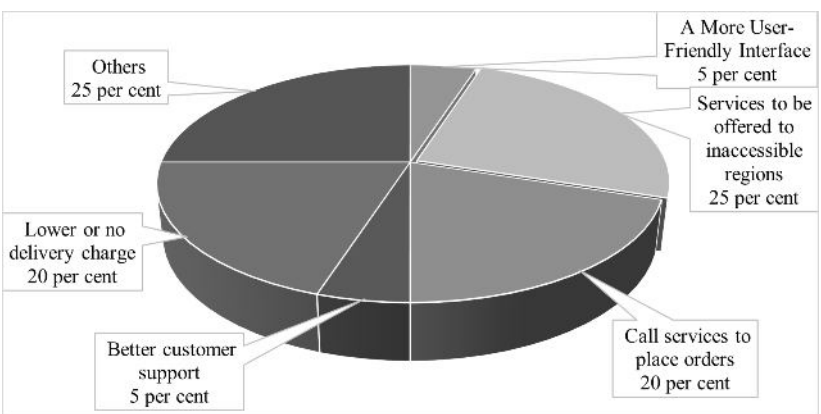

Figure 1: Reasons for Which Customers Willing to Shift for Online Purchase of Daily Essentials via theQuick E-Commerce Applications
(Source: Primary Data)

Interpretation

There are several new introductions that companies can make to improve the online purchase experience for consumers and encourage them to shift to online purchases of daily essentials:

1. Better User Interface (UI): Companies can improve their online store's UI to make it more user-friendly, intuitive, and visually appealing. This can include better product categorization, search functionality, and product descriptions.
2. Personalization: Companies can offer personalized recommendations to consumers based on their previous purchases, search history, and preferences. This can help consumers discover new products and make more informed purchasing decisions.
3. Customer service: Companies can offer customer service through phone calls or live chat to address any concerns or queries that consumers may have while shopping online. This can help build trust with consumers and improve their overall shopping experience.
4. Subscription-based models: Companies can offer subscription-based models for regular purchases of daily essentials. Through these models they can implement lower delivery charges. This would be a win-win situation. This can provide consumers with convenience, as they will not have to manually order the same products each time, they need them.
5. Loyalty programs: Companies can offer loyalty programs to incentivize consumers to shop more frequently and make repeat purchases. This can include discounts, rewards, and other benefits.
6. Delivery at inaccessible regions: Companies can introduce delivery options for consumers living in inaccessible or remote regions where traditional brick-and-mortar stores are not easily accessible. This can provide greater convenience for consumers and expand the reach of online stores.

Overall, these new introductions can help companies improve the online purchase experience for consumers and encourage them to shift to online purchases of daily essentials.

FINDINGS

Ways in Which the Quick E-Commerce Applications Supplying Daily Essentials Can Expand Their Business as Per the Consumers of Kolkata

The findings of the consumer analysis in Kolkata regarding quick e-commerce applications supplying daily essentials reveal several key points. Consumers in Kolkata highly value application features such as easy navigation, personalized recommendations, secure payment options, and responsive customer support. Factors such as product range, delivery speed, and competitive pricing significantly impact consumer satisfaction and loyalty. The research highlights the growing trend of purchasing daily essentials through e-commerce applications and the influence of discounts and offers on consumer buying decisions. To encourage consumers to shift to online purchases, companies can focus on improving user interfaces, offering personalized recommendations, providing excellent customer service, implementing subscription-based models, introducing loyalty programs, and expanding delivery options to inaccessible regions.

Weighted Analysis of the Perception of Consumers in Kolkata for Different ApplicationsOffering the Quick Delivery Services

The analysis highlights the diverse strengths and competitive landscape of quick e-commerce applications in Kolkata. While early entrants like BlinkIt and Amazon Fresh have established their positions, newer players like InstaMart and Zepto have made significant strides. The success of these applications ultimately depends on their ability to align with consumer preferences, offer efficient delivery services, a wide product variety, a user-friendly interface, and robust customer support mechanisms. As the Kolkata e-commerce market continues to grow, competition in this space is expected to intensify, driving further innovations and improvements to enhance the online shopping experience for consumers.

CONCLUSION

In conclusion, this research paper has examined the consumer analysis and business growth strategies for quick e-commerce applications supplying daily essentials in Kolkata. The study highlighted the growing popularity of these applications among consumers, driven by factors such as convenience, product availability, and competitive pricing.

The analysis of consumer preferences revealed that delivery services, product variety, user interface, customer complaint redressal mechanism, and subscription schemes were key factors influencing consumer choices. Understanding these factors is crucial for e-commerce companies operating in Kolkata to tailor their strategies and meet customer expectations.

1. Online shopping for daily essentials has become increasingly popular in India due to the convenience, wider selection of products, cost savings, and safety considerations.
2. While impulsive buying and wasteful expense can occur when shopping on e-commerce applications, they are not the primary reasons behind their success. Instead, it is the convenience, speed, competitive prices, wide selection of products, trust and reliability that have contributed to the resounding success of quick e-commerce applications in India.
3. The success of quick e-commerce applications in India is due to their convenience, speedy delivery, better prices, wide variety of products, ease of payment, and user-friendly interfaces. These factors have made them a popular choice for consumers who are looking for a fast and hassle-free shopping experience.
4. Blinkit is the most preferred applications by customer. This is primary because it was the first one to enter and capture the market.

The perception of people regarding the purchase of quick e-commerce applications and the 10-minute delivery model may vary depending on several factors, including their personal preferences, lifestyle, location, and level of trust in online shopping platforms.

Some people may find the convenience of quick e-commerce applications and 10-minute delivery models appealing, particularly those who lead busy lives and value time-saving solutions. This may include working professionals, parents with young children, or individuals who live in areas where brick-and-mortar stores are not easily accessible.

On the other hand, some people may have concerns about the quality of products delivered through such fast delivery services, especially with respect to perishable items like fruits and vegetables. Additionally, some may be hesitant to trust new or unfamiliar e-commerce platforms, particularly if they have had negative experiences with online shopping in the past.

To foster business growth, the research suggests several strategies for quick e-commerce applications. These include focusing on enhancing delivery services with faster delivery times and reasonable charges, expanding product variety to cater to diverse consumer needs, investing in a user-friendly interface to improve the overall shopping experience, prioritizing effective customer complaint resolution mechanisms, and offering attractive subscription schemes to incentivize customer loyalty.

The research also reveals that Blinkit ranked the highest, followed by Amazon Fresh and BigBasket. Instamart, Zepto, and JioMart secured lower rankings. The results suggest that factors such as delivery services, product variety, user interface, and customer complaint redressal mechanism play a significant role in determining the success of e-commerce applications in India.

By implementing these strategies, e-commerce applications can strengthen their market position, attract more consumers, and achieve sustainable growth in Kolkata's competitive market. Continuous monitoring of consumer preferences, adaptation to evolving trends, and maintaining high standards of service will be crucial for long-term success in this dynamic industry.

RECOMMENDATIONS

Recommendations for Companies

1. Strengthen last-mile logistics and delivery infrastructure to ensure faster and more reliable delivery services.
2. Continuously update and expand product offerings to cater to a diverse range of consumer needs.
3. Invest in UI enhancements to improve the overall online shopping experience.
4. Establish a robust customer complaint redressal mechanism to address consumer concerns promptly.
5. Develop flexible and affordable subscription schemes to attract more customers and drive loyalty.

Recommendations for Future Researchers

1. Conduct a detailed analysis of consumer preferences and behaviour specific to different regions within Kolkata.
2. Explore the impact of digital marketing strategies on the adoption and growth of quick e-commerce applications.
3. Investigate the role of social media influencers and customer reviews in shaping consumer decision-making.
4. Examine the challenges and opportunities for integrating offline and online retail channels for daily essentials.
5. Study the long-term sustainability and scalability of the 10-minute delivery model in the Indian market.

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> With the increasing demand for authentic and relatable content, influencer marketing will continue to grow and change as social media platforms and consumer behaviour evolve.

Rise of Influencer Marketing in India

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ABSTRACT

This paper assesses the influence of different categories of influencers and evaluates whether it has a positive impact after an influencer collaborates with a brand. Businesses spend a lot of money on influencers to collaborate with the brand. Hence, the research will evaluate whether the return on this expenditure has been sufficient or not. Expenditure on an influencer can be in terms of paying their contract fees, paying for the products or services they are promoting, giving them access to products or services free of cost, or providing them with free samples.

KEYWORDS: Influencer, Engagement Rate, Endorsement, Reach, Collaboration.

INTRODUCTION

In recent years, influencer marketing has emerged as a popular marketing strategy in India. An influencer is an individual who has the ability to affect the purchasing decisions of others due to their credibility, popularity, and expertise in a specific niche or industry. Influencers can be found across various fields, including fashion, beauty, fitness, and many others.

In the context of social media, an influencer is typically someone who has a significant following on platforms such as Instagram, YouTube, or Twitter. They often create content that is focused on a specific niche or industry, such as fashion or beauty, and their content can range from product reviews and tutorials to lifestyle content and personal stories. Influencers are often sought after by brands for their ability to promote products or services to their followers authentically and engagingly. By collaborating with influencers, brands can reach a wider audience and leverage the influencer's credibility and trust with their followers to promote their products.

The process of influencer marketing typically involves identifying relevant influencers, establishing a partnership with them, and creating content that promotes the brand's products or services.

LITERATURE REVIEW

Vaidya (2023): Studied and worked to gain and provide insights into existing research works exploring the strategic use of social media influencers.

Trivedi and Arora (2022): Studies the importance of celebrity influencers and long duration video advertisements in tourism marketing.

Rani and Roy (2022): Studies the factors pertaining to source credibility and platform credibility in determining influencer's effectiveness on social media.

Rudra (2022): Studies how influencer marketing impacts changing buying preferences and how it transforms to be in tune with modern consumers.

Suri (2022): Studies the elements that influence digital content viewing through influencer marketing and its impact between male and female.

Tanwar and Chaudhry (2022): Reviewed the academic literature related to influencer marketing between 2011 and 2019 with the help of both bibliometric analysis and content analysis.

Nidamarthy (2020): Studies various social media platforms used by the audience to view different content and its impact on consumers which could help companies decide appropriate marketing strategies to reach the right customer at the right place.

Gupta and Mahajan (2019): Studies the credibility of micro-influencers and their impact on behavioural intentions of their followers.

Trivedi (2018): Studies a solution to the problem fashion marketers are facing in the conundrum of employing a fashion expert as an influencer by measuring the comparative efficacy of these influencers.

Mohan (2017): Studies the concept of influencer marketing and its types. The paper explains how companies can market to the influencers and how influencers can further target customers.

RESEARCH GAP

From the literature review, we can say that not much research has been done on the immediate impact of an influencer collaborating with a brand. This research focuses on the four different categories of influencers who are uploading posts on brand collaborations and checking if there is any increase in the number of followers on the brand's Instagram account or their quarterly or yearly sales. Hence, in this research, we focus on this gap and try to find out which category of influencer has the highest impact on a brand after they collaborate with the brand.

OBJECTIVES

The objectives of this research paper are as follows:

1. To observe how a face associated with a brand can boost sales (four brands covered).
2. To observe the change in the number of Instagram followers of a brand after an influencer has collaborated with them.
3. To analyze which category of influencer the surveyed audience relied upon and does it correlate with their engagement rates.

RESEARCH METHODOLOGY

The research work has been conducted based on primary data collected from 173 people and secondary data collected from various marketing and social media websites. For this research, four Indian influencers (one from each category) having high engagement rates within their category, having a niche in their domain, and having a longer history of their relationship with the brand are selected. Then, we made a questionnaire comprising 16 questions and circulated it among various groups of people. Also, we took the help of some paid analytical influencer marketing websites like Popsters, Qoruz and Socialblade. The Socialblade website helped us to gather information like the trend analysis of that brand's Instagram account in a graphical manner. The Qoruz website helped us to know the daily followers' patterns of these brands' Instagram following. Lastly, the Popsters website helped us to know information like the influencer's engagement rate for that particular post, their average likes and views on that post and so on. We then researched the influencers category-wise and sorted out the ones with the highest engagement rate in that category. We thoroughly searched these influencers Instagram account to come across some of their best collaborations with an Indian brand. We have focused on different fields such as Fashion, Fitness Enthusiast, Travel, Food vlogger and Music. These fields have been taken as per the responses received from the respondents via the questionnaire.

In this paper, the influencers are categorized into four categories on the basis of followers:

a. Nano Influencers (1,000 – 10,000)

b. Micro Influencers (10,000 – 100,000)

c. Macro Influencers (100,000 – 1,000,000)

d. Mega Influencers (Greater than 1,000,000)

Four different companies are analysed which are selected based on the influencers from different categories.Firstly, we sorted the above-mentioned categories in the Popsters website where we found at least 2500 to 4000 influencers from each category and filtered out the ones with at least 10 per cent or higher engagement rate. After this, we searched more than 25 Instagram accounts from each category to get an Indian collaboration with a known and prominent brand. We went through more than 9000 posts on Instagram in total to get these four posts mentioned in this project. Then we searched these brands on the Qoruz website to see which brands were having a positive change in their followers' number after the collaboration with these influencers. We also made sure that none of the brands had any or much collaborations during that period in time when our selected influencers collaborated with the brand. We analyzed the brands Instagram account daily followers' movement during that collaboration period. This process is carried for all these four brands and the data collected is put together to draw conclusions and to find out if these influencers are actually helping the brands to get more followers via their collaborations.

CATEGORY OF INFLUENCERS

Nano Influencers (Followers: 1,000 – 10,000)

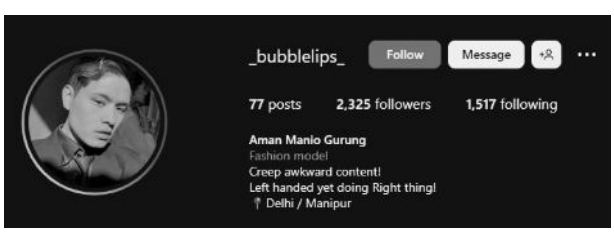

Figure 1: Aman's Instagram Account (Source: Instagram)

Name: Aman Mario Gurung

Average Like (Per Post): 365

Followers: 2,325

Average Post Uploads (Per Month): 6

Brand: Snitch.co.in

Field: Fashion

Engagement Rate (On Average):16.064 per cent

Average Views (Per Post): 6,000

Aman uploaded a post on Instagram on 13th January,2023 where he was wearing a few collections from his collaboration with a clothing company called Snitch.co.in. The post gained 342 likes on the first day itself. The engagement rate of this post is 22.055 per cent.

Snitch.co.in is an Indian clothing brand operating in the space of fashion and their Instagram account (@snitch.co.in) has 343,000 followers.



Figure 2: Aman's Posts for Snitch
(Source: Popsters.com)



Figure 1: Monthly Gained Followers for Snitch.Co.In (Source: SocialBlade.com)

Figure 3: Monthly Gained Followers for Snitch.co.in
(Source: SocialBlade.com)

Here in Figure 3, we can see that the followers in the month of January 2023 have risen by almost five times than its previous month, which is the very month Aman collaborated with this brand.

INSTAGRAM STATS SUMMARY / USER STATISTICS FOR SNITCH.CO.IN (2023-01-08 - 2023-01-18)					
DATE		FOLLOWERS		FOLLOWING	
2023-01-08	Sun	+ 981	230181	-	137
2023-01-09	Mon	+1178	231359	-	137
2023-01-10	Tue	+872	232231	-	137
2023-01-11	Wed	+1005	233236	+1	138
2023-01-12	Thu	+771	234007	-	138
2023-01-13	Fri	+1921	235928	+3	141
2023-01-14	Sat	+2009	237937	+1	142
2023-01-15	Sun	+1142	239079	-	142
2023-01-16	Mon	+1548	240627	-	142
2023-01-17	Tue	+893	241520	+1	143
2023-01-18	Wed	+991	242511	-	143

Table 1: Daily Follower Movement of Snitch (for 10 Days)
(Source: Qoruz.com)

Table 1 shows the daily follower insights of Snitch. Here we can see that there has been a surge in the number of followers on the day Aman uploaded his post. So in the following days the number of followers increased to a great extent.

It is to be noted that Snitch was not uploading a lot of posts during that period. Thus, it means Aman, who is a nano-influencer, has the potential to drive a lot of traffic to this brand and therefore increase its followers.

Micro-Influencers(Followers: 10,000 – 100,000)

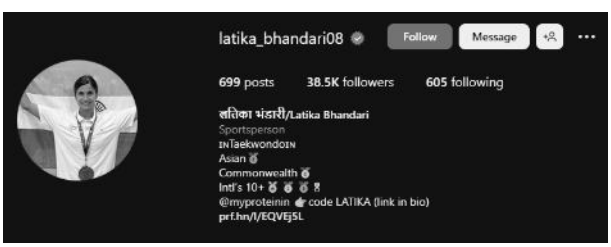

Figure 4: Latika's Instagram Account
(Source: Instagram)

Name: Latika Bhandari
Brand: Pintola Peanut Butter
Followers: 38,500
Field: Sports and Fitness Enthusiast
Average Post Upload (Per Month): 46
Average Views (Per Post): 25,000
Average Likes (Per Post): 4,889
Engagement Rate (On Average): 14.398



Figure 5: Latika's Post About Pintola
(Source: Popsters.com)

Latika Bhandari uploaded a post in Instagram on 26th January, 2023 where she has collaborated with an Indian company known as Pintola. The post gained an overall 4458 likes. It was a sponsored post by Pintola. The engagement rate of this post is 11.6536 per cent.

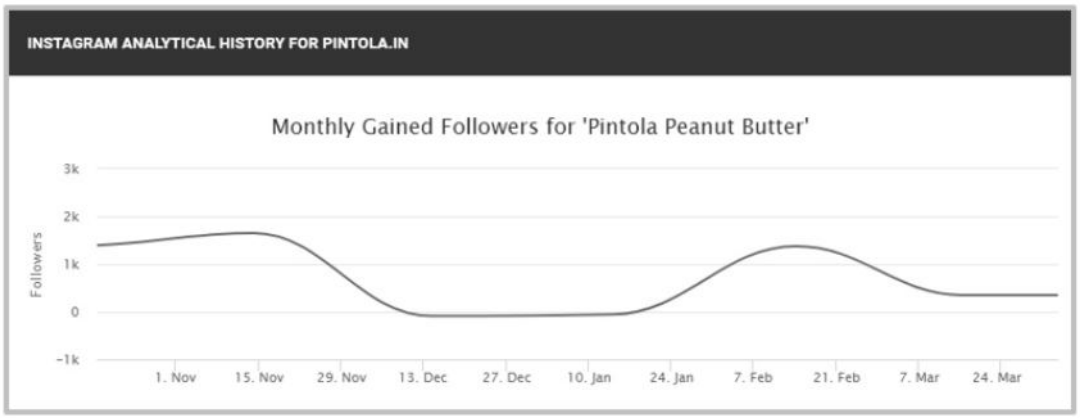

Figure 6: Monthly Gained Followers of Pintola
(Source: SocialBlade.com)

Here in Figure 6, we can see there has been a massive increase in the number of followers of Pintola's official Instagram account January end onwards. During that very period only, Latika collaborated with the brand and shared her content.

INSTAGRAM STATS SUMMARY / USER STATISTICS FOR PINTOLA (2023-01-22 - 2023-02-01)					
DATE		FOLLOWERS		FOLLOWING	
2023-01-22	Sun	+75	25068	-	12
2023-01-23	Mon	+65	25133	-	12
2023-01-24	Tue	+68	25201	-	12
2023-01-25	Wed	+112	25313	-	12
2023-01-26	Thu	+472	25785	-	12
2023-01-27	Fri	+348	26133	-	12
2023-01-28	Sat	+412	26545	+1	13
2023-01-29	Sun	+244	26789	-	13
2023-01-30	Mon	+292	27081	-	13
2023-01-31	Tue	+312	27393	-	13
2023-02-01	Wed	+374	27767	-	13

Table 2: Daily Follower Movement of Pintola (for 10 Days)
(Source:Qoruz.com)

In Table 2, it shows the daily follower insights of Pintola. Here we can see that there has been a surge in the number of followers on the day Laitka uploaded her post in her Instagram account. So in the following days the number of followers of Pintola increased by a great extent.

The rise in the number of followers of Pintola must be due to the publicity done by influencers like Latika who have a very specific group of followers (i.e. the fitness enthusiast) who listen to their master for health benefit tips. It is the reason why Pintola reached several new audiences via their collaboration with Latika during that period in time.

Macro-Influencers (Followers: 100,000 – 1,000,000)

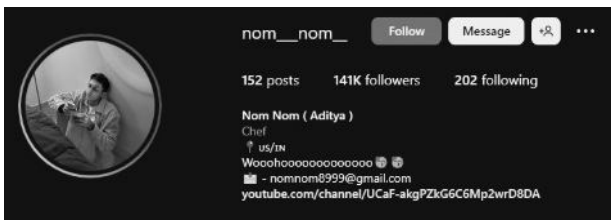

Figure 7: Aditya Nair's Instagram Account (Source: Instagram)

Name: Aditya Nair
Average Likes (Per Post): 17,000
Followers: 141,000
Average Post Upload (Per Month): 22
Brand: Swiggy Instamart
Engagement Rate (On Average): 12.016 per cent
Average Views (Per Post): 169,000
Field: Food Vlogger



Figure 8: Aditya Nair's Post for Swiggy Instamart (Source: Popsters.com)

Aditya uploaded a post on Instagram on 27th February, 2022 where he has collaborated with an Indian company known as Swiggy Instamart. The post gained an overall of 19,234 likes. It was a sponsored post by Swiggy Instamart. The engagement rate of this post is 13.6487 per cent. Swiggy Instamart is a grocery delivery application under the parent company Swiggy. It has over 32,400 Instagram followers.

Swiggy Instamart made Aditya its Brand Endorser in February 2022 and he then started to upload various Instagram Reels (shorter version of videos) in his account. Over a couple million views were generated from all these Swiggy Instamart collaborations combined.

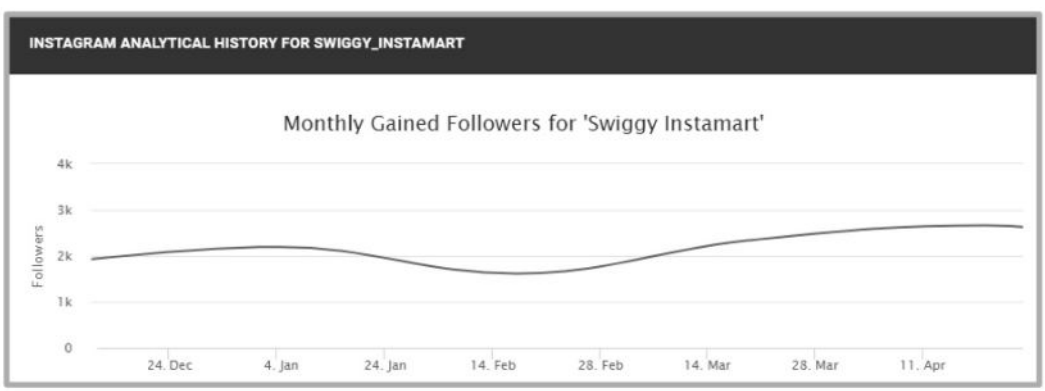

Figure 9: Monthly Gained Followers for Swiggy Instamart (Source: SocialBlade.com)

Here in Figure 9, we can see there has been a massive increase in the number of followers of Swiggy Instamart's official Instagram account from February end onwards. During that very period only, Aditya collaborated with the brand and shared his content. Notably, the rise of followers is consistent as Aditya continued sharing his reels and post over a span of months.

INSTAGRAM STATS SUMMARY / USER STATISTICS FOR SWIGGY INSTAMART (2022-02-22 - 2022-03-04)					
DATE		FOLLOWERS		FOLLOWING	
2022-02-22	Tue	+12	10070	-	3
2022-02-23	Wed	+19	10089	-	3
2022-02-24	Thu	+35	10124	-	3
2022-02-25	Fri	+68	10192	-	3
2022-02-26	Sat	+54	10246	-	3
2022-02-27	Sun	+298	10544	-	3
2022-02-28	Mon	+312	10856	-	3
2022-03-01	Tue	+207	11063	-	3
2022-03-02	Wed	+189	11252	-	3
2022-03-03	Thu	+67	11319	-	3
2022-03-04	Fri	+121	11440	-	3

Table 3: Daily Follower Movement of Swiggy Instamart (for 10 days) (Source: Qoruz.com)

In Table 3, it shows the daily follower insights of Swiggy Instamart. Here we can see that there has been a surge in the number of followers on the day Aditya uploaded his post in his Instagram account. So in the following days the number of followers of Swiggy Instamart increased by a great extent as Aditya started to upload many food related contents in collaboration with Swiggy Instamart.

Today food vloggers like Aditya are gaining a lot of attention as people love seeing food related content and this whole food vlogging related section is receiving approximately 1.1 billion views per month (combining all platforms and all Indian creators).

Mega Influencers (Followers: 1,000,000 and above)

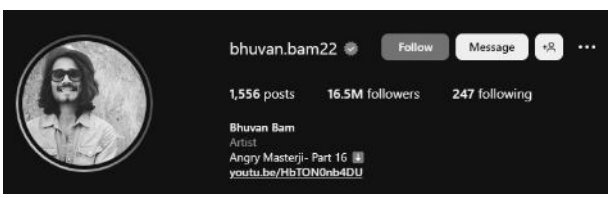

Figure 10: Bhuvan Bam's Instagram Account (Source: Instagram)

Name: Bhuvan Bam

Brand: Disney+HotstarFollowers: 16.5 million

Engagement Rate (On Average): 10.83 per cent

Average Likes (Per Post): 2 million

Average Post Upload (Per Month): 47

Average Views (Per Post): 9 million

Field: Youtuber and Entertainer

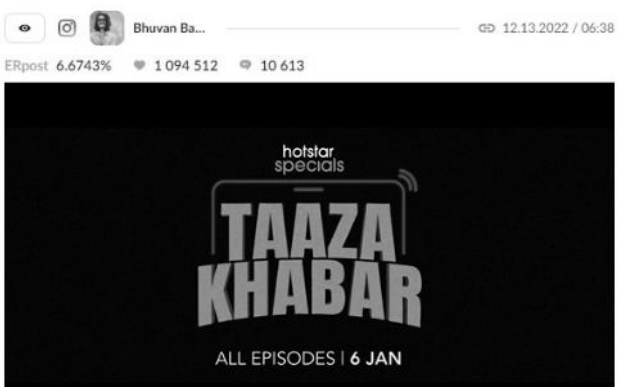

Figure 11: Bhuvan Bam's Post for Disney+ Hotstar (Source:Popsters.com)

Bhuvan Bam uploaded a post in Instagram on 13th December 2022 where he has collaborated with an Indian OTT (over-the-top) company known as Disney+Hotstar. The post gained over a million likes. Bhuvan had made a web series named 'Taaza Khabar'starring himself as the main character. The series was set to be released on 6th January, 2023 on Disney+Hotstar. The engagement rate of this post is 6.6743 per cent.

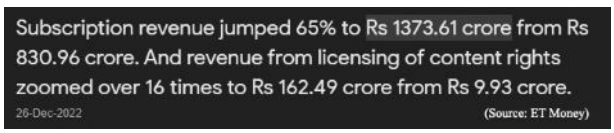

Figure 12: Statistical Impact of the Post (Source: Economic Times Money)

The series is a Disney+Hotstar exclusive and received eight million plusviews in the first week of release. In the undermentioned picture, we see there has been a huge jump in the subscription revenue of Disney+Hotstar in the first half of December, that is from when Bhuvan announced his upcoming series. Disney + Hotstar is an Indian OTT platform that provides television and film content over the internet, and it has its official Instagram account (@disneyplushotstar) with around two million followers.

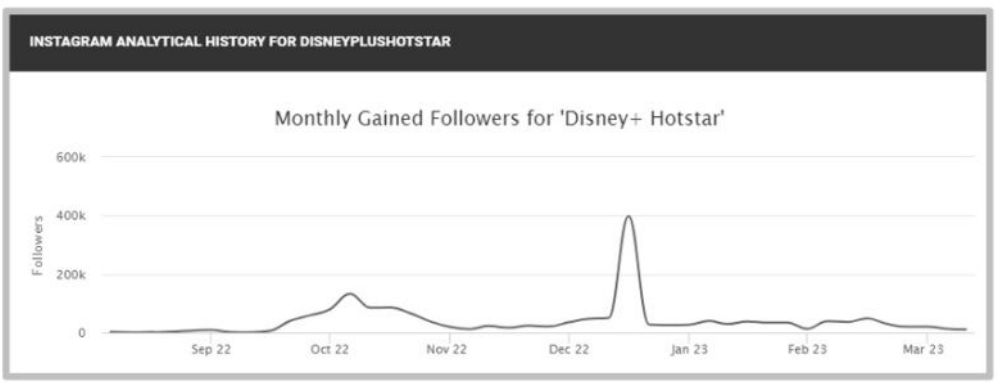

Figure 13: Monthly Gained Followers for Disney+ Hotstar (Source: SocialBlade.com)

Here in Figure 13, we can see there has been a massive increase in the number of followers of Disney+Hotstar's official Instagram account from the end of December 2022 onwards. During that very period only, Bhuvan collaborated with this OTT platform.

