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**Vidya Prasarak Mandal's**  
**R Z Shah College of Arts, Science and Commerce,**  
**Mulund-East, Mumbai**



**(Affiliated to the University of Mumbai)**

**Accredited by NAAC Grade "A"**

**Internal Quality Assurance Cell (IQAC)**

**in collaboration with**

**Centre for International Studies (CIS)**

**Organized**

**One Day Multidisciplinary National E-Conference on**  
**Incredible India in Amrit Kaal**

**On 11<sup>th</sup> May, 2024**

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CIS Provides a forum for discussing contemporary National and International issues, and is meant to register aspiring candidates for academic study programme leading to the award of MA (by Thesis) and Ph. D degrees in the faculty of Arts, especially in the Political Science discipline, with a special reference to International Relations. Dr. P.M. Kamath, former Professor of Politics in the Department of Civics and Politics of the Mumbai University is a recognised guide. Smt. Prachee Mandar Phadke was the first candidate who registered with the CIS for her PhD On "Cross Border Terrorism and Abuse of child rights in Jammu and Kashmir, 1989 - 1999". Mumbai based members of the CIS Governing council have indicated their willingness to guide students in the areas of their specialization. Dr. (Ms.) Amruta Deshmukh, Head, Dept. of Political Science, Chetana College, Mumbai and Member of the CIS Academic council is one of the recognized research guides of the CIS. Approval of the Mumbai University has been sought to recognize Dr. (Mrs.) Vasundhara Mohan, formerly Reader in Central Eurasian studies as a research guide of the CIS. Similarly former Head, Political Science Dept in SIES College of Arts, Science and Commerce, Dr (Mrs) Maneesha Tikekar has joined Academic Council of the VPM's CIS; so also Dr (Mrs) Bindu Chowdary, formerly Head, Dept. of Political Science, R. J. College. PhD. guiding recognition is also sought to these two professors with long academic guiding experience.

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INCREDIBLE INDIA IN AMRIT KAAL: DIGITAL TRANSFORMATION AND INNOVATION:  
INDIA'S IT SECTOR IN THE AMRIT KAAL ERA

Mrs. Anita Allwyn Lopez  
VPM's R Z Shah College, Mulund

**ABSTRACT**

*The Amrit Kaal era, symbolizing a period of auspicious growth and development, marks a significant phase for India's IT sector. This paper delves into the digital transformation and innovation within India's IT industry during this transformative period. It explores the key drivers of this change, including government policies like Digital India and Startup India, advancements in technologies such as AI, Cloud Computing, and Block Chain, and the influence of global market dynamics. The study also addresses the challenges faced in infrastructure, skill development, and regulatory frameworks. By highlighting innovations in products, processes, and business models, this paper underscores the IT sector's role in fostering economic growth and digital inclusion. The future prospects of India's IT industry, focusing on emerging technologies, sustainable practices, and inclusive growth, are also examined. This research provides insights into how strategic investments and supportive policies can position India as a global leader in digital transformation and innovation during the Amrit Kaal era.*

*One of the key pillars of the Modi government's vision has been the establishment of a robust digital infrastructure across the country. The ambitious "Digital India" campaign has played a pivotal role in **connecting remote areas and bridging the digital divide**. The government's efforts to expand internet connectivity and provide affordable data services have resulted in an exponential increase in internet penetration. Today, India today is home to more than 75 crore smartphones, 133 crore Aadhaar cards, more than 80 crore internet users, has 4G and is now accelerating towards 5G.*

*Keywords: Digital India, Startup India, Skill Development and IT Industry*

**INTRODUCTION**

The Amrit Kaal era is envisioned as a period of significant progress and development for India, focusing on economic growth, technological advancements, and sustainable development. In this context, the IT sector plays a crucial role as a driver of innovation and digital transformation. This paper aims to provide a comprehensive analysis of the factors contributing to the IT sector's growth, the innovations driving this transformation, and the strategic initiatives undertaken by both the government and private sector.

**Key Drivers of Digital Transformation in India's IT Sector**

**1. Government Policies and Initiatives:**

- **Digital India Campaign:** This initiative aims to transform India into a digitally empowered society and knowledge economy.
- **Startup India:** A government initiative to promote innovation and entrepreneurship by providing support and incentives to startups.
- **Atmanirbhar Bharat (Self-Reliant India):** Focuses on reducing dependency on foreign technology and fostering indigenous innovations.

**2. Technological Advancements:**

- **Artificial Intelligence and Machine Learning:** Adoption of AI and ML in various sectors including healthcare, finance, and agriculture.
- **Cloud Computing:** Growth in cloud infrastructure and services, enabling businesses to scale efficiently.
- **Blockchain Technology:** Implementation of blockchain for secure and transparent transactions in finance, supply chain, and governance.

**3. Global Market Dynamics:**

- **Outsourcing and Offshoring:** India remains a preferred destination for IT outsourcing due to its skilled workforce and cost advantages.
- **Foreign Direct Investment (FDI):** Increased FDI in the IT sector, driven by favorable policies and market potential.

- **Collaboration with Global Tech Giants:** Partnerships and collaborations with international technology companies for innovation and research.

### **Challenges in the Digital Transformation Journey**

#### **1. Infrastructure Gaps:**

- Inconsistent internet connectivity and limited access to high-speed broadband in rural areas.
- Need for robust Cyber Security frameworks to protect against increasing cyber threats.

#### **2. Skill Development:**

- Addressing the skill gap through education and training programs tailored to emerging technologies.
- Encouraging continuous learning and upskilling among the workforce.

#### **3. Regulatory and Policy Framework:**

- Ensuring data privacy and protection through comprehensive regulations.
- Balancing innovation with regulatory oversight to prevent monopolistic practices.

### **Innovation in the IT Sector**

#### **1. Product and Service Innovation:**

- Development of new software products, mobile applications, and digital platforms.
- Growth of FinTech solutions transforming financial services.

#### **2. Process Innovation:**

- Automation of business processes using Robotic Process Automation (RPA).
- Implementation of DevOps and Agile methodologies for efficient software development.

#### **3. Business Model Innovation:**

- Emergence of subscription-based models and Software as a Service (SaaS).
- Expansion of gig economy platforms enabling freelance and remote work opportunities.

### **Promoting Digital Payments and Financial Inclusion**

Under the leadership of Prime Minister Modi, the government launched the transformative "Digital India" initiative, which aimed to promote digital payments and enhance financial inclusion. The **Jan-Dhan-Aadhaar-Mobile (JAM) trinity** has ensured that the poorest receive every penny of their entitled benefits. Financial benefits worth nearly Rs 23 lakh crore have been transferred using DBT technology in the last eight years. This has led to savings of Rs 2.22 lakh crore of public money. Initiatives like the **Unified Payments Interface (UPI)**, Aadhaar-enabled payment systems, and the **BHIM app** have revolutionised the way Indians transact. As a result, India has witnessed a tremendous surge in digital transactions, from 2,071 crore transactions in FY 2017-18 to 8,840 crore transactions in FY 2021-22 boosting financial inclusion and reducing the dependency on cash-based transactions.

### **Empowering Entrepreneurs and Startups**

The Modi government has been committed to fostering a conducive ecosystem for entrepreneurs and startups in the country. The flagship "**Startup India**" initiative, along with policies like ease of doing business reforms, tax incentives, and simplified regulations, have encouraged innovation and entrepreneurship. As a result, **India has emerged as the third-largest startup ecosystem globally, after US and China.**

*As per the Economic Survey 2022, nearly 14,000 startups were recognised during 2021-22, 555 districts of India had at least one new startup.*

Many of these startups are coming from mofussil towns or rural areas. Nearly 44 startups achieved unicorn status in 2021 and in the first four months of 2022, 14 startups have become unicorns.

### **Promotion of Digital Education**

Recognising the importance of digital literacy and skill development, the Modi government has focused on promoting digital education across the country. Initiatives like "**SWAYAM Portal**", "**PM WANI**", "**Skill India**" and "**National Digital Literacy Mission**" have equipped millions of Indians with essential digital skills, making them employable in the digital economy. Additionally, the government's push for online education during the **COVID-19 pandemic** ensured uninterrupted learning for students, highlighting the transformative power of technology in the education sector.

**Digital Governance and Service Delivery**

The Modi government has harnessed technology to enhance governance and improve service delivery to citizens. Initiatives like "**e-Governance**," "**MyGov**," and "**Digital Locker**" have streamlined administrative processes, reduced corruption, red-tapsim, and enabled seamless access to government services. By harnessing the capabilities of drones and GIS technologies, the "**SVAMITVA Yojana**" is revolutionising the process of providing digital land records to rightful landowners. This initiative has successfully minimised land disputes, while also facilitating the monetisation of land for accessing bank loans and enabling meticulous planning at the village level. Nearly 2.14 crore land parcels have been digitised so far. Another shot in the arm for 3rd tier is the implementation of "**Bharat Net**" that aims to provide high-speed broadband to all the villages via optical fibres. As of March 2022, 1.83 lakh gram panchayats have been connected under this scheme. The implementation of **Aadhaar**, a unique identification system, has facilitated targeted service delivery, plugged over Rs 2 lakh crore leakage in the welfare scheme by eliminating fake and duplicate identities.

**Promoting Innovation and Research**

Prime Minister Modi has emphasised the importance of innovation and research to propel India's growth in the digital age. The "**Atal Innovation Mission**" and the establishment of "**Atal Tinkering Labs**" in schools have fostered a culture of innovation from an early age. The government's focus on research and development, particularly in emerging technologies like artificial intelligence, blockchain, and cybersecurity, has positioned India as a global hub for innovation and technological advancements. India is also aiming to become **Atma Nirbhar** in electronics manufacturing. India has touched \$75 billion in 2020-21 from \$29 billion in 2014. In 2014, the number of mobile phone manufacturing units in India was limited to just two. However, through the implementation of various initiatives such as the Modified Special Incentive Scheme (MSIPS), Electronics Manufacturing Cluster, National Policy on Electronics 2019, Electronics Development Fund, Production Linked Incentive (PLI), and Scheme for Promotion of Electronics Components and Semiconductors (SPECES), the country has made significant strides towards achieving self-reliance in the realm of electronics manufacturing.

**Future Prospects and Strategic Directions****1. Emerging Technologies:**

- Potential of 5G technology to revolutionize connectivity and drive the Internet of Things (IoT) ecosystem.
- Quantum computing as a frontier technology with transformative potential.

**2. Sustainability and Green IT:**

- Emphasis on sustainable practices and green technologies within the IT sector.
- Development of energy-efficient data centers and promotion of eco-friendly IT solutions.

**3. Inclusive Growth:**

- Bridging the digital divide by enhancing digital literacy and access in rural areas.
- Empowering marginalized communities through digital inclusion initiatives.

**CONCLUSION**

The Amrit Kaal era presents a unique opportunity for India's IT sector to lead the digital transformation and innovation landscape globally. With strategic investments in technology, skill development, and infrastructure, coupled with supportive government policies, India is poised to become a global powerhouse in the IT industry. The journey, however, requires overcoming significant challenges and fostering a collaborative ecosystem to sustain growth and innovation.

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**LITERARY GAMING: GAMIFICATION AS A TOOL FOR TEACHING AND LEARNING LITERATURE****Dr. Hirenkumar Dineshbhai Patel**

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**ABSTRACT**

*The successful engagement of contemporary learners in the ever-evolving field of education requires the incorporation of novel pedagogical approaches and technology. This research explores the concept of "Literary Gaming" and its application as a transformative tool for teaching and learning literature. Literary Gaming, rooted in the principles of gamification, influences the immersive and interactive nature of video games to enrich the study of literary works. By incorporating game mechanics, narratives, and interactive elements into literature education, educators can create dynamic learning experiences that captivate students' interest and deepen their understanding of literary concepts. This research paper examines the theoretical foundations of Literary Gaming, drawing on concepts from gamification, constructivist learning theories, and narrative-based learning. Practical implementations of Literary Gaming strategies are explored, including interactive textual analysis games, gamified collaborative projects, and literary-themed gaming simulations. The impact of Literary Gaming on student engagement, comprehension, and critical thinking skills is analyzed, highlighting its potential to revolutionize literature education in the digital age.*

*Keywords: Literary Gaming, Gamification, Literature Education, Interactive Learning, Student Engagement.*

**• INTRODUCTION****Background**

Traditional literature education often faces challenges in engaging contemporary learners who are familiarized to collaborating and dynamic experiences. The integration of gaming elements into the curriculum, known as Literary Gaming, emerges as a response to this challenge. This research aims to explore the potential of gamification in literature education, evaluating its impact on student engagement, comprehension, and the development of critical thinking skills.

**Rationale for the Study**

The rationale for investigating Literary Gaming lies in the recognition that games have become a pervasive and influential medium in contemporary culture. Understanding how to harness the inherent motivational and interactive aspects of gaming for educational purposes can revolutionize literature instruction, making it more accessible and enjoyable for a diverse range of students.

**• AIM AND OBJECTIVES OF THE STUDY****AIM**

The primary aim of this study is to explore the concept of Literary Gaming and evaluate its efficiency as a means for teaching and learning literature. By examining theoretical frameworks, practical implementations, and student outcomes, the study aims to provide insights into the transformative potential of gamification in literature education.

**OBJECTIVES**

1. To analyze the theoretical foundations of gamification in literature education.
2. To explore practical implementations of Literary Gaming in literature classrooms.
3. To evaluate the effect of gamification on student engagement and understanding of literary works.
4. To observe the improvement of critical thinking skills through Literary Gaming.
5. To identify challenges and considerations associated with the integration of gamification into literature education.

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**• LITERATURE REVIEW****Traditional Approaches to Literature Education**

Traditional literature education has relied on methods such as close reading, class discussions, and written analyses. While these methods have enduring value, there is an increasing need to adapt to the changing preferences and learning styles of contemporary students.

**The Emergence of Gamification in Education**

Gamification involves incorporating game-like elements into non-game contexts to enhance engagement and motivation. This section reviews the theoretical foundations of gamification in education and its potential to transform the learning experience.

**• Theoretical Foundations of Literary Gaming****Constructivist Learning Theories**

At the heart of Literary Gaming lies the constructivist perspective on learning, which posits that individuals actively construct knowledge through experiences and interactions with their environment. In the context of literature education, constructivist principles emphasize the importance of active engagement, collaboration, and the construction of meaning by students. These ideas are supported by literary gaming, which offers students engaging and interactive experiences that let them study literary texts, evaluate narratives, and develop their own interpretations of topics. By enthusiastically contributing in the creation of meaning within the context of a game, students deepen their understanding of literary concepts and develop critical thinking skills.

**Gamification and Motivation**

The basis for Literary Gaming is provided by gamification, which is the application of game design ideas outside of games. Points, levels, achievements, and honors are just a few of the game features that are used to inspire and engage students on their learning path. The intrinsic motivation that games naturally evoke, including the desire for mastery, achievement, and progression, is harnessed to create compelling learning experiences. In Literary Gaming, students are motivated to engage with literary texts through game-like structures that provide clear goals, feedback, and rewards for progress. By tapping into students' intrinsic motivation, Literary Gaming promotes sustained engagement and deeper immersion in literary content.

**Narrative-Based Learning**

Narrative-based learning theories highlight the power of storytelling in facilitating learning and knowledge acquisition. In Literary Gaming, narratives serve as the backbone of the gaming experience, providing context, purpose, and meaning to students' interactions with literary texts. Through immersive narratives, students are transported into the worlds of literary works, where they become active participants in the unfolding story. By experiencing literature through interactive narratives, students develop empathy, perspective-taking skills, and a deeper appreciation for the complexities of human experiences portrayed in literary texts.

**Cognitive Load Theory**

Cognitive Load Theory offers insights into how the design of learning materials affects cognitive processing and learning outcomes. In Literary Gaming, game mechanics and interface design are optimized to manage cognitive load effectively, ensuring that students can focus their cognitive resources on the task at hand—engaging with and interpreting literary texts. Game-based scaffolding, such as hints, tutorials, and adaptive feedback, assists students in navigating complex literary concepts and challenges without becoming overwhelmed. By reducing extraneous cognitive load and promoting deeper cognitive engagement, Literary Gaming enhances students' capacity to comprehend and analyze literary works.

**• Practical Implementations of Literary Gaming****Interactive Textual Analysis Games**

One of the most straightforward implementations of Literary Gaming is the development of interactive textual analysis games. These games immerse students in the world of literary texts, prompting them to navigate plots, analyze characters, and make interpretive decisions in real-time. For example, students might engage in a mystery-solving game where they must uncover clues scattered throughout a digital adaptation of a classic novel. By actively participating in the narrative and making meaningful choices, students deepen their understanding of literary elements and develop critical thinking skills.

**Gamified Collaborative Projects**

Literary Gaming can also take the form of gamified collaborative projects, where students work together to create digital artifacts related to literary works. For instance, students might collaborate to develop a choose-



your-own-adventure game based on a novel, where each decision branch reflects different interpretations of the text. Alternatively, students could design a digital escape room themed around the plot and characters of a play, requiring players to solve puzzles and riddles related to the text. These collaborative projects not only promote teamwork and creativity but also encourage deeper engagement with literary content as students actively contribute to the creation of meaningful artifacts.

### **Literary-Themed Gaming Simulations**

Another practical implementation of Literary Gaming is the development of literary-themed gaming simulations, which provide students with virtual environments to explore and interact with literary texts. For example, students might immerse themselves in a 3D simulation of a historical setting depicted in a novel, where they can explore landmarks, interact with virtual characters, and experience key events from the text firsthand. Alternatively, students could participate in a role-playing game set in the world of a fantasy novel, where they assume the roles of characters and embark on quests that parallel the plot of the text. These gaming simulations offer students a unique opportunity to experience literature in a dynamic and immersive way, fostering empathy, perspective-taking, and a deeper appreciation for the complexities of literary works.

### **Integration with Educational Technology Platforms**

Practical implementations of Literary Gaming often involve the integration of educational technology platforms, such as learning management systems, game development tools, and virtual reality platforms. These platforms provide educators with the tools and resources needed to design and implement engaging gaming involvements that line up with curriculum purposes and learning goals. Additionally, educational technology platforms offer opportunities for data collection and analysis, allowing educators to assess student engagement, progress, and learning outcomes in real-time.

## **• Impact of Literary Gaming on Student Engagement and Comprehension**

### **Enhanced Student Engagement**

One of the most notable impacts of literary gaming is its ability to heighten student engagement with literary texts. By incorporating game mechanics such as points, levels, achievements, and rewards, literary gaming creates a sense of progress and accomplishment that motivates students to actively participate in the learning process. Moreover, the interactive nature of gaming experiences captivates students' interest and imagination, drawing them into the world of the text in a way that traditional teaching methods may not achieve. As students navigate through virtual environments, solve puzzles, and make decisions that impact the narrative, they become extremely devoted to the story and characters, prominent to sustained engagement with the text.

### **Deeper Comprehension of Literary Texts**

Literary gaming facilitates deeper comprehension of literary texts by providing students with opportunities to interact with and explore the content in dynamic ways. Through gameplay, students engage with key literary elements such as plot, character, setting, and theme, gaining a nuanced understanding of the complexities of the text. For example, in a role-playing game set in the world of a novel, students may assume the roles of characters and make decisions that distress the conclusion of the story, consenting them to understanding the narrative from multiple perspectives. Similarly, interactive puzzles and challenges embedded within the game prompt students to think critically about the text and make connections between different elements, enhancing their comprehension and analytical skills.

### **Promotion of Critical Thinking Skills**

Literary gaming encourages students to study, assess, and comprehend literary material within the confines of the game, so fostering the development of critical thinking skills. As students navigate through the challenges presented in the game, they must apply their problem-solving skills to overcome complications and development through the description. Additionally, the interactive nature of gaming experiences encourages students to think creatively about the text, as they are prompted to make choices and explore alternative narratives. By engaging in these cognitive processes, students deepen their understanding of the text and develop the ability to think critically about literature in a dynamic and interactive environment.

## **• CHALLENGES AND CONSIDERATIONS**

### **Technological Infrastructure**

One of the primary challenges of implementing literary gaming is the requirement for adequate technological infrastructure. Literary gaming often relies on digital platforms, gaming software, and interactive technologies, which may not be readily available in all educational settings. It is imperative to guarantee the availability of dependable internet connections, suitable hardware, and harmonious gadgets that encourage the execution of

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literary gaming projects. Additionally, educators must be proficient in using technology and troubleshooting technical issues to facilitate smooth gameplay experiences for students.

### **Game Design and Development**

Developing high-quality literary games that effectively engage students and align with curriculum objectives requires significant time, resources, and expertise. The creation of games that successfully combine instructional material and entertaining value might present difficulties for educators. Additionally, ensuring that games are accessible to students with diverse learning needs and abilities requires careful consideration of game mechanics, interface design, and instructional scaffolding. Collaborating with game developers, instructional designers, and content experts can help educators overcome these challenges and create engaging literary gaming experiences.

### **Alignment with Curriculum Standards**

Integrating literary gaming into the curriculum necessitates alignment with educational standards, learning objectives, and assessment criteria. Educators must ensure that literary gaming activities complement and enhance existing curriculum frameworks rather than detracting from essential learning outcomes. Additionally, assessing student learning and progress within the context of literary gaming presents unique challenges, as traditional valuation approaches may not completely capture the intricacy of learning experiences in game-based environments. Developing authentic and meaningful assessment strategies that account for the diverse skills and competencies fostered by literary gaming is crucial for evaluating student learning effectively.

### **Equity and Access**

Ensuring equitable access to literary gaming experiences is essential to prevent disparities in educational opportunities among students. Not all students may have access to the necessary technology or resources to participate fully in literary gaming activities, potentially exacerbating existing inequities in educational outcomes. Educators must consider how to provide alternative options or accommodations for students who may face barriers to participation, such as offering offline activities or providing access to technology resources outside of school hours. Additionally, addressing issues of digital literacy and ensuring that students have the necessary skills to navigate gaming environments responsibly is essential for promoting equitable access to literary gaming experiences.

### **Teacher Training and Professional Development**

Effectively implementing literary gaming in the classroom requires ongoing teacher training and professional development to build educators' skills and confidence in using gaming technology and pedagogical strategies. Many educators may lack experience or expertise in incorporating gaming elements into their teaching practices and may require support in understanding how to integrate literary gaming effectively into the curriculum. Providing professional development opportunities, workshops, and resources that focus on best practices for designing, implementing, and assessing literary gaming initiatives can help educators overcome these challenges and maximize the potential of gaming technology in literature education.

### **• CONCLUSION**

Literary gaming stands as a transformative approach in literature education, harnessing the immersive and interactive nature of gaming to engage students in dynamic learning experiences. Through the integration of game mechanics, narrative-driven gameplay, and digital technologies, literary gaming offers educators a powerful tool to foster student engagement, enhance comprehension, and promote critical thinking skills in the study of literature.

The exploration of literary gaming has revealed its potential to captivate students' interest and motivation, leading to increased engagement with literary texts. By gamifying learning experiences through points, levels, achievements, and rewards, educators can create environments that inspire students to actively participate in the exploration and interpretation of literary works. Moreover, the interactive nature of gaming experiences appeals to contemporary learners, providing opportunities for deeper engagement and meaningful connections with literature.

Literary gaming has also demonstrated its capacity to deepen students' comprehension of literary texts by providing interactive and immersive experiences that enable students to explore key literary elements in dynamic ways. Through gameplay, students engage with plot, character, setting, and theme, gaining a nuanced understanding of the complexities and nuances of the text. Furthermore, by pressuring students to assess, evaluate, and comprehend literary material in the context of the game, literary gaming fosters the growth of critical thinking abilities.

While literary gaming holds tremendous promise for transforming literature education, it is not without its challenges. Addressing issues related to technological infrastructure, game design, curriculum alignment, equity and access, and teacher training is essential for successful implementation. By proactively addressing these challenges and considering the unique needs of students and educational contexts, educators can create inclusive and engaging literary gaming experiences that inspire a lifelong love of reading and critical thinking skills in students.

In conclusion, literary gaming represents a paradigm shift in literature education, offering educators innovative ways to engage students and deepen their understanding of literary texts. By embracing the principles of gamification and leveraging digital technologies, educators can create dynamic and immersive learning situations that enable students to develop themselves as dynamic participants in their literary journey. As the field of literary gaming endures to progress, educators have the chance to connect its potential to revolutionize literature education and inspire a new generation of readers and thinkers.

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## DITHIOBIURETS AND CARBOXYLIC OXIME COMPLEXES

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## ABSTRACT

The synthesis and spectroscopic studies of some Cu(II) complexes with poly dentate Schiff bases are reported here. These Schiff bases were derived by condensing carbonyl oximes-like isonitrosoacetophenone (HINAP) $\alpha$ -benzyl monoxime (HBMO), isonitroso acetyl acetone (HINAA) with amines like Dithiobiurets. phenyl/tolyl 2,4-dithiobiuret .They are abbreviated as HPEPDTB and HPETDTB respectively. The characterization of the complexes was done on the basis of elemental analysis, molar conductivity, spectral (IR,  $^1\text{H}$  and electronic) thermal analysis and electron spin resonance spectra. On the basis of theses analysis it was concluded that Cu (II) complexes exhibit paramagnetic square planar binuclear geometry with  $\text{M}_2\text{L}_2\text{Cl}_2$  stoichiometry. Under antimicrobial studies *Escherichia coli*, *Staphylococcus*, *B.cereus*, *Bacillus subtilis* were studied on laboratory grown cultures; these yielded kind of information which is of value in guiding and understanding their therapeutic use. The concentration required to inhibit various organisms and the effects of environmental conditions on their activity are of paramount importance. The complexes show moderate activity against (10-18 mm) against the above mentioned bacteria as shown in the table given below. This shows that besides the complex formation, the nature of the metal ion has important role in the inhibition of the pathogenic activity of the bacteria.

The below table shows result of agar cup method for the antibacterial activity of the Cu(II) complexes in (DMF).

Compound	B.Subtilis(Mm)	B.Cereus(Mm)	S.Aureus(Mm)	E.Coli(Mm)
$\text{Cu}_2(\text{HPEIBSA})_2\text{Cl}_2$	16	14	18	12
$\text{Cu}_2(\text{HBEIBSA})_2\text{Cl}_2$	18	10	11.5	17

## INTRODUCTION

Metal complexes with oxime ligands in various fields. Specifically, their roles in catalysis, including oxidation, reduction, and asymmetric synthesis, are discussed, along with their applications in materials science, such as in the design of functional materials with tailored properties. Furthermore, the potential biomedical applications of these complexes, including their use as anticancer agents and metallopharmaceuticals, are explored.

The synthesis and spectroscopic studies of some Cu(II) complexes with poly dentate Schiff bases are reported here. These Schiff bases were derived by condensing carbonyl oximes-like isonitrosoacetophenone (HINAP) $\alpha$ -benzyl monoxime (HBMO), isonitroso acetyl acetone (HINAA) with amines like Dithiobiurets. phenyl/tolyl 2,4-dithiobiuret .They are abbreviated as HPEPDTB and HPETDTB respectively. The characterization of the complexes was done on the basis of elemental analysis, molar conductivity, spectral (IR,  $^1\text{H}$  and electronic) thermal analysis and electron spin resonance spectra. On the basis of theses analysis it was concluded that Cu (II) complexes exhibit paramagnetic square planar binuclear geometry with  $\text{M}_2\text{L}_2\text{Cl}_2$  stoichiometry. Under antimicrobial studies *Escherichia coli*, *Staphylococcus*, *B.cereus*, *Bacillus subtilis* were studied on laboratory grown cultures; these yielded kind of information which is of value in guiding and understanding their therapeutic use. The concentration required to inhibit various organisms and the effects of environmental conditions on their activity are of paramount importance. The complexes show moderate activity against (10-18 mm). This shows that besides the complex formation, the nature of the metal ion has important role in the inhibition of the pathogenic activity of the bacteria.

The elemental analysis of the metal complexes of HPEPDTB and HPETDTB corresponds to 1:1 metal:ligand stoichiometry and suggests that the complexes may be represented by the general formula  $\text{M}_2\text{L}_2\text{Cl}_2$ . where M = Cu(II),

The complexes are coloured and non-hygroscopic in nature. They are insoluble in water and sparingly soluble in common organic solvents though somewhat more soluble in dimethyl formamide (DMF) at room temperature. They give intense colour with dil. NaOH solution suggesting the presence of a free oxime group in the complexes.

All the complexes are thermally stable at least up to 120°C indicating fairly high thermal stability and hence a strong metal-ligand bond.

The values of molar conductance of the metal complexes in DMF solution at  $10^{-3}$  M concentration are  $< 1.0 \text{ ohm}^{-1} \text{ cm}^2 \text{ mole}^{-1}$  and are suggestive of the non-electrolytic nature of these complexes

The magnetic moments of the Cu(II) complexes of HPEPDTB and HPETDTB at  $308^\circ\text{K}$  are 1.74 and 1.76 B.M. respectively, which are very close to the spin-only value expected for a  $d^9$  system with one unpaired electron. The observed magnetic moments are in the range normally found for Cu(II) complexes. The values also suggest that they are magnetically dilute, nearly planar and have no appreciable Cu-Cu interaction at least at room temperature.

### Electron Spectra

The electronic absorption spectral data of the metal complexes, recorded in the range 200-350 nm in methanol

All the metal complexes in solution exhibit two intra-ligand transitions in the ultra violet region around 36,360-38,460  $\text{cm}^{-1}$  and 47,160-48,076  $\text{cm}^{-1}$  respectively, which may be ascribed to  $\pi - \pi^*$  and  $n - \sigma^*$  transitions which are observed at 34,960 and 37,630  $\text{cm}^{-1}$ .

The diffuse reflectance spectra of solid Cu(II) complexes show a broad band in the region 15,380-16,680  $\text{cm}^{-1}$  with a distinct maximum at around 15,380  $\text{cm}^{-1}$ . The position and shape of the unsymmetrical absorption band suggests that it may be ascribed to d-d transitions and may envelope at least two or possibly three d-d transitions in a highly distorted octahedral or nearly planar environment.

The PMR spectra of metal complexes can provide vital information on the mode of bonding in the metal complexes and a correlation can be derived between the observed chemical shifts of various proton resonance signals and the coordination behaviour of ligands with respect to different metal ions.

The PMR spectrum of the complex shows oximino proton of the ligand as a singlet at  $\sim 12.2 \delta$  which suggests that proton of =NOH is not replaced during complexation. A broad multiplet between 6.4-7.2  $\delta$  has its origin in the phenyl ring protons of the ligand.

It may also be noted that the methine proton, which appears at 7.8  $\delta$  in the spectrum of HPEPDTB, is observed at nearly the same position ( $\sim 7.5 \delta$ ) in the PMR spectrum of complex, indicating that the oxime group is not involved in bonding to the metal ion.

The singlet for -SH proton, which appeared at 10.6  $\delta$  in ligand, however, disappears in the complex suggesting the removal of -SH proton during

### Infrared Spectra

The FT-infrared spectra of the metal chelate contain large number of bands of varying intensities and are quite complex. However, several structurally important bands, such as those due to  $\nu_{(\text{O-H})}$ ,  $\nu_{(\text{C=N})}$ ,  $\nu_{(\text{N-OH})}$ ,  $\nu_{(\text{C=S})}$  etc modes have been identified to derive information regarding the structural features of the ligands and their manner of bonding with the metal ions.

A careful comparison of the spectra of the metal complexes with those of the ligands also reveals that bands due to  $\nu_{\text{N-OH}}$ , and  $\nu_{\text{N-H}}$  in the region around 3200-3300  $\text{cm}^{-1}$  are observed for the complexes, which overlap in several cases making their distinction difficult. The -N-H bending vibrations are observed near 1620-1600  $\text{cm}^{-1}$ , around the same position as in ligands, indicating that -NH group is not involved in coordination. The presence of free -NOH function in the complexes is also revealed by their solubility in dilute alkali solution.

The azomethine and oximino C=N stretching vibrations are relatively unaffected and are observed at  $\sim 1610$ -14 and 1563-1567  $\text{cm}^{-1}$  respectively indicating that the azomethine or oxime nitrogen donors are not involved in bonding.

The C=S stretching frequency of the ligands are found to undergo a negative shift on complexation suggesting that the ligands coordinate to the metal ions through sulphur donors. The C=S stretching bands are observed around 1220-1240  $\text{cm}^{-1}$  in the spectra of the complexes.

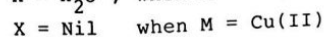
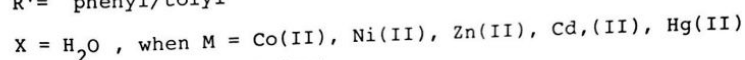
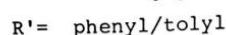
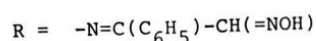
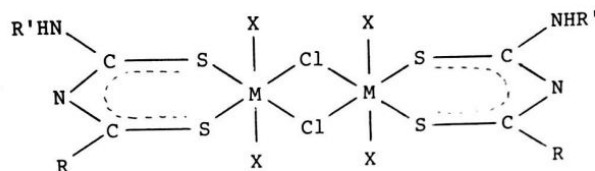
Another fairly strong band around 725-759  $\text{cm}^{-1}$  due to C=S vibrations in ligands is also found to be shifted to lower frequencies between 686-692  $\text{cm}^{-1}$  in complexes with medium intensity.

The IR bands due to phenyl ring systems of the ligands observed around 1497, 1450 and 1400  $\text{cm}^{-1}$  are found to be almost unaffected in the spectra of the metal complexes.

Absence of -SH band around  $\sim 2560 \text{ cm}^{-1}$  it shows that the coordination occurs through sulfur atoms and larger low-frequency shift of the C=S stretching frequency may be attributed in part to the change in the symmetry of

the ligand from  $C_s$  to  $C_{2v}$ . Observed decrease in C=S frequencies together with negligible shift or slight increase in C=N stretching frequencies is suggestive of sulphur coordination of the ligands to the metal ion. Similar sulphur coordinated dithiobiuret complexes are reported in the literature.

On the basis of the elemental analysis and results of various physicochemical studies, the bonding in the choro metal complexes of HPEPDTB and HPETDTB can be represented as follows.



### ESR Spectra

The ESR spectrum of  $Cu_2(HPEPDTB)_2Cl_2$  at room temperature is not fully resolved in the  $g_{\parallel}$  region and does not clearly show all the four lines of the hyperfine structure expected due to the interaction of the single unpaired electron with the copper nucleus. It therefore does not permit the detailed calculations of all the EPR parameters. The ESR resonance occurs at a magnetic field lower than that of the maker (TCNE,  $g = 2.00277$ ) and the isotropic  $g$  value is calculated to be 2.171.

The ESR spectrum of  $Cu_2(HPETDTB)_2Cl_2$ , at room temperature though not very well resolved, does permit the calculation of relevant ESR tensors which are listed in Table 5.31. While the relevant discussion on the ESR studies in Section I is presumed and not repeated here for the sake of brevity, only two  $g$  values,  $g_{\parallel}$  and  $g^{\perp}$  are obtained which follow the order  $g_{\parallel} > g^{\perp} > 2.0023$ , together with the fact that  $g < 2.1G > 4$  confirm nearly planar structure for the complex with the unpaired electron occupying  $d_{x^2-y^2}$  orbital.

### Thermal Studies

Thermal studies of two of the ligands HPEPDTB and HPETDTB representative complexes have been carried out and the resulting thermal curves

#### $CO_2(HPEPDTB)_2Cl_2 \cdot 4H_2O$

The probable pattern of decomposition of the complex  $CO_2(HPEPDTB)_2Cl_2 \cdot 4H_2O$  based on the analysis of the results of the thermal study, is presented in Table 5.33 while the related thermal curves are shown in Fig.5.91.

The study indicates that the complex decomposes in three steps in the temperature range studied. The first step of decomposition is observed in the temperature 160-150°C which corresponds to the loss of four coordinated water molecules.

The loss of  $2(C_6H_5-NH) + (C_6H_5)_2$  is observed during the 2<sup>nd</sup> stage of decomposition observed near 530°C.

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The below table shows result of agar cup method for the antibacterial activity of the Cu(II) complexes in (DMF).

Compound	B.subtilis(mm)	B.cereus(mm)	S.aureus(mm)	E.coli(mm)
$Cu_2(HPEIBSA)_2Cl_2$	16	14	18	12
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**WHEN NUCLEAR DETERRENCE BRINGS FEAR OF ANNIHILATION****Ms. Kiran Mahadik**

Research Scholar, Foreign Policy Research Centre

**ABSTRACT**

*Some theorists insist that we should be thankful for the fact that a third-world war has been avoided. Furthermore, studies suggest that tensions arising from the potential for new wars in many regions of the world always raise concerns about nuclear arms usage. The Russia-Ukraine war, which began in 2014 due to Russia's illegal annexation of Crimea and destabilization of eastern Ukraine in 2022, prompted NATO to support Ukraine's sovereignty and territorial integrity with its 14 member countries. Russia has been threatening to attack NATO nuclear sites in Poland after Poland expressed its willingness to host nuclear arms. The United Nations has always prioritized decreasing and eradicating nuclear weapons, destroying chemical weapons, and strengthening the prohibition of biological weapons. However, my research suggests that nuclear deterrence theories have actually enabled conflicts and instilled a fear of annihilation. A review of nuclear deterrence reveals more obvious failures than successes. Given the complexities, this research critically examines the viability of nuclear deterrence in the globalized world. The record of nuclear deterrence is even more problematic in a globalized world. Investing more in nuclear deterrence will not make the world safer; instead, it may fuel more aggression. Perhaps nuclear weapons should be banned altogether.*

*Keywords: Nuclear deterrence, NATO, United Nations*

**INTRODUCTION**

NATO's reliance on nuclear deterrence is vital for ensuring the security and stability of its member states. As a defensive alliance, NATO views nuclear deterrence as a crucial component of its overall strategy to prevent aggression and maintain peace in the Euro-Atlantic region. By possessing a credible nuclear deterrent, NATO aims to deter potential adversaries from threatening its member states with nuclear weapons. This deterrent capability serves as a cornerstone of NATO's collective defense posture, providing a strong and reliable security umbrella for all member states.