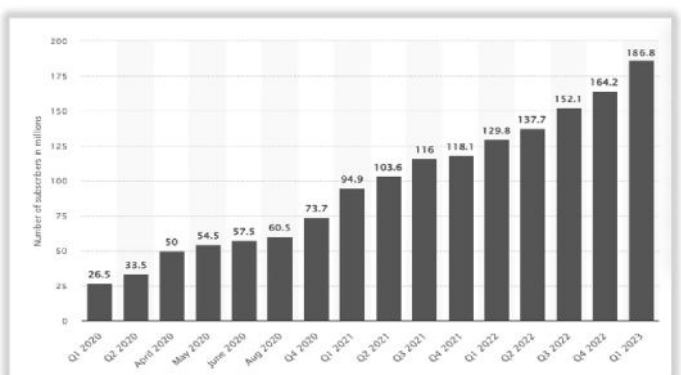

Figure 14: Quarter-on-Quarter Rise of Disney+Hotstar's Subscribers (Source: Economic Times Money)

In the above graph, we can see the number of subscribers of Disney + Hotstar has increased by 13 per cent in the first quarter of 2023 from the fourth quarter of 2022. This is the same period when Bhuvan's series was released.

ANALYSIS

A total of 173 responses were collected. Below given are the question charts with the number of responses:

1. Gender

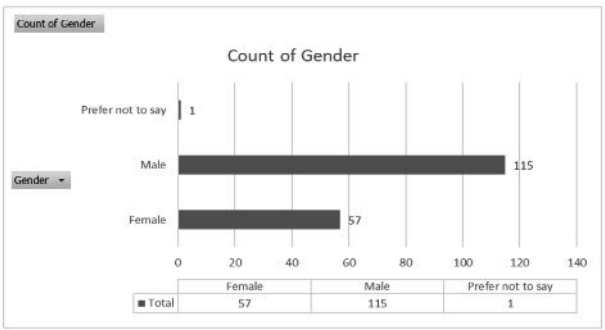

Figure 15: Count of Gender
(Source: Primary Data)

2. Age

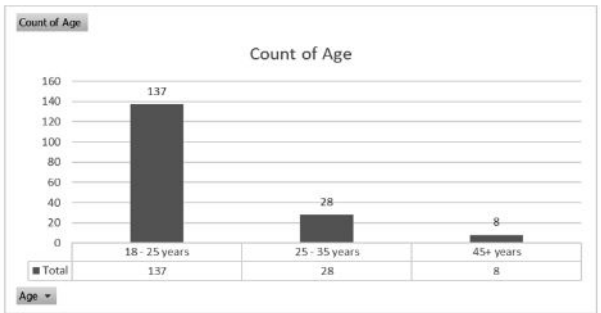

Figure 16: Count of Age
(Source: Primary Data)

3. Occupational Status

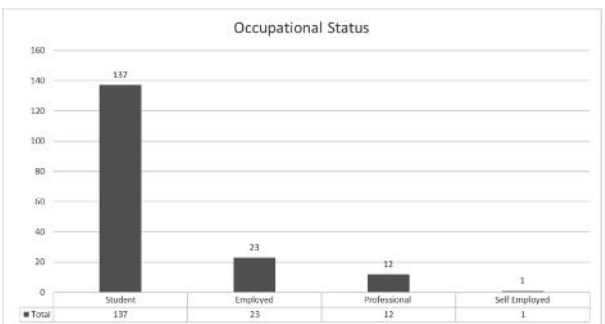

Figure 17: Occupational Status
(Source: Primary Data)

4. Occurrence of Usage

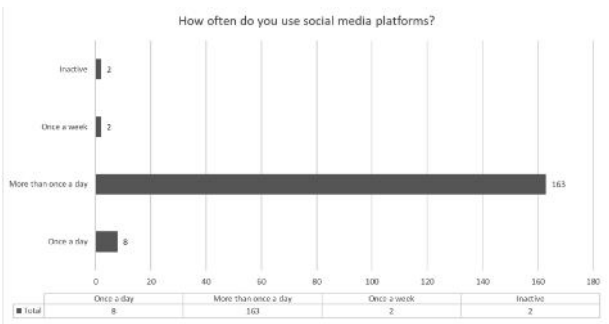

Figure 18: Occurrence of Usage
(Source: Primary Data)

5. Platforms

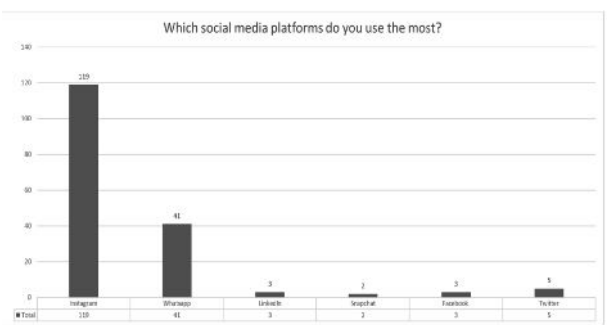

Figure 19: Platforms as Per Usage
(Source: Primary Data)

6. Following Influencers

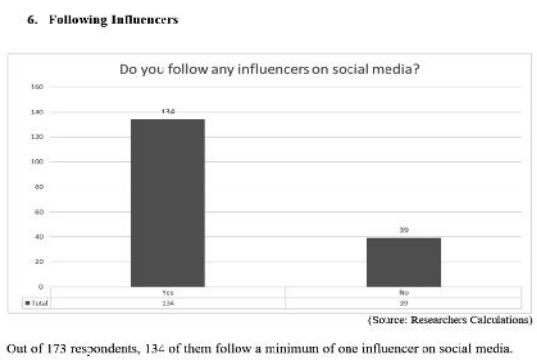

Figure 20: Following of Influencers on Social Media
(Source: Primary Data)

7. Purchasing a product

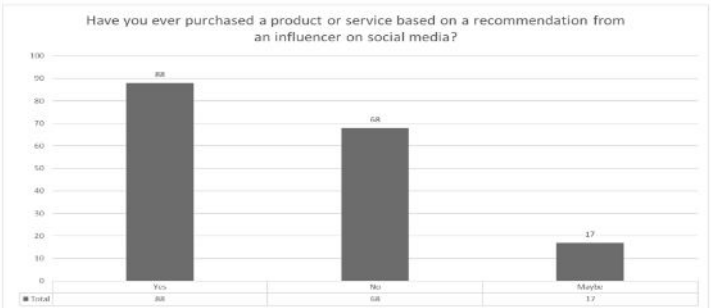

Figure 21: Purchases Based on Influencer Recommendations
(Source: Primary Data)

8. Content

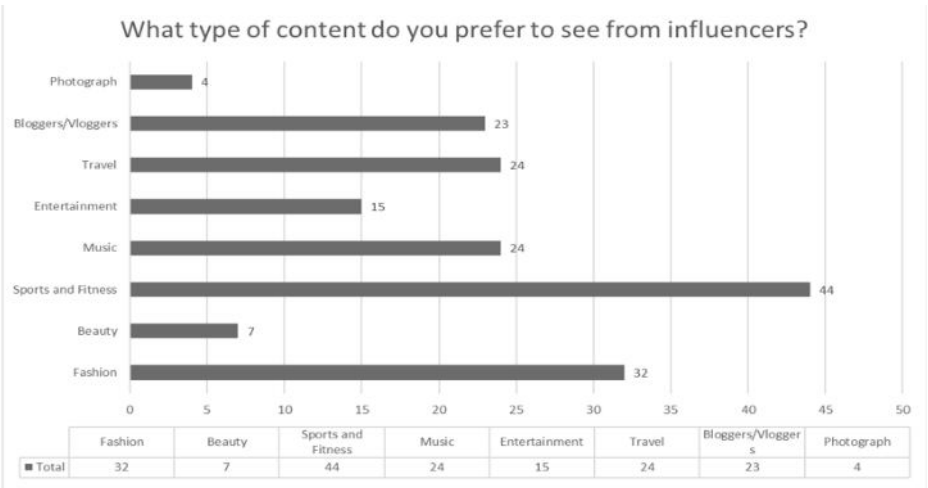

Figure 22: Content Preference
(Source: Primary Data)

9. Basis of selection

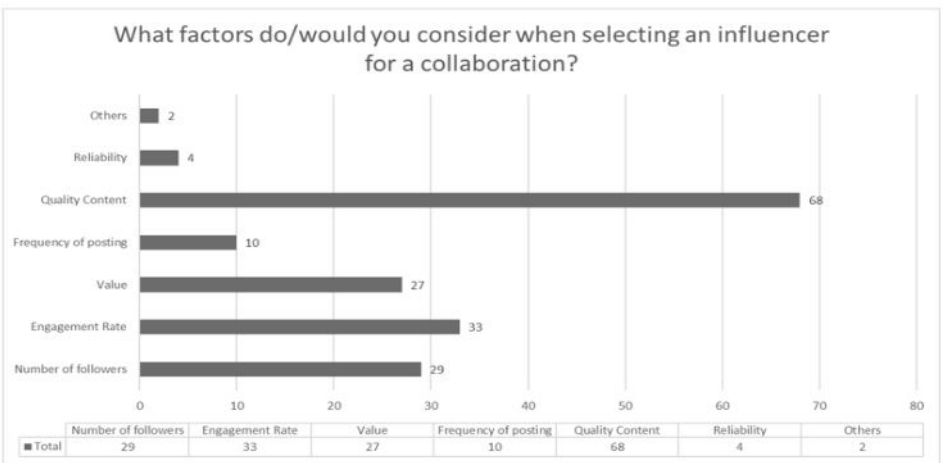

Figure 23: Factors while Choosing an Influencer for Collaboration
(Source: Primary Data)

10. Effectiveness

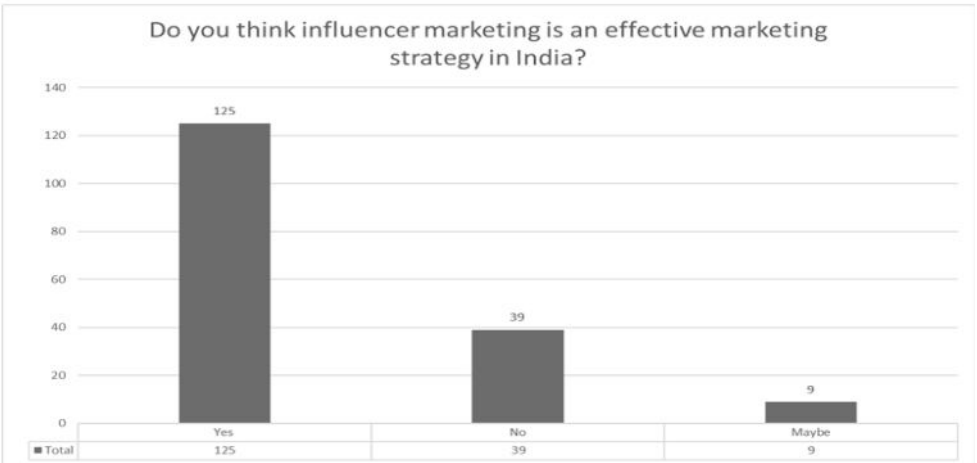

Figure 24: Opinion on the Effectiveness of Influencer Marketing
(Source:Primary Data)

11. Category

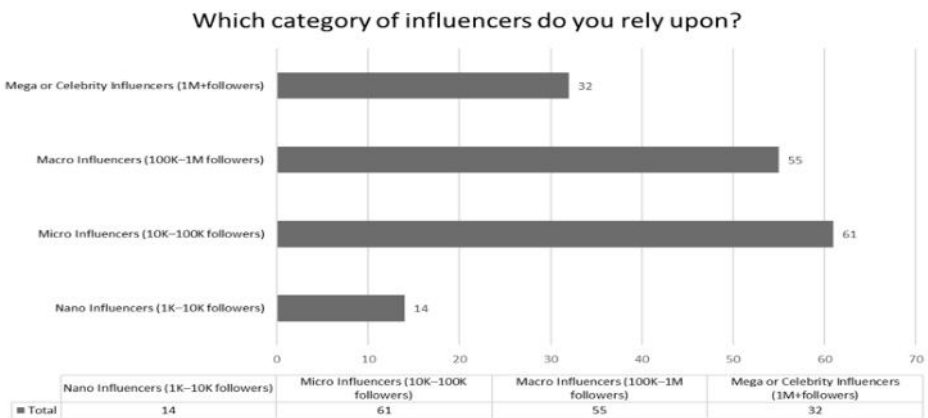

Figure 25: Reliance on Influencers
(Source: Primary Data)

12. Increase in Usage

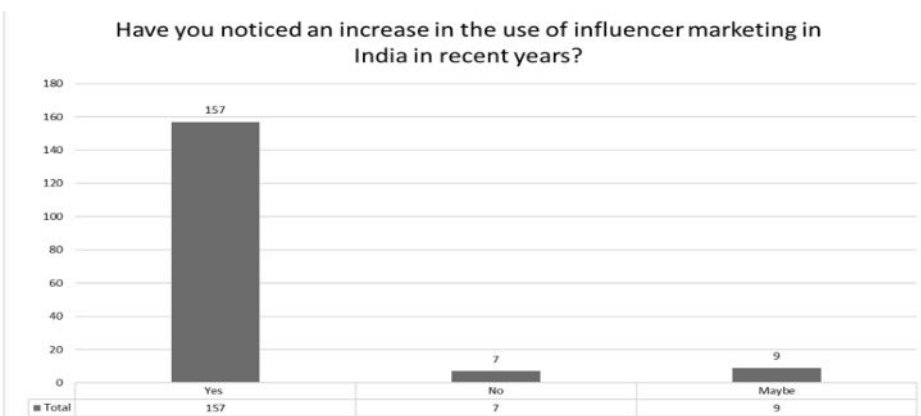

Figure 26: Opinion on the Growth of Influencer Marketing in India in Recent Years
(Source: Primary Data)

13. Purchase Behaviour

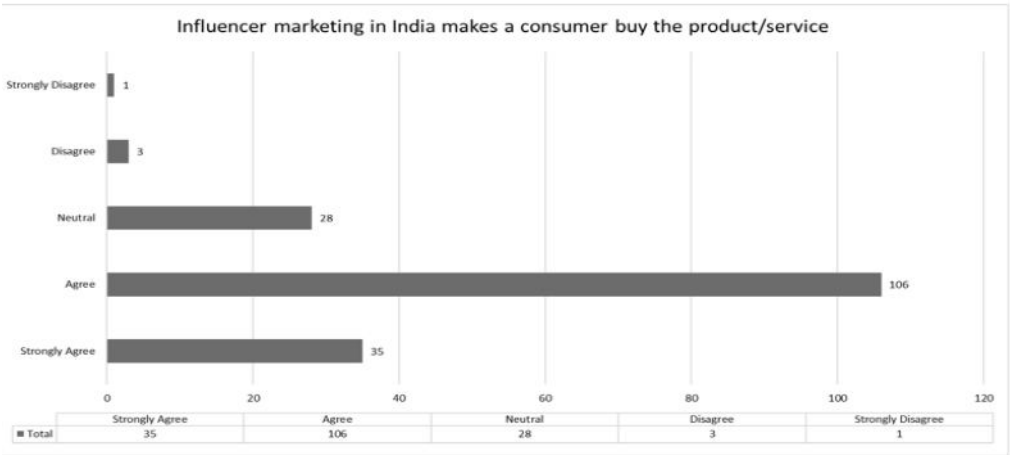

Figure 27: Opinion on Purchasing Behaviour due to Influencer Marketing (Source:Primary Data)

14. Success of an Influencer

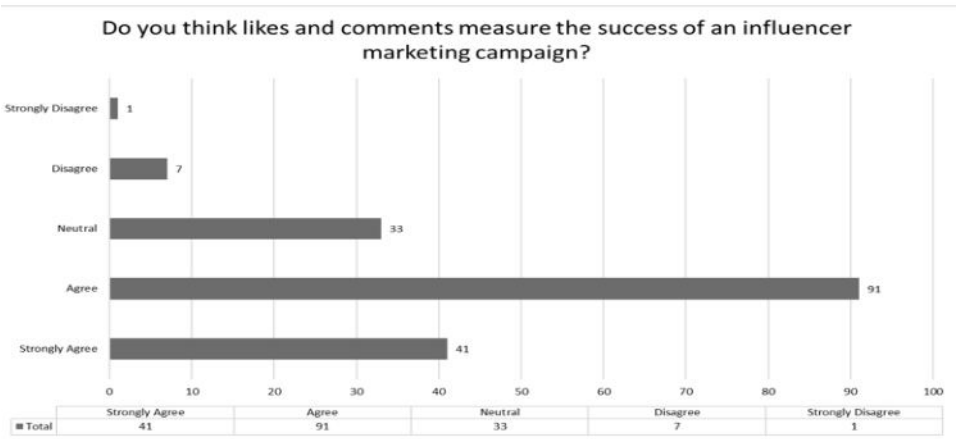

Figure 28: Opinion on Impact of Likes and Comments on the Success of an Influencer (Source:Primary Data)

15. Trend of this marketing

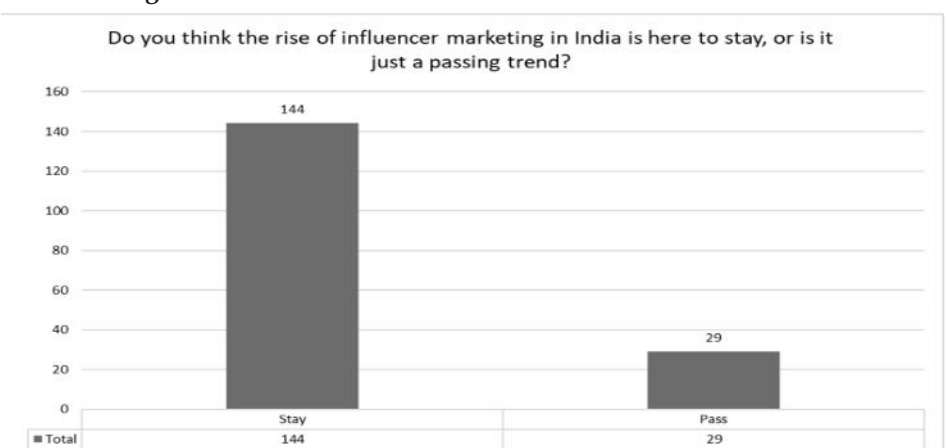

Figure 29:Opinion on Sustainability of Influencer Marketing in India (Source:Primary Data)

16. Answers to the questions asked to respondents



Figure 30: Respondents' Answers
(Source: Primary Data)

FINDINGS

From the analysis we can come up with the following findings:

Engagement Rate

1. Nano influencers have the highest rate of engagement due to their concise number of followers. Also due to limited brand collaborations, they tend to attract a lot of their followers whenever they upload a post with a brand.
2. In the case of micro influencers, they are the highest rated category of influencers and have an amazingrate of engagement. Due to their limited reach, their access to a larger audience is not possible. But still they have the power to influence the audience and convert those into sales as they are highlyconnected with their audience.
3. With a decent engagement rate, the macro influencers have a much firm grip with their content due to their expertise in their niche. As our macro influencer (Aditya Nair) frequently post reels, so people love to watch reels, which makes his content more interesting and engages a huge number of audiences on a daily basis.
4. Although mega-influencers have a wide audience, research has revealed that the level of interaction with their followersand engagement ratedeclines as their number of followers increases. But people get fascinated when a mega influencer associates with a brand and they find the brand very reliable.

Category of Influencers

1. As per the questionnaire circulated, more than 71 per cent of the responders found micro and macro influencers much more reliable. It is due to their expertise in their niche and relationship with their followers.

Rise in Follower Numbers

1. The data found signifies that whenever these four influencers collaborated with a brand, the brand's Instagram follower rate increases drastically.

CONCLUSION

In India, influencers hail from diverse backgrounds, such as bloggers, Youtubers, and social media personalities, et al. They are well-known for their ability to interact with their audience and sway their purchasing decisions. Influencer marketing has emerged as an effective strategy for brands in India, enabling them to target their audience in a more personalized and genuine manner. This marketing method is gaining popularity, with 89 per cent of Indian marketers planning to increase their influencer marketing budgets in the upcoming year.

As per theInfluencer Marketing Hub,

- 'Influencer marketing has grown to ₹1200 billion ($16.4 billion) in 2022'.
- 'Businesses are making ₹430 Return on Investment (ROI) for every ₹84 spent on influencer marketing'.
- '67 per cent of brands use Instagram for influencer marketing'.

To sum up, the advertising industry in India has been transformed by the emergence of influencer marketing. Brands are collaborating with influencers to advertise their products or services due to the increasing use of social media platforms. This has resulted in higher engagement rates and has proven to be an effective way of reaching the target audience.

With the increasing demand for authentic and relatable content, influencer marketing will continue to grow and change as social media platforms and consumer behaviour evolve. Brands and marketers who can adapt to these changes will benefit from the power of influencer marketing.

The circulated questionnaire also signifies that 90 per cent of the respondents believe that influencer marketing to be an effective form of marketing and it will be having more growth in the future and India being a highly growing country in terms of population, will certainly excel in bringing out more and more amazing influencers.

RECOMMENDATIONS AND PRACTICAL IMPLICATIONS

1. Brands should approach influencer marketing companies like Qoruz, Popsters, et al, (which have been used in this project to analyze the data) to gain access to millions of influencers in every domain, so that they can get a more diverse audience.
2. Sometimes the audience should also understand that everything advertised by an influencer should not be taken for granted, as they are just doing their work and making money in that process. Further research about a brand should be done from the customer's side too.
3. It is crucial for both brands and influencers to follow ethical practices and maintain authenticity in their collaborations.
4. Mere number of followers must not be a way of judging an influencer. Traits like quality content should be the goal to assess an influencer.

LIMITATIONS

The limitation of the research are as follows:

1. The sample size of influencers for this research is only four due to restrictions on the length of the research. The results would have been more accurate if the sample size was larger.
2. Also, we have only scanned their Instagram account and not considered their collaborations with other brands in platforms other than Instagram.
3. The number of responses were only 173. If more responses could have been received, then the research could have been done from a broader perspective.

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> ITC's marketing strategy focuses on building strong brands and creating sustainable value for its customers and stakeholders.

A Study on Indian Tobacco Company:
The Unbeatable King of Cigarette Industry in India

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ABSTRACT

Indian Tobacco Company (ITC), erstwhile the Imperial Tobacco Company, is the pioneer organization of the cigarette industry in our country. Headquartered in Kolkata and established on 24thAugust, 1910, it has now grown into a diversified global corporation with business in various sectors such as Paper, Hotels, Fast Moving Consumer Goods (FMCGs), et al. However, the principal and basic business has always been the manufacturing of well-known brands of cigarettes.

This article focuses on a study on ITC as a cigarette innovator, the reasons for its success and its humongous growth with its formulation of an effective

marketing strategy. This research paper also exhibits the differences of ITCas a corporate brand from its competitors.

Through secondary and primary data analysis, the article recommends the needs of ITC to expand into other sectors of business from cigarette, keeping in view the social welfare of the community.

KEYWORDS: ITC, Tobacco, Cigarettes.

INTRODUCTION

Headquartered in Kolkata, the company was established on 24th August, 1910 by the name of Imperial Tobacco Company and then later it was changed to Indian Tobacco Company Limited in 1970 because the company was mostly Indianized and later in 1974, it was named as I.T.C. Limited.

ITC plays a monopolistic role in the cigarette industry. It is the biggest exporter of tobacco in India. Out of every 10 smoked cigarettes in India every eight of them are of ITC brand. The top selling brands in cigarettes in India are Classic and Gold Flake which are sold by ITC. According to the ITC, the stability in the taxation system since April 2018 has boosted its cigarette business to achieve double digit growth.

The biggest competitor of ITC in India is Godfrey Philips India Limited (GPI) and, in addition, a few more competitors, are Vazir Sultan Tobacco (VST) Industries, Indian Wood Products, Golden Tobacco and National Tobacco Company (NTC) Industries. ITC's debt-equity ratio value is at zero which is a positive sign for the investors to invest in the company without hesitating or even thinking of a loss.

ITC's marketing strategy focuses on building strong brands and creating sustainable value for its customers and stakeholders. The company has a diversified portfolio of brands, ranging from FMCG products to premium hotels, and each brand has its own marketing strategy tailored to its target audience.

SOME OF THE KEY ELEMENTS OF ITC'S MARKETING STRATEGY

Customer-centric Approach

ITC places a strong emphasis on understanding its customers' needs and preferences and tailors its products and services accordingly. The company conducts extensive market research to gain insights into customer behaviour and uses this information to create products and marketing campaigns that resonate with its target audience. For example, ITC's Gold Flake brand of cigarette is marketed with a golden coloured box as a symbol of rich personality in North India and yellow coloured box as a symbol of purity and prosperity.

Innovation

ITC is known for its innovative products and services. The company invests heavily in research and development to create new products and improve existing ones. ITC also uses innovative marketing techniques such as experiential marketing and influencer marketing to create buzz around its products.

Sustainability

ITC's sustainability initiatives are an integral part of its marketing strategy. The company promotes sustainable practices across its supply chain and communicates its commitment to sustainability through its marketing campaigns. For example, ITC's Aashirvad brand of flour is marketed as '100 per cent natural' and '100 per cent pure' to appeal to consumers who are looking for healthier and more sustainable food options.

Brand Building

ITC has built strong brands over the years through consistent messaging and high-quality products. The company uses a mix of traditional and digital marketing channels to build its brands, including television (TV) commercials, print ads, social media campaigns, and influencer marketing. ITC also invests in sponsorships and events to create brand awareness and engagement.

Overall, ITC's marketing strategy is centred around creating value for its customers and stakeholders, promoting sustainability, and building strong brands that resonate with its target audience.



Figure 1: Marlboro (Source:https://medium.com/the-history-philosophy-and-ethics-of-design/marlboro-red-a-product-that-kills-its-best-customers-6b9c1f866ba8)



Figure 2: Gold Flake (Source: https://smokeshop.co.in/products/gold-flake-king-size?sku_id=45611400)

While ITC is a diversified conglomerate with businesses in various sectors, it is true that one of its early businesses was in the cigarette industry. ITC started as a tobacco trading company in India in 1910 and has expanded its operations over time to include the manufacture and sale of cigarettes, as well as other tobacco products. Today, ITC is one of the largest players in the Indian cigarette market with several popular brands such as Gold Flake, Navy Cut, Classic, and Silk Cut. However, it is important to note that the cigarette industry is just one of the many businesses that ITC operates in. The company has been working to diversify its revenue streams and reduce its reliance on tobacco products over the years.

It is well known that the cigarette industry as a whole has historically used various marketing techniques to promote their products. These techniques have included advertising in various forms of media such as print, television, and billboards, as well as sponsoring events and sports teams. In recent years, many countries including India have implemented restrictions on the advertising and promotion of tobacco products, including cigarettes. In India, for example, cigarette advertising is banned on television and in print media.Tobacco companies are also prohibited from sponsoring events or activities. As a result, ITC and other tobacco companies have had to adapt their marketing strategies to comply with these regulations. ITC has also been focusing on reducing its reliance on tobacco products and has been diversifying its business into other areas such as FMCG, hotels, and agribusiness. It is worth noting that ITC has stated that it follows responsible marketing practices and complies with all applicable laws and regulations.

LITERATURE REVIEW

Chawla Rai Palkush (2012), in his analysis, stated that if ITC doesnot sell cigarettes someone else will, and it would not just be another Indian company that would be more than willing to jump the bandwagon.Big global cigarette players like Phillip Morris (Marlboro) or Imperial Tobacco (Davidoff) would do it.

Goel Sanjay (2020), in his report, stated that it has been proved beyond doubt that consuming tobacco products causes cancer and reduces life expectancy. Government took many initiatives to create awareness about hazards of smoking. Realizing that smoking would decline over a period of time, cigarette manufacturers have diversified into other businesses.

Souza D. Irvin (2021),in his report stated that, ITC has great consumer brands in hotels, biscuits, ready to eat food edible foods et al. but the fact is that ITC has 20 per cent of its total investment in tobacco and in spite of regulations and punitive taxes, this tobacco division contributes 80 per cent of the profits of ITC Limited.Thus, it is considered as a tobacco company.

Badjugar Sunny (2021), in his report, stated that ITC is India's largest cigarette manufacturer, having in its kitty India's most valuable brands 'Classic' and 'Gold Flake'. Being a company that is over 100 years old, ITC has access to the best quality tobacco produced in India. ITC has top grade manufacturing facilities at multiple locations across India. Hence, we conclude that it manufactures best quality of cigarettes.