Since Russia's invasion of Ukraine in February 2022, NATO has reinforced its defense posture by providing armed forces, equipment, and training Ukrainian troops and it continues to respond to Russian threats by significantly strengthening its deterrence and defense, ensuring that NATO is prepared to protect and defend all allies. The Russia- Ukraine Conflict is significant today because it affects global security and stability. Tensions between Russia and NATO have the potential to escalate into a border conflict, impacting international relations and global stability. Additionally, it raises concerns about the security of NATO members and their allies. NATO's reliance on nuclear deterrence to counter Russia's aggression increases the risk of nuclear escalation. While intended to prevent conflict, this strategy heightened even more tensions and stakes military confrontation. The risk of increasing troops by NATO, its escalation of military activities and relying on nuclear weapons are significant concerns, highlighting the precarious nature of nuclear deterrence in today's world.

This paper examines the unstable nature of nuclear deterrence in the context of Russia- NATO conflict.

The research methodology includes:

- Comprehensive analysis of existing theories and research on nuclear deterrence.
- Overview historical review of nuclear deterrence within NATO
- Along with the focus on recent concerns and challenges in Russia- NATO conflicts.

**• Important of Nuclear deterrence:**

Nuclear deterrence plays a crucial role in global security by discouraging aggression and preventing major conflicts between nuclear-armed states. As a cornerstone of NATO's defense strategy, nuclear deterrence helps to maintain peace and stability in Europe and beyond, emphasizing the importance of maintaining a credible deterrent in today's increasingly uncertain geopolitical landscape.

**• Overview of Nuclear Deterrence within NATO:**

NATO officially adapted nuclear deterrence during the cold war as a response to the perceived threat posed by the Soviet Union. The doctrine of "flexible response," implemented in the 1960s, aimed to deter aggression by demonstrating NATO's readiness to respond to any level of conflict, including with nuclear weapons, in a



proportional manner. As part of its deterrence strategy, NATO initiated the policy of "nuclear sharing," allowing for the deployment of American nuclear weapons in Europe. These initiatives were integral to NATO's efforts to counter the Soviet threat and maintain peace and stability in Europe during the Cold War era.

To understand nuclear deterrence within NATO's strategy, it's essential to grasp how the alliance's nuclear policy operates, particularly in response to aggression from Russia.

1. NATO's nuclear deterrence strategy relies on the principle of deterrence by punishment, which means that the threat of retaliation with nuclear weapons is intended to dissuade potential adversaries from attacking NATO members. This strategy is designed to convince potential aggressors, like Russia, that the costs of attacking NATO would outweigh any potential benefits.
2. NATO's nuclear strategy emphasizes that any aggression, whether conventional or nuclear, against a NATO member state will be met with a proportional response, which could include the use of nuclear weapons if necessary. This approach is known as "extended deterrence" and is aimed at ensuring the security of all NATO members.
3. The presence of American nuclear weapons in Europe, as part of NATO's nuclear sharing arrangements, further reinforces the alliance's commitment to nuclear deterrence. These weapons serve as a visible symbol of NATO's nuclear capability and its willingness to defend its members against any aggression, including from Russia.

Overall, nuclear deterrence remains a central component of NATO's defense strategy, serving as a critical deterrent against potential aggression from Russia and other adversaries, and helping to maintain peace and stability in Europe and beyond.

• **NATO-Russia conflict:**

Since February, 2022, NATO has implemented several measures in response to escalating tensions and threats from Russia. Since Cold War era, it is NATO's largest exercise including activities highlighted below:

- **Increased Military Presence:** NATO has bolstered its military presence along its eastern flank, deploying additional troops, equipment, and conducting more frequent military exercises to enhance readiness and demonstrate resolve. Also, NATO has been providing Kyiv with advanced weapons, training and intelligence.
- **Heightened Alertness:** NATO forces are on heightened alert, closely monitoring Russian military activities along NATO borders and maintaining readiness to respond to any potential aggression.
- **Enhanced Defensive Capabilities:** NATO continues to invest in and enhance its defensive capabilities, including missile defense systems, cyber defenses, and rapid response forces, to effectively counter any potential threats from Russia.
- **Diplomatic Engagement:** NATO maintains open channels of communication with Russia to prevent misunderstandings and de-escalate tensions. However, NATO remains steadfast in its commitment to defend its member states against any aggression.
- These measures aim to deter aggression, preserve peace, and ensure the security of NATO member states in the face of growing threats from Russia.

In today's NATO-Russia open dialogue, the effectiveness of nuclear deterrence theory is being questioned. It is also possible that after NATO deployments, Poland will face territorial challenges, as Andrzej Szejna, Poland's deputy minister of foreign affairs, expressed his concerns and initiated a dialogue to host nuclear weapons despite the risk of Russian military strikes against Ukraine. Warsaw supports nuclear deterrence and NATO's actions, and it is now pursuing discussions about leveraging nuclear weapons for the collective defense of all alliance members. Russia, on the other hand, has strongly opposed the decision to deploy additional troops and weapons along its western borders as a response. Russian officials have warned that the deployment of nuclear weapons in Poland could cause a dangerous escalation. Russia has threatened to deploy more troops, weapons and nuclear warheads along with its western borders in response to NATO's decision to station nuclear weapons in Poland. These threats from Russia have further escalated the tensions between NATO and Russia dialogue and it might be higher risk of military confrontation. Russia's response to Poland hosting nuclear weapons have increased security challenges faced and raised concerns about peace in Europe.

**• Russia-NATO Strategic Dialogue:**

The Russia-NATO strategic dialogue initiated in 2023 was intended to address mutual security concerns, reduce tensions, and enhance cooperation between the two parties. However, instead of fostering stability, this dialogue has inadvertently increased the risk of nuclear conflict, undermined the nuclear deterrence theory and threatened international security.

One of the critical elements affected by this dialogue is the nuclear deterrence theory, which relies on the concept of mutually assured destruction to prevent nuclear conflict. According to this theory, the possession of nuclear weapons by both sides serves as a deterrent, as the risk of retaliation ensures that neither side initiates a nuclear attack. However, the breakdown in Russia- NATO relations has undermined this theory, leading to increased nuclear tensions and a higher risk of nuclear weapons use. One significant development exacerbating these tensions is the deployment of nuclear weapons in Poland, a NATO member state. Since the deployment, Russia has intensified its attacks and threats against NATO member states, including explicit warnings about the use of nuclear weapons. This escalation has further eroded the stability and predictability of the Euro-Atlantic security environment, increasing the risk of a catastrophic nuclear conflict.

In conclusion, the Russia-NATO strategic dialogue, instead of fostering stability and cooperation, has increased the risk of nuclear conflict and undermined the nuclear deterrence theory. The deployment of nuclear weapons in Poland and Russia's aggressive response have heightened tensions and created a volatile security environment in the Euro-Atlantic region. Urgent diplomatic efforts are needed to de-escalate tensions, reduce the risk of nuclear conflict, and preserve international security.

**• NATO member's reactions on continuous threats by Russia:**

➤ **Poland's** readiness to host nuclear weapons can be attributed to several factors, including growing concerns about Russia's aggressive behavior and the need for enhanced security measures within NATO. Poland, like other NATO member states in Eastern Europe, perceives Russia's actions as a significant threat to its security and sovereignty. Russia's annexation of Crimea, military intervention in eastern Ukraine, and aggressive posture towards NATO member states have raised alarms in the region. Hosting nuclear weapons is seen as a deterrent against potential Russian aggression. By stationing nuclear weapons in Poland, NATO aims to send a clear signal to Russia that any aggression against NATO member states will be met with a strong and unified response. Poland's decision to host nuclear weapons is also a demonstration of solidarity with NATO and a commitment to collective defense. By offering to host nuclear weapons, Poland is reaffirming its commitment to the alliance and contributing to NATO's overall defense posture.

However, Poland's readiness to host nuclear weapons has also increased the risk of nuclear conflict in several ways:

1. **Escalation of Tensions:** Russia views the deployment of nuclear weapons in Poland as a direct threat to its security. In response, Russia has escalated its military activities and issued explicit threats against NATO member states, including warnings about the use of nuclear weapons.
2. **Heightened Risk of misunderstanding:** The presence of nuclear weapons in Poland increases the risk of misunderstanding and miscalculation between NATO and Russia. In a crisis scenario, the presence of nuclear weapons on both sides could escalate tensions and increase the risk of a catastrophic nuclear conflict.
3. **Nuclear Saber-Rattling:** The deployment of nuclear weapons in Poland has led to increased nuclear saber-rattling from both sides, further destabilizing the security environment in Europe. The risk of a nuclear confrontation is heightened as both NATO and Russia engage in provocative actions and rhetoric.

In conclusion, while Poland's readiness to host nuclear weapons is driven by legitimate security concerns and a desire to enhance deterrence, it also increases the risk of nuclear conflict. Urgent diplomatic efforts are needed to de-escalate tensions, reduce the risk of misunderstanding, and preserve international security.

The decision by Poland to host nuclear weapons has sparked a contentious open debate within France and Germany, highlighting divisions within NATO regarding the appropriate response to Russia's growing aggression. France has been vocal in supporting Poland's decision, viewing it as a necessary measure to counter Russia's increasingly assertive behavior and ensure the security of NATO member states in Eastern Europe.

➤ **France's Position:** France has strongly supported Poland's decision to host nuclear weapons, arguing that it strengthens NATO's deterrence posture and sends a clear signal to Russia that any aggression will be met

with a strong and unified response. French officials have emphasized the importance of standing in solidarity with NATO allies in the face of growing security challenges in Europe.

President Emmanuel Macron has been particularly vocal in his support for Poland, stating that the deployment of nuclear weapons in the country is a necessary response to Russia's aggressive behavior. Macron has called for a robust and credible deterrent to counter the growing threat posed by Russia and ensure the security of NATO member states.

France has also highlighted the importance of maintaining open lines of communication with Russia while also demonstrating NATO's resolve to defend its member states. French officials have emphasized the need for dialogue and diplomacy to address security concerns in the region while also making it clear that NATO is prepared to respond decisively to any aggression.

➤**Germany's Reaction:** In contrast to France's position, Germany has expressed reservations about the deployment of nuclear weapons in Poland and has been more cautious in its response to Russia's aggressive behavior. German officials have raised concerns that the deployment could escalate tensions with Russia and undermine efforts to reduce nuclear proliferation in Europe.

1. Chancellor Olaf Scholz has emphasized the importance of dialogue and diplomacy in addressing security concerns in Europe, stating that Germany is committed to finding peaceful solutions to the ongoing crisis. Scholz has called for renewed efforts to engage with Russia and build trust between NATO and Moscow.
2. Germany's reaction reflects broader divisions within NATO regarding the appropriate response to Russia's aggressive behavior. While France favors a more assertive approach, including the deployment of nuclear weapons, Germany is more cautious and emphasizes the importance of dialogue and de-escalation.

• **Challenges and implications of the current scenario:**

The fact that Putin has avoided certain escalatory military operations against NATO's increasing military deployments and training does not mean that he will avoid them in the future. As Poland and France's supportive upfront actions with NATO to face Russia are already bringing up threats from Russia. The open debate within France and Germany regarding Poland's decision to host nuclear weapons underscores the challenges facing NATO in developing a unified response to Russia's threats. While France advocates for a robust and credible deterrent, Germany is more cautious and emphasizes the importance of dialogue and diplomacy. Finding a common approach that balances deterrence with diplomacy will be essential for ensuring security and stability in Europe in the face of growing tensions with Russia.

**Some highlighted points are below:**

1. **Escalating Tensions:** The conflict between Russia and NATO has led to escalating tensions, increasing the risk of miscalculation and military confrontation.
2. **Nuclear Deterrence at Risk:** The escalating tensions between Russia and NATO jeopardize the effectiveness of nuclear deterrence strategies, raising concerns about the stability of the region.
3. **Heightened Nuclear Threat:** As tensions increase, so does the risk of one or both sides resorting to the use of nuclear weapons, undermining the credibility of nuclear deterrence.
4. **Arms Race Dynamics:** The escalation in tensions has led to arms race dynamic, with both sides enhancing their nuclear capabilities in response to perceived threats, further heightening the risk of a nuclear confrontation.
5. **Erosion of Strategic Stability:** The conflict between Russia and NATO erodes strategic stability, making it harder to manage crises and increasing the risk of unintended nuclear escalation.
6. **Need for Diplomatic Solutions:** Given the catastrophic consequences of a nuclear conflict, there is an urgent need for diplomatic solutions to de-escalate tensions and rebuild trust between Russia and NATO member states.

In conclusion, the conflict between Russia and NATO and the escalating tensions poses a significant risk to nuclear deterrence, highlighting the need for diplomatic efforts to reduce tensions and prevent the situation from spiraling out of control.

**CONCLUSION**

The escalating tensions between Russia and NATO pose a significant threat to international security and stability. The risk of nuclear conflict has never been higher in this region since decade, but since Feb 2022, when Russia invaded Ukraine and making remarkable shifts in military and weapons, NATO is making its shifts too with military exercises and armaments. Especially after open dialogues since 2023 within Russia-NATO, NATO always shows its readiness to face Russia despite of threats. Poland, a neighbor country of Ukraine is deploying nuclear armaments shows the reflection of readiness to face the situation. Both sides engaging in provocative actions and making dialogues of using nuclear armaments is a failure of nuclear deterrence and bringing the fear of annihilation. The fear of destruction looms large as the fear of nuclear war once again haunts the European and Atlantic region.

It is imperative that all parties exercise restraint, engage in dialogue, and try to de-escalate the disastrous consequences of a nuclear conflict. Failure addresses mutual concerns and escalation can only exacerbate the fear of destruction. The continued lack of trust and cooperation between NATO and Russia raises specter of catastrophic nuclear conflict in today's world. Despite the fact that many regions in the world are facing conflicts, armaments, chemical weapons, and nuclear tests, the Third World War is still avoided. But the risk is becoming higher with consequences of failure to avoid destruction now.

Risking nuclear deterrence and miscalculations and misinterpretations may further lead to use of nuclear technology. Therefore, the consequences of failures are too grave to contemplate but the world will definitely face annihilation. So only through de-escalation, bringing mutual diplomacy within the region and with no competency to invade another region for expansionism to become a superpower, can the world ensure peace and stability for future generations.

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**COMPARTIVE STUDY OF MARKETING STRATEGY OF PAYTM AND GOOGLE PAY**

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**ABSTRACT**

*The fascinating world of digital payments, focusing on two giants in the field: Paytm and Google Pay. We begin by taking a closer look at the ever-changing landscape of digital payments, both in India and around the world. This includes understanding how these companies position themselves in a highly competitive market and how they adapt to the evolving trends and preferences of consumers.*

*We then move on to dissecting the strategies employed by Paytm and Google Pay to gain an edge over each other and other competitors. This involves understanding what makes each platform unique and how they attract and retain users. We explore the various factors that influence consumer behaviour, such as convenience, security, and trust, which are essential for the success of any digital payment platform.*

*A key aspect of our analysis is the role of technology in shaping the user experience. Both Paytm and Google Pay rely on innovative technologies to make transactions faster, easier, and more secure. We delve into these technologies and examine how they contribute to the overall marketing strategy of each platform.*

*Regulatory compliance is another crucial area of focus. As digital payment platforms, Paytm and Google Pay must adhere to strict regulations to ensure the security and privacy of users' data.*

*Keyword: 1.Mobile Payment., 2.Secure Transactions, 3.Rewards, 4.Seamless integration, 5, Bill payments.*

**INTRODUCTION**

In this cashless economy era, information and communication technology (ICT) plays a vital role in making payments using various payment modes. The mobile wallet app is an innovative technology for avoiding the usage of physical cash. The mobile wallet records all kinds of transactions with a clear payment reference and makes it accountable for tax payments

The term "digital payment" refers to using electronic means to pay for products and services online. This is referred to as a cashless economy since it avoids the use of physical money. These digital transactions help to lower transaction costs while also speeding up the process of completing one transaction cycle. It lowers the risk of dealing with cash. The digital payment history may also be readily kept track of. Digital transactions also benefit the government because transactions can be easily recorded, which helps to eliminate black money and so aids economic progress.

The government is taking steps to shift the country's economy away from cash and toward more digital transactions. Electronic wallet, often known as E-wallet, is an online service that allows users to conduct electronic transactions. Through QR codes, the E-wallet capability may be utilized in smart phones, PCs, and several other electronic gadgets at stores.

The use of an E-wallet requires a bank account, and money may be deposited or transferred using this E-wallet. Furthermore, digital wallets are utilized for a variety of applications beyond E-payment than simple financial transactions. Digital wallet systems may be used for a variety of reasons, and money can be transmitted to anybody, anywhere, at any time using them. The Indian government's principal goal is to create the Indian economy "Cashless, Faceless, and Paperless."

There are a variety of apps available that allow users to make online payments. These are incredibly easy to use and give consumers a lot of freedom because they allow them to make payments at any time and from anywhere. Phone Pe, Google Pay, and Paytm are some of the online payment apps available. Online banking allows a user to conduct financial transactions via the Internet. Online banking is also known as Internet banking or web banking.

A lot of digital advancement has taken place over the last 10 years in India. People have started to change their perspective and method of purchasing because of digitalization economically, especially after,, Demonetization". One of the popular digital evolutions that attracted and made people to adapt to new mode of purchase and marketing is. Day by day, the number of users of online payment have increased instead of using paper \plastic money.

Even during PANDEMIC, it really helped people to continue their finances and transactions. E-payments facilitates all kind of cashless transactions and services through online by many apps Globally, people are getting more and more benefitted using e-payments\ e-wallets. There are a lot of software \ applications competing in the market to give safe and secure cashless transactions and other efficient services to consumers. One of the popular E-Payment apps that competing with each other and used almost equally is GOOGLE PAY and PAYTM.

**Company Profile:**

In India, hundreds of millions of people are entering the digital economy for the first time thanks to inexpensive mobile data and smartphones. Most of these are skipping the plastic and going straight to mobile payments. If the slew of announcements made at the fifth edition of the Google for India event were any indication, Google is working towards an ecosystem play with its payment's app – Google Pay. The company is looking to prop Google Pay as its engine of expansion in the world's largest untapped digital market.

In the last 12 months, Google Pay has grown to reach **67 million** monthly active users, driving transactions worth over **\$110 billion** on an annualized basis, with hundreds of thousands of offline and online merchants.



Paytm was founded in **August 2010** with an initial investment of **US\$2 million** by its founder **Vijay Shekhar Sharma** in Noida, Delhi NCR.

It started off as a prepaid mobile and DTH recharge platform, and later added data card, postpaid mobile and landline bill payments in 2013.

In January 2014, the company had launched the Paytm Wallet, which the Indian Railways and Uber added as a payment option.