Sudarshan V. (2021): According to his research paper, ITC is a big name in the organized tobacco trade for

more than a century. It is only in the last three decades that it has diversified into other businesses, which still forms less than 40 per cent of its overall profit. Tobacco products are very high margin products and it is a sector where ITC is a dominant player with almost 85 per cent share of the market. This is a market which is indifferent to pricing and thus ITC has continued advantage.

Rao Raghav (2021): His research paper says ITC is slowly growing into the FMCG sector and is trying to establish brands.With increased awareness of ill effects of smoking, there is an expected decline in smoking though it cannot be ruled out altogether. In the next 10 years' time, cigarettes will have lesser revenue share due to the diversification.

OBJECTIVES

Examining ITC's Monopolistic Behaviour

ITC has a diversified presence in cigarettes, FMCG, hotels, packaging, paperboards and specialty papers and agribusiness. Apart from having a near borderline monopoly in its traditional business of cigarettes, ITC is the country's leading FMCG marketer, a clear market leader in the Indian paperboard and packaging industry, a globally acknowledged pioneer in farmer empowerment through its wide-reaching agribusiness, and a preeminent hotelier in India - a trailblazer in 'Responsible Luxury' chain of hotels.

Studying ITC's Marketing Strategy

ITC designs its promotion strategy considering its brand proposition and target audience. The company promotes its products through various mediums such as print, television, and radio as part of its marketing mix. Different ITC brands are associated with various brand ambassadors. For instance, Yuvraj Singh and Soha Ali Khan have endorsed Classmate; Savlon has been endorsed by Saina Nehwal, and Shahrukh Khan represents the entire range of snacks under the Sunfeast brand. Ranbir Kapoor was roped in as the face of John Players. As part of ITC's centenary initiative, Classmate launched the Ideas for India challenge, the largest student contact program. This initiative provided a platform for Indian youth to brainstorm and address the nation's issues and challenges, contributing to national development. ITC runs numerous digital campaigns to encourage maximum participation. The Fiama De Wills Men campaign is one example. Fiama De Wills collaborated with designer Masaba Gupta for the Wills Lifestyle Fashion Week.ITC also engages in cross-marketing promotions. For example, YiPPee! partnered with Paytm, offering recharge coupons equivalent to the price of YiPPee noodles. The company supported this campaign with an advertisement. This summarizes ITC's marketing strategy and mix.

Studying the Difference between ITC and its Competitors

1. ITC versus Golden Tobacco Limited.
2. ITC versus Philip Morris International.
3. ITC versus Raghunath Tobacco Company Limited.
4. ITC versus Godfrey Phillips India Limited.
5. ITC versus Vazir Sultan Tobacco Company.

To Identify the Target Market of ITC

ITC majorly targets consumers aging from 12 to 60 years old. It uses four different marketing segmentation methods to target its consumers namely, geographic, demographic, behavioural and psychographic.

As ITC is the oldest company in cigarettes industry, it has access to the best quality of tobacco produced in India.

DATA AND METHODOLOGY

Types of Data

1. Primary data

The data is collected through a questionnaire designed solely for the purpose of conducting the research. It was circulated to all people of all age groups without any biasness to know the interest of customers in cigarette smoking.

2. Secondary data

The data includes reference from previously published research papers, journals books and articles. The data helped me in understanding the interests and perceptions of customers in a better way.

RESEARCH DESIGN

The research design is the conceptual framework around which the survey is undertaken. Here, the research undertaken is descriptive research as it is describing the characteristics of the population. It also portrays the frequencies and trends common within the population.

Sample Size

The sample size is 150. Data has been collected and analyzed on the basis of the responses.

Area of Study

The research was conducted in Kolkata.

Period of Study

The period of study was around two weeks. Data collection was started on 7th March, 2021 and was completed on 20th March, 2021.

Sampling Technique

The research has been conducted by using convenience sampling technique. This is a type of non-probabilistic sampling which involves the sample being collected from the part of the population which is close to hand.

FINDINGS

Forty-eight per cent of the respondents fall into the 'student' category, aged between 18-25, while only four per cent of respondents are aged above 45. None of the respondents are employed. As the majority are students, their income is less than ₹0.25 million, accounting for 44 per cent of the total. Most of these students rely on financial support from their families. Additionally, a few of them are employed, working as interns, with an annual income of less than ₹0.25 million.

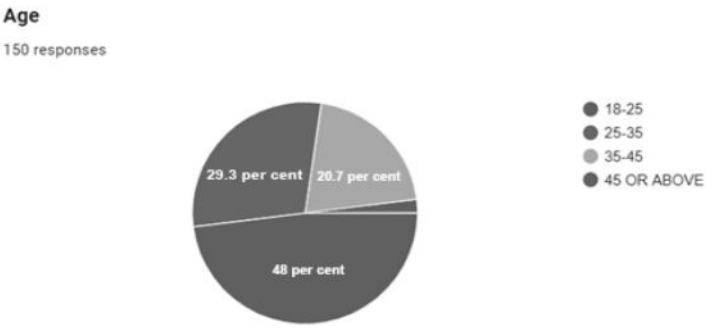

Figure 3: Age of the Respondents
(Source: Primary Data)

Majority of them (52.7 per cent) are female and the male respondents comprise of 47.3 per cent.

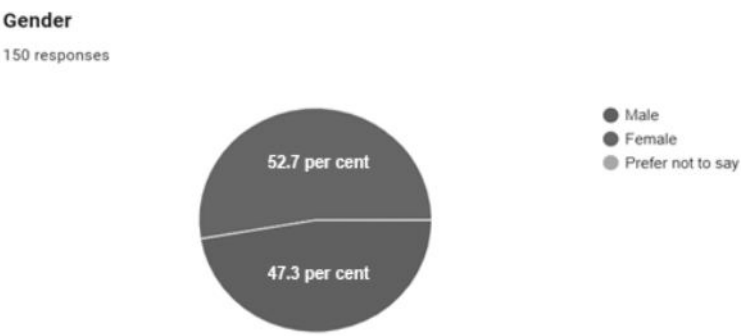

Figure 4: Gender-ratio of the Respondents
(Source: Primary Data)

The analysis shows that approximately 90 per cent of the respondents have used ITC products. Also, according to them ITC is more famous for cigarettes rather than hotels, FMCG goods Information Technology (IT) solutions, et al.

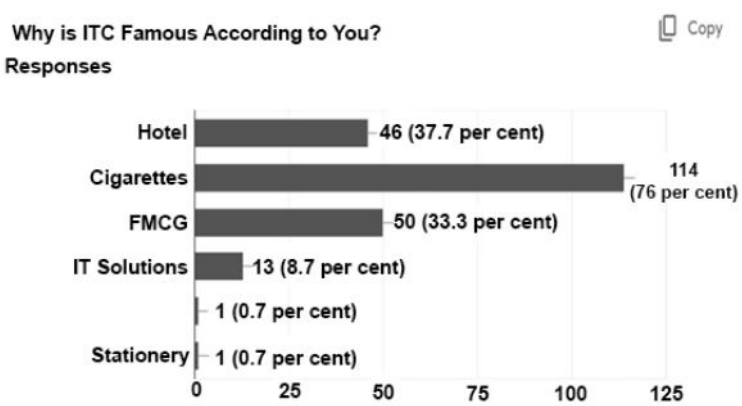

Figure 5: Why is ITC Famous According to You?
(Source: Primary Data)

The survey shows that majority of the respondents smoke (72.7 per cent). It also added to the knowledge that Gold Flake, an ITC brand, is the most known and loved brand in comparison to other brands.

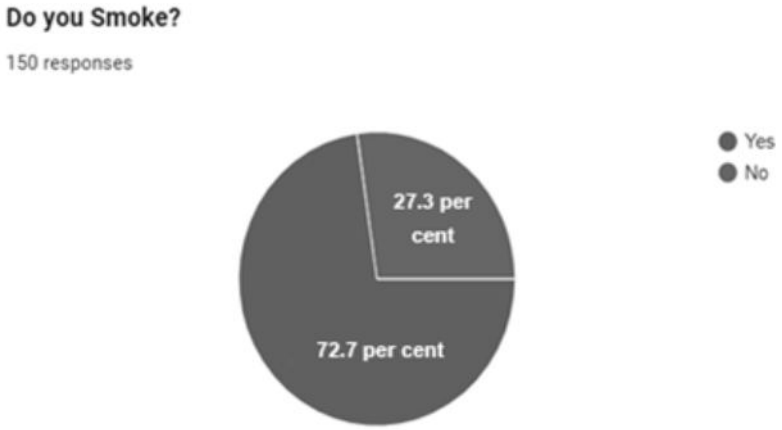

Figure 6: Do You Smoke?
(Source:Primary Data)

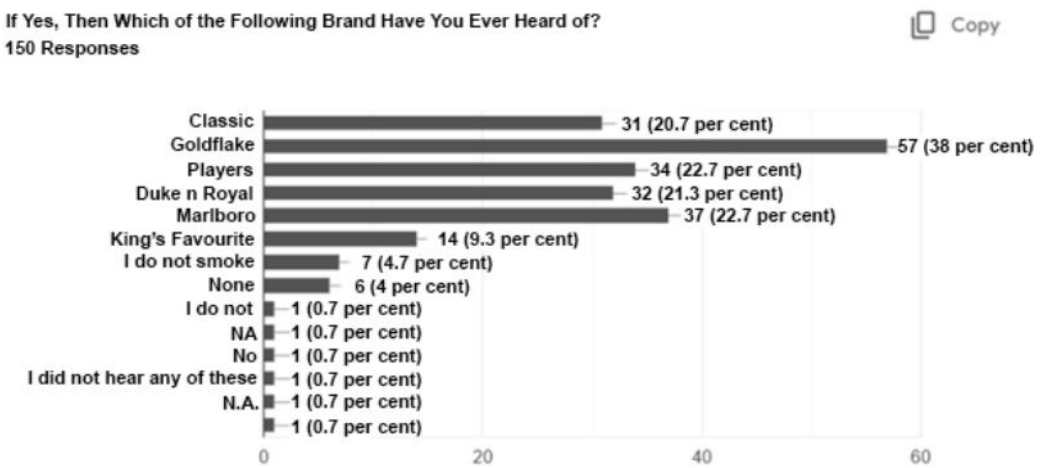

Figure 7: If Yes, Which of the Following Brands Have You Ever Heard of?
(Source: Primary Data)

The analysis lets us to know that majority of the respondents (58.9) per cent would recommend ITC cigarettes over others due to its 'attractive packaging' whereas 31 per cent of the respondents would recommend the cigarettes because of the 'quality of the cigarettes'. Also, an approximate of 26 per cent of them would recommend ITC's cigarettes to others because of the 'reputation of the company'.

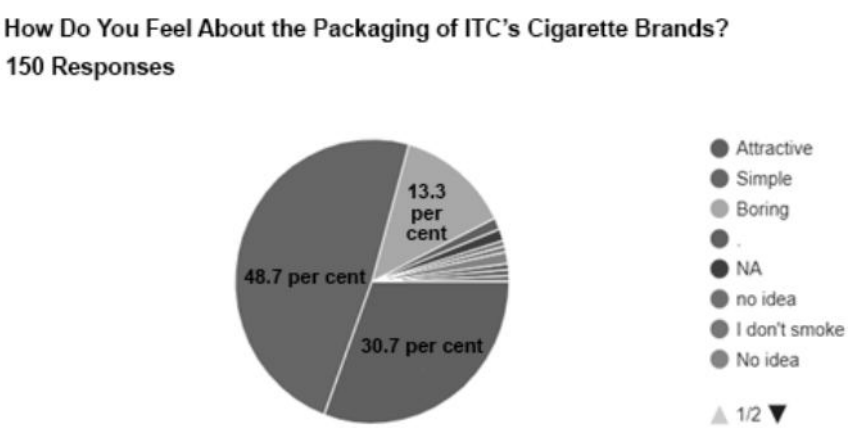

Figure 8: How Do You Feel About the Packaging of the ITC's Cigarette Brands?
(Source: Primary Data)

The analysis showed us that numerous numbers of people have started taking few healthy motos and are avoiding cigarettes whilst simultaneously making others aware about the ill effects of cigarettes.This can be seen in the data as a majority of the respondents (73.9 per cent) have stated a lack of recommendation for cigarettes because of 'health issues' and also 28.4 per cent of the respondents have mentioned the 'poor quality of the cigarettes' by ITC.

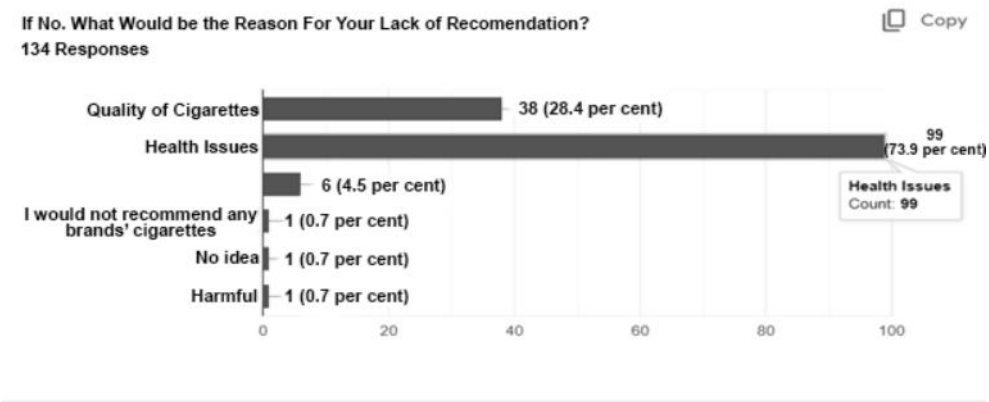

Figure 9: If No, What Would be the Reason for Your Lack of Recommendation?
(Source: Primary Data)

The survey conducted gave us knowledge about whether the marketing strategies advertising campaignsused by ITC were beneficial or not.A majority of the respondents (60.7 per cent) have opted 'Yes', an approximate of 19 per cent of the respondents opted for 'Maybe' and 20 per cent of them have opted 'No'.

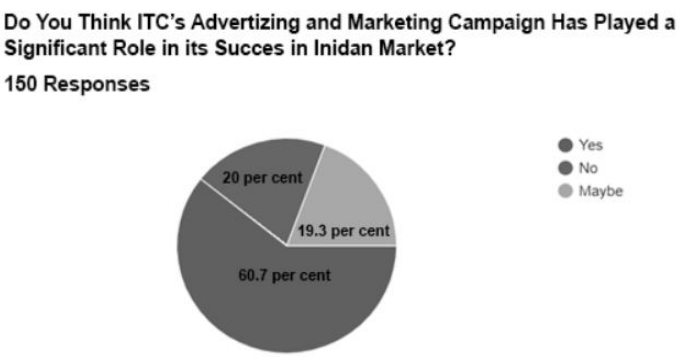

Figure 10: Do You Think ITC's Advertising and Marketing Campaign Has Played aSignificant Role in its Success in Indian Market?
(Source: Primary Data)

SECONDARY FINDINGS

ITC Limited stands as the largest tobacco company in India, commanding almost 80 per cent of the market share (by value) in cigarettes. The inelastic demand for cigarettes, in conjunction with government regulations, has propelled ITC to nearly monopolistic status. Boasting a century-long legacy, ITC has privileged access to high-quality Indian tobacco, acquiring most of the top-grade produce and leaving only lower-grade tobacco for other manufacturers. Operating top-grade manufacturing facilities across multiple Indian locations, ITC employs sophisticated, hygienic machinery capable of producing thousands of cigarettes per minute without manual intervention.

However, it is worth noting that ITC Limited is responsible for selling 81 per cent of cigarettes and

'bidis' in Asia, catering to 275 million tobacco product consumers. Its market leadership and success primarily stem from backward integration strategies. Procuring key materials directly from producers enables ITC to maintain superior operating margins of 36 per cent. The cigarette segment contributes 61 per cent of its revenues and 92 per cent of its operating profits. Over the past five years, ITC has generated over 400,000 million in cash, excluding non-cash expenses and depreciation. Its backward-integration capability, expansive distribution network, reputable brands, and customer loyalty set it apart in the industry.

While 20 per cent of its total investment is in tobacco, ITC has diversified into other FMCG categories, hotels, paper, and agribusiness, foreseeing these as future growth drivers. Despite being considered a tobacco company due to its profitability in this division, the company has embraced various sectors. If ITC were to cease cigarette sales, other global giants like Phillip Morris or Imperial Tobacco would fill the gap, taking away a significant portion of profits from the Indian economy. Unlike these global entities, ITC, being an Indian company, reinvests its earnings in various businesses, benefiting India's economy and stakeholders.

CONCLUSION

Thus, we can conclude that ITC plays monopoly in the cigarette market because its competitors hold a tiny market share (one to two per cent). Cigarette brands (Gold Flake, Classic, et al.) by ITC are most demanded and liked by the majority number of people.

However, there are many factors that is affecting the sales of cigarettes for ITC. Amongst all the factors, the most important is health issues. As nowadays almost every generation is facing health issues and the number of cases is increasing daily due to which ITC has to look after the target market in order to keep its product alive in the market.

In addition, as India is a developing nation, the adaption of numerous things takes place very rapidly and with the similar thought ITC has also started to divert itself in the different segment of the markets (Hotel, IT solutions, FMCG goods, et al.). It would be quite tough for ITC to compete in these different market segments as already the other giants have a very big market holding over there.

It seems to be a totally different track for producing healthy FMCG goods for a company like ITC who is well known for cigarettes. Nevertheless, ITC always uses different market strategies and advertisement campaigns to penetrate the market and in the upcoming years, it might enjoy speedy growth in every segment.

RECOMMENDATIONS

1. ITC need to look after the target market for its cigarette industry due to the declining health of the people.
2. ITC should try to invest more in other market segments (Hotels, FMCG goods, et al.) rather than cigarettes.
3. As ITC has been more famous and well-known for the cigarettes, it is a big turn for the company to diversify themselves into FMCG goods. So, they must try to plan and start new and different marketing strategies to acquire the market.
4. ITC should also keep on surveying the needs and wants in the market, and then work according to it.
5. As ITC is new to FMCG goods, hotels, IT solutions and other items,it should try to lower its price and try to penetrate the market.

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> The effect of the pandemic could have been devastating but the presence of Fintech in India and also the continuous change in policies adopted by the RBI have helped to mitigate the impact to a large extent.

How Financial Technology (Fintech) Helped Mitigate the Impact of COVID-19 in the Indian Banking Sector

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ABSTRACT

The paper is an attempt to explains how Fintech and its presence had reduced the adversity of the COVID-19 pandemic even in the absence of physical working of the banks. Despite India being a developing and high-powered nation was not prepared to face such a crunch. The study focuses on how banks and Fintech have emerged as a change-agent in the difficult

post COVID-19 system for new normal developments. For this purpose, the researchers will analyse the financial statements issued by some leading private and public sector banks in the country. Using the quarterly results issued by these banks, the researcher will do a comparative study of some significant financial and economic indicators using Trend analysis.

KEYWORDS: Fintech, COVID-19, Banking, Finance, Trend analysis, Private banks, Public banks, net-banking, Unified Payment Interface (UPI), Operating profit.

INTRODUCTION

The worldwide economic structure was completely upended by the COVID-19 pandemic's destruction. The exponential spread of COVID-19 has caused a significant drop in major indices, suggesting its influence and ability to have a significant impact on Gross Domestic Product (GDP) growth(Rana, 2021). World Health Organization (WHO) reports mentioned that there have been 491,090,196 confirmed cases of COVID-19 recorded worldwide, including 6,174,444 deaths. India reported a total of 43,028,131 cases since March 2020 out of which active cases at present stand at 12,984. India recorded a total of 521,374 deaths. India faced two waves of COVID-19. The first wave started in March 2020 and lasted till August 2020 whereas the second wave started in April 2021 and lasted till October 2021. During the second wave there was an acute shortage of hospital beds, oxygen supply, medicines and ventilators across the country. The only option to maintain control over this situation was to establish a curfew and limit people's freedom of movement. All governments' measures had suspended all commercial activities, leaving all businesses, banks, and financial institutions to calculate losses and expenses. The COVID-19 epidemic has had a significant negative impact on the Indian economy. The Indian banking system is constantly enacting modifications in order to mitigate the impact of COVID-19. The Reserve Bank of India (RBI), being the apex bank, implemented appropriate policy modifications with the support of experts in order to combat the pandemic such as cutting down the repo rate and the reverse repo rate, it increased the repayment period to give customers more time to pay their Equated Monthly Instalments (EMI) and many more such changes took place to support the banking sector.

India was compelled to transition to a digital banking environment as a result of the restrictions imposed by the Indian government. A person can access all of their financial data instantly. Banking clients sought financial relief, thus the Reserve Bank of India urged national banks to provide it by establishing client-friendly banking regulations. Technology is combining with banking through blockchain, chatbots, big data and robotic process automation. The distinction between technology and finance was becoming increasingly hazy, which encouraged traditional banks and tech companies to collaborate online and merge and buy one another. Computerization led to revolutions in electronic commerce, digital finance, wealth management, and non-financial services, all of which are now referred to as Fintech. It helped automate various aspects like banking, investing, payments, insurance, lending and more. Thus, mitigating the impact of the COVID-19 pandemic on traditional banking by helping banks to adhere to new challenges and changing customer behaviour. The important question is whether collaboration between Indian banks and technology will still be essential for success in this brand-new environment created by COVID-19 or not.

LITERATURE REVIEW

(Perwej, 2020), showed how pandemic COVID-19 will affect the banking and finance sectors. According to the Indian bank, the coronavirus outbreak in India has threatened a year-long clean-up of the country's financial system. Banks are at the centre of the economy, providing capital to both businesses and individuals. It is critical that they remain stable to maintain the system up and running. It was then concluded that bank activities have been disrupted as a result of COVID-19's widespread proliferation. The breakout of the COVID-19 epidemic has hit India's economy like a ton of bricks. Banks must continue to

use technology and integrate flexibility into their infrastructure to handle these issues.

(Dev & Sengupta, 2020), described the state of the Indian economy prior to the COVID-19 shock, assessed the shock's potential impact on various segments of the economy, examined the policies declared so far by the central government and the Reserve Bank of India to mitigate the economic shock, and made policy recommendations for specific sectors. They found out that the COVID-19 pandemic has presented India with a once-in-a-lifetime challenge.

(Bobade & Alex, 2020), sought to look at how COVID-19 affected the Indian banking industry generally as well as the changes implemented by the RBI as a result. The Indian banking industry was also given a remedy to deal with the damages brought on by the COVID-19 outbreak. The findings show that a number of steps have been put in place by the Indian banking industry to improve the effectiveness and efficiency of the financial system in response to the COVID-19 outbreak. Without a doubt, banks were established in India with the primary objective of generating money by giving customers the promised ease.

(Ozili, 2020),proposed a variety of policy ideas to enhance financial inclusion. During the coronavirus or COVID-19 crisis, financial inclusion remained a significant development instrument for improving access to finance and supporting vulnerable persons and households. Through the use of Fintech and short-term policies, the outlined policy options for financial inclusion can assist in minimizing the impact of the COVID-19 problem. It was concluded that governments, financial institutions, and Fintech companies now must act rapidly to help underprivileged individuals and households.

RESEARCH GAP

The above papers discussed only about the changes that the RBI brought during the phase of the pandemic. They do not talk about how Fintech has helped to mitigate the impact of the pandemic in the Indian banking sector alone and the post-pandemic situation.

OBJECTIVE OF THE STUDY

- To study how technology helped to minimize the impact of COVID-19.
- To study the change in different economic indicators due to lockdown and pandemic.

MOTIVATION AND RELEVANCE OF THE STUDY

COVID-19 had wrecked the entire global economic system into disarray. It had cost millions of lives of people which led to a financial crisis causing huge loss for Indian investors as well as the overall Indian market. The pandemic has led to stock market crashes too.This should be known in advance so that countries can make appropriate measures to face such a situation in future.

RESEARCH METHODOLOGY

This paper's objective is to evaluate the effect of COVID-19 on India's banking industry. It looked at how banks and Fintech are collaborating in digital banking to address the issues caused by the COVID-19 outbreak and contains the imminent economic consequences in India and throughout the world. The study also focuses on how banks and Fintech have emerged as a change-agent in the difficult post COVID-19 system for new normal developments. For this purpose, the researchers have analysed the financial statements issued by the top three private banks which includes Industrial Credit and Investment Corporation of India (ICICI) Bank, Housing Development Finance Corporation) HDFC Bank, and Axis Bank, and two public sector banks which are Punjab National Bank (PNB) and Canara Bank. Using the quarterly results issued by these banks, the researcher did a comparative study of some significant financial and economic indicators such as total deposits, total advances, net interest income, cash balance with the RBI and operating profit. The study had compared the changes in these indicators pre-COVID and post-COVID in order to have a clear picture to assess up to which extent Fintech helped to mitigate the impact and problems faced by the people during the pandemic. For pre-COVID,quarterly data for the financial year2018 - 2019 and 2019 - 2020 has

been used, and for post-COVID, quarterly data for the financial year, 2020 - 2021, along with the first three quarterly results (Quarter 1: April - June, Quarter 2: July-September, Quarter 3: October - December) of the financial year 2021- 2022 have been used.

Type of Research

The information used in the paper were collected from published literatures, articles and books mentioned in the literature references.

Research Tool

Graphs and scatter charts were used to study the changes in the economic variables over the timeframe of three years.

Research Technique

Trend analysis have been used to study the trend in different quarters.

Data Source

All the data were collected from the quarterly statements issued by respective banks (ICICI Bank, HDFC Bank, Axis Bank, PNB and Canara Bank)

Period of Study

31 March, 2019- 30 December, 2021

DATA ANALYSIS

Trend analysis has been done to look for the green shoots. Our primary focus was to observe the trend in these variables(economic indicators) during the pandemic. Each graph has been divided into three phases (Pre-COVID, COVID, and Post-COVID).

1. ICICI Bank

Net Interest Income[Difference between the revenue generated from a bank's interest-bearing assets and the expenses associated with paying its interest-bearing liabilities]

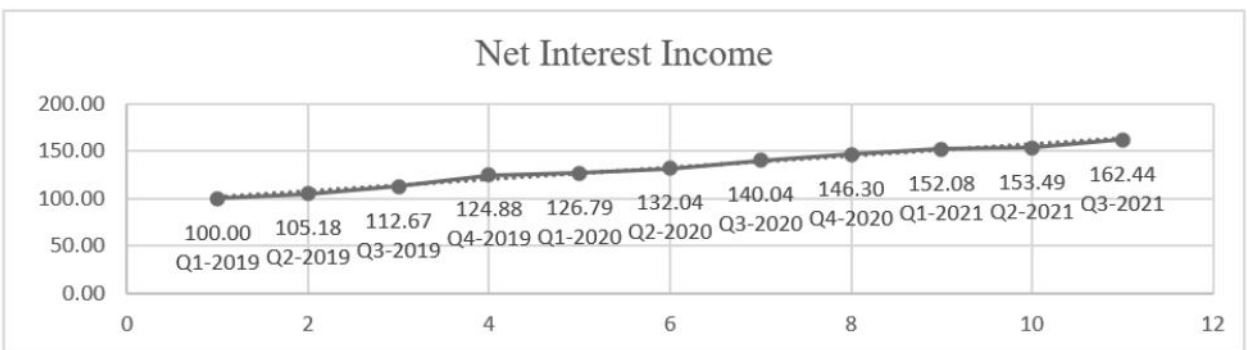


Figure1:Showing the Trend of Net Interest Income Quarterly (ICICI Bank)
(Source: Moneycontrol.com)

From Figure1,it is clearly understood that the net interest income is increasing at a favourable rate every quarter from 2019 to 2021. The first quarter of 2019 was kept as a base year to calculate the net increase or decrease in the value over the timeframe of three years. Though the rate of growth is not constant or stable, there is an increase altogether. Within three years, we see an overall increase in the net interest income by 62.44 per cent at the end of Quarter 3 of 2021. As we know, a complete lockdown was imposed during the first two quarters of 2020, i.e., Quarter 1 of 2020 and Quarter 2 of 2020,the slope of the graph during this phase is the lowest, but it is positive. Net interest income during the first phase of lockdown increased by 2 per cent and by 4 per cent during the second phase. It clearly explains how Fintech and its presence had reduced the adversity of the pandemic even in the absence of physical working of the bank. The trendline is positive in nature as it moves upwards.

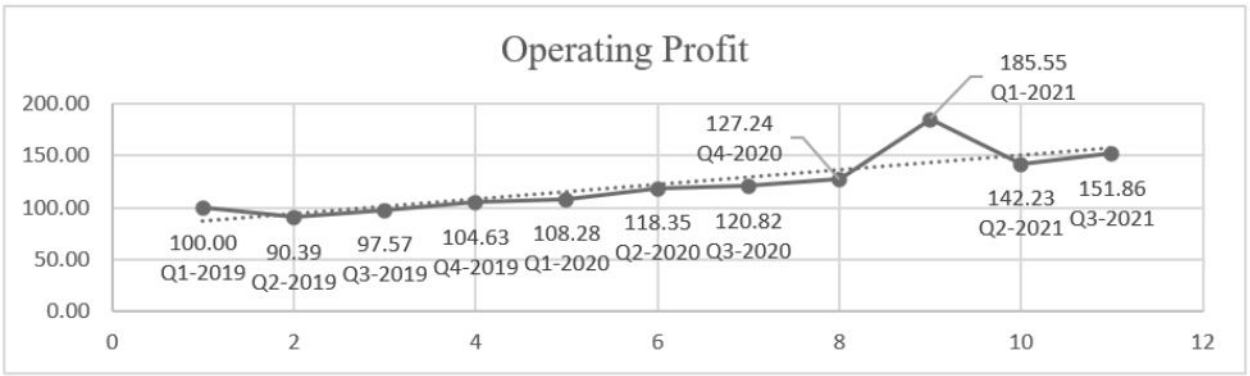


Figure2: Showing theTrend of Operating Profit Quarterly (ICICI Bank)
(Source: Moneycontrol.com)

As we know, operating profit is the net income of a company that is derived from its primary or core business operations. There has been a fall in the operating profit in the second quarter of 2019 by 9 per cent which could be because of the Non-Banking Financial Companies (NBFC) crisis that India faced in late 2018. But since then, we can see an increase in the profit in all the quarters. Till the fourth quarter of 2020, the growth rate has been fluctuating between 5to 8 per cent. But we see a sudden hike in profit in the first quarter of 2021. The growth rate directly jumped by 46 per cent. The reason behind the sudden hike was due to the sudden increase in sales. In a press release by the RBI (Prasad, 2021), sales of 1,647 manufacturing companies recorded extraordinarily high year-over-year growth (Y-o-Y) of 75 percent, and sales growth of Information Technology (IT) sector companies accelerated to 17.5 per cent. Thus, following the hike, there was an expected fall the profit in the following quarter by 23 per cent. But an overview of the graph indicates that the operating profit has been increasing throughout the timeframe. The upward rising trend line also proves the same.

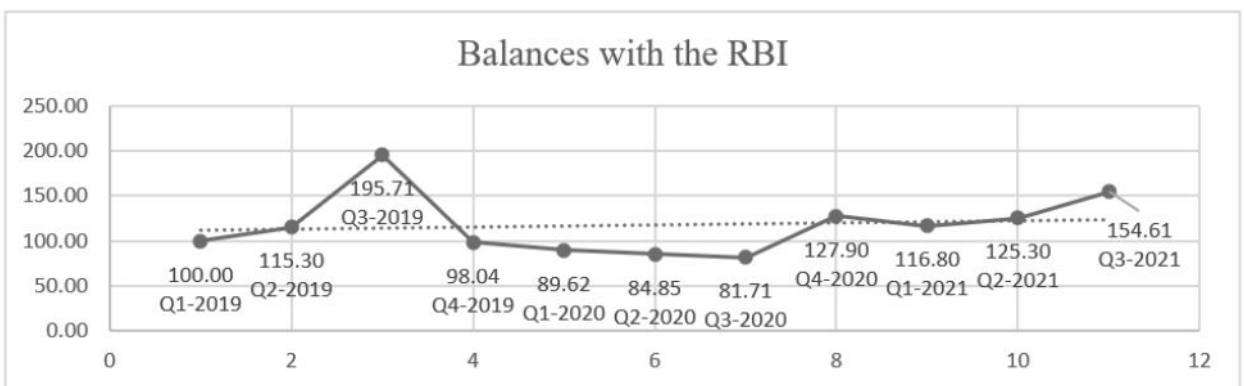


Figure3: Showing the Trend of Balance with the RBIQuarterly (ICICI Bank)
(Source: Moneycontrol.com)

Balances with the RBI are the minimum amount of cash balance that the commercial banks need to maintain with the RBI. Currently, this amount is ₹10 million on a daily basis and ₹1 billion on Fridays. The trend line is almost flat, which indicates that there has not been a significant increase in the balance during the timeframe. We can clearly see a fall in the balance during the first wave of the pandemic, i.e., Quarter 1 of 2020 till Quarter 3 of 2020. The main reason behind this fall was due to the complete lockdown, which was imposed from March 2020 and continued till July 2020. The flow of income completely stopped for most of the people who used to get their salary on a daily basis.

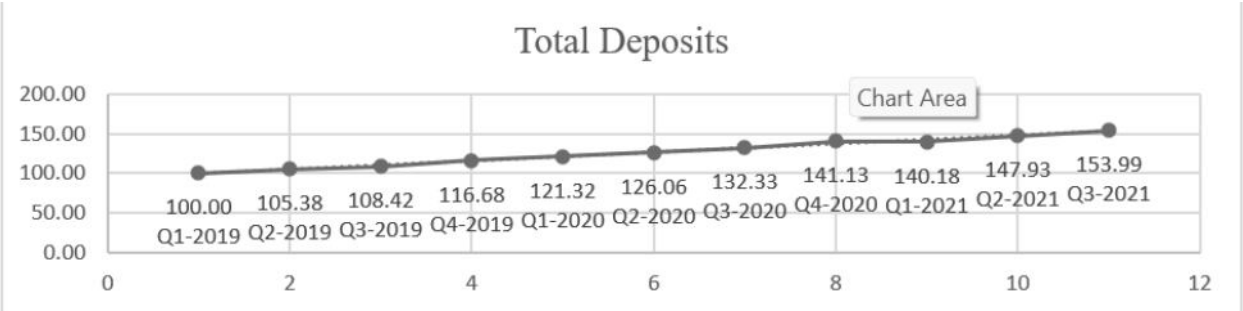


Figure4: Showing the Trend of Total Deposits (ICICI Bank)
(Source: Moneycontrol.com)

The situation created a panic among the people, and as a result, people started to withdraw their funds from the banks. Thus, the banks were forced to reduce their balances with the RBI. The fourth quarter of 2020 recorded an increase of 56 per cent in the balance when compared with that of the previous quarter. During this phase, the COVID situation was under control. Again, the first quarter of 2021 recorded a fall of 8.6 per cent due to the second wave of the pandemic.

Through an overview, it is clearly understood that the total deposits are increasing at a favourable rate every quarter from 2019 to 2021. Though the rate of growth is not constant or stable, there is an increase altogether. A small fall in the total deposits by 0.67 per cent was noted during the first quarter of 2021. Though the fall is not quite significant still, the reason for the fall could be connected with the second wave of the pandemic in the country. The critical inference that should be noted after a close analysis of the graph is despite the lockdown during the first two quarters of 2020, totaldeposits increased by 3.9 per cent. It clearly explains how Fintech and its presence had reduced the adversity of the pandemic even in the absence of physical working of the bank. The upward slope of the trend line indicates a gradual increase in the total deposits.

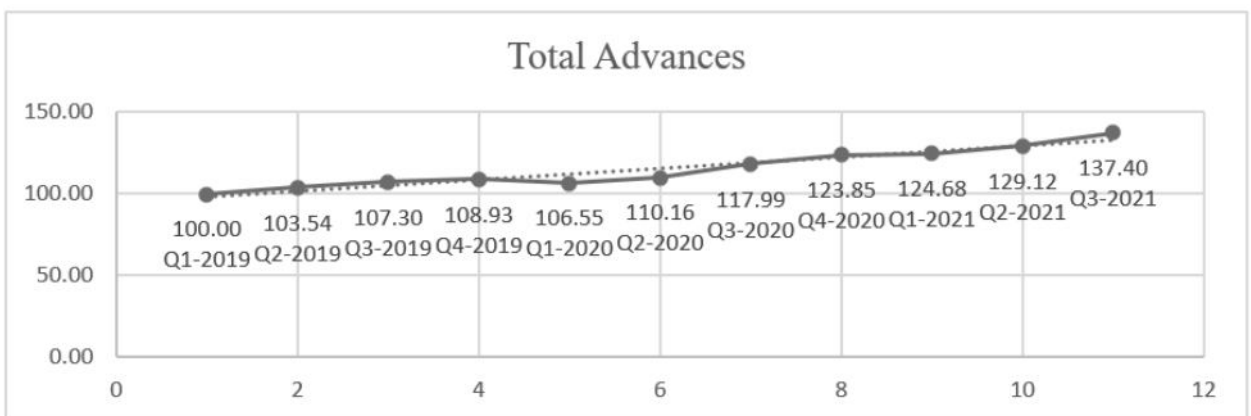


Figure 5:Showing the Trend of Total Advances (ICICI Bank)
(Source: Moneycontrol.com

A slow and constant increase in total advances was noticed till the fourth quarter of 2019. The growth rate during the financial year 2019 was close to 3.6 per cent. The following two quarters, i.e., Quarter 1 of 2020, and Quarter 2 of 2020, recorded a fall of 2 per cent and 3.4 per cent, respectively. The rationale behind the fall was the pandemic and lockdown. Post lockdown, things recovered, and a positive increase was recorded. The second wave of the pandemic did not notice a fall, instead, the growth was almost zero. In the third quarter of 2021, the growth rate increased to 6.4 per cent, which is twice the growth rate that was recorded before the pandemic.

2. Axis Bank

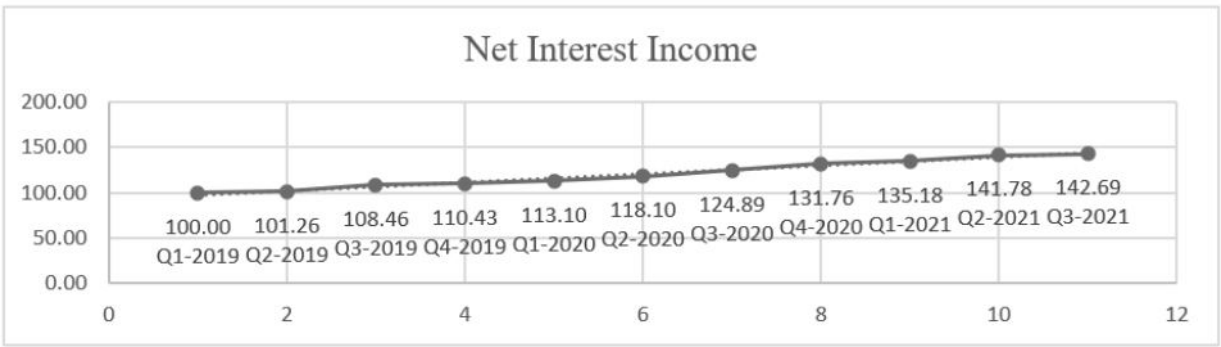


Figure6: Showing the Trend of Net Interest Income Quarterly (Axis Bank)
(Source: Axisbank.com)

From Figure 6, it is clearly understood that the net interest income is increasing at a favourable rate every quarter from 2019 to 2021. The first quarter of 2019 was kept as a base year to calculate the net increase or decrease in the value over the timeframe of three years. Though the rate of growth is not constant or stable, there is an increase altogether. Within three years, we see an overall increase in the net interest income by 42.69 per cent at the end of Quarter 3 of 2021. As we know, a complete lockdown was imposed during the first two quarters of 2020, i.e., Quarter 1 of 2020 and Quarter 2 of 2020, the slope of the graph during this phase is the lowest, but it is positive. Net interest income during the first phase of lockdown increased by 2.4 per cent and by 4.42 per cent during the second phase.

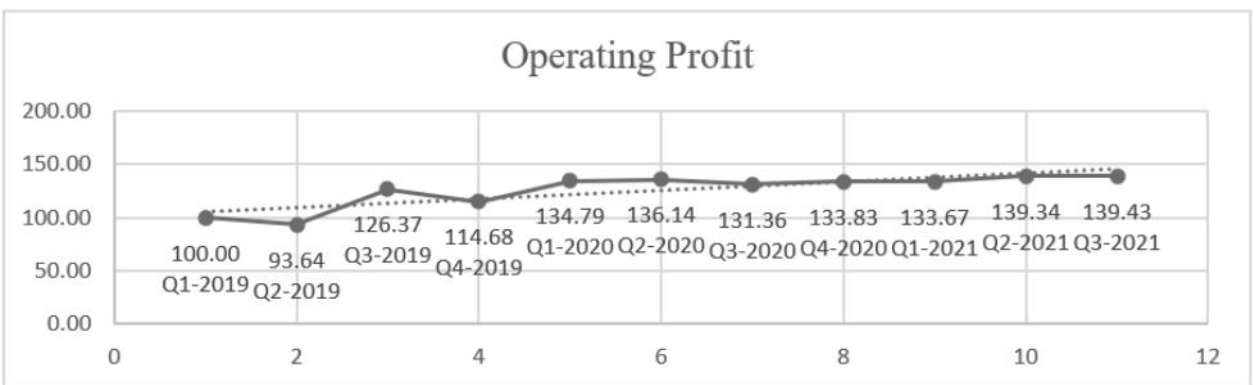


Figure7: Showing the Trend of Operating Profit Quarterly (Axis Bank)
(Source: Axisbank.com)

The second quarter of 2019 faced a drop in operating profit by 6.36 per cent. The reason behind the drop could be the NBFC crisis. A sharp increase also can also be noticed in the profits in the financial year 2020. Profits increased by 17.53 per cental though this phase was hit by the pandemic, and a lockdown was also imposed during the phase. In the next three quarters, we can see that the line is almost flat which indicates that the profit has been constant. A very insignificant fall could be seen in the first quarter of 2021(the second wave of the pandemic). When compared with the ICICI banks, it can be clearly stated that the ICICI bank has performed better than Axis bank, and to some extent, we can see that the operating profit is not stable as we saw in the case of the ICICI bank. However, the trend line is upward rising in nature, which proves that there is an overall increase in the operating profit during the timeframe.

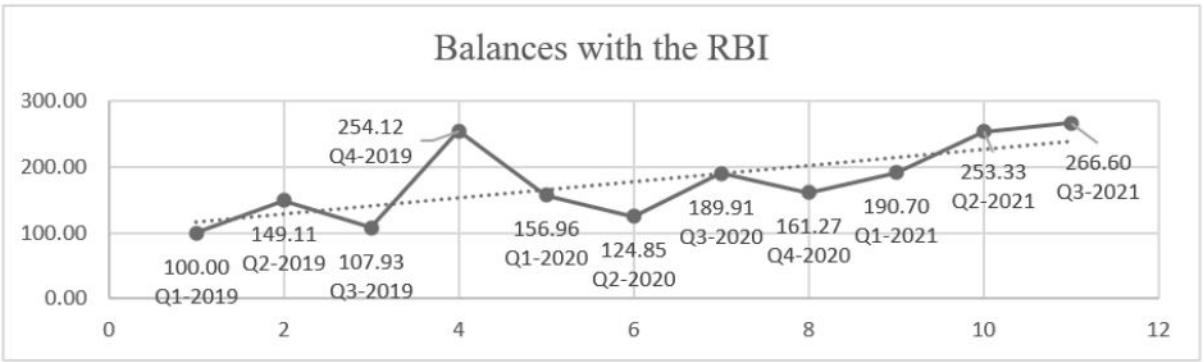


Figure8: Showing the Trend of Balances with the RBI (Axis Bank)
(Source: Axisbank.com)

The fourth quarter of 2019 faced a sudden peak in the increase in the balance of the RBI. The increase is almost double as compared to the previous quarter. The reason for the peak is unknown. The peak can be the result of some internal policies adopted by the bank. Soon after the peak in the fourth quarter of 2019, India was hit by the pandemic. As a result, a crash can be seen in the graph during the first quarter of 2020. Banks' balance with the RBI was ₹976,280 million on 31st March, 2020, which fell to ₹600,800 million. The reason behind the drop is the lockdown. The index recovered during the third quarter of 2020. An increase of 52.11 per cent was recorded, which again fell by 15.08 per cent due to the second wave of COVID-19. But after the second wave, we can see an increase in the index by 32.8 per cent.

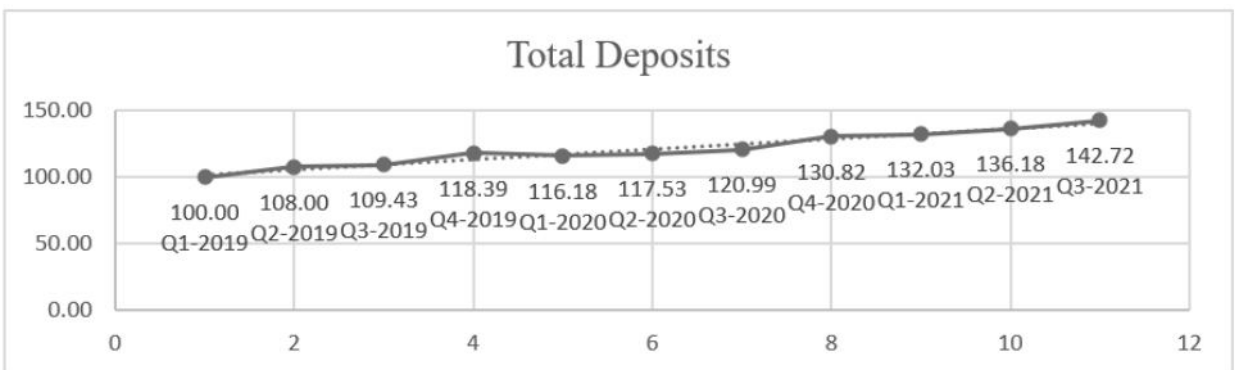


Figure9: Showing the Trend of Total Deposits (Axis Bank)
(Source: Axisbank.com)

Although the rate of growth is not constant or stable, there is an increase altogether every quarter from 2019 to 2021. A small fall in the total deposits by 1.86 per cent was noted during the first quarter of 2020. Though the fall is not quite significant still, the reason for the fall could be connected with the first wave of the pandemic in the country. A close analysis of the graph suggests that despite the second wave of the pandemic, total deposits increased by 8.12 per cent during the fourth quarter of 2020.

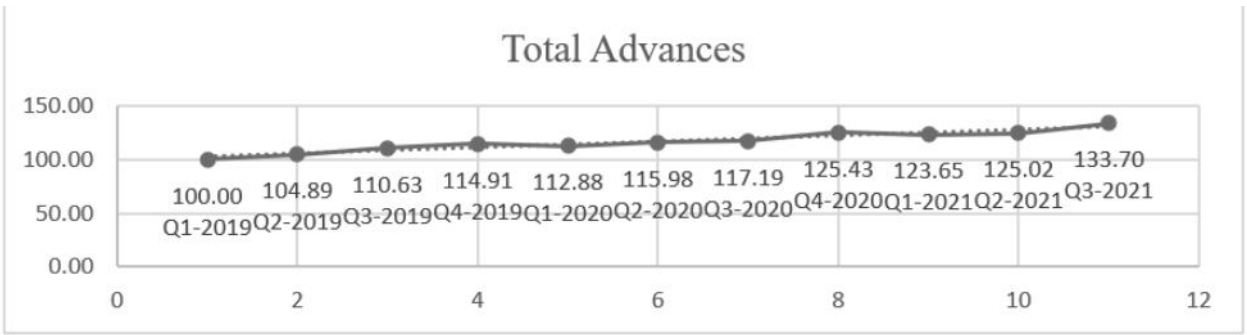


Figure10: Showing the Trend of Total Advances (Axis Bank)
(Source: Axisbank.com)

Though the rate of growth is not constant or stable, there is an increase altogether. We can also notice two insignificant dips in the graph, first during the first wave of COVID-19 (Quarter 1 of 2020) and second during the second wave (Quarter 1 of 2021). In both situations, total advances fell by 1.76 per cent and 1.42 per cent, respectively. Since the trend line is positively sloped, we can conclude that there has been an increase in total advances altogether.

Post-COVID Phase (Quarter 3 of 2021), the total advances increased by 6.96 per cent.

3. HDFC Bank

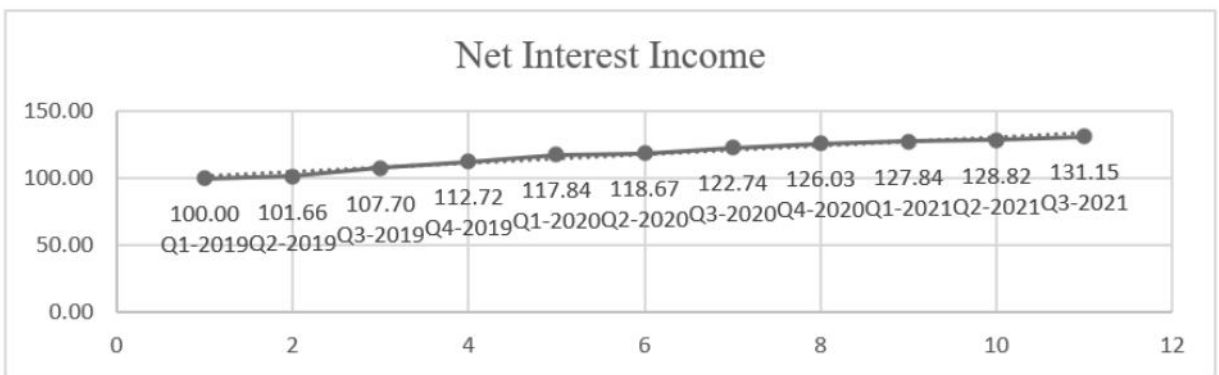


Figure11:Showing the Trend of Net Interest Income (HDFC Bank)
(Source: Hdfcbank.com)

HDFC Bank has followed the same trend when compared to ICICI Bank and Axis Bank with respect to net interest income. The Net Interest Income (NII) is increasing throughout the graph but not at a constant rate. In the first quarter of 2020(when COVID first hit India), we do not see any fall in the index, instead, a growth of 4.54 per cent was recorded. We can see during the COVID phase (Quarter 1 of 2020 to Quarter 2 of 2020), the growth was only 0.70 per cent, but still, it is a positive increase. The same trend could be observed during the second wave of the pandemic (Quarter 1 of 2021 to Quarter 2 of 2021), the rate of growth was only 1.46 per cent.

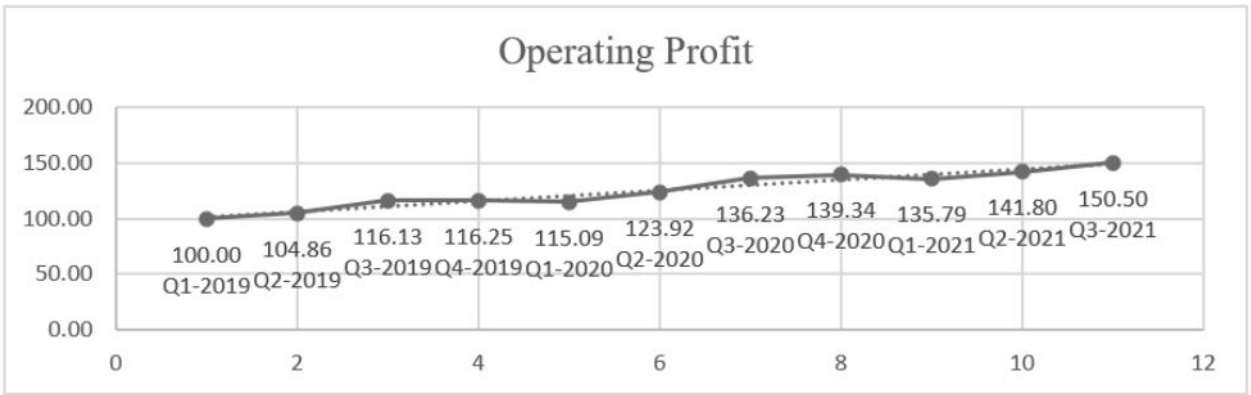


Figure12: Showing the Trend of Operating Profit (HDFC Bank)
(Source: Hdfcbank.com)

The positive slope of the trendline indicates a positive increase in operating profit during the 11 quarters. A slight fall of 1.07 per cent could be seen during the second quarter of 2020(the first wave of COVID and lockdown). Profit was affected by an insignificant amount during the first wave. But in the second wave, we can see an increase of 9.93 per cent. Bank recorded a significant increase in profit arising from online transactions such as Unified Payments Interface (UPI), net banking, National Electronic Funds Transfer (NEFT), et al. This indicates how Fintech helped the bank maintain its profits. The pandemic has brought people close to technology. Post-COVID, i.e., third quarter of 2021 recorded a growth of 6.57 per cent.

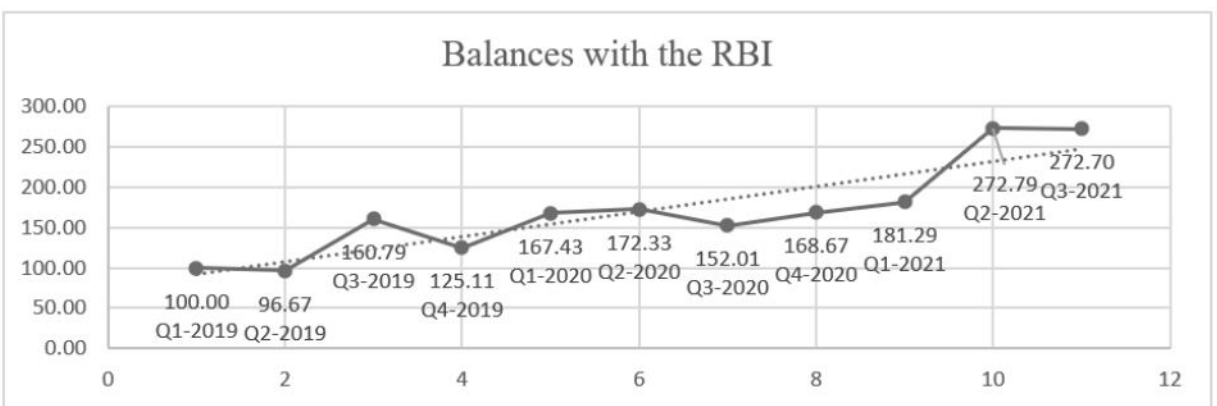


Figure13: Showing the Trend of Balances with the RBI (HDFC Bank)
(Source: Hdfcbank.com)

Balances with the RBI are the minimum amount of cash balance that the commercial banks need to maintain with the RBI. Currently, this amount is ₹100 million on a daily basis and ₹1 billion on Fridays. The trendline in the case of ICICI Bank and HDFC bank was almost a flat line, but in this case, we can see a steep line which indicates an increase in the balance with the RBI in each quarter. Even during the first wave of the pandemic, we did not see a fall in the index, instead, a growth of 33.82 per cent was observed. The reason behind this growth is more deposits that were made by the customers during this period. The index fell by 11.79 per cent during the second wave. This was the only phase during the 11 quarters when the index saw a fall in the value. But soon after the end of the second wave, the index recorded an increase of 50.47 per cent. This was the highest increase index has ever recorded during a single quarter.

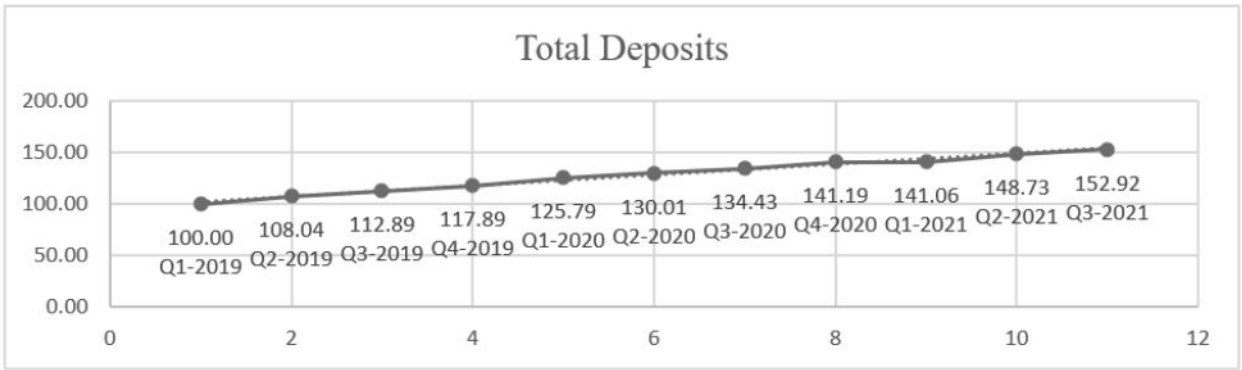


Figure14: Showing the Trend of Total Deposits (HDFC Bank)
(Source: Hdfcbank.com)

It is clearly understood that the total deposits are increasing at a favourable rate every quarter from 2019 to 2021. A slight fall in the total deposits by 0.02 per cent was noted during the first quarter of 2021. Though the fall is not quite significant still, the reason for the fall could be connected with the second wave of the pandemic in the country. The critical inference to be noted after a close analysis of the graph is despite the lockdown during the first two quarters of 2020, total deposits increased by 6.70 per cent.