In March 2015, Paytm received its huge stake from Chinese e-commerce company Alibaba Group, took **40% stock** in Paytm as part of a strategic agreement. Soon after, it received backing from Ratan Tata, the MD of Tata Sons. In August 2016, Paytm raised funding

In 2016, it launched movies, events and amusement parks ticketing as well as flight ticket bookings and Paytm QR. Later that year, it launched rail bookings and gift cards.

In 2017, it became **India's first payment app to cross over 10 crore app downloads**. The same year, it launched Paytm Gold, a product that allowed users to buy as little as ₹1 of pure gold online. It also launched Paytm Payments Bank and “Inbox” a messaging platform with in-chat payments. By 2018, it started allowing merchants to accept Paytm, UPI and card payments directly into their bank accounts at 0% charge. In January 2018, it entered into a joint venture with Alibaba Group-owned gaming company A GTECH Holdings to launch Gamepads, a mobile gaming platform. It was rebranded as Paytm First Games in June 2019. In March 2018, Paytm Money was started with an investment of **₹9 crore** for investment and wealth management.

In March 2019, the firm launched a subscription-based loyalty program called Paytm First, and in May 2019, it partnered with Citibank to launch Paytm First credit card On 25 November 2019, Paytm raised **\$1 billion** in a funding round led by US asset manager T Rowe Price along with existing investors Ant Financial and SoftBank

Vision Fund. In July 2020, Tata Starbucks partnered with Paytm allowing its customers to order food online during the COVID-19 pandemic.

### RESEARCH OBJECTIVE

- ❖ Consumer satisfaction level toward GOOGLE PAY and PAYTM.
- ❖ To analysis the factor that influence consumer preference for GOOGLE PAY and PAYTM service.
- ❖ Analysis the problem while operating GOOGLE PAY and PAYTM.
- ❖ To understand the security system & features available on GOOGLE, PAY and PAYTM.

### REVIEW OF RELATED LITERATURE

In the „Journal of innovative management“ of march 2015 research on “TRENDS IN MOBILE PAYMENTS “by Denis Denney from National University of Ireland, Galway and David Sammon from University College Cork, says that the adoption of e-payment and new way of doing businesses in the 21st century. They actually predicted in 2009 that within 5 to 6 years, 70% of people will change to m-payments\mobile payments.

As predicted, now everything is in our hands and banking is done within minutes saving time in this fast-moving modern world. This has reviews of many authors study and analysis and briefly explains not only the customers also many industries have been benefitted and interlinked their business and formed as an ecosystem. M-payments is the perfect example of the ecosystem as there are many stakeholders in the multiple industries such as consumers, merchants, mobile network operators, financial institutions, mobile device manufacturers, software and technology providers and regulators payments provides so much opportunity to all these stakeholders like it gives financial institutions an opportunity to reduce use of cash and to service the unbanked and non-banked communities.

It also says how all these slowly formed and entered onto each industry and joined them for the collective benefit. From a review paper of Priyanka Jain, a research scholar of the IIS University Jaipur, India on the topic “DIGITAL WALLET ADOPTION “says that the adoption of people’s method of purchase and payment from traditional to digital was rapid, the money speculation and corruption is the cause and reason for implement of demonetization. During this time initialization of the digital wallet was the best and the only option for the future of the market, business and people and to continue the circulation of money to some extent though economy faced many obstacles in mean time.

In the research paper, „A COMPARATIVE STUDY ON E-WALLETS: PAYTM ANDMOBIWIK“, by L. Praba and N. Valliammai from PSGR Krishama College for Women, Coimbatore explains the statistical results of the comparative study of morbific and Paytm. It also states the success of E-Wallets from the officials to local people, lending services even to small shops. It helps to purchase air tickets to grocery within a minute. The comparative study gives the pros and cons of morbific and Paytm from their basic service to high security.

As the smartphone technology increases so is the e-payment method going to reach its heights. The users just need to install the software in their smartphone and give their bank details and to make sure they are secured so they could pay through online wherever they go shopping. It also acts as credit\debit cards which is even more convenient to the users and no need to carry the cards. Though this software is advanced its quite simple to use and that is why people unanimously supported and the user count had topped the charts. All the shops in every region have this facility and main reason is no need to carry money always everything is done virtually.

**Dr. Shuchi Singhal, Priyanka Jain :** Electronic commerce (ecommerce) continues to have an impact on global business, but mobile apps and technology have begun to focus more on mobile banking, digital note keeping, m-commerce, and wireless internet. Against this backdrop, the digital notecase (e-wallet) has developed as a replacement distribution channel, despite the lack of research into its acceptance. As a result, the current study examines the majority of existing research on mobile banking and digital notecase use. It also emphasises the buyer’s perspective on the use of an online purchase. Electronic Payment System (EPS): Benefits, Challenges, and Security Concerns, Muddassir Masihuddin, Burhan UI Islam Khan, and Rashida. Olanrewaju (2017). The planned study will also assess the adoption of e-payment systems and the resulting influence on a country’s economy. Options/Statistical Analysis: The purpose of this paper was to learn about different online payment methods. IN her research paper “Adoption of Digital Notecase by Shoppers,”

**S. Singh:** Discussed about the digital payment modes in India. The main focus was on the customer perception and the factor that put a great impact on the adoption of digital payment system. It was found that the adoption of digital payment system is mostly affected by the education level of the customer. If the education of a person



is higher, he will know the benefits of this system and its usage will be higher. But some other factors like age, gender, annual income do not put affect the use of digital payment system.

**RESEARCH METHODOLOGY:**

Primary and secondary data are used to collect a relevant data.

**Primary data** was collected through survey and questionnaire structured was prepared to collect a relevant primary data. With the help of google form a relevant data is collected for present research. The questionnaires are relevant for adolescent age group to senior age group.

**Secondary data** was collected from various sources like-

- Webstie.
- Social Media.
- Case Studies.
- Market Report.
- Articles.

By examining these sources. I aimed to gain a deeper understanding of how PAYTM and GOOGLE PAY effectively promote their service and engage with their target audience. This analysis helps shed light on the methods these companies employ to stay ahead in the rapidly evolving landscape of digital payments.

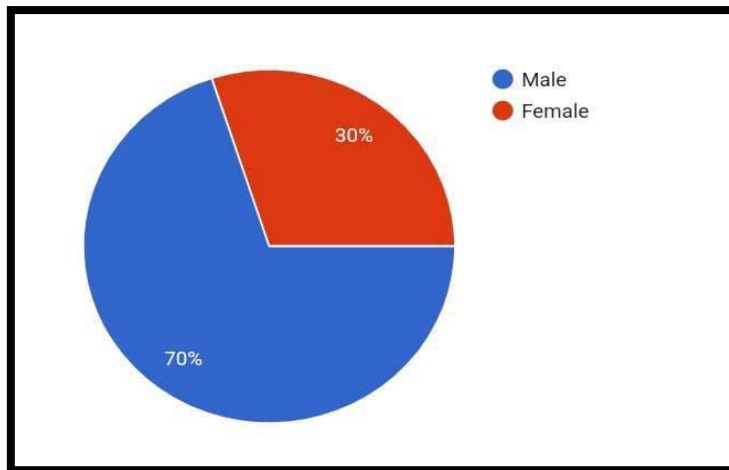
**ANALYSIS AND INTERPRETATION OF DATA:**

The study was conducted on a sample of adolescent age group to senior age group in “THANE CITY” and “MULUND” residential area located in “MUMBAI”. Survey was conducted through a google form questionnaire among the age group of “Adolescent To Senior”.

**Table No. 1** Showing Gender Wise Calculations Of The Respondents.

<b>Gender</b>	<b>Percentage</b>
Male	70%
Femal	30%

**Chart No.1:**



**Interpretation:**

From the above table, it is interpreted that 30% of the respondents are female and 70% of the respondents are male

**Inferance:**

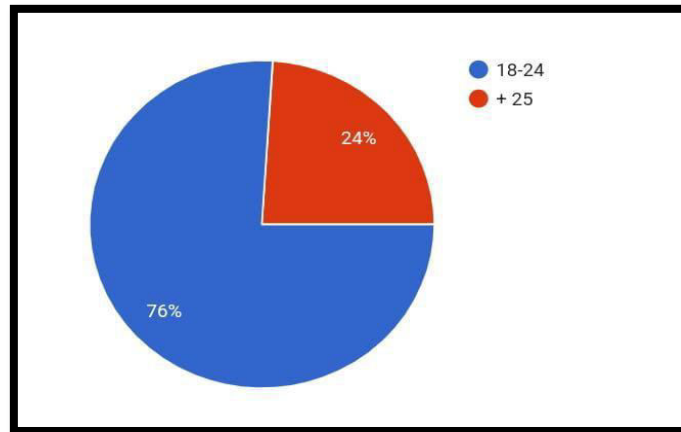
Majority (70%) of the respondents belongs to male category.

**Table No.2:** Age Wise Calculations of the Respondents.

<b>Age</b>	<b>Percentage</b>
18-24	76%
PLUS 25	24%



Chart No.2:



**Interpretation**

From the above table it is interpreted that 76% of the respondents fall under age of 18-24 and only 24% of the respondents fall above 25 ages.

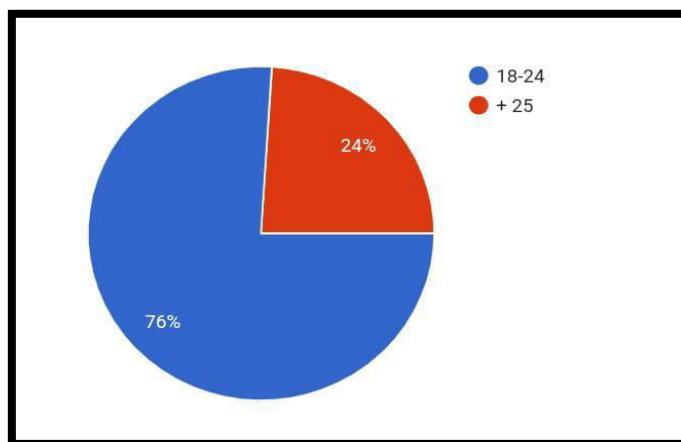
**Inference**

Majority (76%) of the respondents belongs to 18-24 category.

Table No.3: Application That They Downloaded First

Application	Percentage
Google Pay	76%
Paytm	24%

Chart No.3:



**Interpretation:**

From the above table it is interpreted that 76% of the respondents have downloaded Google Pay as their first digital payment application and only 24% has downloaded Paytm later.

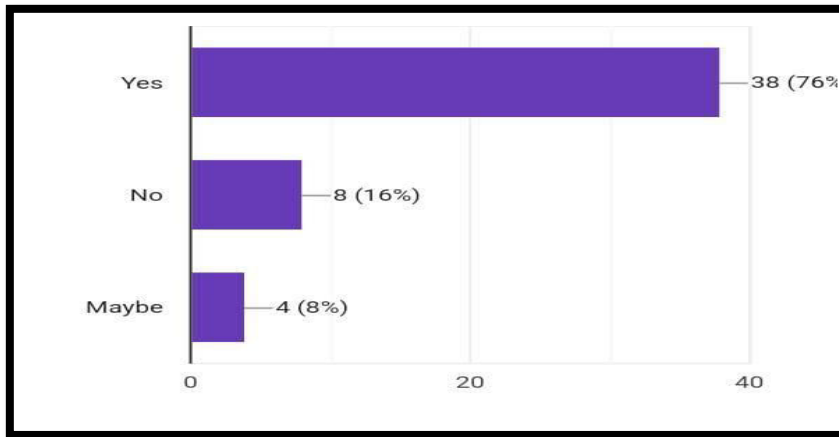
**Inference:**

Majority (76%) of the respondents are Google pay users.

Table No.4: Respondents “Does Google Pay provide a more straightforward and user-friendly interface compared to Paytm?”

Respondents	Percentage
Yes	76%
No	16%
Maybe	8%

Chart No.4:



**Interpretation:**

From the above table it is interpreted that 76% of the respondents are agree of the GOOGLE PAY user-friendly interface compared to PAYTM. And 16% are unagreed of it and 8% are unsure.

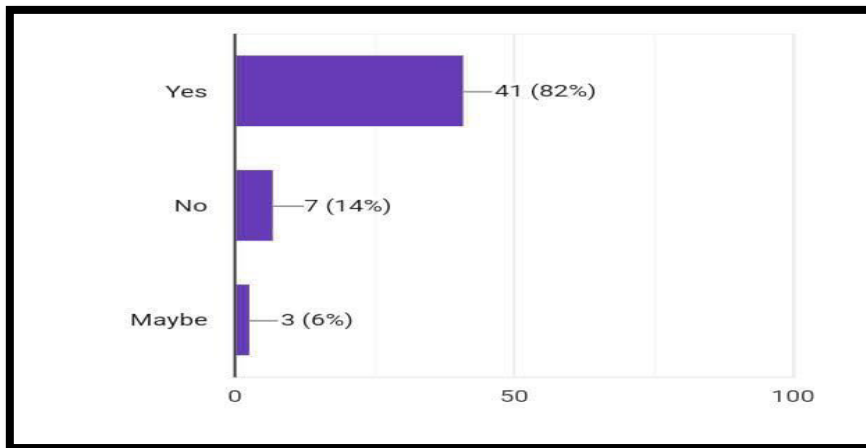
**Inference:**

Majority (76%) of the respondents are agree of Google Pay user-friendly interface compared to PAYTM.

Table No.5: Respondent “Does Google Pay Involves Kyc?”

Respondent	Percentage
Yes	82%
No	14%
Maybe	6%

Chart No.5:



**Interpretation**

From the above table it is interpreted that 82% of the respondents are agree of the GOOGLE PAY involves KYC, and 14% are unagreed of it and 6% are unsure.

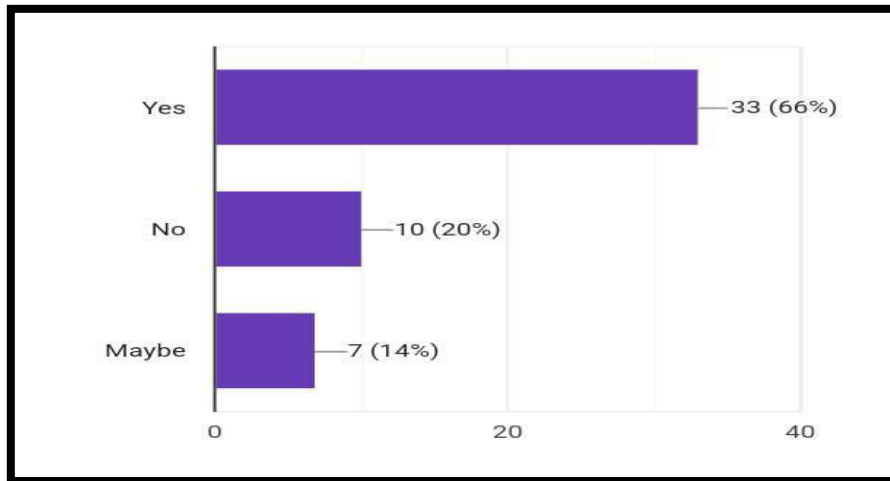
**Inference**

Majority (82%) of the respondents are agree of Google Pay involves KYC.

Table No.6: Respondent “Does Google Pay Have A More Features Then Paytm?”

Respondent	Percentage
Yes	66%
No	20%
Maybe	14%

Chart No.6:



**Interpretation**

From the above table it is interpreted that 66% of the respondents are agree of the GOOGLE PAY have a more features then PAYTM and 20% are unagreed of it and 14% are unsure.

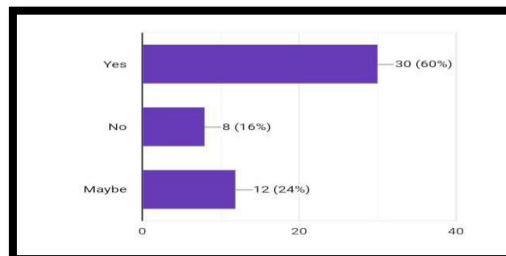
**Inference**

Majority (82%) of the respondents are agree of GOOGLE PAY have a more features then PAYTM .

**Table No.7:** Respondent “Is Paytm Widely Recognized For Its Cashback And Promotional Offers, Making It Potentially More Attractive To Users Than Google Pay?”

Respondent	Percentage
Yes	60%
No	16%
Maybe	24%

Chart No.7:



**Interpretation**

From the above table it is interpreted that 60% of the respondents are agree of the PAYTM widely recognized for its cashback and promotional offers, then Google Pay and 16% are unagreed of it and 24% are unsure.

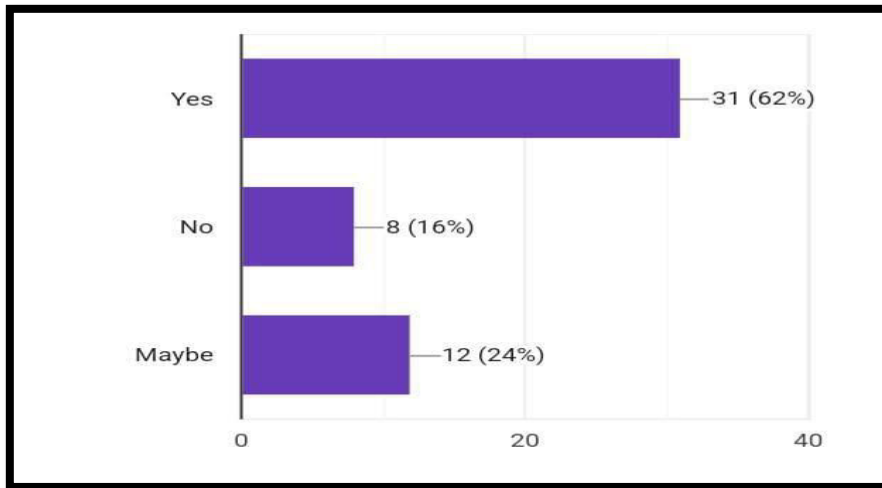
**Inference**

Majority (60%) of the respondents are agree Paytm widely recognized for its cashback and promotional offers.

**Table No.8:** Respondent “Does Google Pay Have A Better Reputation For Its Smooth Integration With Both Android And Ios Devices Compared To Paytm?”

Rerspondent	Percentage
Yes	62%
No	16%
Maybe	24%

Chart No.8



**Interpretation**

From the above table it is interpreted that 62% of the respondents are agree of the GOOGLE PAY have a better reputation for its smooth integration with both Android and IOS devices compared to PAYTM and 16% are unagreed of it and 24% are unsure.

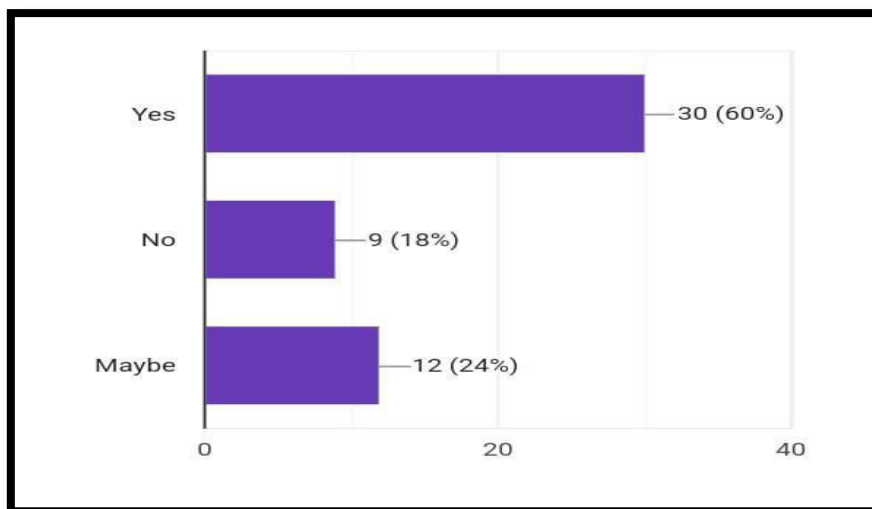
**Inference**

Majority (62%) of the respondents are agree GOOGLE PAY have a better reputation for its smooth integration with both Android and IOS devices compared to PAYTM .

**Table No.9:** Respondent “Is Paytm More Commonly Used For Peer-To-Peer Money Transfers Among Its User Base Than Google Pay?”

Respondent	Percentage
Yes	60%
No	18%
Maybe	24%

Chart No.9:



**Interpretation**

From the above table it is interpreted that 60% of the respondents are agree of the Paytm more commonly used for peer-to-peer money transfers among its user base than Google Pay” and 18% are unagreed of it and 24% are unsure.

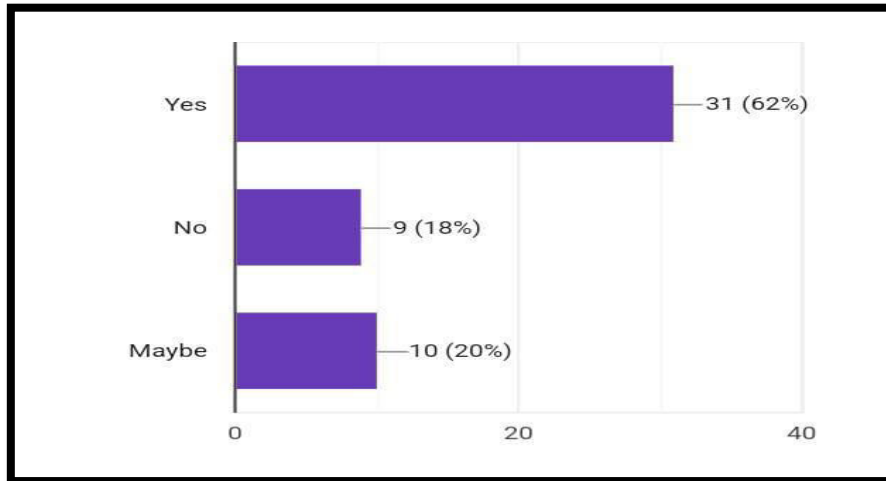
**Inference**

Majority (60%) of the respondents are agree Paytm more commonly used for peer-to-peer money transfers among its user base than Google Pay”.

**Table No.10:** Respondent “Does Google Pay provide a more secure environment for users to store and manage their financial information compared to Paytm?”.

<b>Respondent</b>	<b>Percentage</b>
Yes	62%
No	18%
Maybe	20%

**Chart No.10:**



**Interpretation**

From the above table it is interpreted that 62% of the respondents are agree of the GOOGLE PAY provide a more secure environment for users compared to PAYTM and 18% are unagreed of it and 20% are unsure.

**Inference**

Majority (62%) of the respondents are agree GOOGLE PAY provide a more secure environment for users compared to PAYTM.

**CONCLUSION**

It provides a comprehensive understanding of the marketing strategies of Paytm and Google Pay and their implications in the digital payment industry. By examining these strategies in detail, we gain valuable insights into the dynamics of the digital payments market and the strategies employed by industry leaders to stay ahead in this rapidly evolving landscape.

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A STUDY OF WORKING WOMEN INVESTMENT PLANS IN MUMBAI CITY

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ABSTRACT

The working women are well aware of the investment plans, each and every woman having different views on awareness altitude about the investment plans. The core study that their large number of women with a multiple interest of yearly income and investment among the working women in study area. As women have slowly taken part in various sectors, they have started taking essential decisions relating to investment as well. Many working women save funds, which are invested in various investment avenues, which in turn leads to capital formation in the economy and growth of the nation.

**Data Sources:** The data collected through primary and secondary resources. The primary data source is collected from the responses of working women through the google form questionnaire and taking interview of same respectively. The secondary source of data is gathered from literature survey, journals, periodical, text books, internet.

**Keywords:** Investment Preferences, Women and Awareness.

INTRODUCTION

Investment is an important economic activity of the country, which stems from income and savings and stimulates capital formation in the nation. The best investment options for women depend on your individual goals and risk tolerance. When choosing, consider factors like investment horizon, risk tolerance, and financial goals.

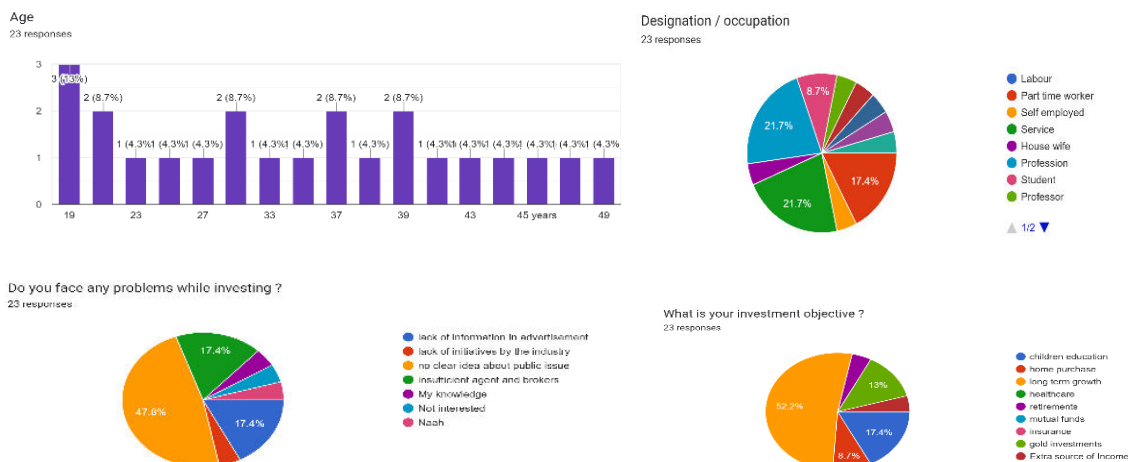
OBJECTIVE

- To find out the awareness level of investment plans among every type of sector working women
- To study the awareness level investment avenues among the working women.
- To examine the association between Annual income and investment among the working women

RESEARCH METHODOLOGY

Method 1

The Investment Plans of working women in Mumbai were examined with the help of a well-structured google form questionnaire. The data was collected from working women in Mumbai. The sum of percentage assigned to various investment plans was used in order to analyse the collected data. This working women coming from the different categories of the education like Doctor, Government servants, Education Faculties , Make up artist , tailor , house made , blue collared job sectors ,etc

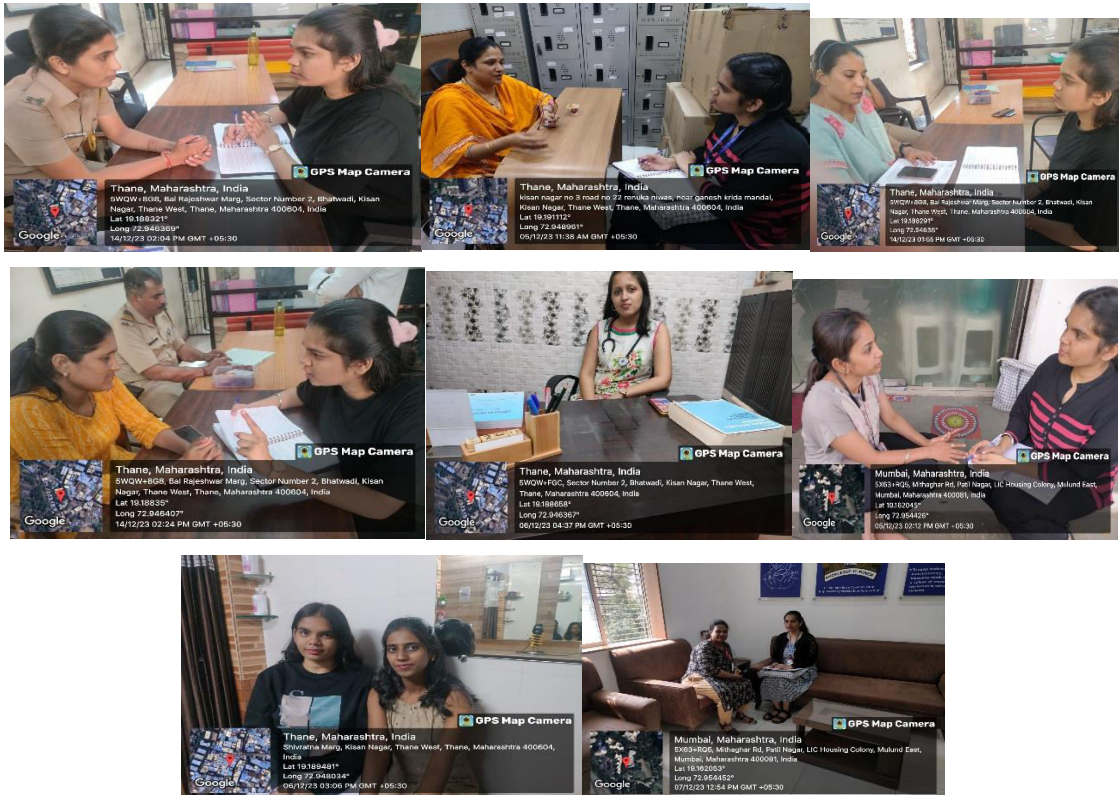


Method 2

In this Method the data was collected from different working women profession by taking their one formal interview. Through these questions the women opened up upon their investment patterns effectively. Many of



women have a multiple investment plans like self-help group, gold investment, property , LIC , Bank deposits ,mutual funds , recurring deposits , investing in business ,etc.



**Name’s Interview of working women:**

1. Dr. Pradnya Shanbhag (HOD Of Pharmacist Department in OCP College) (20 years work experience)
2. Adv. Gauri P Pai (Assistant Professor Department of Commerce and Management in VPM R Z Shah college) (14 years work experience)
3. Mrs. Naina Bansode (Head Constable of Shree Nagar Police Station) 19 Years work experience)
4. Mrs. Archana Gavade (Head of Women police) (13 Years work experience)
5. Mrs. Prajakta Khebadepatil (Police Constable ) ( 2 Years Work experience )
6. Mrs. Deepa Khushal Hanchate (Beauty Salon Owner) (17 years work experience)
7. Mrs. Seema Iengale (Tailor) (8 years work experience)
8. Miss. Shreya Khedekar (Beautician) (3 years’ experience)
9. Dr. Bhavini Dand (Professor) (11 years experience)
10. Dr Sanjana Shinde (Dr Sanjana Shinde) (4 years work experience)
11. Mrs. Parvati Patil (Teacher) (14 years work experience)
12. Mrs Chetana Bhosale (Teacher) (21 years work experience)
13. Mrs. Varsha Aarote (Head Manager of Knowledge Classes) (15 years work experience).

**Analysis of Survey**

- Women Are Well Aware About Investment Platforms.
- Some Women Are Afraid And Have Low Confidence While Investing Money.
- Most of The Women Are Not Having A Technical And Coreect Knowledge About Financial Platform.
- Need To Spent Money on Development of Skills.
- Need To Seek For Investment Opportunities And Its Utilization.
- Real Estate Investment Is Best.

**CONCLUSION**

After analysing all data, it could be concluded that women are not aware about financial platforms. after 12<sup>th</sup> we all are well matured with society concept and ethics, so from 1st year of college in each and every department we can start one additional course which is investment and financial related with practical knowledge conducted by expert teachers. This will be included regular fees of department programs. exams to be conducted with credit points in every semester and make advance syllabus. By doing this we will be well aware about all financial and investment platform with correct knowledge. This course education will be beneficial for both men and women.

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**ATTITUDE TOWARDS ARTIFICIAL INTELLIGENCE AND ITS RELATION TO ACADEMIC SELF-CONCEPT OF STUDENTS****Pritika Naik Yashika Dalvi and Dr. Aarohi Khar**

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**ABSTRACT**

*With the increased use of technology in most fields today, it is important to study its potential effect on humans. The use of technology in education facilitates learning, but it is also important to understand its effects on the student's overall development/ well-being. Research studies have shown that use of technology can have a positive impact on a student's self-efficacy, achievement and motivation, among other factors. This current study specifically aims to understand whether the attitude towards AI and use of its tools and technologies by students, in education, is correlated with their academic self-concept. A quantitative survey was conducted using two standardized tests, The General attitude towards artificial intelligence scale and Academic self-concept scale, to measure attitude towards AI and academic self concept, respectively. Around 200 degree college students from colleges belonging to different regions in the Mumbai metropolitan area were surveyed. A correlation was done to understand the relationship between the two variables studied here. Findings revealed the most used AI software and the nature of relationship between use of AI and academic self concept. This research contributes valuable insights into the correlation between students' engagement with AI for educational purposes and their academic self-concept, informing sustainable educational practices.*

*Keywords: artificial intelligence, education, attitude, academic self-concept, sustainable*

**INTRODUCTION**

The growing use of computers and technology has paved the way for the concept of Artificial Intelligence (AI). Artificial Intelligence, a term coined by Stanford professor John McCarthy in 1955, was defined by him as "the science and engineering of making intelligent machines". (McCarthy, Minsky, Rochester, and Shannon; 1955). However, there is no one definition of technology. According to Ma W. et al., 2015, AI is the "field of computer science dedicated to solving cognitive problems commonly associated with human intelligence, such as learning, problem-solving, and pattern recognition." The application of AI in everyday life changes the ways we look for information, how we communicate with people, and how we behave (Chassigno, Khoroshavin, Klimova, Bilyatdinova; 2018). The field of education is not an exception to this change. The use of AI in education could therefore have a great impact on the academic behaviour of students as well (Nwana, 1990).

Self-concept is defined as "the totality of an individual's thoughts and feelings having reference to himself as an object." (Rosenberg, 1989). Including AI tools in education and academics has been seen to have an impact on the academic self-esteem and self-efficacy of students. It has been shown that technology can have a positive impact on student achievement and student motivation

(Wenglinsky, 1999; Becker, 1999). Self-efficacy is the sense of confidence one has about their performance on specific tasks (Clark, 2003). According to a study by Kevin Clark (2003), after the use of AI tools in education, the self-efficacy amongst African American children in the post-test survey tended to be higher than indicated in the pre-test survey.

Self-esteem is also said to be an evaluative aspect of self-knowledge, which refers to what people believe they are and how competent people believe they are (Brown, 1998, Tafarodi and Swann, 1995). Findings of a study by Margetts, Hatzigianni (2012) state that, computer use enhances self-esteem, especially for children with access to computers both at home and in preschool and the first year of schooling.

Academic self-concept (ASC) can be defined as one's academic self-perceptions or one's perception of one's general ability in school (Shavelson et al., 1976). It influences how students create representations of themselves in the academic settings, in relation to others. Yu Wei Chu (2002) reported that self-esteem scores were positively correlated with specific self-concept scores. Overtime, various scales have been developed to measure this construct across various cultures (Liu and Wang, 2005., Ordaz-Villegas et al, 2013., Iyengar, et al., 2021), one of which has been used for this study (Academic self-concept scale).

Studying how the use of technology in education affects the students as well as all the other benefactors can help us realize its potential. The use of technology in education has now given

space to accommodate AI in education (AIEd) globally. However, certain studies have shown that there is a lack of understanding among youth with respect to AI (Joseph, Jakob, Harikrishnan, 2023). Males are seen to have a better understanding of AI as compared to females, possibly since the field of AI has been predominantly governed by men. The study also distinguishes between different fields of study, saying, students studying science and technology were found to possess greater knowledge compared to those from commerce, medicine, and social sciences, even though students from all fields show a keen interest in learning more about the emerging field. A nationwide survey done on Lebanese medical students revealed that AI education can be integrated in the medical school curriculum to boost both the knowledge and attitudes of such individuals towards AI (Daher, Ghanem, & Khater, 2022).

AI technologies such as machine learning, language processing, etc are increasingly used in various fields of education (Lu Yu., Ma Anyao., & Pengpeng; 2021). It is seen that youth using AI tools for educational purposes are also deliberating on ethical considerations and implications of the future of AI in society. People also believe, centring themes of employment, that use of AI would lead to loss of human connections (Teng et al., 2022). Regarding the use of AI tools and attitude towards AI, a positive correlation has been found between the two (Jönsson, 2021).

AI, in the past, has also been studied with respect to psychological wellbeing. Various studies have concluded that use of AI in an educational setting, has a direct impact on the self-efficacy of students (Durak, 2023). Parsakia (2023), has discussed how educational learning with an AI based chatbot improves learner's self-efficacy. Self-concept and self-esteem, both being constructs of self, are found to be closely related and play a momentous role in personality (Greenwald, Bellezza, & Banaji, 1988). According to Franken (1994), people who have high self-esteem tend to possess a well-defined and distinct self-concept. Raeisoon has emphasized on a positive correlation between self-esteem, academic self-concept, and academic success of students. Yu Wei Chu (2002) reported that self-esteem scores were positively correlated with academic self-concept scores. Srivastava and Joshi (2014) in their study have also found a strong correlation between academic self-concept and self-esteem of adolescents. The use of AI can therefore have an impact on aspects of self, especially in adolescents and young adults. Based on these past researches, this study aimed to understand which AI tools are used by students in Indian urban settings like Mumbai, time spent using AI for educational purposes, for what purpose do students use AI the most and whether there is a direct correlation between the attitude towards AI and Academic Self-concept of university students.

## METHODOLOGY

This research was a quantitative, correlational study. The relation between the variables, Academic self-concept and Attitudes towards AI, was studied. Additionally, the researchers studied the use of AI in terms of time spent and types of preferred AI tools used for various academic purposes.

### Hypothesis

*Null Hypothesis* - There is no correlation between the attitude towards Artificial Intelligence and Academic self-concept of university students.

*Alternate Hypothesis* - There is a correlation between the attitude towards Artificial Intelligence and Academic Self Concept of university students.

### Sample

There were 203 participants in this study. The target population was university students. The sample considered for this research was students from institutions in the Mumbai Metropolitan Region, pursuing their bachelor's or master's degrees.