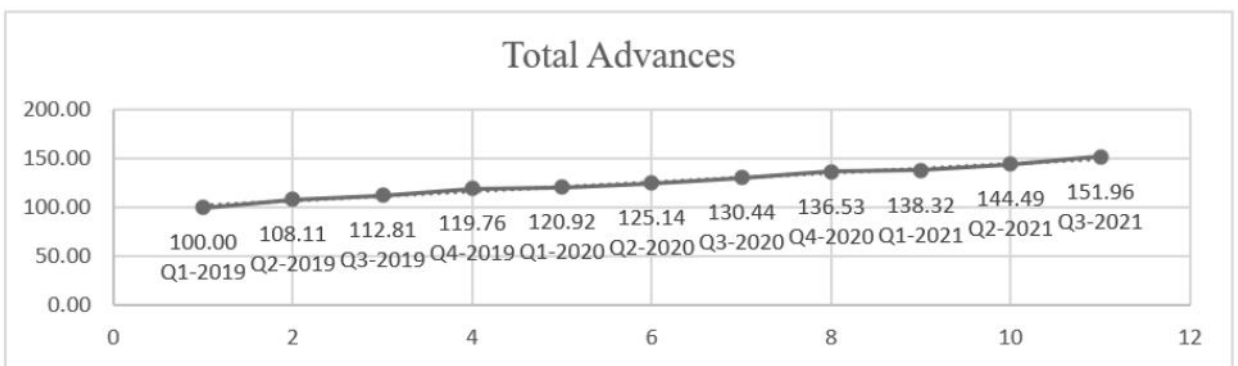


Figure15: Showing the Trend of Total Advances (HDFC Bank)
(Source: Hdfcbank.com)

Though the rate of growth is not constant or stable, there is an increase altogether quarter after quarter. No fall in the index was recorded in any of the quarters. However, the growth rate fell to 0.96 per cent during the first quarter of 2020 and to 1.31 per cent during the first quarter of 2021. The trendline is an upward slope which clearly depicts a gradual growth in total deposits throughout the timeframe of eleven quarters.

Post-COVID Phase (Quarter 3 of 2021), the total advances increased by 5.17 per cent.

4. Punjab National Bank

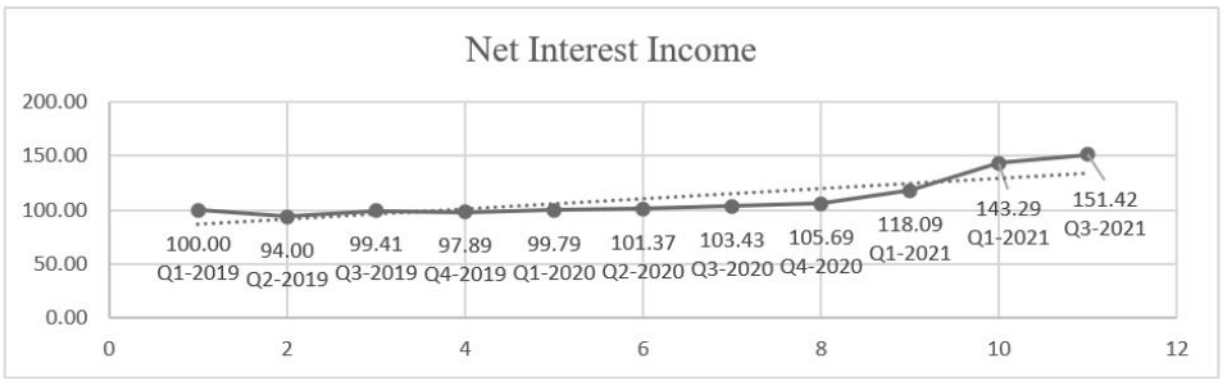


Figure16: Showing the Trend of Net Interest Income (PNB)
(Source: Pnbindia.in)

The index has seen a significant increase or fall till the first quarter of 2021. The first significant increase was noticed in the second quarter of 2021, in which the growth rate was 11.73 per cent, and 21.43per cent in the third quarter of 2021. This was the post-COVID phase. But by an overall analysis, it can be concluded that the index has not been affected by the pandemic.

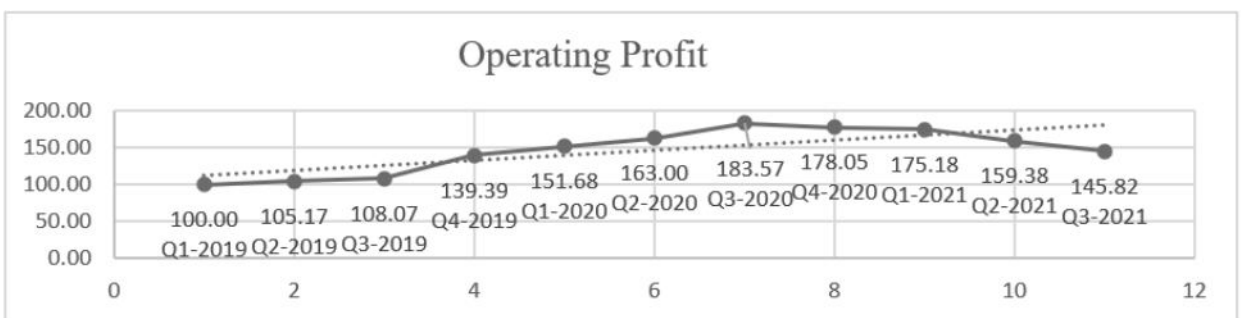


Figure17: Showing the Trend of Operating Profit (PNB)
(Source: Pnbindia.in)

During the first three quarters, the operating profit has not recorded a significant increase. But in the fourth quarter of 2019, a growth of 28.98 per cent was recorded. The quarter also recorded a sharp rise in the total deposits made. During the first wave of COVID operating profit did not record a fall. Post-COVID, a fall of 9.02 per cent was recorded.

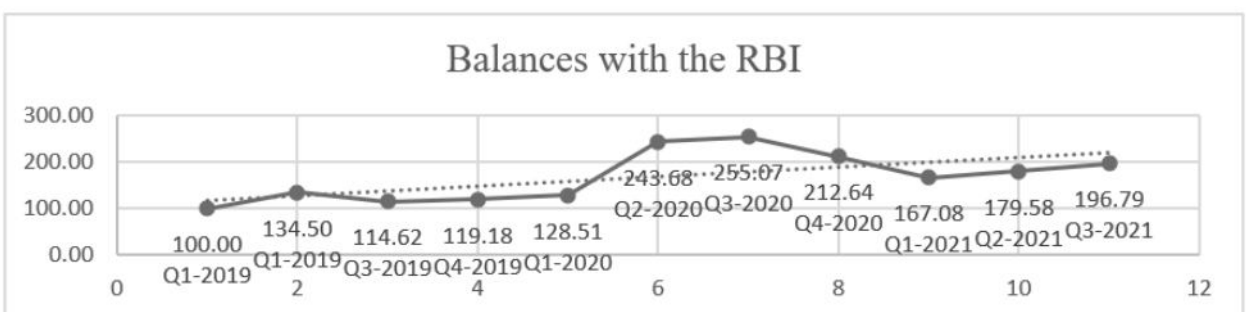


Figure18: Showing the Trend of Balances with the RBI (PNB)
(Source: Pnbindia.in)

The rising upward trendline indicates that the index has increased during the timeframe. In the second quarter of 2020, the index grew by 89.63 per cent, which was the highest growth recorded from quarter to quarter. A great fall of almost 21.42 per cent was recorded during the second wave of COVID. But soon after the pandemic, a growth of 9.93 per cent was observed.

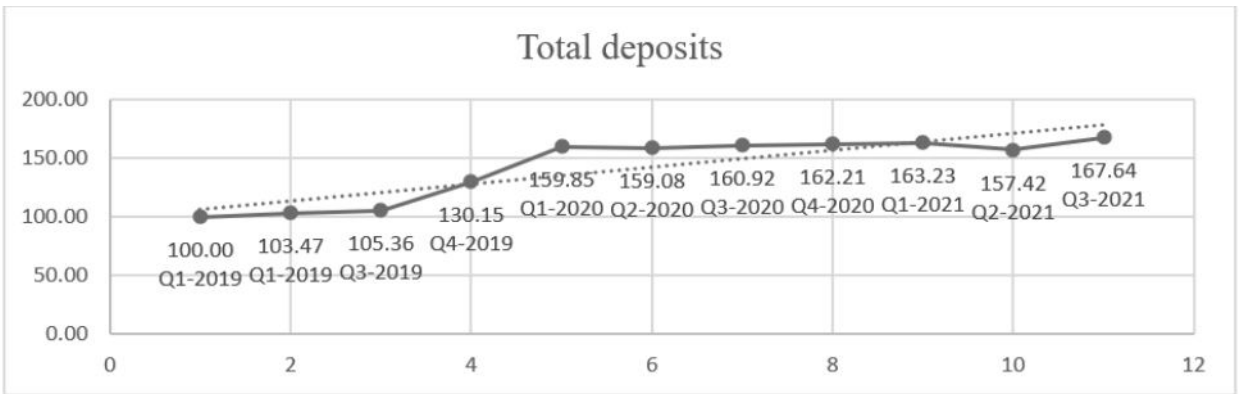


Figure19: Showing the Trend of Total Deposits (PNB)
(Source: Pnbindia.in)

An overview states that the net interest income is increasing at a favourable rate every quarter from 2019 to 2021. Though the growth rate is not constant or stable, there is an increase altogether. The fourth quarter of 2019 and the first quarter of 2020 recorded a significant boost of 23.42 per cent and 22.96 per cent. Since then, there has not been a substantial change in the index. We can see a flat line till the first quarter of 2021. During both the pandemic waves, the index did not reflect any fall in the value. It is observed that despite the lockdown during the first two quarters of 2020, total deposits increased. It clearly explains how Fintech and its presence had reduced the adversity of the pandemic even in the absence of physical working of the bank. The index has seen a significant increase or fall till the first quarter of 2021. The first significant increase was noticed in the second quarter of 2021, in which the growth rate was 11.73 per cent, and 21.43 per cent in the third quarter of 2021. This was the post-COVID phase. But by an overall analysis, it can be concluded that the index has not been affected by the pandemic.

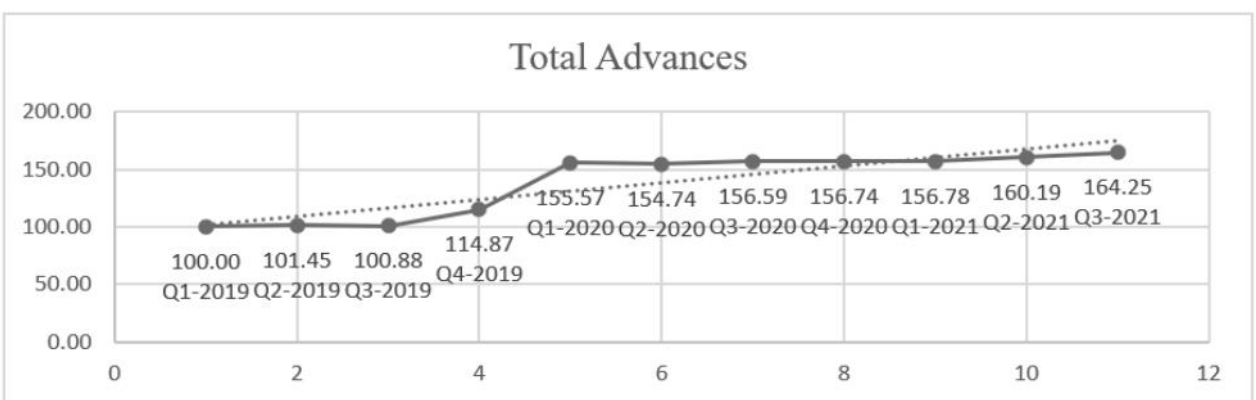


Figure20: Showing the Trend of Total Advances (PNB)
(Source: Pnbindia.in)

The graph is almost the same as that we saw in the case of total deposits. The fourth quarter of 2019 and the first quarter of 2020 recorded a significant boost of 13.83 per cent and 35.43 per cent. Since then, there has not been a substantial change in the index. We can see a flat line till the first quarter of 2021. During both the pandemic waves, the index did not reflect any fall in the value. Due to the lockdown, people started taking loans, as a result, the maximum increase in total advances could be seen during that phase.

5. Canara Bank

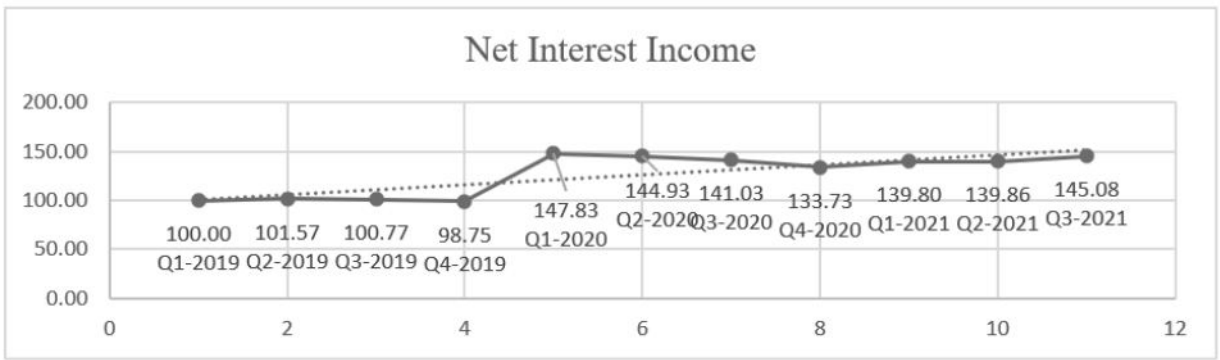


Figure21: Showing the Trend of Net Interest Income (Canara Bank)
(Source: Moneycontrol.com)

Net interest income, as we saw in the case of all the other banks, was almost a flat line but with a positive trendline. But in the case of Canara bank, we can see a flat line during the financial year 2019-2020. But soon after the fourth quarter of 2019, we can see a sharp increase in the value by 47.70 per cent. This growth was recorded in the first quarter of 2020(lockdown period). But after that, the line has almost been a flat line. A slight fall of 5.17 per cent was noticed during the first quarter of 2021 due to the second wave of COVID in India. The positive slope of the trendline indicates an overall increase in the value of net interest income.

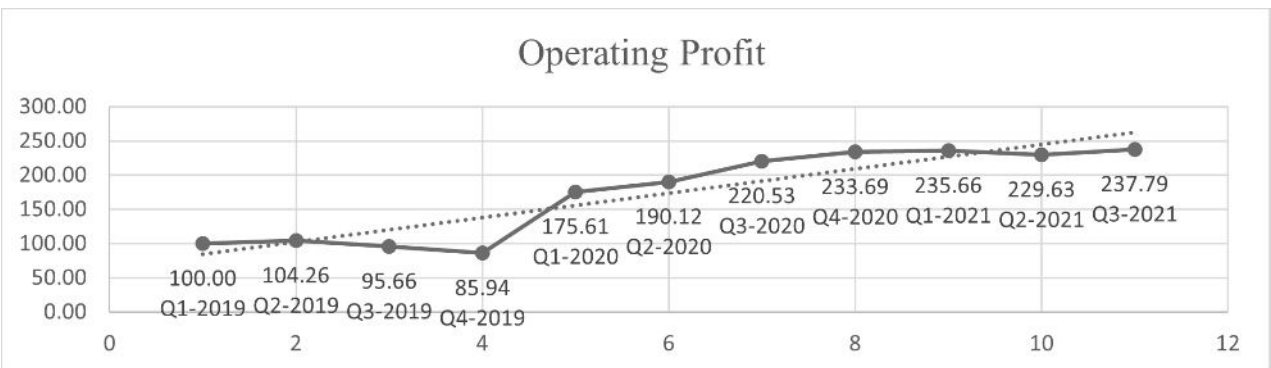


Figure22: Showing the Trend of Operating Profit (Canara Bank)
(Source: Moneycontrol.com)

The third and fourth quarter of 2019 recorded a drop in operating profit by 8.24 per cent and 10.16 per cent respectively. A sharp increase was also noticed in the profits in the financial year 2020. Profits increased by 104.34 per cent although this phase was hit by the pandemic, and a lockdown was also imposed during the phase. In the next three quarters, we can see that the line is upward rising which indicates that the profit has increased. A very insignificant fall could be seen in the second quarter of 2021(post the second wave of the pandemic). However, the trend line is upward rising in nature, which proves that there is an overall increase in the operating profit during the timeframe.

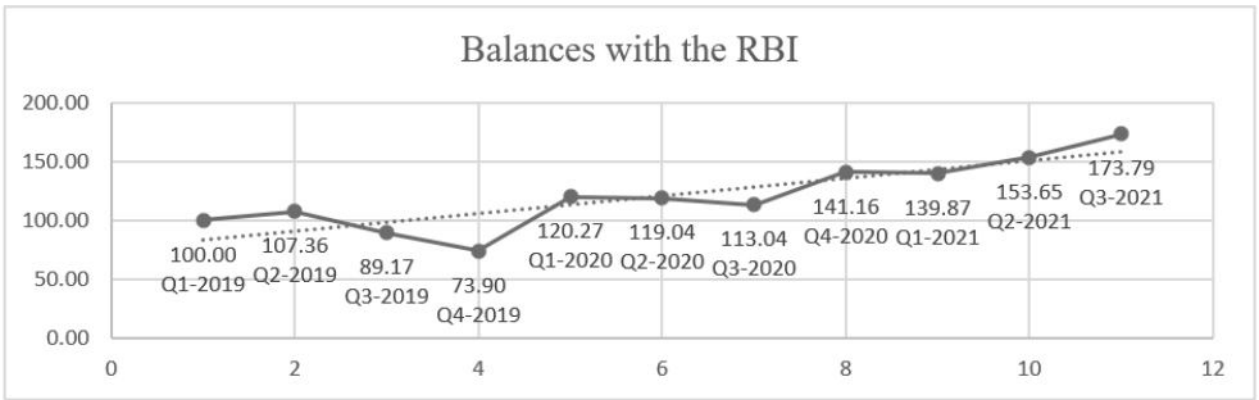


Figure23: Showing the Trend of Balances with the RBI (Canara Bank)
(Source: Moneycontrol.com)

Balances with the RBI are the minimum cash balance that the commercial banks need to maintain with the RBI. A fall of 16.94 per cent was recorded during the third quarter of 2019, and during the fourth quarter of 2019, the balances with the RBI fell to ₹225,700 million. During the first quarter of 2020, the balances recovered, and an increase of 62.74 per cent was observed. Again, a significant increase in the value by 25.09 per cent was recorded during the second wave of COVID. The critical inference that should be noted after a close analysis of the graph is that despite the lockdown during the first two quarters of 2020, balances with the RBI increased significantly.

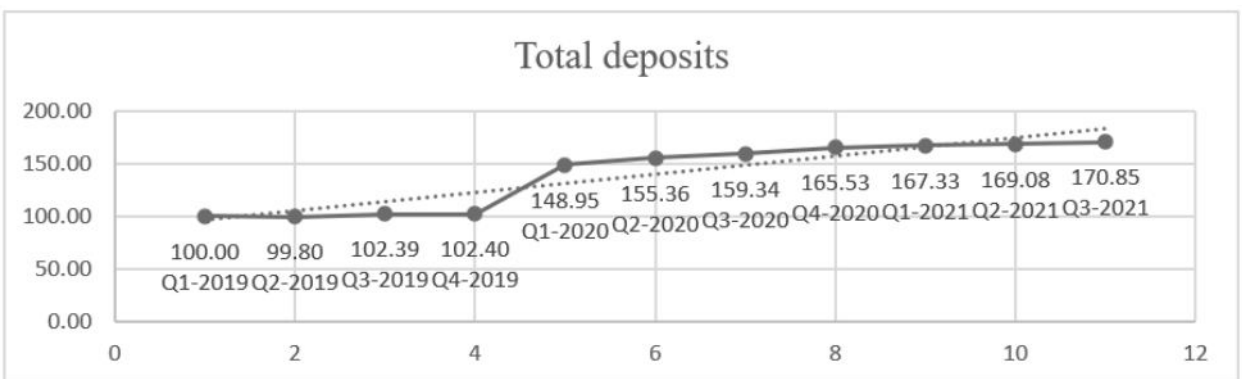
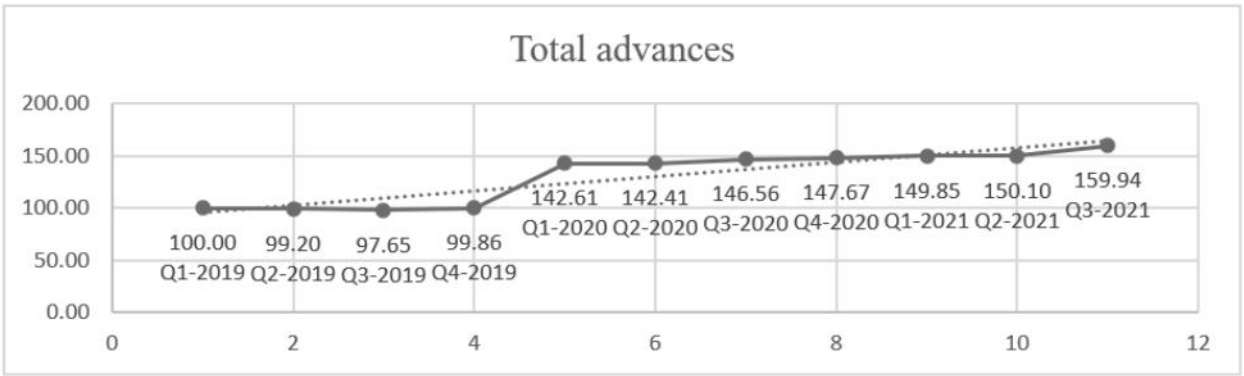


Figure24: Showing the Trend of Total Deposits (Canara Bank)
(Source: Moneycontrol.com)

Though the growth rate is not constant or stable, there is an increase altogether every quarter from 2019 to 2021. The first quarter of 2020 recorded a significant boost of 45.45 per cent in the value. Since then, there has not been a substantial change in the index. During both the pandemic waves, the index did not reflect any fall in the value. The critical inference of the graph showed that despite the lockdown during the first two quarters of 2020, total deposits increased. It clearly explains how Fintech and its presence had reduced the adversity of the pandemic even in the absence of physical working of the bank. The index has seen a significant increase or fall till the first quarter of 2021. But by an overall analysis, it can be concluded that the index has not been affected by the pandemic.



igure 1: Likely to

The graph is almost the same as that of total deposits. The first quarter of 2020 recorded a significant boost of 42.80 per cent in the value. Since then, there has not been a substantial change in the index. We can see a flat line till the second quarter of 2021. Post-COVID i.e., the third quarter of 2021 recorded an increase of 6.56 per cent. During both the pandemic waves, the index did not reflect any fall in the value. Due to the lockdown, people started taking loans, as a result, the maximum increase in total advances could be seen during that phase.

CONCLUSION

It clearly explains how Fintech and its presence had reduced the adversity of the pandemic even in the absence of physical working of the bank. The trendline in all the cases is positive in nature as it moves upwards. After thorough analysis of the technical charts and trends, the results which has been derived are as follows:

A sharp increase or decrease in almost all the indices were noticed during the first wave (first quarter of 2020) and second wave (fourth and first quarter of 2021) of the pandemic. The damage has been quite insignificant due to the presence of Fintech. Even during the time of lockdown, when banks were closed for more than three months, the banking activities did not face considerable problems due to the presence of online banking or electronic banking. With the help of net banking, UPI, NEFT, Immediate Payment Service (IMPS), et al., sending and receiving money was not a difficult task. Banks also provided electronic statements (e-statements) replacing the traditional passbook system to have a record of all your transactions. Through the mobile application, anyone can have a check on their e-statement at any given moment.

On analysing the performance of the top three private banks in India, it was very clear that HDFC has been least affected by the effect of the pandemic. No steep fall or growth could be observed in the variables. A significant change was observed in ICICI and Axis banks. The effect of the pandemic could have been devastating but the presence of Fintech in India and also the continuous change in policies adopted by the RBI have helped to mitigate the impact to a large extent. Total advances and total deposits in case of private sector banks was almost a flat line with a very insignificant growth rate. But in case of public sector banks a sharp increase during the first wave of pandemic was observed.

FUTURE OF FINTECH IN INDIA

1. There are several important structural issues plaguing Indian financial services, but a few of the most pressing ones include expanding reach, enhancing customer experience, reducing operational friction, and encouraging acceptance and usage of the digital channel. This will provide digital Fintech start-ups an advantage. The financial system may undergo long-term changes as a result

of Fintech, which has the ability to expand the market and influence consumer behaviour. Indian Fintech companies have the potential to change the financial services industry in three ways.

2. Fintech companies are anticipated to reduce expenses while raising the standard of financial services. As consumers are not burdened by outdated operations, expensive physical networks, or expensive IT systems, the advantages of leaner operating models and similar things should be passed on to customers.
3. The Fintech industry will create novel risk assessment models. The use of big data, machine learning, and alternative data to underwrite credit and produce credit ratings for customers with little or no credit history would help India's financial services market grow.
4. Fintech will make the financial services landscape more varied, secure, and stable. Fintech firms are less homogeneous than traditional banks, and therefore provide excellent learning opportunities to improve both competencies and culture.

Fintech companies can learn and implement best practices in risk and internal controls, operational excellence, compliance culture, and employee engagement that have proven to be successful for most Indian banks and financial services providers.

LIMITATIONS OF THE STUDY

The following are the limitations of the study:

1. Only top three private sectors banks and two public sector banks have been taken or analysis.
2. Five variables i.e., net interest income, operating profit, balance with the RBI, total deposits and total advances have been used.

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> The challenge most people faced was the lack of energy and motivation which later got eliminated by the guidance, motivation, and help of the trainers.

Re-Invention of the Fitness Industry After the COVID-19 Pandemic in India

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ABSTRACT

'We cannot start over. But we can begin now and make a new ending.'

- Zig Ziglar

Fitness is referred to as a state of health and well-being along with the ability to perform sports,

daily chores, occupations, and activities. It is achievable only through proper nutrition, exercise, and rest involving recovery.

According to a report published by the United States Health on post-pandemic exercise, the world has moved beyond emergency and the pandemic has caused seismic shifts in the fitness industry, which was built on a foundation of people gathering to move together and later shifted to online and outdoors.

A survey published by Mindbody at the beginning of 2022 showed that people seemed to be more cognizant of the need to prioritize their health and take responsibility for it. Health includes both physical and mental health.

KEYWORDS: Physical Well-Being, Health, Virtual, Post-Pandemic.

INTRODUCTION

Physical activity is an important requisite of our human body which assists in the improvement of the fitness of an individual, thereby creating a positive impact on one's well-being. Before COVID, people used to go to the gym and go for walks to stay fit. However, the re-invention of the fitness industry happened when the COVID-19 pandemic started at the onset of March 2020, restricting people within the boundaries of their homes. The fitness industry experienced a significant downturn.

The pattern of exercises also changed from lifting heavy weights and gym to breathing exercises, pranayama, and yogic exercises. It was a little difficult in the beginning but later people coped with it. People understood the importance of physical activity as it would otherwise make them physically, mentally, and emotionally weak. During the pandemic, it became essential for people to stay fit and healthy, and digitalization came to the rescue.

LITERATURE REVIEW

1. Uttara Ananthakrishan (2022) - The research was conducted on the fitness sector in the aftermath of the COVID-19 pandemic. It was found out that the model of operation was affected negatively by the digitalization which was found by using anonymized apps and the gym attendance data.
2. Ru Liu (2022)- She discussed about the medium of fitness during the pandemic in China. Fitness apps, live-streaming workout classes, and virtual reality fitness for physical activity showed a steady increase.
3. A.A. Krasil (2021)- He observed the Russian fitness industry in context of changes after the COVID-19 pandemic. The market of fitness services, disproportions in its development and factors of destructive impact were found out.
4. Professor Annie Stephen and Professor Ashok (2021)-They discussed the leveraging business opportunities in the fitness industry sector post-COVID along with the paradigm shift in India and how it has proved to set milestones.

OBJECTIVES OF THE STUDY

1. To understand how it has changed over a period before and after COVID-19.
2. To find out about the impact of the pandemic on the fitness industry.
3. To know about the impact of digitalization on the fitness industry.
4. To know about the challenges faced by them.

WHAT IS MEANT BY FITNESS?

The word fitness is a term that has a different meaning for every existence. It refers to one's good health and proper well-being. Fitness encompasses not only physical health but also emotional and internal well-being. It involves a 360-degree view of your health. The most important part of staying fit is eating smartly and living an active life.

THE DIFFERENT TYPES OF FITNESS

The four main categories of fitness are as follows-

1. Aerobic exercise
2. Muscle strengthening exercise
3. Flexibility and mobility exercise
4. Balance exercise



Figure 1: Types of Fitness
(Source: https://cdn.mos.cms.futurecdn.net)

AEROBIC EXERCISE

It is an activity that you do for more than a few minutes at a time. While performing this exercise, our body uses an aerobic energy system for power, and we find that our breathing rate increases because our metabolic system uses oxygen to create this energy. It helps improve our cardiovascular health and prevents diseases such as hypertension along with heart diseases like stroke and certain cancers. It is a very useful way of burning calories which eventually helps in losing body weight and maintaining it. It helps in the strengthening of certain muscles and results in increased bone density. The various kinds are-

1. Low and moderate intensity
2. High intensity and intervals



Figure 2: Aerobic Exercise
(Source: https://media.istockphoto.com/id/531930812/vector/aerobic-icons)

MUSCLE STRENGTHENING EXERCISE

This type of exercise increases muscular strength and endurance, thereby increasing the size of your muscles along with bone density. It plays a very important factor in talking about the longevity of one person. It is very important for elders because it helps to reduce the problems related to age, like a decrease in the strength of muscle mass and the density of the bone.

The different forms of it are-

1. Lifting weights
2. Resistance band training
3. Using your own weight
4. Weight bearing exercises
5. Calisthenics
6. Non-weight bearing exercise
7. Pilates



Figure 3: Types of Strength-Training Exercises
(Source: https://www.weightlossresources.co.uk)

FLEXIBILITY AND MOBILITY-TRAINING

Flexibility is the capacity of muscles to stretch, while mobility pertains to a person's joint and tissue movement with a full range of motion. Both are critical for athletes and fitness enthusiasts to prevent injuries, as flexible and mobile muscles and joints are less susceptible to sprains. Prioritizing flexibility and mobility also aids in aging gracefully, enabling individuals to engage in activities without pain and maintain independence for a longer time. It is crucial to include stretching in one's routine before and after any workout as it serves as an effective warm-up and promotes active recovery. Various exercises contribute to improving flexibility and mobility, including yoga, stretching, calisthenics, dance, barre, tai-chi, and mobility exercises like foam rolling and dynamic stretching. These activities not only enhance physical performance but also support overall well-being.



Figure 4: Different Kinds of Flexibility and Mobility Training (Source: https://images.everydayhealth.com)

BALANCE AND STABILITY TRAINING

Balance and stability training are exercises that focus on improving your ability to maintain your balance and stability in between any physical activity. These types of training are useful for both, athletes who want to improvise their performance as well as individuals who want to decrease their risk of getting injured and see an improvement in their overall fitness. The training of balancing involves exercises that challenge the body's ability to maintain balance. Examples of balance exercises include standing on one leg, lunges, and using a balance ball. Stability training, on the other hand, focuses on improving the physical ability to maintain proper alignment and posture during any physical activity.

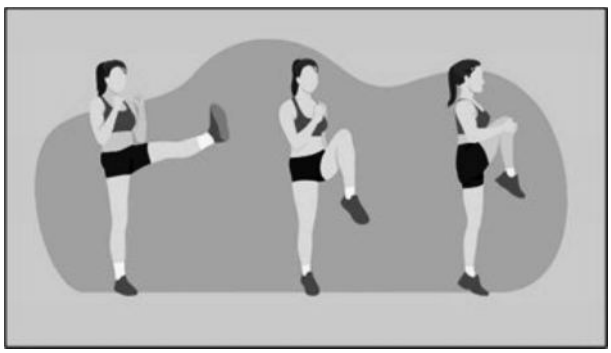

Figure 5: Balance Training (Source: https://fitpage.in/wp-content)

ADVANTAGES OF FITNESS

1. Improves physical health
2. Increases strength and flexibility in a body
3. Improves mental health
4. Improved cognitive function
5. Improved sleep cycle
6. Increased confidence in oneself
7. Social benefits
8. Quit smoking

DISADVANTAGES OF FITNESS

1. It is very addictive
2. Causes premature aging
3. Damages the joints
4. Very stressful
5. Causes inflammation
6. Has a direct effect on the health of the heart

ONLINE VERSUS OFFLINE CLASSES

The COVID-19 pandemic taught everyone to adjust to whatever is available. The online fitness platform started booming, all of which was not imaginable before. Before people used to go outdoors for workouts and did indoor workouts in the presence of an instructor, but due to the pandemic, it had to be

stopped. People had to find an alternative medium of workout and then came the online platform.

ONLINE

As the world shifted to the online mode due to the pandemic, even the fitness industry shifted. They were usually done in the comfort of your home. It required only readily available items which could be found at your home. They would use stairs, and water bottles as a replacement for them. It acted as a savior for many fitness enthusiasts but the possibility of cheating when the instructor is not watching was always tempting for many. The need for extra motivation was required because they were not used to such a mode of workout. Since these classes were done at the comfort of your home, there were no additional travel expenses for fuel, transport, or parking fees, and had less exposure to the virus. It was also done privately and had fewer distractions.

OFFLINE

Offline classes are classes that take place in gym studios or fitness studios in the presence of a trained instructor. It could be in the form of group training or individual personalized training. The studios were very well equipped with treadmills, exercise benches, and workout stations which were open to common use. These offline classes were conducted outdoors in boot camps, parks, and other recreation spaces also. The stairs and benches in these areas were used to support the fitness routines. The presence of an instructor or coach to show the right technique and give proper motivation to the client to boost their confidence and energize them while doing fitness was the most important point while choosing these classes. The taunts and cheers of their peers during the workout would also serve as extra motivation and help them to do the extra repetition.

EVOLUTION OF FITNESS

The fitness sector is always developing and evolving. To be truthful, just looking at the previous five years alone shows how much has changed. Technology is frequently at the heart of innovation, just like it is in many sectors. Technology has altered the way we exercise, from watches and devices to virtual personal training and fitness streaming platforms.

WHAT HAS CHANGED IN FITNESS OVER THE LAST DECADE?

The large gym chains from the 1970s and 1980s are still in operation today. What has changed is that today's consumers desire a more intimate and personal encounter. Boutique gyms, fitness clubs, and specialized training facilities have been providing a different kind of experience for the past 10 years.

There have been a lot of developments in the last 10 years. The transition away from traditional brick-and-mortar gyms towards boot camps and classes like Zumba and boxing started around 2010. Orange Theory Fitness and F45 were among the first boutique studios to open. Functional training and personal training remained popular. Apps and fitness trackers have advanced significantly. What was once just a simple pedometer, now provides customers with a full profile of their health, including heart rate, steps, and sleep duration. Alongside the industry, fitness equipment is improving, becoming more intelligent and changing.

Technology and customer behavior will continue to drive change as the fitness experience becomes more individualized. The fitness business has evolved in the COVID-19 era. Lockdowns and other limitations have significantly changed how people exercise. For several months, people distanced themselves socially, and in-person group exercise nearly seemed like a distant memory. Yet, the COVID-19 crisis did leave one good legacy, and that is the emphasis it has placed on the need for exercise. Every country encourages daily exercise to maintain good health and prevent disease. Home fitness and digital fitness are booming as new exercise habits are adopted. The demand for online content has increased significantly. Thanks to the improvements in the technological industry, a lot of people are now able to do their work at home and stay fit using a variety of digitalized content available online. As fitness brands embrace the technological revolution, they will be able to create more customized home fitness solutions for consumers.

HOW HAS TECHNOLOGY REVOLUTIONIZED THE FITNESS INDUSTRY?

Technology is having a major impact on the fitness industry, changing the way people train, track their progress, and interact with fitness trainers who are professionals in this field. Here are some of the key ways by which technology has revolutionized the fitness industry.

1. Fitness tracking devices
2. Virtual workouts
3. Virtual fitness apps
4. Gamification friendly
5. Personalization
6. Online communities

Altogether, technology has made fitness more accessible, convenient, and engaging for people along with creating newer ways for fitness industry professionals to reach and connect with their customers.

RESEARCH METHODOLOGY

This research is exploratory and descriptive.

Sources- Primary (questionnaire) and secondary data.

Sampling Technique- A Convenience sampling method was adopted to draw the sample respondents for the research. It is a non-probability sampling technique, where subjects are selected because of their accessibility and proximity to the researcher.

Secondary Data Source- Use of data from various reports published by Michigan Medicine, United States News, Maryville Education, Harvard Health, Cable News Network (CNN)'s Website, Bloomberg, and many other trusted publications.

METHOD OF ANALYSIS

The data gathered was analyzed using descriptive analytics. Variables in a question have been presented as a percentage of total responses using charts, graphs, and conclusions have been drawn from them.

PRIMARY DATA ANALYSIS

This survey was conducted on a population of 150 people using convenience sampling. Most of the respondents pertain to the age group 18-24 years, who are exposed to the emerging fitness industry. A fair number of males and females have been included.

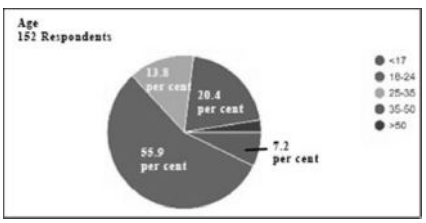

Figure 6: Pie-Chart Depicting Age Classification (Source: Primary Data)

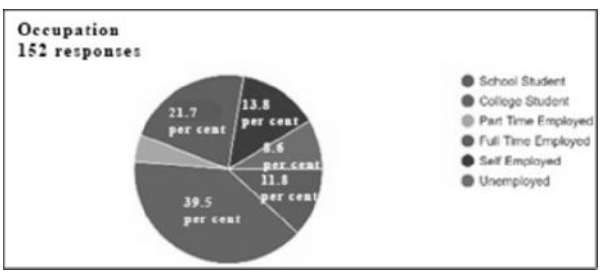

Figure 7: Pie-Chart Depicting Occupation Classification (Source: Primary Data)

A diversified occupation helps to improve the validity of the research conclusion.

PRE-COVID AND POST-COVID ANALYSIS

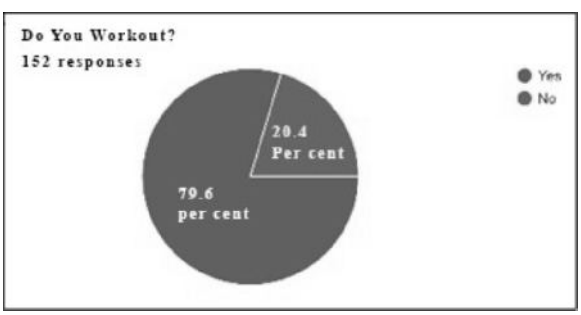

Figure 8: Pie-Chart Depicting Whether the Respondents Work Out in Terms of Fitness (Source: Primary Data)

Even before and during the pandemic, more than 75 per cent of the respondents worked out, which is a very positive sign.

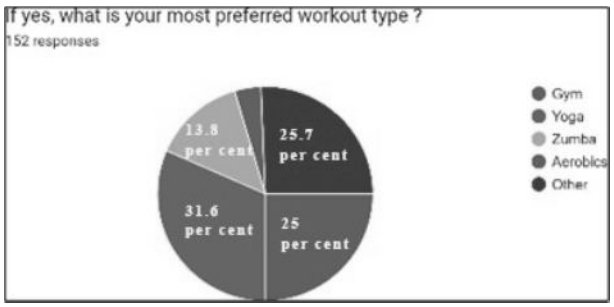

Figure 9: Pie-Chart Depicting the Respondent's Most Preferred Work Out Type (Source: Primary Data)

We found out that more than 31 per cent of the respondents preferred yoga followed by the rest 69 per cent preferring gym, Zumba and any other fitness activity.

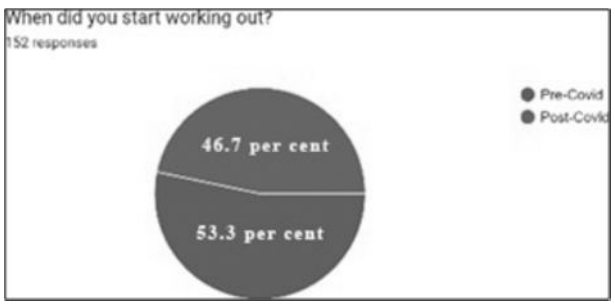

Figure 10: A Pie-Chart Depicting the Percentage of Individuals Who Started Their Fitness Journey Pre-COVID Versus Post-COVID. (Source: Primary Data)

More than 50 per cent of the respondents used to work-out even before the pandemic which was very impressive.

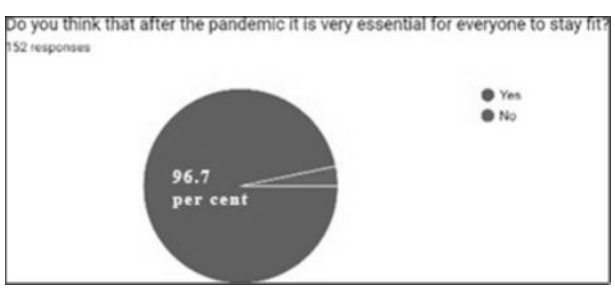

Figure 11: Pie-Chart Depicting the Respondent's Opinions on the Need to Stay Fit After the Pandemic (Source: Primary Data)

Almost 97 per cent of the respondents realized the importance of staying fit due to the pandemic.

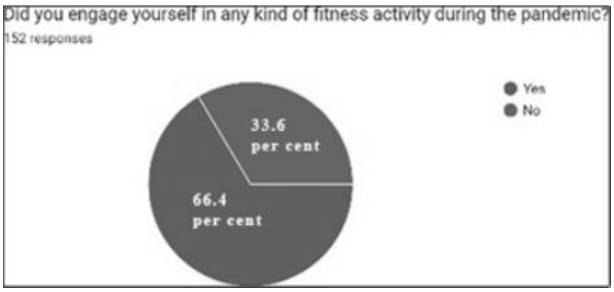

Figure 12: Pie-Chart Depicting Whether the Respondents Engaged Themselves in any Fitness Activity (Source: Primary Data)

More than 65 per cent of the respondents worked out during the pandemic, kept themselves fit and healthy, and made an effort to combat the disease.

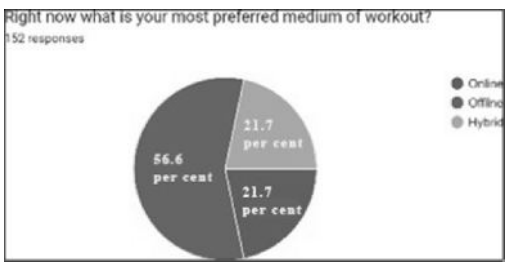

Figure 13:Pie-Chart Depicting the Respondent's Most Preferred Medium of Workout Post-Pandemic (Source: Primary Data)

More than 55 per cent of the people preferred the offline mode of workout, while the online and hybrid modes had equal numbers of respondents. The offline mode was most preferred because of the personal attention and motivation.

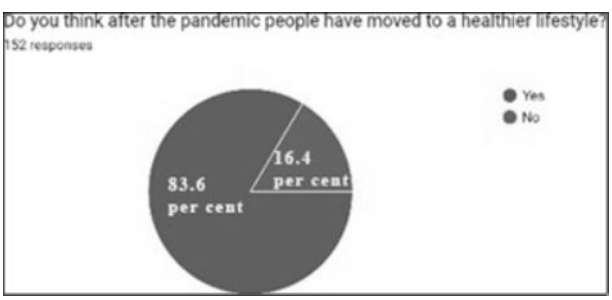

Figure 14: Pie-Chart Depicting the Opinion of the Respondents on Moving to a Healthier Lifestyle Post-COVID-19 (Source: Primary Data)

More than 80 per cent of the respondents have shifted to a healthier lifestyle post-covid, making sure that they are fit and healthy.

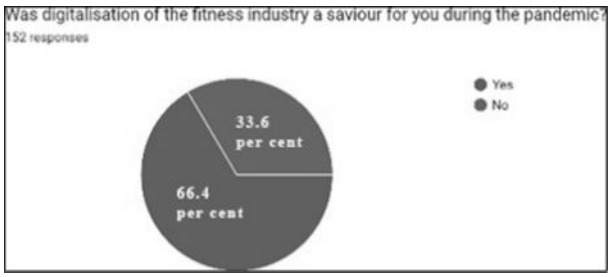

Figure 15: Pie-Chart Depicting Whether Digitalization of the Fitness Industry Acted as a Savior for the Respondents (Source: Primary Data)

For more than 65 per cent of the respondents, digitalization was a savior since it did not stop them from keeping themselves fit.

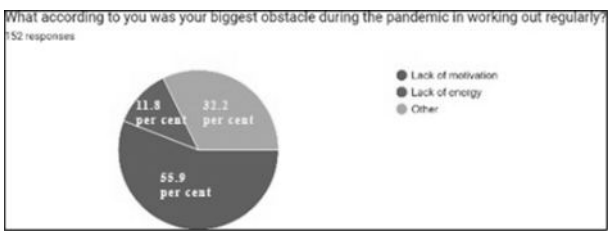

Figure 16: Pie-Chart Depicting the Biggest Obstacle Faced by the Respondents While Choosing to Work Out During the Pandemic (Source: Primary Data)

More than 50 per cent of the respondents faced a lack of motivation during the pandemic to work out.

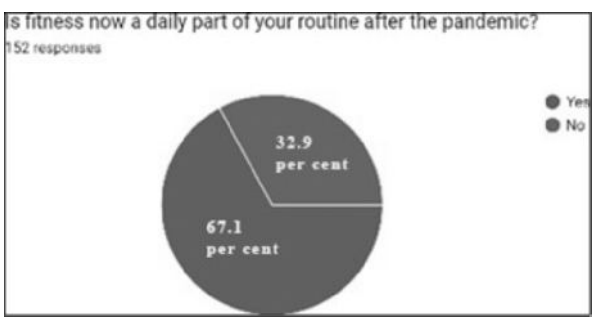

Figure 17: Pie-Chart Depicting Whether Fitness is Now a Daily Part of the Respondents (Source: Primary Data)

For more than 65 per cent of the respondents, the pandemic made fitness a daily part of their life enabling them to stay fit.

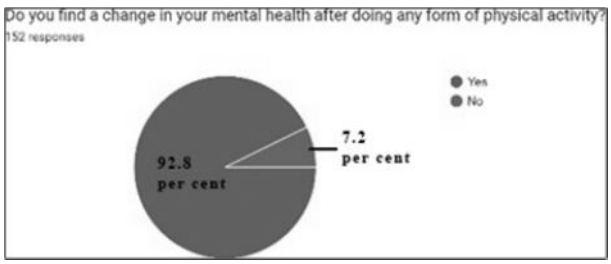

Figure 18: Pie-Chart Depicting Whether the Respondents Found any Change in their Mental Health after Working Out (Source: Primary Data)

More than 90 per cent respondents found a change in their mental health as fitness was not only about physical health but mental too.

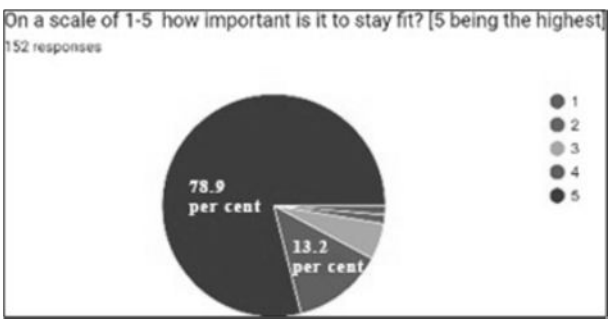

Figure 19: Pie-Chart Depicting the Respondent's View on the Importance of Fitness (Source: Primary Data)

This analysis highlights the importance of fitness being realized by the respondents, which is essential after the pandemic, both physically as well as mentally. This development in the mindset was a much-needed move in India because previously, many people did not understand its importance.

POST PANDEMIC FITNESS INDUSTRY

The fitness industry has undergone major changes during the pandemic. The industry has been hit hardest,

with many gyms and fitness centers forced to close due to lockdowns and social distancing regulations. But as restrictions ease, the industry will ensure the safety and health of its members. Some of the post-pandemic fitness industry analysis and findings are presented below-

1. Rise of home training
2. Growing focus on outdoor fitness
3. Digital transformation
4. Focus on health and hygiene
5. Member demographic changes

CONCLUSION

In India, after the pandemic, there has been a constant rise in the consciousness of people regarding health and fitness. The fitness industry has seen only an upward growth as more awareness is being raised. Our primary research concludes that Indians are aware of the increased importance of fitness after the pandemic. The research helped show how the fitness industry changed drastically after the pandemic right from the shift to online classes to the usage of wearable technology. The pandemic had a positive impact on the industry. Initially, they faced a lot of problems and were a bit skeptical but the gradual shift ensured a positive return. The shift helped both the enthusiasts as well as the industry. The digitalization created a little toughness in the minds of the people. They did not get the personal touch initially and had no motivation, but later on with a little adjustment, they easily adapted to the new way of exercising. The challenge most people faced was the lack of energy and motivation which later got eliminated by the guidance, motivation, and help of the trainers. Thus, it can be concluded that the re-invention helped a lot and will continue to expand more and more as new modes of exercising will come into being. Indians have also started including fitness in their regular routine, thereby making India a fit nation gradually.

IN TERMS OF FITNESS INDUSTRY

The COVID-19 pandemic has had a huge impact on the fitness industry. Health and safety concerns have forced gyms to close or limit capacity. This has changed the way people exercise, with many turning to home exercises and outdoor activities.

Looking at the fitness industry transformation post-COVID, there are some key areas where we have seen a significant change:

1. Hybrid model
2. Personalization
3. Safety measures
4. Building community
5. Wellness integration

The post-pandemic re-invention of the fitness industry presents an opportunity for businesses to find new and innovative ways to support the health and well-being of their customers.

IN TERMS OF FITNESS ENTHUSIASTS

Fitness enthusiasts face a variety of new opportunities and problems because of the industry's transformation following the pandemic. The shift towards hybrid models that blend in-person and virtual offerings means that fitness fans now have access to a greater selection of training options, including live-streamed courses, on-demand workouts, and individualized coaching. Fitness enthusiasts can feel more confident and at ease returning to in-person workouts due to the focus on health and safety measures, such as improved cleanliness and social seclusion. Fitness enthusiasts have the chance to connect with like-minded people and concentrate on their general health and well-being due to the emphasis on community building and holistic wellness techniques. They must adjust to new technology and training formats, and there may be more rivalry in the fitness market because of the fitness industry's re-invention. Fitness enthusiasts may need to be more adaptable and willing to attempt new workout options while also concentrating on their own requirements and goals to overcome these obstacles.

After the pandemic, exercise is important for both physical and emotional health. Here are a few reasons-

1. Increases immunity
2. Improves mental health
3. Reduced risk of chronic disease
4. Pandemic
5. Increased energy and productivity
6. Promote healthy habits

Overall, regular exercise is an important part of maintaining overall health and well-being, especially after the pandemic.

RECOMMENDATIONS

To the Fitness Industry

1. Invest in virtual and hybrid fitness as an offering
2. Focus on safety and sanitation to build trust
3. Offer personalized fitness programs using wearable technological devices
4. Create a sense of community
5. Integrate holistic health services
6. Offer flexible membership options
7. Prioritize employee training

To the People Who Want to Start Working Out

1. Start slow
2. Set realistic goals
3. Find an activity you enjoy
4. Make it a habit
5. Get support

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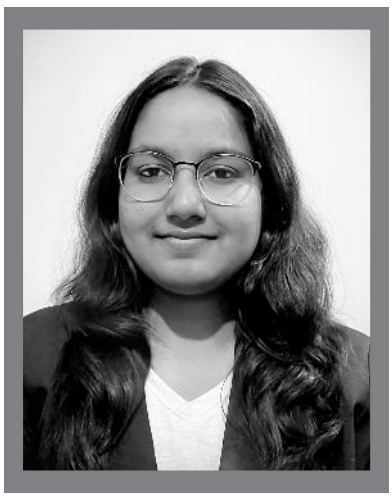

> The Indian government introduced UPI, a real-time payment system, as part of its efforts to promote a cashless and digital economy.

Impact of Unified Payments Interface (UPI) on the Performance of Public Sector Banks in India

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ABSTRACT

In response to the imperative of digitalisation, National Payments Corporation of India (NPCI) brought about the cashless revolution with the launch of Unified Payments Interface (UPI) in the late 2010s and, in only about five years' time, UPI has dominated the transaction space nationwide from low value bill payments to large purchases. This paper studies the impact that this cashless revolution has had on the performance of public

sector banks (PSBs) in India which form the foundation of the country's financial system. The study explores UPI's impact on PSBs' financial performance, specifically profitability, operating efficiency, and overall financial health. Secondary data from government publications, RBI databases, and bank websites for the period 2016 to 2022 was analyzed. Descriptive statistics and correlation analysis were employed to assess the relationship between UPI adoption and certain financial metrics. The findings indicate that while UPI adoption has a positive impact on PSBs' financial performance, no substantial correlation exists between UPI adoption and operating efficiency. Despite this, UPI is projected to sustain its growth trajectory, transforming India's transaction landscape.

KEYWORDS: Unified Payments Interface (UPI), Public Sector Banks (PSBs), Financial Performance, Operating Efficiency, Digital Payments, India.

INTRODUCTION

The banking sector in India has seen a substantial transformation in recent years with the emergence of digital payments. The government of India, with the cooperation of public sector banks, has taken several steps since 2015 to discourage the use of cash and move India towards a digital economy. These include the introduction and promotion of UPI, the promotion of e-wallets for shopping, bill payments and mobile phone recharge, etc. and withdrawal of surcharge and service charges on cards and other digital payment methods among others. UPI is a mobile-based payments method introduced by NPCI in 2016. Since its inception, UPI has gained tremendous popularity among customers and merchants due to its convenience, speed and ease of use. PSBs have been actively promoting the usage of UPI to their customers. However, the impact of UPI on these banks is not well understood. This paper aims to explore the impact of UPI on public sector banks in India by examining the adoption of UPI by PSBs and its impact on their profitability, operating efficiency, and financial performance.

BACKGROUND OF THE STUDY

Until the early 2010s, India predominantly relied on cash for small-value transactions. In 2016, the demonetization of ? 500 and ? 1000 bank notes was a major decision. The Indian government introduced UPI, a real-time payment system, as part of its efforts to promote a cashless and digital economy. Arvind Kumar's (2017) empirical evidence highlights a substantial increase in digital payment usage, particularly UPI, following demonetisation. UPI allows users to link multiple bank accounts to a single mobile application and facilitates payments through mobile numbers, unique identities (IDs), or Quick Response (QR) codes. Radhika Basavaraj Kakade and Professor Nupur A. Veshne (2017) compare UPI transactions to sending and receiving text messages on smartphones. In a few years, UPI has revolutionised the way Indians transact, offering convenience in payment for goods, money transfers, and bill payments. Consequently, the Indian financial sector is undergoing significant structural changes, driving the growth of digital payments.

LITERATURE REVIEW

In their study of India's cashless payment system, Ashish Das and Rakhi Agarwal (2010) found that using cash as a form of payment is costly for the government. The nation must transition from a cash-based payment system to a cashless (or electronic) one. This will promote financial inclusion and harmonise the parallel and mainstream economies.

A. Martina Franciska and Dr. S. Sahayaselvi (2017) pointed out that digital payments have the potential to reduce the burden on banks and promote financial inclusion by providing access to banking services to the unbanked and underbanked sections of society.

According to Gochhwal, R. (2017), UPI offers a significantly superior user experience for online payments when compared to other cashless and digital payment solutions like debit cards or net banking transactions. The author added that UPI has witnessed rapid growth since its inception because of its ease of use and affordability.

Shamsher Singh and Ravish Rana's (2018) research offers insights into how Indian consumers feel about using digital payment methods. The ANOVA test revealed that demographic characteristics, with the exception of education, have no bearing on the uptake of electronic payments.

Rashi Singhal (2021) suggests that the banking industry can play a crucial role in promoting the adoption of digital payment systems by educating and supporting individuals who may be unaware or lack knowledge about digital payments.

Fahad, Mohammad Shahid's (2022) study examined the factors that influence the intention to use the Unified Payments Interface (UPI) among young Indian adults. The results showed that the intention to use the UPI is positively associated with relative advantage, low complexity, observability, recommendation intention and satisfaction; and is not associated with compatibility and triability.

In R. Gopinath, S. Vevek, Dr. S. Sivaprakkash's (2022) study comparing pre- and post-COVID digital payment transactions for Immediate Payment Service (IMPS), UPI, and National Financial Switch (NFS), it was found that UPI exhibited exponential growth compared to IMPS and NFS. During the pandemic, UPI emerged as the preferred choice for Indians to replace cash transactions, signalling a green light for the Indian government's vision of a cashless economy.

RESEARCH GAP

UPI has been widely adopted in India, but little study has been done to determine how it affects the performance of public sector banks. While there are some studies exploring the overall impact of UPI on the economy, customer satisfaction, etc., there is a dearth of literature focusing on the banking sector, specifically PSBs. This study seeks to address such research gaps.

OBJECTIVES

The objectives of this research are:

1. To study the background of UPI in India and its role in the banking sector
2. To analyze the adoption and usage of UPI by customers of public sector banks in India.
3. To evaluate the impact of UPI on the financial performance and efficiency of Indian public sector banks.