### Tools

The questionnaire contained the following standardized scales:

1. *The General Attitudes Towards Artificial Intelligence Scale (GAAIS) by Schepman and Rodway, 2022.*

This is a 5-point Likert scale. It contains 20 items with two subscales, Positive General Attitudes towards AI (8 items) and Negative General Attitudes towards AI (12 items). internal consistency for each subscale being,  $\alpha=0.88$  (Positive GAAI),  $\alpha=0.82$  (Negative GAAI) with overall convergent and discriminant validity.

2. *The Academic Self-Concept Scale (ASCS) by Reynolds, 1988*

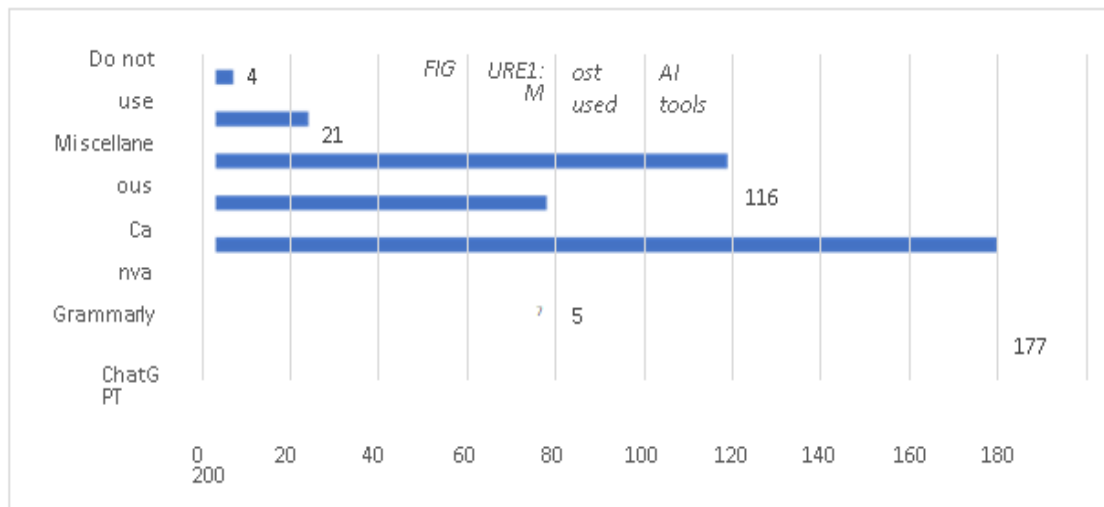
This is a 4-point Likert scale, It contains 40 items and shows a good internal consistency,  $\alpha=0.91$  (Reynolds et al, 1980) and convergent and discriminant validity (Reynolds, 1988).

**Procedure**

The data for this research was collected online, through a Google Forms survey, which was circulated via social media and in-person contact. A few questions related to the use of AI in academics were added. This was done to understand whether there was any relation between the use of AI and attitude towards AI and academic self-concept, and to provide insights on the purpose of AI use. The data collection was done between the months of December 2023 and February 2024. Data calculation was done using the Microsoft Excel software. Correlation between attitude towards AI and academic self-concept was calculated using Pearson r. Descriptive analysis was done of types, duration and purpose of AI used.

**RESULTS**

Several findings have come up while understanding the relationship between the attitude towards AI and Academic self-concept across various variables such as gender, educational streams, and grades. Additionally, which AI tool is used the most and for what purpose are the AI tools used by university students, is also measured.



Majority (91.6%) of the sample reported using AI software for educational purposes, with Chat GPT being the most used one (87.2%), followed by software such as Canva (57.1%) and Grammarly (36.9%).

The use of AI was marked highest for the purpose of “influencing an individual’s confidence in their academic pursuits” (68%), with “using it to generate additional personalized study resources” rated as the second highest (67%) use.

It was also observed that, on an average, students with higher grades had a slightly increased weekly usage of AI software (2.31 hours) as compared to students with lower grades (2.02 hours). This demonstrates that students with higher grades spend slightly more time weekly using AI for educational purposes, though these findings were not found to be statistically significant. Similarly, though not statistically significant, students from the science field show a slightly higher weekly usage on average (2.71 hours), followed by commerce students (2.21 hours) and arts students (2.11 hours).

	R (Gaais And Ascs)	Stream	R (Gaais And Ascs)	Grade Group	R (Gaais And Ascs)
<b>Overall</b>	<b>0.2127*</b>				
		Arts	-0.1096	Below B,B, B+	0.4738**
<b>Gender</b>					
		Commerce	0.4687**	A, A+, O	0.1574
Male	0.3187*				
		Science	0.4714**		
Female	0.1796*				

**Figure 2:** Correlation among three variables – Gender, Stream and Grade Group and overall correlation

A correlation between the General Attitude Towards Artificial Intelligence Scale (GAAIS) and Academic Self-Concept Scale (ASCS) was done and a relationship of varying strength was found between them based on comparisons of different variables. Overall, a weak positive correlation was found between the two variables,  $r = 0.2127$ . The correlation was found to be statistically significant, at 0.05 confidence level. When the correlation between the two variables were looked at specifically in males ( $M = 0.3187$ ) as compared to females ( $F = 0.1796$ ), the results were significant for the current sample. The strength of the correlation moderately varied between the different educational streams, with Arts = -0.1096, Commerce = 0.4687 and Science = 0.4714. Correlations for different streams, except arts, were found to be statistically significant. A major difference in strength of correlation can be seen based on the grade groups of students, where scores of students with lower grades showed higher correlation (0.4738) between the two variables, as compared to those scoring higher grades (0.1574). Out of these correlational values, the one for students with lower grades was found to be statistically significant at 0.01 confidence level.

## **DISCUSSION**

Artificial intelligence and its use in education has grown at an extremely rapid pace in the last few decades. This paper aimed to study the correlation between attitude toward AI and academic self-concept across various variables. The results have been discussed in the following sections.

### **Most used AI tools**

The findings suggest that the most used AI tool among college students is ChatGPT followed by Canva and Grammarly. Various other software is also used for different purposes, like Duolingo, Photoshop, Bard AI, etc. ChatGPT is primarily used for language generation, understanding, and translation. It could also be used for content creation, improving conceptual understanding and more. Canva is used for designing purposes whereas Grammarly for evaluating the grammatical structure of written content. For what purpose do students use AI brings us to the next section.

### **Purpose of use of AI**

Based on the responses given by the participants, findings reveal that AI is used the most for influencing an individual's confidence in their academic pursuits. This demonstrates the reliance on AI for enhancing students' belief about performing a task and achieving academic goals. Additionally, AI helps students to personalize their learning experience, get additional information on topics of interest, and understand complicated concepts in a comprehensible manner. Students also believe that AI provides them with personalized learning recommendations based on their strengths and weaknesses.

AI is also used for language learning skills, AI-driven tutoring systems and scheduling and organizing study material. Students also collaborate with peers using AI enhanced tools for group projects or study sessions.

### **Correlation data**

The findings suggest a weak positive correlation between GAAIS and ASCS, but the correlation is statistically significant for the given sample. This implies that there might be a link between the two variables. Attitude towards artificial intelligence could be considered as a factor related to the academic self-concept of college students according to this research. Additionally, there are various variables that influence one's attitude towards AI, and naturally its use, such as the field of study, as seen in this study's results as well as past research (Hajam, Gahir, 2024). Academic self-concept is influenced by a couple of factors like socio-economic status (Chevalère, Cazenave, et al.), democratic parenting, learning motivation, peer relations, etc (Ningsih, Triyono, Ramli, et al.). The effects of such factors on the Academic self-concept of students may have influenced the results of this study.

An analysis based on gender was done, where the findings revealed aslight difference between the two genders, wherein, men showed a higher correlation between the two variables than women. Males were seen to have better understanding of AI as compared to females, possibly because the field of AI has been predominantly governed by men (Daher, Ghanem, & Khater, 2022), which could also explain the findings.

The analysis done on the basis of the different educational streams namely, Arts, Science, and Commerce, exhibited a weak negative correlation among Arts students, and a moderate positive correlation in both commerce and science students. These results show statistical significance. Students from the field of science and technology are seen to have a better understanding of AI as compared to commerce and social sciences (Daher, Ghanem, & Khater, 2022). On an average, science students showed a slightly higher use of AI possibly due to the inherent exposure in academics. The higher use of AI by science and commerce streams

as compared to students from the arts stream (Garrel & Mayer, 2023) could be a reason for the positive correlation as the use of AI has been positively correlated with attitude towards AI (Jönsson, 2021).

Another variable that this study measures is the association of grades on the correlation between attitude towards AI and the Academic self-concept of students. Those with lower grades show a higher correlation as compared to those with high grades. This implies that low grader's attitude towards artificial intelligence and their academic self-esteem share a stronger relationship. High grader's attitude towards AI is weakly related to the academic self-concept of college students. The sample size of the low graders and the high graders were not balanced and that have influenced the findings.

## CONCLUSION

This study reveals a significant but weak positive correlation between attitude towards AI and academic self-concept within the given sample. Therefore, the null hypothesis is rejected. ChatGPT was found to be the most utilized AI tool. The highest rated purpose of AI was found to be "positively influencing students' confidence in academics." Differences based on gender, educational streams, and grades were observed.

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**IMPACT OF UPI/E-WALLETS ON SAVINGS AND EXPENDITURE PATTERN OF WORKING WOMEN****Nidhi Rai**

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**ABSTRACT**

*The impact of digitization on the Indian economy has been both positive and negative, with the digital revolution having a significant impact on the lives of Indian women. "Paperless, Cashless, Faceless" is one of the professed roles of Digital India, and this has led to the growth of UPI/E-wallets in the country. This study focuses on the impact of UPI/E-wallets on the savings and expenditure pattern of working women.*

*Finance is an essential domain of Indian women, and they participate in the administration of family finances, right from managing everyday expenses to determining investment decisions. Digitization of the economy has had a tremendous impact on the activities of Indian women. However, in general, women have shown the ability to adapt to the changing environment. The growth in the female literacy rate across the country has also had a positive impact on the digital adaptation of women.*

*The tech sector is the second-largest sector with women employees after agriculture, which shows how women have carved a place for themselves in technology-related fields. Working women have greater opportunities to learn and update themselves on digital transactions. Non-working women adapt out of necessity.*

*This article analyzes how digital money transactions have impacted the lives of women in the urban sector. It is interesting to see how UPI/E-wallets have changed the way women manage their finances. Digitization has made it easier for women to make transactions and has given them more control over their savings. Women are now more confident about making digital transactions and have adopted digital technology to manage their finances. Overall, digitization has had a positive impact on the lives of women, and it has made financial management more accessible to them.*

**INTRODUCTION**

The Digital India program was launched in India in July 2015 with one of its focus on digital empowerment of its citizens. "Paperless, Cashless, Faceless," is one of the professed roles of Digital India. Digitization has impacted almost all spheres of the Indian economy. It has had both positive and negative impact on the life of a commoner. Even more true, in the life of Indian women. This study seeks to gain insights into "Impact of Digital Money Transactions on Indian women". The article tries to assess whether women are prepared to adapt themselves to the happening Digital revolution. Finance is an important domain of Indian women. Indian Women participate in the administration of the family finance, right from managing everyday expenses, to determining investment decisions of the family. Needless to say, the Digitalization of Economy will have tremendous impact on the activities of the Indian women. In General we observe that women are able to accept the change in the environment. The growth in female literacy rate (65% in 2017-18) across the country has also created a positive impact on digital adaptation of the women. The tech sector is the second largest sector with women employees after agriculture. This shows how women have carved a place for themselves in technology related fields also. On the other hand there is great digital divide between men and women and even among women between the rural and the urban, working and non- working. Working women have greater opportunity to learn and update themselves on digital transactions, whereas Non working women adapt out of necessity. Therefore the adaption is slower. This article tries to analyze how the digital money transactions have impacted the life of the women (urban sector). The study was conducted in Chennai collecting primary data through a structured questionnaire from 50 women respondents, both working and non working. Analysis was done based on the response of the respondents.

**OBJECTIVES OF THE STUDY**

- To know the demographic profile of Indian women and their accessibility to digital payment methods
- To review the impact of cashless policy on the perception of women on digital transactions
- To identify most preferred digital payment modes based on their advantages.
- To identify association between Education, Employment and Digital adaptation.



**Tools Used**

- Percentage analysis of demographic variables.
- Freedman's ranking to identify the most popular payment method.
- Chi-square analysis to identify association between Education, Employment and Digital adaptation.

**REVIEW OF LITERATURE**

Review of various literatures on this topic related to the status of women in digital India, we find that there are different views and observations from different authors. While some highlight the gap in the digital divide between Indian men and women, others look at the positive impact that digital economy has created on women and how women are able to exploit the benefits of digital employment opportunities and support provided to them. Some of the important articles reviewed are discussed here to give a preview of the background of the study.

1. Sahil Kini in her E-paper titled „She is offline: India's digital gender divide' published in live mint epaper on 27/02/2018 has expressed concern over the digital gender divide. She opinions that the gender divide will not get addressed as early as it is expected. She also suggests that women in rural areas can be empowered by providing them mobile phones with net connectivity or a computer with connectivity as the first step. Government could start providing free phones with connectivity to high school students. Sahil Kini regards computer as bicycle of minds that will impact the digital divide to a large extent.
2. Aditi Bhowmick in her article „Opinion | digitally empowering women in rural India' published on 19/09/18 in live mint e-paper has cited many cases across rural India where mobile technology has transformed the lives of rural women in India. She is positive about the transition and adaptability of rural women to digital operations.
3. Federation of Indian Chambers of Commerce and Industry (FICCI),the women's wing of industry chamber FICCI said at a conclave of global Chief Information Officers on the theme of “Digital leadership and Inclusive Culture” Digital technology and several government policies are playing a significant role in empowering women in India. Encouraging and empowering women in the workforce is something the country needs to take up on a war footing. Digitization has helped women to be safer at work place as they are familiar with the usage of various apps on mobile.
4. Urvashi Aneja and Vidisha Mishra, in their research paper titled Digital India Is No Country for Women. Here's Why' published in „the wire. In“ in May 2017, have acknowledged that technology by itself is not empowering; it must be inter-linked with broader policy interventions across social sectors. A vast gender gap exists in the way technology is used in India.
5. Anita Gurumurthy & Nandini Chami have discussed in their paper titled „Digital India as if women matter' submitted to Heinrich Boll Foundation in August 2018 has highlighted that the Digital India program document does not contain any explicit reference to women empowerment and gender equality. And has recommended women's digital skilling, entrepreneurship and inclusion in welfare delivery systems.

**The Demographic Profile of the Women Respondents**

The sample comprised of 50 women respondents above 20 years of age in Chennai city, both working and nonworking

Age: 42% of the respondents belonged to the age group of 40-50 years and 30% belonged to 30-40 years of age.

Qualification: 60% of the women were Graduates, 12% Post graduates and 28% under graduates. Majority of them are educated.

Working/ Non working: 58% of the women respondents are working while 42% are not in employment.

Monthly Income of working women: 34% of the working women earn a monthly income of Rs. 20,000- 30,000 and 28% between Rs.30, 000 to 50,000 pm.

**Access To Digital Infrastructure:**

Majority of the respondents have access to digital infrastructure.

Android phone or IOS phones: 88%

- Mobile data packs: 94%
- WIFI facility: 92%



- Laptops: 94%
- Broad band facility: 96%

**Access to Digital Payment Infrastructure:**

Bank accounts and payment facility linked to banks are crucial to digital payment transactions. Majority of the respondents have access to online and mobile banking facility.

- Net banking facility 92%
- Mobile banking facility 94%

**The Perceptions of Women Respondents on Digital Payments**

The Perceptions of Women Respondents on Digital Payments:

- 74% of the respondents are satisfied with Digital Payment methods;
- 86% of them regard digital payments as Safe to transact.
- 92% of respondents agree that they would recommend digital payments to others.

**RESEARCH METHODOLOGY**

The study was conducted in Chennai collecting primary data through a structured questionnaire from 50 women Respondents, on working. Analysis was done based on the response of the respondents

**1. Research Design**

- The research will employ a quantitative approach to gather numerical data regarding the usage of UPI/e-Wallets among working women and its impact on their saving and expenditure patterns.
- A cross-sectional design will be used to capture a snapshot of the current situation.

**2. Sampling Technique**

- The target population will be working women aged 18-60 years who are actively using UPI/e-Wallets.
- A convenience sampling technique will be utilized due to the accessibility of participants.

**3. Sample Size**

- A sample size of at least 300 working women will be targeted to ensure adequate representation and statistical power.

**4. Data Collection**

- Primary data will be collected through structured questionnaires distributed electronically or in person.
- The questionnaire will consist of both closed-ended and Likert scale questions to capture usage patterns, saving habits, expenditure trends, and perceptions towards UPI/e-Wallets.

**5. Variables**

- Independent Variables: Usage of UPI/e-Wallets, demographic factors.
- Dependent Variables: Saving patterns, expenditure patterns.

**6. Data Analysis**

- Descriptive statistics such as frequencies, percentages, means, and standard deviations will be used to summarize the data.
- Inferential statistics such as correlation analysis, t-tests, and regression analysis will be conducted to determine the relationships between variables.

**7. Ethical Considerations**

- Informed consent will be obtained from all participants.
- Participant anonymity and confidentiality will be ensured.
- The research will comply with ethical guidelines and regulations.

**8. LIMITATIONS**

- The study's findings may be influenced by factors not accounted for in the research design.
- The results may not be generalizable to all working women due to the sampling technique used.

9. SCOPE FOR FUTURE RESEARCH

- Longitudinal studies could be conducted to track changes in saving and expenditure patterns over time.
- Qualitative research methods such as interviews could provide deeper insights into the experiences and perceptions of working women regarding UPI/e-Wallets.

10. Timeline

- Research Proposal: February 2024
- Data Collection: March-April 2024
- Data Analysis: May-June 2024
- Report Writing: July-August 2024
- Presentation and Submission: September 2024

11. Resources

- Human Resources: Researchers, assistants for data collection.
- Financial Resources: Funds for questionnaire design, data collection, analysis software, and report printing.

12. Dissemination of Findings

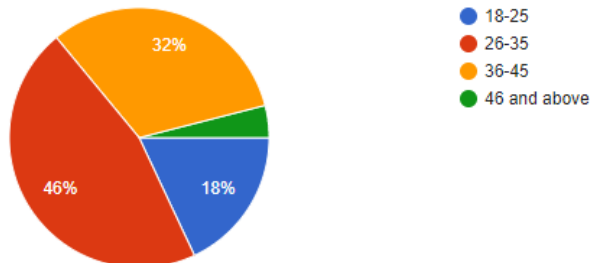
- The findings will be presented at conferences, published in academic journals, and shared with relevant stakeholders to contribute to the existing body of knowledge.

Data Analysis

1-

What is your age range?

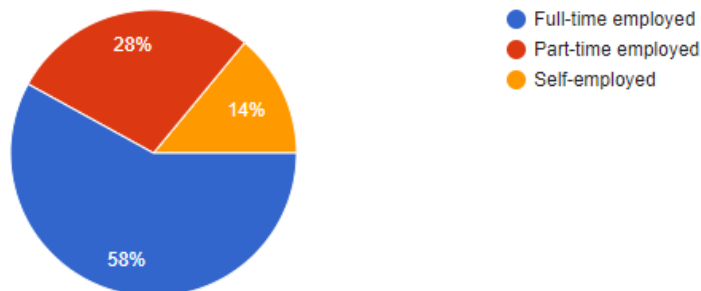
50 responses



2-

What is your employment status?

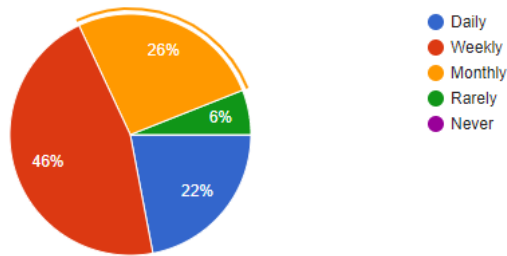
50 responses



3-

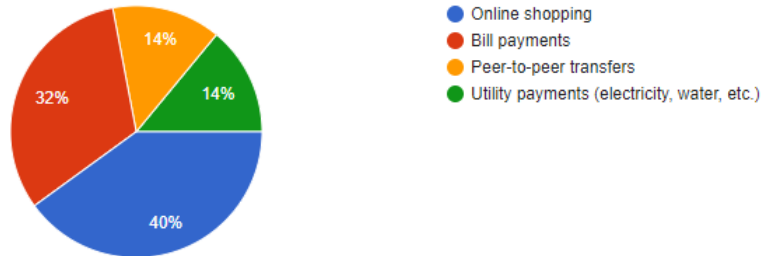
How often do you use UPI/e-wallets for making transactions?

50 responses



What are the primary purposes for which you use UPI/e-wallets?

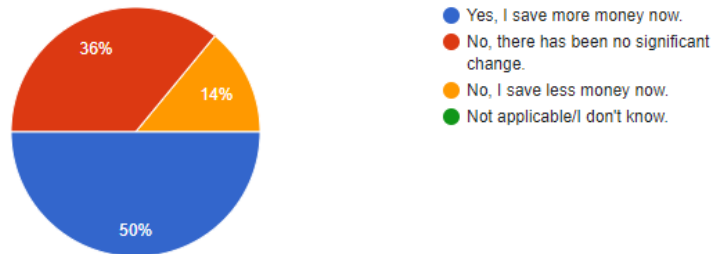
50 responses



4-

Since you started using UPI/e-wallets, have you noticed any changes in your saving habits?

50 responses



5-

6-

How do you think using UPI/e-wallets has influenced your expenditure patterns?

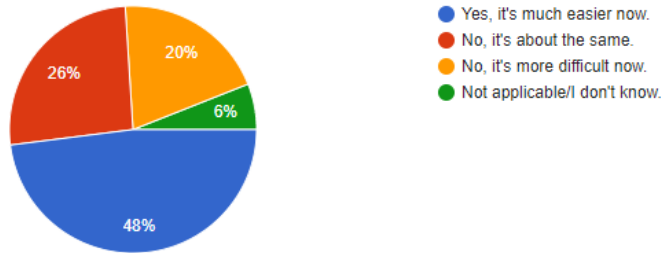
50 responses



7-

Do you find it easier to track your expenses since you started using UPI/e-wallets?

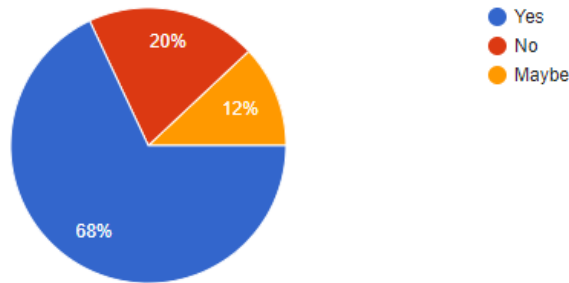
50 responses



8-

Have you experienced any security concerns or issues while using UPI/e-wallets?

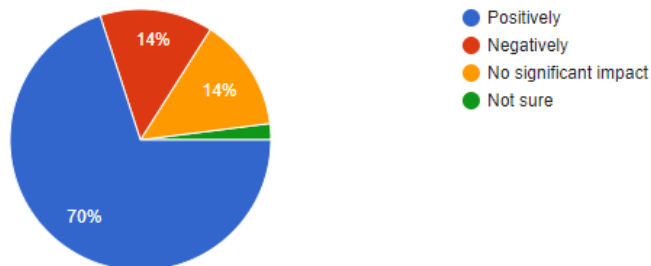
50 responses



9-

Overall, do you think using UPI/e-wallets has positively or negatively impacted your financial management as a working woman?

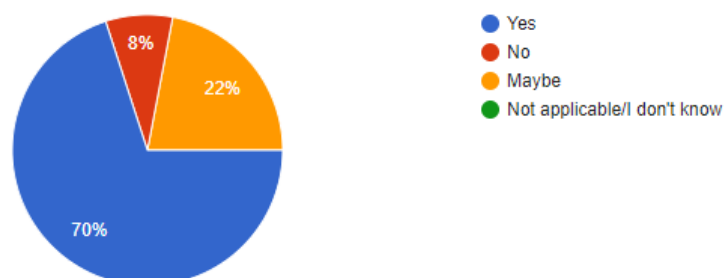
50 responses



10-

Would you recommend UPI/e-wallets to other working women for managing their finances?

50 responses



**Secondary Data**

- Look for journals focusing on finance, economics, or gender studies. Journals such as the Journal of Economic Behavior & Organization, Journal of Consumer Research, or Gender & Society might have relevant articles.
- Utilize databases like JSTOR, Google Scholar, or Pub Med to search for academic papers and articles on the impact of UPI/E-wallets on the saving and expenditure patterns of working women.
- Check reports from government agencies or central banks that may have conducted studies on financial inclusion, digital payments, or gender-specific economic behaviors. For example, in India, you might explore reports from the Reserve Bank of India (RBI) or the Ministry of Women and Child Development.
- Organizations like Pew Research Center, Brookings Institution, or RAND Corporation might have conducted studies or published reports on digital payments and their impact on different demographic groups.
- Companies like Nielsen, Deloitte, or McKinsey often publish reports on consumer behavior and digital trends, which may include insights on the usage of UPI/E-wallets among working women.
- Sometimes, online forums like or Quora can provide anecdotal evidence or personal experiences that can supplement formal research findings.

When accessing secondary data, ensure to critically evaluate the credibility, relevance, and regency of the sources to make informed conclusions. Additionally, if you're unable to find existing data, you might consider conducting your own survey or research study to gather relevant information on this topic.

**CONCLUSION**

Based on the survey of the 50 women in Chennai, the paper concludes with a positive note. The Response has been more in favor digital transactions. Women are more adaptable to the changes in the economy when comes to finance matters. Adaptation is higher among the working women than the non working. There is adequate access to digital infrastructure in the city and therefore the usage. Several papers reviewed have highlighted the digital divide among men and women in India. However this study has clearly shown that adaptability of women will not be a problem if the necessary infrastructure is available. The digital divide will reduce considerably. The Government should therefore aim at providing internet access through good service providers at lower costs to the rural women also. This will empower women across the country, increase their work force participation, improve literacy rates, and encourage entrepreneurial activities. Digitization is a boon to the women if properly implemented and women are prepared for the change. UPI/e-wallets provide working women with a convenient and efficient means of managing their finances. The ease of transactions allows for quicker payments and transfers, streamlining financial activities. The availability of digital payment platforms empowers working women to better track their expenses and savings. With features such as transaction histories and budgeting tools, they can gain insights into their financial habits and make informed decisions. The study suggests that the adoption of UPI/e-wallets may lead to changes in spending patterns among working women. The convenience of digital payments could encourage more frequent transactions and impulse purchases, potentially impacting overall expenditure. While digital payment platforms offer convenience in spending, they also facilitate savings through features like automated transfers to savings accounts or investment options. Working women may find it easier to set aside funds for future goals with these tools at their disposal. Despite the benefits, the study highlights the importance of financial literacy among working women using UPI/e-wallets. Understanding how to effectively manage finances, avoid debt, and maximize savings is crucial for making the most of digital payment platforms. Access to UPI/e-wallets can contribute to the economic empowerment of working women by providing them with greater control over their finances. By leveraging these digital tools, they can assert their independence and make informed financial decisions. While this study sheds light on the initial impact of UPI/e-wallets on saving and expenditure patterns, further research is needed to delve deeper into specific demographic factors, regional variations, and long-term effects on financial behavior. In conclusion, UPI/e-wallets play a significant role in shaping the saving and expenditure patterns of working women, offering convenience, enhanced financial management, and potential economic empowerment. However, their impact on spending behavior and the need for continued financial literacy underscores the importance of further study and education in this area.

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**SOCIAL MEDIA – AN INCREDIBLE MARKETING STRATEGY FOR GROWING ENTREPRENEURS**

**Ms. Raksha Rajesh Jaiswal [SYBMS (M)], Ms. Tisha Jiten Gosar (SYBBI) and Mrs. (Adv). Gauri Prashant Pai.**

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**ABSTRACT**

*“When you cease to dream you cease to live.”*

*-Malcolm Forbes*

*Incredible India the word itself describes about its people and their thoughts of the country. We have incredible things with us like different cultures, different languages, different religion , etc but we are united. Talking about entrepreneurs, Indian entrepreneurs face lots of challenges first is their own people, then lack of business knowledge and skills. But a young entrepreneur is not financially strong but his ambition is stronger than any thing in world. He has a will to improve, learn and dream to built an empire. The research is conducted to know the social media platforms which are being used by young entrepreneurs as a synergic marketing strategy. While conducting research which is based on mostly primary data we found that most of them are using social media as it is helpful to increase sales in lesser cost and improve working efficiency. We also found that they hesitate to promote it online because of not having proper knowledge of algorithms and scams which they have seen. The main goal of this research is to promote growing entrepreneurs and to build a path which will help their business promotion on social media.*

**INTRODUCTION**

Social media marketing (also known as digital marketing and e-marketing) is the use of social media—the platforms on which users build social networks and share information—to build a company's brand, increase sales, and drive website traffic. In addition to providing companies with a way to engage with existing customers and reach new ones, SMM has purpose-built data analytics that allows marketers to track the success of their efforts and identify even more ways to engage.

A young entrepreneur is someone having age of 15- 25 or lesser than that and have potential to implement innovation practically and generate profit. Designing and marketing new ideas, products and services, they take on the risk and potential rewards of owning their own startup. Many young entrepreneurs develop their business skills and secure funds or investments before they begin their first project. To promote and gain good number of customers social media is one of the unarguably best platform. It doesn't restricts the reach of market and connects worldwide. A new person in business have the best advantage to improve is social media marketing. Most of the businesses are on social media marketing but most of the young entrepreneurs don't have the quality to access because of not having proper knowledge and lack of trust on social media. Hence, a contrast still exists though we have exposure. We wish to provide implementable solution.

**Hypothesis**

1. Social media is best source of marketing.
2. It has the potential to make customers without any physical marketing.



**RESEARCH METHODOLOGY**

Our research methodology have primary and secondary data.

**Primary data-** using qualitative interview method and then an analysis is been made by conducting interviews of young entrepreneurs and their social media marketing strategy.

Name	Name of business	Type of business	Registered Business Yes/ No	Social media marketing used	% of revenue generated from social media	%Cost invested	Cost of Advertising	Do firm have its own social media account
Aryan Sudhan Arun	Mama would B proud	Jewellery business (aluminium and oxidised)	No	Instagram	80% from social media and 20% mouth to mouth	0% as it is promoted by friends and family social media influencers	0 rs	Yes
Tisha Jiten Gosar	The Fashion Closet	Gifts and showpiece	Yes	Instagram WhatsApp Facebook Telegram	Instagram -55% WhatsApp- 25% Facebook -15% Telegram – 5%	Instagram – 10%of sales WhatsApp – 4% Facebook – N/A Telegram – N/A	Instagram -1200/per month WhatsApp – N/A Facebook -180/per month Telegram – N/A	Yes
Devan sh Gosar & Sangeeta Gosar	Parshwa Homemate	Bathing and cosmetics	Yes	Completely based on social media ( Instagram, WhatsApp, Facebook, etc)	70% overall online platforms	10% of sales	700 to 1200 per month	Yes
Krishna Menon	Menon’s Eduworld	Education sector	Yes	Instagram and WhatsApp	45% of all	10% of sales	0 investment	Yes
Pranjal	Miclaya	Accessorie	No	Instagram	100%	800-1k	Rs320 per	Yes



Salvi	ngelo	s and ornaments		m based business		per month depending on trend	ad	
Vasudav Shetty and Saritha Shetty	Future Visions	Tax related services	Yes	No. As the business doesn't fits like on social media chances of losing customers	--	--	--	--
Muhammad Thakur	Cookies and bakes by M	Foods n Drinks	No	Instagram WhatsApp	30%	10% of sales from Instagram	Rs 100 per day	Yes
Yashaswini Dayan and Poojary	Kushi Caterers	Foods and party orders	Yes	About to start	--	--	--	Mostly yes
Prakash Tukshetty	Shetty tours and travels	Tourism services	No	Unaware about digital marketing and it's applications in Business promotion	--	--	--	--
Harish Poojary	Soft link system	Software services	Yes	Instagram Just dial	55%	8% Just dial Instagram - N/A	500 - 1k per month	Yes

**How they use ?**

**• On Instagram**

By asking influencers to put videos on their Instagram account of using product or service.

Creating promotional video with help of Canva and pixabay and uploading on business Instagram account.

Purchasing ad period on Instagram ( each pulse rate cost is charged).

**• On WhatsApp**

Sending product or service message, photos and videos to contact members.

Uploading WhatsApp Status.

Pay to WhatsApp channel eg. No one cares, cravings. for promotion.( Meme marketing method is more popular in this case).

**• On Justdail**

Mostly SEO is used.

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Purchasing place for recommendation list.

Even while using some ads are displayed as pop up videos or banner (guerrilla marketing skill) is used mostly they finance them.

### **Secondary data**

We have used some research papers, social media sites, etc for collection of secondary data.

#### **1. TWITTER**

Twitter uses short posts called “tweets” with text, images, animated GIFs, videos and links. You can use Twitter to connect with your audience through short yet valuable messages. Depending on the nature of your business, it may allow you to provide customer service, build brand awareness and look for topics and information related to your industry and target audience. A tweet can usually contain up to 280 characters.

#### **2. YOUTUBE**

YouTube is a streaming social media platform and the second-largest search engine next to Google. If your brand has the desire and ability to produce meaningful video content, YouTube should definitely be on your radar. With YouTube, you can explain complex topics, showcase interesting processes, promote the unique features of your offerings and so much more. It’s a great way to include videos in your marketing strategy.

#### **3. PINTEREST**

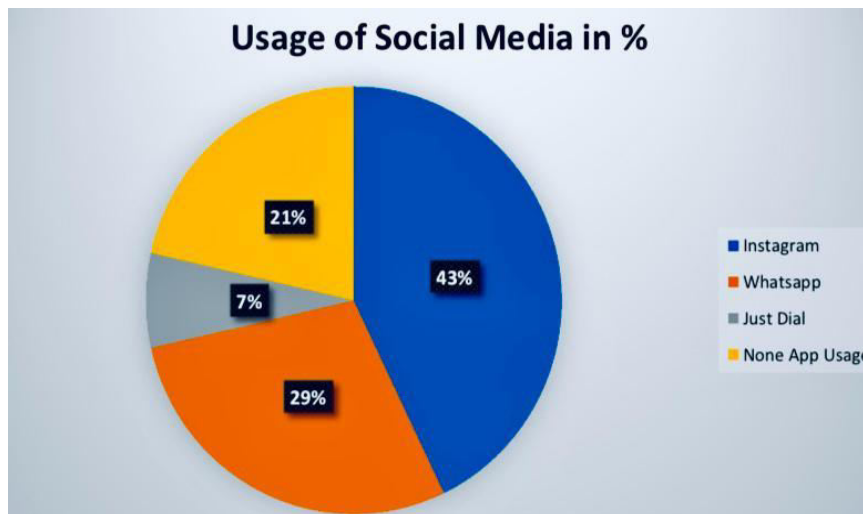
Pinterest is known as a “visual discovery engine” that inspires users. Users often search the platform for ideas that help them renovate their homes, take dream vacations, plan weddings and fulfill other dreams in their lives. If your brand provides products or services that can allow users to discover their dreams and achieve them, Pinterest is the way to go.

#### **4. LINKEDIN**

LinkedIn is a business networking platform that’s particularly useful if you’re a B2B business. It’s geared toward professionals and can give you the opportunity to share your industry expertise. You might also use it to promote job openings within your company, connect to your employees and even generate leads through paid ads.

### **FINDINGS OF RESEARCH PAPER**

1. Instagram is mostly used application for promotion.
2. Most of the business are completely based on social media since it’s a platform is not only for promotion but for doing business too.
3. Advertisement on social media is free or lesser than other IMC tools.
4. Some of entrepreneurs don’t feel that social media is for that business or are unaware of its algorithms.
5. The costing of each in percentage against revenue is mentioned.
6. Still all our entrepreneurs believe on mouth to mouth promotion as it helps to built unbreakable trust and bonding between customer and business so both PRs to be done for generating profits and Goodwill.
7. Social media helps to tap more customers and doesn’t restrict you in one area.
8. The methods mentioned is primary data are more helpful in a comparative way.

**Comparative pie chart of Social media apps used for advertising:****SUGGESTIONS**

1. Awareness should be made to promote use of social media marketing as we are in generation of people who have more virtual exposure.
2. Every coin has two sides, if mouth to mouth PRs built trust then social media makes new customers so not to depend on only one.
3. As per the changing trends things should be accepted and implemented too.
4. A main stream should be sought to bring balance of both types of PRs.
5. As the young entrepreneurs are new and ambitious help should be provided by B – schools, NGOs, experienced businesses and government startup India and Standup India schemes.

**CONCLUSION**

The Indian population is of young people and entrepreneurship is one of the best source to develop a nation. When ambition of youth comes with a Synergy of every aspects to make their dream a reality nothing can stop them to grow. With such ambitious entrepreneurs a country will grow and develop more.

Social media is not only a source of marketing but also a source to enhance the skills of entrepreneurs and people who are connected to it like content creators , editors, story writers and graphic experts.

Since, it's very important to built a path for entrepreneurs to leverage social media utility.

With this research our 2<sup>nd</sup> hypothesis is not as such true but when it's comes to globe connectivity then it is a big yes.