RESEARCH METHODOLOGY

Data Collection and Sources

This research is based on a review of secondary data from government publications, the RBI database, NPCI website, and bank websites. The time frame of this study spans from the launch of UPI in April 2016 to the most recent data available up to the third quarter of 2022 to 23.

Variables and Measurements

Independent Variable

The study focuses on the UPI as the primary factor examined for its impact on the performance of PSBs in India. Both the volume and value of UPI transactions remitted are considered.

Dependent Variables

Performance Indicators like Return on Asset (ROA) and Return on Equity (ROE) are used as indicators to measure the financial performance of the banks. Operating expenses are also considered an indicator of operating efficiency.

ROA = Net Income / Total Asset

ROE = Net Income / Shareholders' Equity

Operating expenses include normal business expenses, such as salaries, rent, utilities, and other costs, as well as expenses related to running the bank's digital channels.

Mediating Variable

The degree to which customers adopt UPI serves as a mediating variable. Customer adoption of UPI can impact the financial performance and efficiency of PSBs.

Sampling and Sample Selection

The research made use of non-probability purposive or

judgmental sampling where a specific group of public sector banks were selected based on certain criteria, i.e., their UPI transaction volume over the last three years.

The State Bank of India (SBI), the largest public sector bank in India, has remitted the highest number of UPI transactions, followed by the Bank of Baroda. In contrast, United Commercial Bank (UCO Bank) and the Indian Overseas Bank have shown the lowest number of UPI transactions.

Data Analysis

Descriptive statistics and correlation analysis were used to examine the adoption of UPI. Descriptive statistics show the rate of increase in UPI transactions from 2016 to 2022 and provide a time series analysis of transaction trends. To study the impact of UPI on PSB's performance, a correlation analysis was conducted between transaction volume and quarterly ROA. A similar analysis was done for UPI remittances and ROE for studying the financial performance. The correlation between transaction volume and operating expenses was examined to assess its impact on operating efficiency.

The adoption of UPI can reduce operating expenses related to customer service, transaction monitoring, and dispute resolution due to its automation. Vincent Okoth Ongore and Gemechu Berhanu Kusa (2013) highlight the relation of ROE with profit generation and of ROA with the efficiency of resource utilisation.

LIMITATIONS

This research has the following limitations that should be considered when interpreting the findings:

1. The study relies on secondary data from government publications, RBI and NPCI databases, and bank websites. This may not fully capture the actual performance of PSBs. Data on the ROE of Bank of Baroda for the quarters ending March 2020 and June 2020, as well as Indian Overseas Bank for the quarter ending March 2020, were unavailable on their public websites.
2. The study's timeframe is limited to 2016-2022, as UPI has only been around for about five years now, which may not reflect its long-term impact on PSBs.
3. The correlation analysis focuses solely on performance indicators and UPI remittance volume, without considering other variables such as bank strategies, services, and internal structure.

COMPUTATIONAL FRAMEWORK

The conceptual framework for this study provides a clear understanding of the relationship between UPI implementation and the performance of PSBs in India.

Research Question

This paper seeks to answer the following questions:

1. To what extent has UPI enhanced the efficiency of financial services offered by the public sector banks in India?
2. What is the relationship between UPI adoption and the performance of public sector banks as measured by ROA, ROE and operating expenses?
3. What is the role of UPI in building a digital economy in India?

DATA, ANALYSIS AND FINDINGS

Background of UPI in India

India has experienced a surge in digital payment options. The introduction of UPI in 2016 revolutionised the digital payment landscape, enabling instant fund transfers between bank accounts using a single identifier. In February 2023 alone, there were over 7,534.76 million transactions worth ₹1,235,846.62. According to the ACI worldwide report, India recorded the highest number of time real-time transactions globally in 2021, with 48.6 billion transactions.

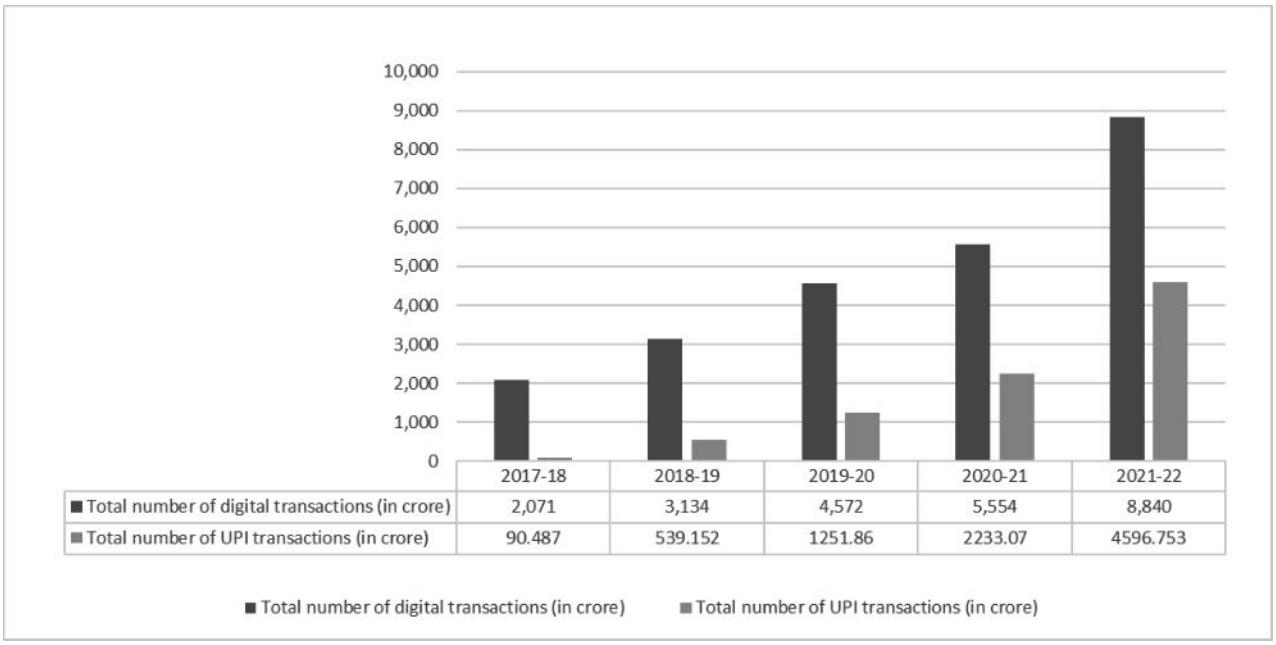

Figure 1: Share of UPI Transactions out of the total number of digital transactions over the last 5 Financial Years (Source: Reserve Bank of India (RBI))

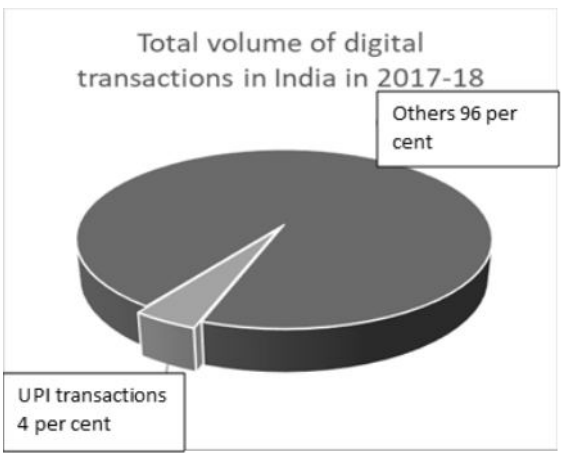

Figure 2: Share of UPI transactions in the total volume of digital transactions in India for Financial Year 2017-18 (Source: RBI)

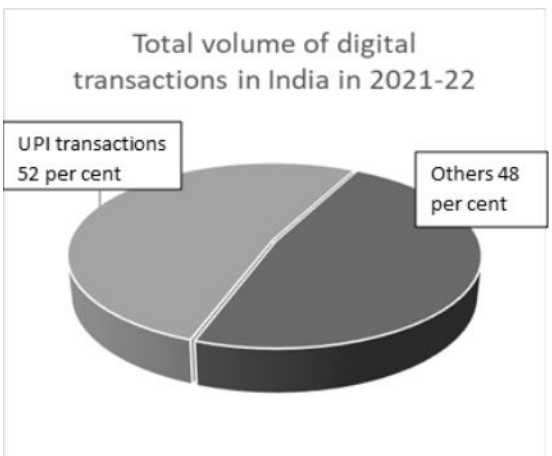

Figure 3: Share of UPI transactions in the total volume of digital transactions in India for Financial Year 2021-22 (Source: RBI)

The charts (figures 2 and 3) demonstrate the significant growth of UPI transactions in India's? total volume of digital transactions. From four per cent in 2017-18, UPI's share has risen to 52 per cent in 2021 to 2022.

The NPCI introduced UPI in April 2016, just before the demonetisation of bank notes. From 0.09 million transactions in July 2016, it surged to over 8,036 million in January 2023, with a value of ₹1,298,726.62 crores. Using this data, a time series analysis forecasts UPI's future in India (figures 4 and 5).

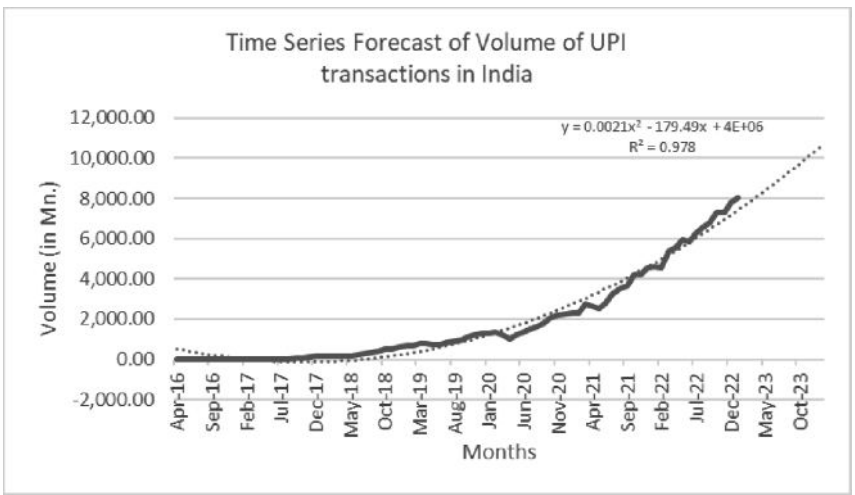

Figure 4: Time Series Forecast of Volume of UPI Transactions in India (Source: Data Analysis)

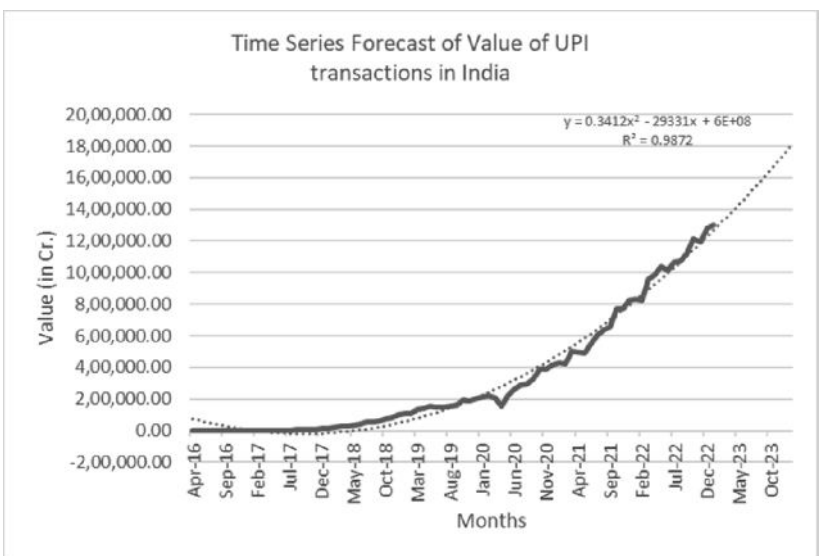

Figure 5: Time Series Forecast of Value of UPI Transactions in India (Source: Data Analysis)

From this analysis, we observe an upward trend in both the volume and value of UPI transactions in the next 12 months.

IMPACT OF UPI ON PUBLIC SECTOR BANKS

To study the correlation between UPI transactions and financial performance, an analysis was conducted between the number of UPI transactions and quarterly Return on Assets (ROA) and Return on Equity (ROE) for these four PSBs. A positive correlation could indicate an improvement in performance with an increase in UPI remittances. The correlation between UPI transactions and quarterly operating expenses was analysed to understand the relationship with operating efficiency. A negative correlation would indicate that increased UPI adoption reduces operating costs, reflecting improved operational efficiency.

Quarter	Volume of UPI transactions remitted (in Million)			
	SBI	BANK OF BARODA	UCO Bank	INDIAN OVERSEAS BANK
March 2020	1035.49	150.28	35	40.18
June 2020	1054.69	145.85	36.27	38.68
September 2020	1396.58	215.74	51.82	56.18
December 2020	1848.78	317.59	65.82	73.72
March 2021	2097.22	416.17	74.69	85.89
June 2021	2307.3	472.27	82.66	94.83
September 2021	2990.68	646.52	110.71	126.78
December 2021	3666.04	816.66	137.64	156.88
March 2022	4016.94	943.89	154.93	179.86
June 2022	4810.38	1132.23	193.32	223.43
September 2022	5368.74	1288.77	225.39	256.29
December 2022	6053.57	1464.27	255.79	294.57

Table 1: Quarterly UPI Transaction Volume of the Four Banks
(Source: NPCI's UPI Ecosystems Statistics)

Hypothesis Testing - ROA

The null hypothesis is that UPI has no significant effect on Indian PSBs' performance.

Ho: $\rho = 0$

The alternative hypothesis is that UPI has a significant effect on Indian PSBs' performance.

H1: $\rho > 0$

Here, ρ represents the correlation coefficient.

Quarter	ROA in per cent			
	SBI	BANK OF BARODA	UCO Bank	INDIAN OVERSEAS BANK
March 2020	0.37	0.18	0.03	0.2
June 2020	0.42	-0.3	0.03	0.16
September 2020	0.44	0.59	0.05	0.2
December 2020	0.49	0.37	0.06	0.28
March 2021	0.58	-0.36	0.12	0.5
June 2021	0.57	0.42	0.15	0.46
September 2021	0.66	0.73	0.3	0.53
December 2021	0.71	0.74	0.48	0.62
March 2022	0.74	0.57	0.44	0.74
June 2022	0.48	0.68	0.17	0.51
September 2022	1.04	1.01	0.68	0.65
December 2022	1.08	1.13	0.88	0.73

Table 2: Quarterly Return on Assets of the Four Banks
(Source: Quarterly Financial Statements)

Correlation Coefficients:

SBI

	Volume in Million	ROA (per cent)
Volume in Million	1	
ROA (per cent)	0.850123192	1

Table 3: Correlation matrix: SBI's UPI transactions vs. ROA
(Source: Data Analysis)

Strongly positive correlation

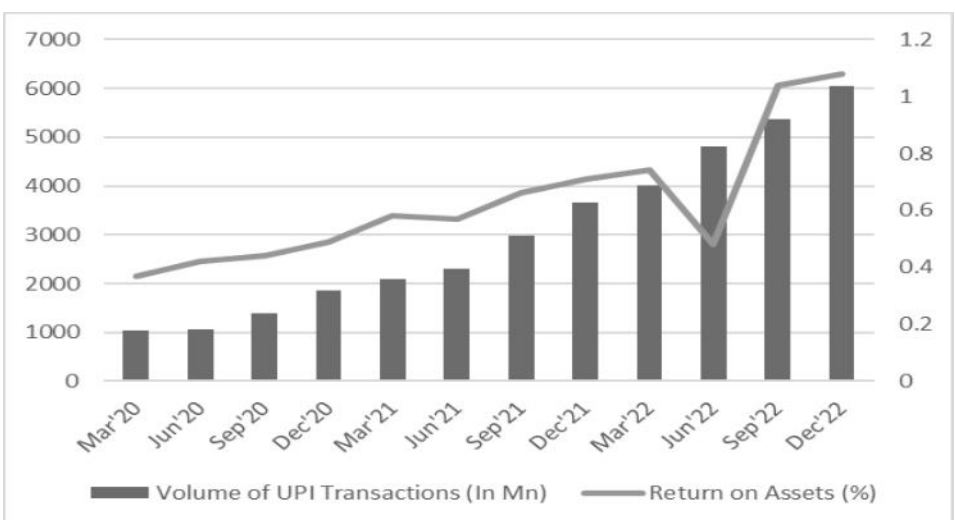

Figure 7: Bank of Baroda's UPI transactions vs. ROA
(Source: Data Analysis)

UCO Bank

	Volume in Million	ROA (per cent)
Volume in Million	1	
ROA (per cent)	0.891970363	1

Table 5: Correlation matrix: UCO Bank's UPI transactions vs. ROA
(Source: Data Analysis)

Strongly positive correlation

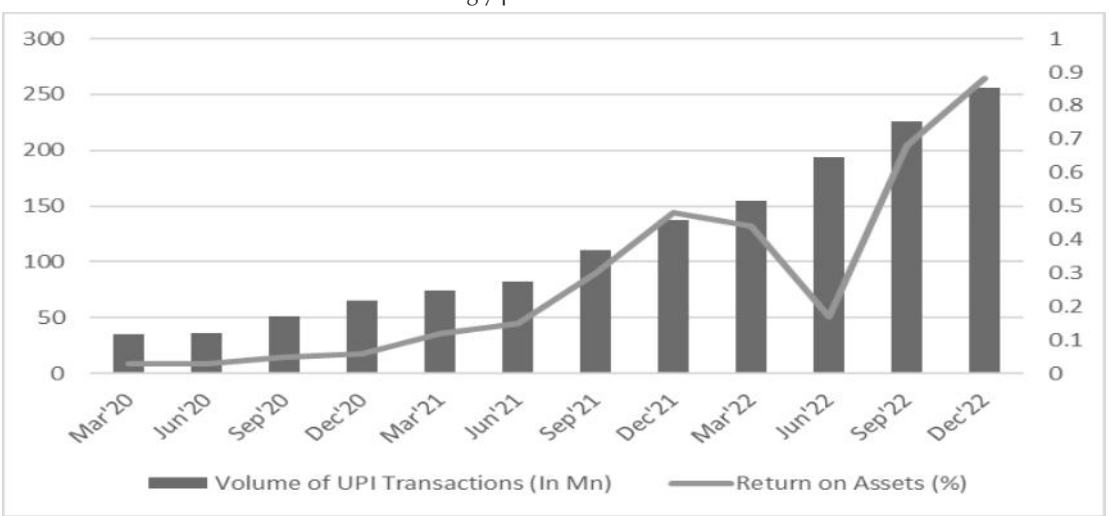

Figure 8: UCO Bank's UPI transactions vs. ROA
(Source: Data Analysis)

INDIAN OVERSEAS BANK

	Volume in Million	ROA (per cent)
Volume in Million	1	
ROA (per cent)	0.848831866	1

Table 6: Correlation matrix: Indian Overseas Bank's UPI transactions vs. ROA
(Source: Data Analysis)

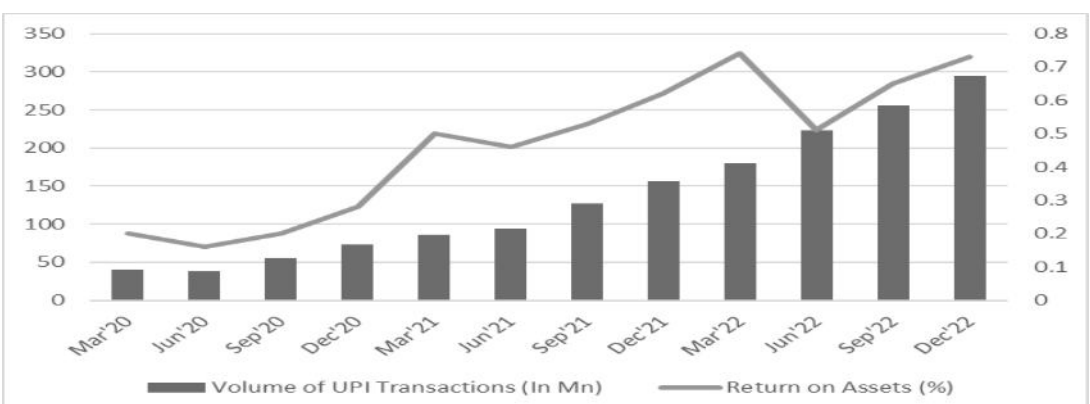

Figure 9: Indian Overseas Bank's UPI transactions vs. ROA
(Source: Data Analysis)

Interpretation:

Since all four banks show a strong positive correlation between the number of UPI transactions remitted and the ROA, we reject the null hypothesis. This indicates a positive correlation between the number of UPI transactions and the performance of PSB. So, an increase in UPI transactions could lead to a higher ROA for PSBs in India.

Hypothesis Testing - ROE

The null hypothesis is that UPI has no significant effect on Indian PSBs' financial performance.

Ho: $\rho = 0$

The alternative hypothesis is that UPI has a significant effect on Indian PSBs'? financial performance.

H1: $\rho > 0$

Quarter	**Return on Equity in per cent**			
	SBI	**BANK OF BARODA**	**UCO Bank**	**INDIAN OVERSEAS BANK**
March 2020	6.51	-	0.44	-
June 2020	8.55	-	0.53	8.18
September 2020	3.37	15.24	0.73	9.8
December 2020	16.55	9.12	0.86	13.63
March 2021	11.29	1.5	1.92	21.33
June 2021	12.12	8.63	2.25	14.57
September 2021	14.22	14.02	1.92	13.22
December 2021	15.59	14.37	6.25	15.37
March 2022	13.65	11.82	6.2	18.12
June 2022	10.09	13.63	2.43	12.63
September 2022	22.07	19.56	9.76	15.1
December 2022	23.61	21.08	12.27	16.43

Table 7: Quarterly Return on Equity of the Four Banks
(Source: Quarterly Financial Statements)

Correlation coefficients:

SBI

	Volume in Million	ROE (per cent)
Volume in Million	1	
ROE (per cent)	0.769672623	1

Table 8: Correlation matrix: SBI's UPI transactions vs. ROE
(Source: Data Analysis)

Strongly positive correlation

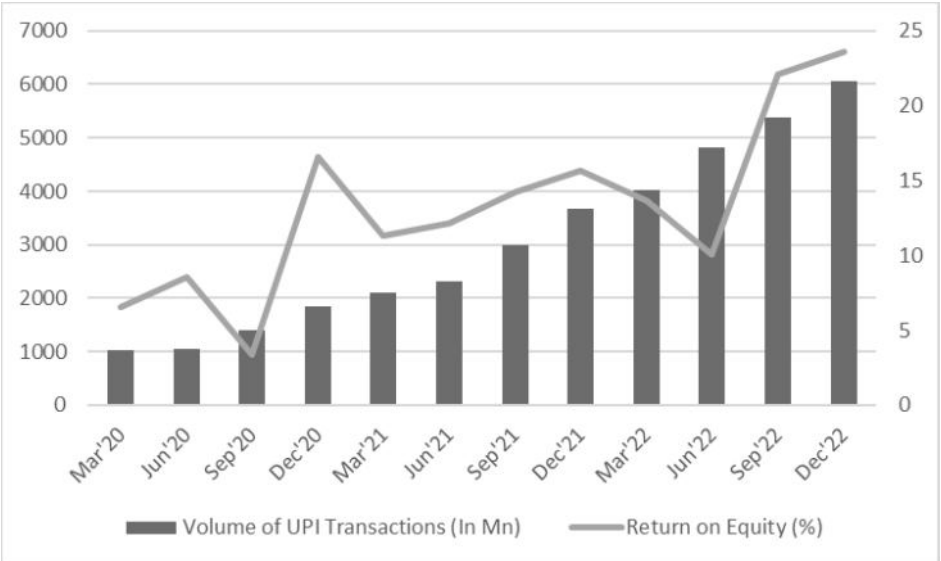

Figure 10: SBI's UPI transactions vs. ROE
(Source: Data Analysis)

BANK OF BARODA

	Volume in Million	ROE (per cent)
Volume in Million	1	
ROE (per cent)	0.684834829	1

Table 9: Correlation matrix: BANK OF BARODA's UPI transactions vs. ROE
(Source: Data Analysis)

Strongly positive correlation

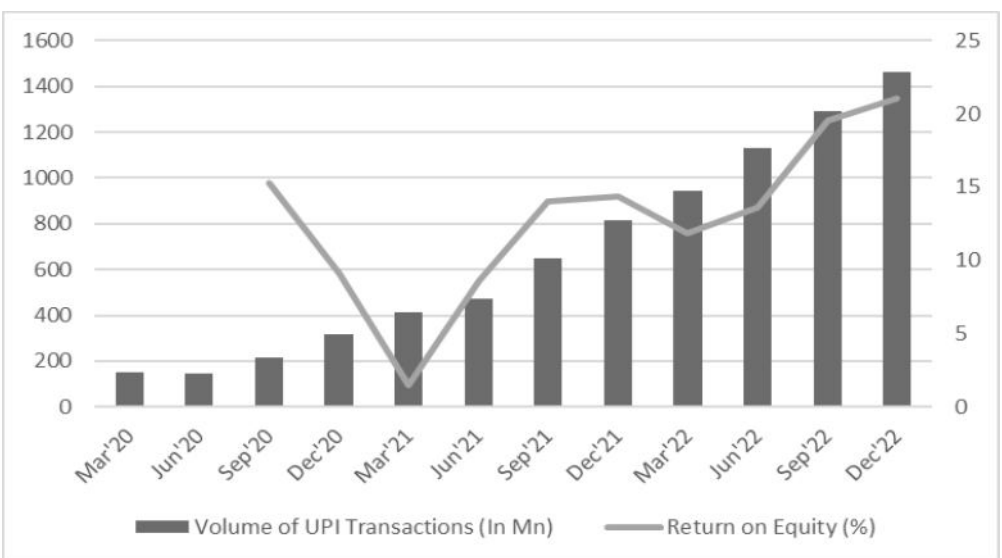

Figure 11: BANK OF BARODA's UPI transactions vs. ROE
(Source: Data Analysis)

UCO Bank

	Volume in Million	ROE (per cent)
Volume in Million	1	
ROE (per cent)	0.891644556	1

Table 10: Correlation matrix: UCO Bank's UPI transactions vs. ROE
(Source: Data Analysis)

Strongly positive correlation

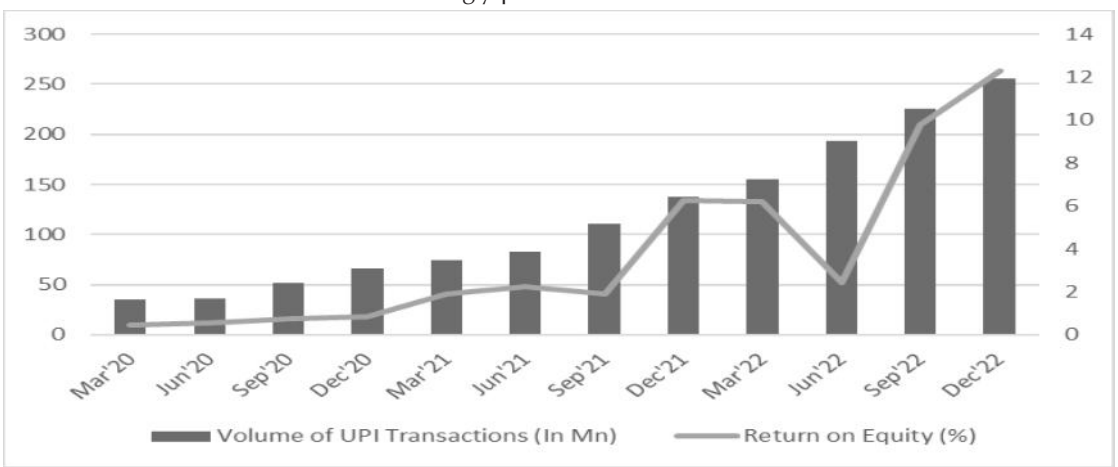

Figure 12: UCO Bank's UPI transactions vs. ROE
(Source: Data Analysis)

INDIAN OVERSEAS BANK

	Volume in Million	ROE (per cent)
Volume in Million	1	
ROE (per cent)	0.357976556	1

Table 11: Correlation Matrix: Indian Overseas Bank's UPI transactions vs. ROE
(Source: Data Analysis)

Weakly positive correlation

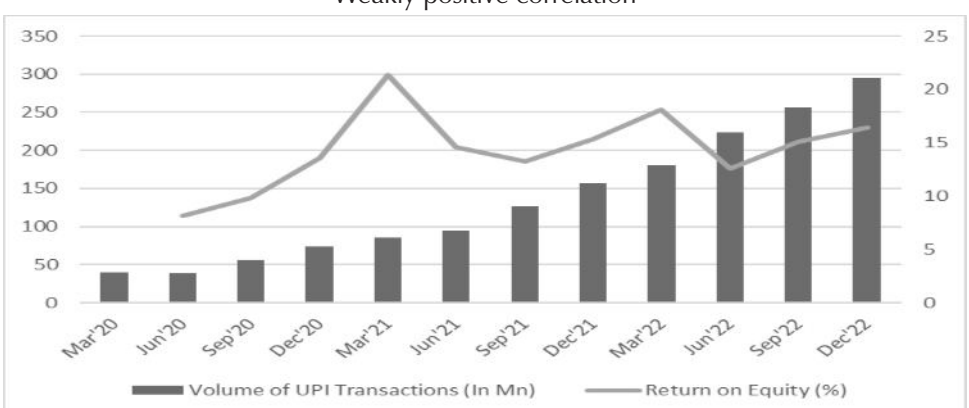

Figure 13: Indian Overseas Bank's UPI transactions vs. ROE
(Source: Data Analysis)

Interpretation:

Three out of four banks show a strong positive correlation between the number of UPI transactions remitted and the ROE. The Indian Overseas Bank shows a weakly positive correlation. Thus, we reject the null hypothesis. This indicates a positive correlation between the UPI transaction. So, an increase in UPI transactions could, to some extent, lead to a higher ROE for PSBs in India.

Hypothesis Testing – Operating Expenses

The null hypothesis is that UPI has no significant effect on Indian PSBs' operating efficiency.

Ho: $\rho = 0$

The alternative hypothesis is that UPI has a significant effect on Indian PSBs' operating efficiency.

H1: $\rho < 0$

Quarter	**Operating Expenses in Million (₹)**			
	SBI	**BANK OF BARODA**	**UCO Bank**	**INDIAN OVERSEAS BANK**
March 2020	203,790	47,110	8,070	14,300
June 2020	180,780	43,140	8,170	12,500
September 2020	202,490	49,580	10,300	12,830
December 2020	207,330	53,040	9,370	13,330
March 2021	235,920	56,890	12,510	16,950
June 2021	204,660	51,540	11,430	13,870
September 2021	213,120	54,760	12,920	13,335
December 2021	208,390	55,880	11,550	12,310
March 2022	233,610	54,990	12,920	14,990
June 2022	207,560	54,920	11,550	13,210
September 2022	229,380	59,690	13,600	15,940
December 2022	243,170	61,380	14,210	16,820

Table 12: Quarterly Operating Expenses of the Four Banks
(Source: Quarterly Financial Statements)

Correlation coefficients:

SBI

	Volume in Million	Operating Expenses in Million (₹)
Volume in Million	1	
Operating Expenses in Million (₹)	6.74658924	1

Table 13: Correlation matrix: SBI's UPI transactions vs. Operating Expenses
(Source: Data Analysis)

Strongly positive correlation

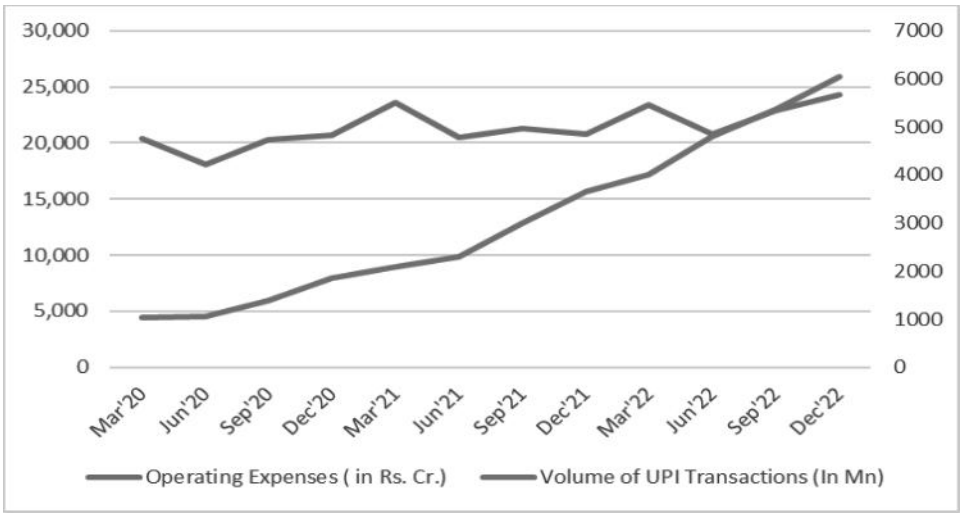

Figure 14: SBI's UPI transactions vs. Operating Expenses
(Source: Data Analysis)

BANK OF BARODA

	Volume in Million	Operating Expenses in Million (₹)
Volume in Million	1	
Operating Expenses in Million (₹)	0.8381781378	1

Table 14: Correlation matrix: BANK OF BARODA's UPI transactions vs. Operating Expenses
(Source: Data Analysis)

Strongly positive correlation

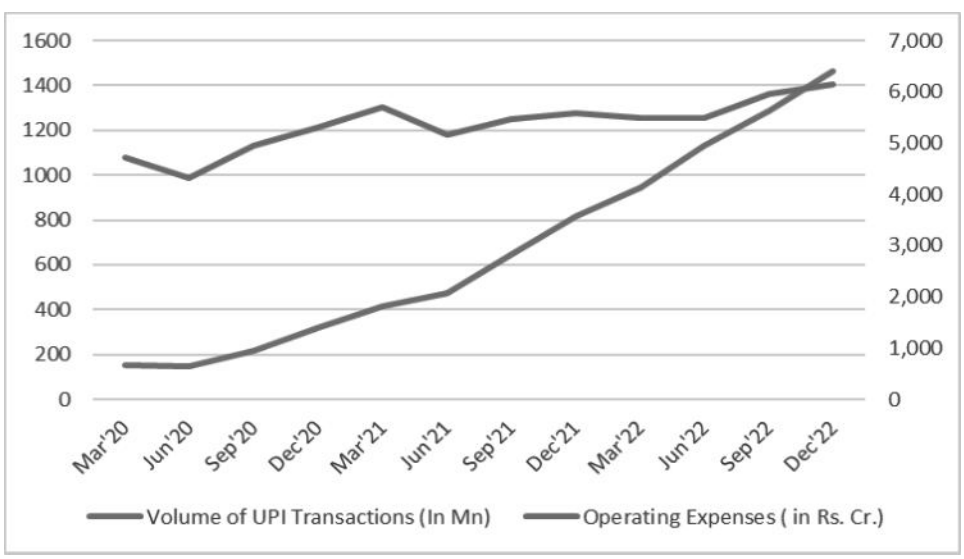

Figure 15: Bank of Baroda's UPI transactions vs. Operating Expenses
(Source: Data Analysis)

UCO Bank

	Volume in Million	Operating Expenses in Million (₹)
Volume in Million	1	
Operating Expenses in Million (₹)	0.829172318	1

Table 15: Correlation matrix: UCO Bank's UPI transactions vs. Operating Expenses (Source: Data Analysis)

Strongly positive correlation

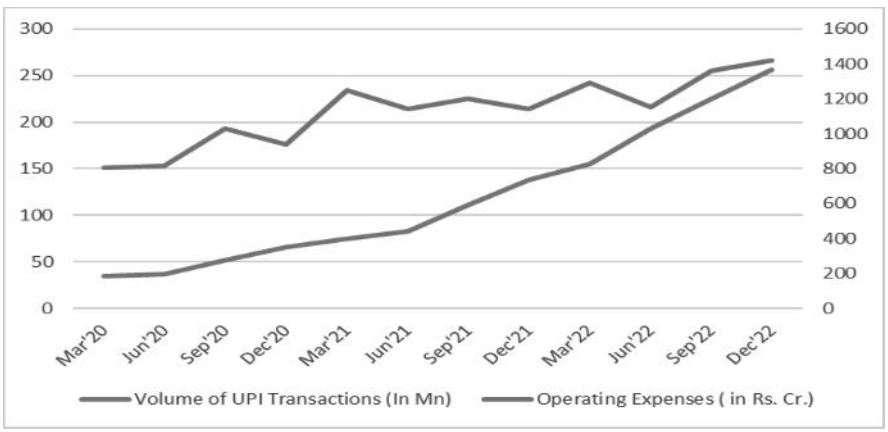

Figure 16: UCO Bank's UPI transactions vs. Operating Expenses (Source: Data Analysis)

INDIAN OVERSEAS BANK

	Volume in Million	Operating Expenses in Million (₹)
Volume in Million	1	
Operating Expenses in Million (₹)	0.475235722	1

Table 16: Correlation matrix: INDIAN OVERSEAS BANK's UPI transactions vs. Operating Expenses (Source: Data Analysis)

Weakly positive correlation

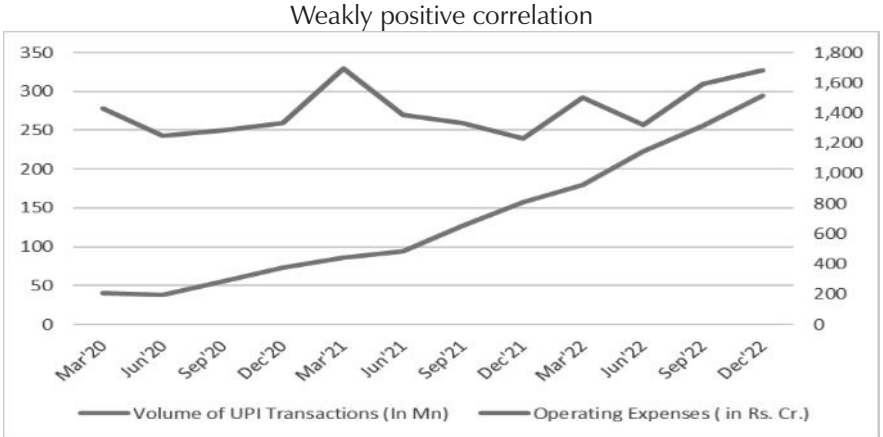

Figure 17: Indian Overseas Bank's UPI transactions vs. Operating Expenses (Source: Data Analysis)

Interpretation:

The correlation analysis of operating expenses yielded varying results. Three out of four banks show a strong positive correlation between the number of UPI transactions remitted and the operating expenses. The Indian Overseas Bank again shows a weakly positive correlation. Hence, in this analysis, we fail to reject the null hypothesis. This indicates that the operating efficiency may or may not be impacted by the volume of UPI transactions remitted by the PSBs.

CONCLUSION AND RECOMMENDATIONS

Conclusion

This study investigated the impact of UPI adoption on the performance of public sector banks (PSBs) in India. The findings shed light on several critical aspects of this relationship:

Transformation of Transaction Infrastructure

The introduction of UPI in India has brought about a significant transformation in the country's transaction infrastructure. With over 300 banks actively participating in the UPI system, its dominance in both inward and outward remittances, as highlighted in the RBI's 2021-2022 annual report, is undeniable. The study reinforces the notion that UPI has become a cornerstone of modern banking.

Positive Impact on Financial Performance

The correlation analyses clearly indicate a positive impact of UPI adoption on the financial performance of PSBs. Metrics like ROA and ROE have shown improvements over the study period, suggesting that UPI has contributed to enhancing these key indicators of financial health among PSBs.

Operating Efficiency Remains Varied

While the financial performance has been positively influenced by UPI adoption, the correlation analysis reveals that there is no significant correlation between UPI adoption and operating efficiency across all PSBs. This finding suggests that while UPI has improved the overall financial position of PSBs, it has no major role in reducing operating expenses or enhancing operating efficiency among the banks.

In conclusion, the research underscores the transformative power of UPI in the Indian banking landscape, positively impacting the financial performance of PSBs. However, the impact on operating efficiency exhibits variations across banks, reflecting the complexity of the relationship. These findings emphasise the need for tailored strategies and further research to optimise the operational benefits of UPI adoption among PSBs.

Recommendations

As digital finance continues to evolve, this study contributes valuable insights for policymakers, bank executives, and researchers seeking to navigate this dynamic landscape effectively. Based on the findings of this study, the following recommendations are proposed:

Promote UPI Adoption

The Government of India should continue to encourage the use of UPI among the populace. This can be achieved through awareness campaigns and by providing financial incentives to both banks and customers.

Invest in Technological Infrastructure

PSBs should invest in robust technological infrastructure to support UPI. This involves upgrading IT systems, enhancing cybersecurity measures, and developing secure and user-friendly mobile banking applications.

Enhance Customer Experience

Efforts should be made to offer better customer support, simplify the payment process, and promptly address any technical issues.

Streamline Regulatory Framework

The Indian government work towards simplifying the regulations governing digital payment platforms.

Summing up, the Government of India and public sector banks should continue their efforts to increase UPI adoption and enhance the user experience of digital payment systems.

Scope for Further Study

While this study has highlighted the impact of UPI on the financial performance and efficiency of PSBs in India, there are areas for further exploration in future research like:

UPI's Impact on Private Sector Banks

Investigating how UPI implementation has affected the financial and operating performance of private sector banks in India.

UPI's Impact on the Banking Sector as a Whole

Exploring how UPI adoption has influenced the entire banking sector, including market competition, customer behaviour, and industry-wide trends.

UPI's Impact on Financial Inclusion

Examining how UPI adoption has influenced the financial inclusion of underserved population, such as low-income individuals, rural communities, and women.

UPI's Impact on Other Sectors of the Economy

Assessing how UPI implementation has impacted industries beyond banking, such as e-commerce, retail, and transportation.

Overall, there is a wide range of areas for further study related to the impact of UPI on the performance of public sector banks in India. By exploring these areas in more depth, researchers can continue to deepen our understanding of the role that UPI plays in the Indian economy and its potential for future growth and innovation.

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FEATURE
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> Black is not merely an absence of colour; it is a canvas upon which life's richest tapestry is woven.

Legacies of the Black Canvas

Aaryaman Jain and Disha Khandelwal
Xavier's Commerce Society

Life - an uncertain journey, with different stops: stops that establish our path; paths that decide our future and the future that determines our life. We embarked on this journey three years ago, when the world was surviving during the trying times, where deserted college corridors and virtual classrooms had become our normal life. We stood at a crossroads at the moment, unsure that a college experience would soon transform us into individuals who rise in black.

In 2021, our first stop in this journey embarked at St. Xavier's College Kolkata (Autonomous), where no one could have predicted that a pandemic of such magnitude would take over our once-in-a-lifetime college experience. We enrolled in this institution as oblivious youth who were looking forward to experiencing college life, a plethora of opportunities, and corporate exposure, but the reality was virtual classrooms with a poor internet connection. Every door that closes reveals a new one, a bright light beyond it—hope that inspires self-assurance and ardour, a fleeting chance that will steer our life's course in the proper path where we experienced an expedition that shaped who we are now, one that was full of challenges and triumphs, hardships and victories, an adventure with a 17-year-old bequest, the Xavier's Commerce Society (XCS).

A spark of excitement ignited within us, the youth, when Inception 2021—an event exclusively for first-year students at our college—appeared. Inception's complex and resilient stages showed us the knowledge we could gain from other participants. It tested our judgment and conscience, marking our first encounter with a corporate-like situation in real life. During this event, we met the XCSers for the first time—a group of extremely optimistic people exuding panache and composure. They inspired our longing for the black t-shirt imprinted with the XCS logo. Even through the virtual medium, we felt the sheer determination of the XCSers and their pride in this legacy.

On November 30, 2021, as we sat for Inductions with passion in our eyes to 'don that black t-shirt,' we remember being amidst thousands of students up until being in the 'Top 54' who came to be known as Working Committee Members (WCMs) of Insignia 2022. Every individual works diligently to discover a platform, one that provides them with an opportunity to demonstrate their effort and create an indelible impression, and XCS is that forum for our fellow Xaverians. 'You never forget your first Insignia,' a phrase used by our seniors as we commenced this juncture, who knew the wonders that a team composed of versatile people with different skill sets and ambitions would create the first college-level corporate event of their lives through Insignia, a national-level management festival. A transition from timid tenderfoots to decision makers, a series of sleepless nights racking our brains attempting to create rigorous rounds, from the bonding of Internationals to the memories of our event, just like the evanescence of a shooting star, these five months went by us, which gave us a memoir for life. During those months, we witnessed an improvement in our perspective, and our deeds opened the door for something prodigious. As Insignia came to an end, we were entrusted with a souvenir of memories, and indeed, at that moment, we realized we would never really forget our first Insignia.

Be patient; life is in stages. As we eagerly waited for days to move towards our next stop in this journey of XCS, our hard work paid off when we transitioned from WCMs to XCSers, finally donning the black t-shirts, which was worth the wait. Our journey through our second year was also the year the world was steered back to normal, where we stepped out of the pandemic umbrella and the college gates were open for us. We faced a series of obstacles in this transition, but as Molière famously quoted, 'The greater the obstacle, the more glory in overcoming it.' Indeed, after pulling off events like Inception, Innovision, and Inductions offline after two years and contributing towards society through our social drive-Inayat, we successfully pulled off another year and perceived the true sense of being an XCSer. As second-year students and XCSers, we had a new sense of accountability and a set of responsibilities, as we were now seen as the representatives of our college's most prominent society. We knew we were not just working together, but we were creating a team—a team who helped each other when their work was incomplete, a team who made somebody else's fault on them, a team who defined 'One for All and All for One.' It was the support of 23 individuals that shaped our present in Xavier's Commerce Society.

As the most challenging and arduous year checked off, we stepped into the final stop of our XCS journey as third-year students. It is a moment of pride and prestige to serve in this position, as we were not only leading a society of 49 individuals but also representing 5000 students of the Department of Commerce. This is the year where we kept the purpose ahead of our feelings; holistic growth and a secure future are our main objectives. Today, as the two of us give words to our journey, we realize it is about providing guidance to the incoming group of XCSers, understanding that they share our passion and acceptance of the fact that they will make errors, and making sure they have the ideal platform to tell their own story, just like us. It had to do with realizing that, among the most crucial qualities to cultivate if one wishes to make an impact, are honesty and character. Every action taken, every occasion planned, and every second invested were done with the intention of improving what we had and what we could achieve.

The Xavier's Commerce Society has evolved over the last 17 years from an organization to an experience, and the phrase 'Dreams, Development, and Destiny' is now more of an emotion than a doctrine. What began as a

small group of people working to launch the Department of Commerce's annual business journal, 'Youthink,' has grown into a force of 49 people who, with perseverance and determination, put on seven exciting and engaging events throughout the year.

The success story of this organization is an incredible one, but it cannot be complete without the mention of the President of the Xavier's Commerce Society, Rev. Dr. Dominic Savio, SJ, whom we thank for his constant support and guidance. Moreover, we are grateful to Rev. Dr. Joseph Kulandai, SJ, and Rev. Dr. Peter Arockiam, SJ, for always encouraging us in all our endeavors. None of our pursuits would have been successful without the support of Dr. Amitava Roy and Dr. Soheli Ghose, who have guided us and motivated us to perform better at every juncture. Besides, we shall remain forever indebted to our professor-in-charge, Dr. Anulekha Banerjee, and our mentor, Dr. Sumona Ghosh, for guiding us through every event and being the backbone of everything we fall back on. We are also grateful for the support that XCS continues to draw from its alumni members. Without the non-teaching employees and other college office-bearers who support us on a daily basis, none of the events could have gone off without a hitch. Finally, and above all, we would like to express our gratitude to all of the students at St. Xavier's College (Autonomous), Kolkata, for their enthusiastic participation in all of our activities and for their insightful input, which helps us to consistently provide our best work. With the slogan 'Nihil Ultra,' the Xavier's Commerce Society aspires to surpass all expectations and explore new horizons while solidifying its reputation as a formidable force.

XCS, maybe for an outsider, is mere content for the experience column in our resume but has become a permanent chapter of our lives. A chapter that has its own share of ups and downs, all the disputes, disagreements, and differences of opinion we might have, is part and parcel of being in a society with extraordinary individuals. When everything is said and done, we have a tonne of albums, innumerable memories, and, of course, a string of 'acknowledged' messages that demonstrate that nothing is ever overlooked insofar as we stand together as a family.

'I wish there was a way to know you are in the good old days before you have actually left them.' As our session comes to an end, we hold nothing but episodes of this journey titled as: the one sitting at the green benches ideating and formulating rounds; the one running around the college campus with banners and flexes; the one where we spent our entire day in the black t-shirts; and the one where we screamed out loud XCS. All these ethereal and intangible memories are a lot to fit in these three pages.

Every single XCSer can attest to the fact that an XCSer's path is never defined by the number of years they spend in college, regardless of what occurs a few years later. XCS is a voyage of a lifetime, and these three years have simply prepared the ground for the larger journey that lies ahead. As the sun sets on these formative years of our journey, we can only express our gratitude to our seniors, who guided us in all of our endeavours and instilled in us the belief that no hurdle is too great to overcome if we walk fearlessly in the path of our dreams, focus on our development, and fulfil our destiny.

Black is not merely an absence of colour; it is a canvas upon which life's richest tapestry is woven. It is a colour that paradoxically represents both darkness and light, sorrow and joy, loss and renewal. It is this duality that lies in its profound beauty and its ability to evoke a spectrum full of emotions and transport us back to the moments that have shaped our lives. 'The doors we leave behind are the doors we look back at again,' and as we bid our farewell to Xavier's Commerce Society, we look back at the two oblivious youth who today have risen in black.

For one last time, acknowledged.



Aaryaman Jain



Disha Khandelwal

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COMMUNIQUE

SUBHASH CHANDRA BOSE



In his passionate address, Subhas Chandra Bose commended the remarkable progress achieved in the year-long march towards India's liberation from the shackles of British rule. He struck the chord of opportune moments, born from the weakening British Empire. Acknowledging India's staunch movement, Bose stressed the need for strengthening the ammunition base and India's partnership with Japan to counter the British forces.

'Today I demand of you one thing, above all. I demand of you blood It is blood alone that can avenge the blood that the enemy has spilt.'



ABRAHAM LINCOLN

In his Gettysburg Address, Abraham Lincoln paid homage to the unity forged amongst the fallen in the crucible of the Battle of Gettysburg. Embracing the cardinal aspects of emancipation and a call to commitment, he delved into the sacrifices that have bequeathed us freedom and an enduring government. This speech resonates with themes of unity and the essence of the nation's foundational ideals, encapsulating the spirit of American democracy.

'Government of the people, by the people, for the people, shall not perish from the earth.'

DR. MARTIN LUTHER KING



In the iconic speech about his dream, Rev. Dr. Martin Luther King, Jr. passionately articulated his vision for racial equality envisaging a forthcoming era where children of diverse races could unite in harmony. He confronted the deep-rooted injustices inflicted upon the African Americans, imploring to cease the discrimination and oppression faced by the African diaspora. His speech continues to reverberate as a timeless plea for social justice and civil rights.

'I have a dream that my four little children will one day live in a nation where they will not be judged by the colour of their skin but by the content of their character.'

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COMMUNIQUE

DR. JAWAHARLAL NEHRU



In his iconic 'Tryst with Destiny' speech, Jawaharlal Nehru celebrated India's newfound independence. He acknowledged the historical significance of the moment, as India transitioned from its dusk to the new dawn of freedom. He helped us understand the vested responsibility that went hand-in-hand with freedom, emphasizing that the future should be beset with continuous progress and concluded his speech with a call to serve India, the eternal and ever-evolving homeland.

'At the stroke of the midnight hour, when the world sleeps, India will awake to life and freedom.'



JOHN F. KENNEDY

In his Presidential Inaugural Speech, John F. Kennedy encapsulated his holistic vision for a united and hopeful America. He emphasized the quintessential elements of global cooperation for peace and a harmonized sustenance. Kennedy's memorable message encouraged individuals to shift their focus from expecting favours from their country to actively contemplating their contributions towards it. The speech resonates with its call to embrace change and work together towards a better future.

'And so, my fellow Americans: ask not what your country can do for you—ask what you can do for your country.'

FRANKLIN D. ROOSEVELT



'Day of Infamy' is a pivotal address delivered by President Franklin D. Roosevelt in direct response to the egregious assault on Pearl Harbour orchestrated by Japan. In his eloquent oration, he adeptly articulated the unprovoked and treacherous nature of the attack, underscoring its implications for the U.S.A. The speech deeply called for unity and determination, strengthening America's commitment to entering World War II and facing forthcoming challenges.

'No matter how long it may take us to overcome this premeditated invasion, the American 'eople in their righteous might will win through to absolute victory.'

BUZZ WORD



(EXAMPLE: PUBLISH)

SEARCH FOR WORDS USING THE CLUES

1. Find a 7 letter word for each clue.
2. Keep track of the centre letter of each answer.
3. Unscramble all the centre letters to find the principal word.



CLUES

1. Something that provides its owner value or benefit.
2. Ascertaining the value of goods or service.
3. A business associate is also known as .....
4. A provisional position or solution.
5. Feeling of exhilaration and joy, e.g-It was a pretty ..... victory.
6. To provide guidance and expertise on specialized functions of business like marketing, finance and more.
7. The information or material on a website or other medium.

MAIN WORD: | | | | | | | |

SOLUTIONS: 1. CAPITAL 2. PRICING 3. PARTNER 4. INTERIM 5. ELATING 6. CONSULT 7. CONTENT
MIDDLE LETTERS: L, I, R, E, A, C, T – ARTICLE

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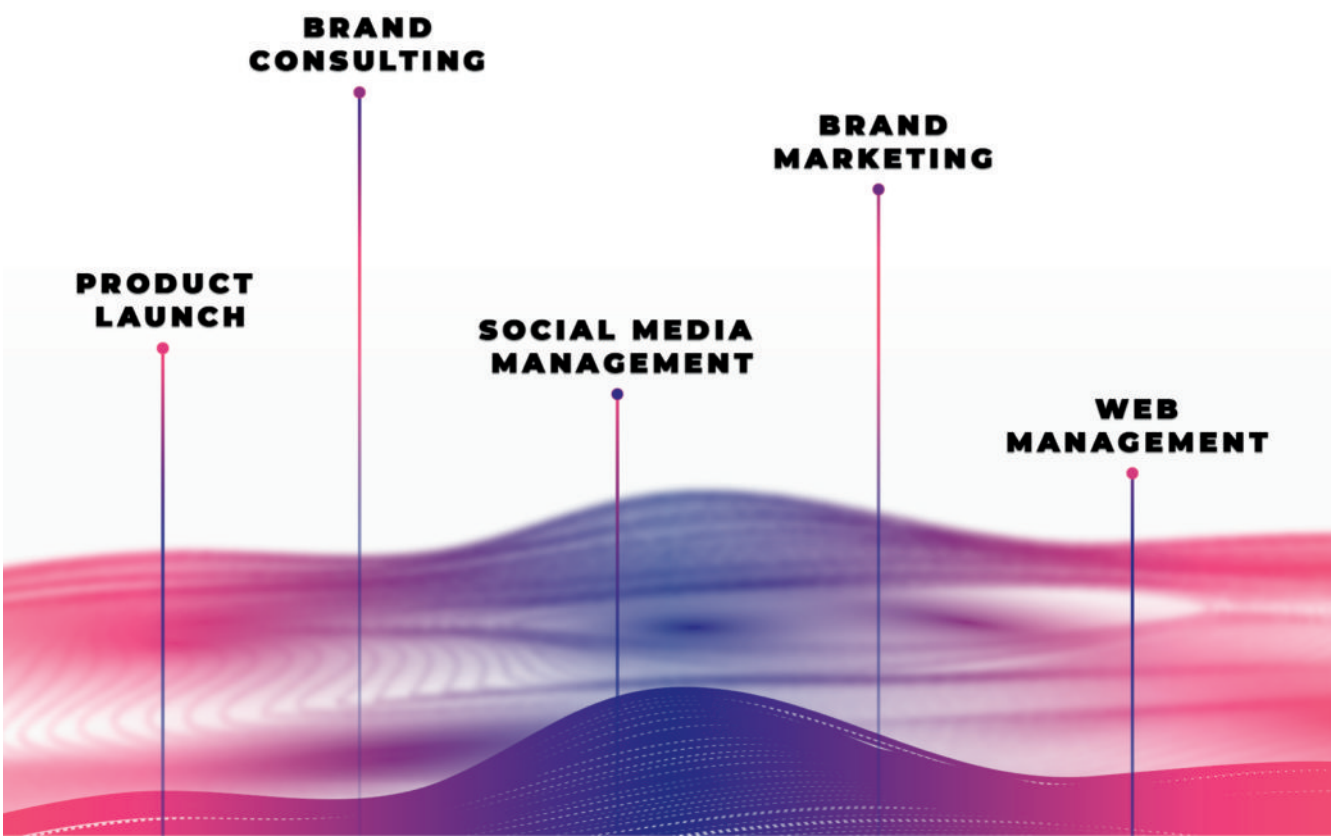



St. Xavier's College (Autonomous)

Kolkata

सत्यमेव जयते

प्रधान मंत्री

Prime Minister

MESSAGE

I am happy to learn Xavier's Commerce Society is publishing the 11th edition of the annual journal, 'Youthink' of the Commerce Department of St. Xavier's College, Kolkata.

On this occasion, I extend my best wishes for the success of the publication.

(Narendra Modi)

18 August, 2016
New Delhi

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