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Interview Glimpse-



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**SUGGESTION TO THE PROBLEM FACED BY GIG WORKERS IN MUMBAI****Ms. Reenu Yadav**

Assistant Professor, Thakur Ramnarayan College of Arts and Commerce, Dahisar (E)

**ABSTRACT**

*The gig economy has changed the face of work everywhere, offering opportunities and difficulties for employees, especially in big cities like Mumbai. This summary outlines recommendations for resolving the many issues that Mumbai's gig workers face. The recommendations, which are based on a variety of sources such as policy papers, expert opinions, and academic research, cover a wide range of topics, including supportive activities, policy reforms, and stakeholder collaboration. Establishing specialized support centers, encouraging gig worker cooperatives, building community-based networks, making healthcare and financial services more accessible, providing skill development programs, increasing public awareness, guaranteeing safety standards, funding research, and facilitating multi-stakeholder discussions are some of the important recommendations. These recommendations stress the significance of creating a more fair and encouraging work environment for gig workers.*

*Keywords: - Gig economy, Mumbai, Gig workers, Challenges, Suggestions, Policy reforms, Healthcare access, financial inclusion, Skill development, Public awareness, Safety standards etc.*

**INTRODUCTION**

The gig economy has grown significantly in the last several years, changing the face of traditional employment and giving people new options for flexible and independent work. Gig workers are essential in a number of industries, including freelancing services, delivery, transportation, and more, in the vibrant metropolis of Mumbai, where economic activity is varied and active. With a focus on the complexities of their working lives and the effects on their general well-being, this study intends to explore the many difficulties experienced by gig workers in Mumbai.

The various kinds of gig laborers

Mumbai has a thriving gig economy where different kinds of gig workers contribute to different industries and offer a range of services. In Mumbai, gig workers typically fall into the following categories:

- 1) First, ride-sharing drivers
- 2) Meal Delivery Riders: Gig workers who carry meals from restaurants to clients' doorsteps fall under this category. They use their personal bikes or scooters to work for companies like Uber Eats, Swiggy, and Zomato.
- 3) Independent contractors and freelancers: Experts including authors, programmers, graphic designers, and consultants who provide their services on a project-by-project basis. They frequently use websites like Fiverr, Freelancer, and Upwork to find job.
- 4) Home-Based Service Providers: People who work on a gig basis and offer services including house cleaning, pet care, tuition, and beauty services. They might use word-of-mouth or internet resources to locate customers.
- 5) Temporary Retail Staff: Temporary workers hired to handle spikes in demand during particular times of the year or occasions. Retail sales are included in this.

**OBJECTIVES**

This study focuses on the Suggestion to the problem faced by gig workers in Mumbai.

- 1) The aim of this study is to examine the issue of income stability encountered by gig workers and potential solutions.
- 2) The issue of social security and benefits for gig workers and its resolution.
- 3) To research the issues and solutions pertaining to the safety and working environment of gig workers.
- 4) To evaluate the gig workers' professional growth and skill improvement.
- 5) To evaluate the additional issues and remedies raised by gig workers.

**METHODOLOGY**

Secondary data served as the foundation for this investigation. The World Bank, the International Labor Organization (ILO), research articles published in journals and newspapers, and other national and international organizations' reports were among the sources from which the researcher gathered information.

**Mumbai's Gig Workers' Primary Concerns:**

1. **Stability of Income:** Because gig workers' earnings are so volatile, they frequently experience
2. **Social Security and Benefits:** Inability to receive paid time off, health insurance, and pension schemes.
3. **Workplace Safety and circumstances:** A concern about the workplace's safety and circumstances, which include extended workdays without scheduled breaks and physical risk exposure without proper insurance or safety precautions.
4. **Restricted access to resources:** Many gig workers in Mumbai might not have easy access to things like reasonably priced transportation, appropriate workplaces, or the tools and equipment they need to do their jobs well.
5. **Safety concerns:** Gig workers may be at risk for injury depending on the nature of their employment, particularly if they are required to work late or in strange places. This is especially valid for gig workers in the delivery and transportation industries.
6. **Social safety is lacking:** gig workers frequently

**Goals Focused on Finding Solutions**

- **Enhancement of wage Stability:** To lessen the impact of demand swings, create and put into place systems that guarantee gig workers a minimum wage.
- **Access to Social Security and Benefits:** Put up a plan to give gig workers access to social security benefits including paid time off, health insurance, and pension contributions.
- **Enhancement of Safety and Working environments:** Set guidelines for appropriate working hours, safe working environments, and required breaks. As part of this, safety gear and injury and accident insurance are provided.
- **Improvement and Clarification of the Regulatory and Legal Framework:** Collaborate with legislators to make clear the legal standing of independent contractors, with the goal of giving them protections akin to those afforded to regular employees while taking into account the flexibility of this type of work.
- **chances for Skill Development and Career Advancement:** Establish initiatives that provide training and chances for skill development to gig workers, enabling them to advance their careers both inside and outside of the gig economy.
- **Creation of an Equitable and Open Dispute Settlement Process:** Establish a mechanism that will allow gig workers to air complaints and conflicts and guarantee prompt, equitable outcomes.
- **Promotion of Digital Literacy and Financial Inclusion:** Provide gig workers with access to financial services and literacy programs to assist them better manage their income and savings, as well as programs that improve their digital abilities.
- **Gig Workers' Engagement and Representation:** Encourage the establishment of unions or collectives that can speak for them in talks with platform providers and legislators.
- **Creation of Sustainable Business Models:** Promote the investigation of business models by platform firms that are equitable to workers and economically sustainable, taking into account their rights and benefits.
- **Public-Private Partnerships for Worker Support:** Promote collaborations between governmental bodies, nonprofits, and commercial enterprises to establish support networks for independent contractors, including medical facilities, child care centers, and financial aid for higher education.
- **Technology for Good:** Make use of technology to provide platforms that allow employees to support and share resources with one another, as well as more equitable job distribution schemes and transparent compensation structures.
- **Advocacy & Awareness efforts:** Run efforts to educate legislators and the public about the difficulties gig workers experience and the necessity for all-encompassing solutions.

- Establish a structure for ongoing monitoring of how adopted solutions affect gig workers' livelihoods, and make necessary adjustments to tactics in response to feedback and evolving circumstances. This is known as the monitoring and evaluation framework.

### **CONCLUSION**

All parties involved must take thorough and coordinated effort to address the issues that Mumbai's gig economy faces. We can establish a more equitable and supportive environment for gig workers by putting a number of recommendations into practice, such as establishing support centers, encouraging cooperatives, building community networks, making healthcare and financial services more accessible, providing skill development programs, increasing public awareness, guaranteeing safety standards, funding research, and encouraging multi-stakeholder dialogues. To effectively address these issues and protect the rights and well-being of gig workers in Mumbai, policymakers, employers, gig platforms, civil society organizations, and gig workers themselves must work together. We can work together to create a gig economy that is equitable, welcoming, and powerful for everybody. Hard-hit sectors, particularly those in low- and middle-income nations, have a large percentage of workers in informal employment and restricted access to social security and health services. Workers are more likely to become impoverished and will have a harder time reclaiming their livelihoods during the recovery period if the right policies aren't put in place.

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**INCREDIBLE INDIA IN AMRIT KAAL: TO BE REALISED BY SELF-RELIANCE IN CONTAINER SHIPPING FOR INDIAN CARGO****Ms. Rupali Ghanekar**

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**ABSTRACT**

The “**Maritime Amrit Kaal Vision 2047**” was released and endorsed by the prime minister Mr. Narendra Modi on 23<sup>rd</sup> October 2023 while inaugurating Global Maritime India Summit 2023 in Mumbai.

The stated target is to be in the world’s top ten 10 by 2030 and top 5 by 2047. The Indian shipping fleet is currently ranked 18<sup>th</sup>. The next part of the battle is to ensure that effect is given to the suggestions in the Vision document and all the goals are met.

In shipping, the shortage of containers has severely impacted the Indian sea trade. According to the Federation of Indian Export Organisation set up under the Ministry of Commerce and Industry, the lack of containers has resulted in rising sea freight rates in the range of 300 per cent to 350 per cent. (Source: Economic Survey 2021-22, Page 32)

Amid resumption in global activity coupled with international shortage in shipping vessels, transportation costs escalated, resulting in large increase in freight payments made to global container shipping companies which grew by 64.9 per cent on y-o-y basis to US\$ 14.8 billion in H1: FY 22. This is a monstrous outflow of valuable foreign exchange. To stem this tide, it is necessary that the General Order No. 1 of 2018 by the Ministry of Shipping is reversed. The order relaxed the restrictions on foreign ships involved in transporting containers carrying goods for export or import, and empty containers between Indian ports along India’s coastline and has caused a generational loss in the Indian shipping sector.

**Keywords:** Maritime Amrit Kaal Vision 2047, shortage of containers, General Order No. 1 of 2018 by the Ministry of Shipping, outflow of valuable foreign exchange

**INTRODUCTION**

The ‘Amrit Kaal Vision 2047’ unveiled the following economic agenda:

- a) Capital Investment Outlay increased by 33% to Rs. 10 lakh crore
- b) Effective Capital Expenditure at 4.5% of GDP
- c) Fiscal Deficit estimated to be 5.9 % of GDP in 2023-24
- d) Real GDP to grow at 7% in FY2022-23
- e) Exports to grow at 12.5% in FY 2023.

The “**Maritime Amrit Kaal Vision 2047**” was released and endorsed by the prime minister Mr. Narendra Modi on 23<sup>rd</sup> October 2023 while inaugurating Global Maritime India Summit 2023 in Mumbai. The economic agenda requires a healthy national shipping industry that would serve to carry raw materials and finished goods, along the coast as well as internationally and rightly **Theme 11** in the said Vision document is titled “**Improving India’s tonnage**”. This portion specifically deals with the current state of the Indian shipping industry, identifies problems that are faced by it and proposes solutions that would make Indian shipping competitive along with the way forward.

Given the many continuous strategic and security challenges that India faces towards achieving this agenda, this is a heartening development for every India. Now the next part of the battle is to work to ensure that effect is given to the suggestions made in the Theme 11 and the Vision document as a whole and all the goals are met.

The policy aims to enhance Indian tonnage and the key performance indicator has been identified as “world ranking of Indian tonnage” – the stated target is to be in the world’s top ten 10 by 2030 and top 5 by 2047. The Indian shipping fleet is currently ranked 18<sup>th</sup>.

To achieve these key deliverables, the Indian government needs to do several things like

- a) To make funding available for purchase of new ships.
- b) To grant infrastructure status to shipping so that finance is available at internationally competitive rates.



- c) There is a need to affirm and encourage Free On Board (FOB) imports and Cost Insurance Freight (CIF) exports. For cases requiring any exception to the above rule, a proper SOP needs to be formulated.
- d) Find a resolution to GST and direct tax related issues of the industry that make Indian shipping non-competitive vis-à-vis global shipping companies which compete with Indian ships for Indian coastal cargoes and for EXIM cargoes.
- e) Reverse General Orders Nos. 1 of 2018, 2 of 2018 and 3 of 2018 which permit foreign flag vessels to transport EXIM laden, Empty containers and Agri products, horticulture, fisheries, animal husbandry commodities and fertilizers between two or more Indian ports without obtaining a license from the Director General of Shipping.

**For the sake of this paper, we will focus on the General Order No. 1 of 2018.**

A small backgrounder on container shipping or containerization in shipping

Containerization in shipping refers to a shipment method in which commodities are placed in containers for transporting them. The uniqueness of this method is that after initial loading, the commodities are not rehandled in shipment until they are unloaded at the destination. This allows for goods to be shipped more securely and efficiently.

Containerization has become a popular shipping method in recent years due to its many benefits. It is quicker, more efficient and minimizes damage to goods during transport. It has also helped to reduce inventory levels and improve turnaround times.

In India, around 20% of its total export-import trade is carried out in containers and it is a steadily increasing segment of shipping.

About the impact of COVID-19 Pandemic on container freight rates

Post the initial COVID wave, pent-up demand and gaps in supply due to lockdowns led to a surge in demand. This surge in demand led to a shortage of containers and containerised ships as there were massive berthing delays at Chinese ports due to COVID related restrictions. This also led to similar delays at US ports and the situation was further exacerbated by other supply chain disruptions such as the Suez Canal blockage due to grounding by Evergreen Shipping’s Ever Given. All these factors contributed to the upsurge of freight rates for container shipping.

According to the United Nations Conference on Trade and Development (UNCTAD), “...The COVID-19 pandemic led to a sudden dip in international seaborne trade. But by late 2020 there had been a swift rebound mainly in container and dry bulk shipping. The recovery in container trade flows, which was mainly on East-West containerized trade lanes, created a series of logistical challenges and hurdles, pushed up rates and prices, increased delays and dwell times, and undermined service reliability.” Hence, the freight prices on major global sea routes observed an upward trend during the same period. The table below shows prices and percentage change (YoY) in 2022 from the previous year for major routes.

**Spot freight rates by major routes across eight major East-West trades**

Route	Freight as on 24-02-2022 in US\$	Annual change from previous year (%)
Composite Index	9477	81
Shanghai - Rotterdam	13625	61
Rotterdam - Shanghai	1439	1
Shanghai - Genoa	12759	48
Shanghai - Los Angeles	11030	151
Los Angeles - Shanghai	1247	125
Shanghai - New York	13160	99
New York - Rotterdam	1198	59
Rotterdam - New York	6518	179

**Source:** <https://www.drewry.co.uk/supply-chain-advisors/supply-chain-expertise/world-container-index-assessed-by-drewry>

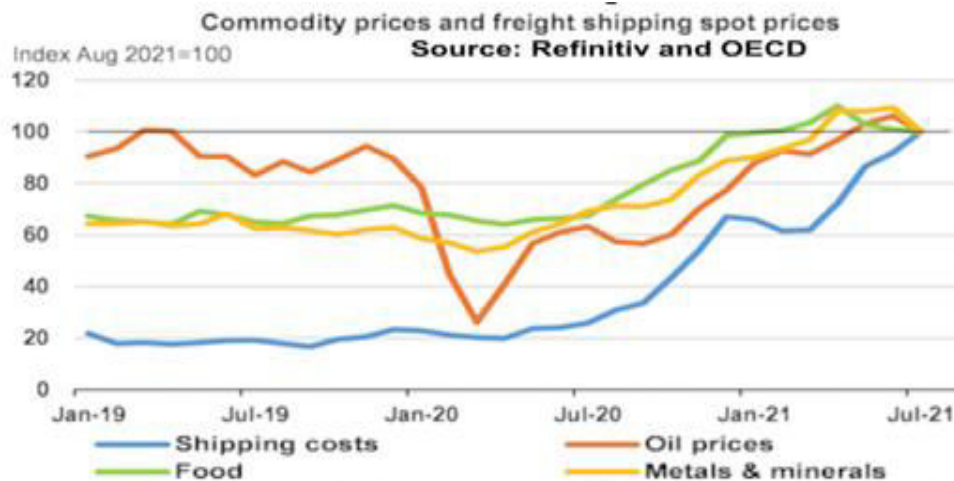
*Drewry Supply Chain Advisors, 2022*

*Drewry, a well-known maritime research and consulting company.*

Concerns of the Organisation for Economic Co-operation and Development (OECD)

The problem of higher container freight rates was so acute globally too, that the Organisation for Economic Co-operation and Development (OECD) is now tracking how much container shipping is factoring into global inflation as on October 2021.

According to information provider IHS Markit, the surge in shipping costs added point one to point two percentage points to US consumer inflation. *The said report and the following table was published by Splash 247 on October 13, 2021.*



Source: <https://splash247.com/oecd-tracks-how-much-container-shippings-sky-high-freight-rates-are-contributing-to-global-inflation/>

Source: Refinitiv and Organisation for Economic Co-operation and Development (OECD)

*The table above is attributed to Refinitiv which headquartered in United Kingdom is one of the world's largest providers of financial markets data and infrastructure.*

The shortage of containers has also impacted the Indian sea trade. According to the Federation of Indian Export Organisation set up under the Ministry of Commerce and Industry, the lack of containers has resulted in rising sea freight rates in the range of 300 per cent to 350 per cent. (Source: Economic Survey 2021-22, Page 32)

Amid resumption in global activity coupled with international shortage in shipping vessels, transportation costs escalated, resulting in large increase in transport payments that grew by 64.9 per cent on y-o-y basis to US\$ 14.8 billion in H1: FY 22. (Source: Economic Survey 2021-22, Page 100). This is a monstrous outflow of valuable foreign exchange given how important it is for us to try and maintain the balance of payments equation.

The surge in container rates during the COVID crises doubly impacted India as on May 21<sup>st</sup> 2018, the Ministry of Shipping had issued the General Order No. 1 of 2018 which relaxed the restrictions on foreign ships involved in transporting containers carrying goods for export or import, and empty containers between Indian ports along India's coastline.

In the criss-crossing interests of the various stakeholders involved – Indian shipping companies, foreign shipping companies, government-run ports, private ports as well as various manufacturing and trading bodies who form the clientele of the shipping industry – alongside with the need to balance national security considerations – has created an atmosphere of intense lobbying by various groups both for and against relaxing the cabotage restrictions and a series of false-starts and flip flops by the government in terms of policy.

This General Order was the outcome of a policy tussle that was ongoing for many years between the Indian flag shipping, the Indian government and the frantic lobbying efforts of the global container shipping companies. Unfortunately, this outcome tilted the balance in the Indian shipping and ports sectors in favour of major multinational shipping lines and private port operators, to the detriment of Indian shipping companies, government run ports and the Indian economy as a whole. As this development predated the COVID crises, the actual on Indian shipping and trade was abysmal.

Prior to 1991, the entire container traffic from India was being sent to ports such as Jebel Ali, Colombo and Singapore for the purposes of connecting to mother vessels. This, despite the fact that the port of JNPT had

commenced operations in and around 1989. Recognizing the business opportunity and the national need to try and tranship cargo over Indian terminals, Indian companies developed the coastal container business in India – i.e. carrying EXIM cargo in containers and empties from one Indian port to another and carriage of domestic cargo in containers. This helped achieve the dual objective of causing a modal shift from land to sea and diverting cargo from foreign transshipment ports to Indian ports. The companies were the state-owned Shipping Corporation of India (SCI) and Shreyas Shipping Ltd. (SSL) in the private sector.

With no support from the government but solely due to the efforts of the industry, the transshipment of EXIM boxes was permitted by the Customs through a notification 31/99 dated 27th May 1999 on Procedures for Transshipment of Export Cargo from Gateway Ports like Chennai and JNPT to enable the carriage of containers. Thereafter, for more than 20 years, the Indian flag container industry has been fighting odds to develop a market for coastal transshipment of EXIM containers in India grappling with Customs issues, port infrastructure, high port charges and cheaper rail/road costs and higher cost of doing business in India.

During this effort, the Indian shipping companies built mutually beneficial relationships with all Indian government ports, major and non-major and terminals owned by Indian and foreign companies.

From 2014 until these orders, it would not be out of place to say that the Indian container shipping was enjoying what could be termed as a dream run. As the levy of customs and central excise duty on bunkers was seen as a hindrance to the growth of Indian container shipping, the Ministry of Shipping took up this issue then and Indian flag container ships transporting a mix of domestic, EXIM and empty containers between ports in India were permitted to draw duty free bunkers vide Department of Revenue Notification No.46/2015 dated September 15<sup>th</sup> 2015. The earlier revenue notification No. 31/2014 dated November 11<sup>th</sup> 2014 was expanded to include all types of cargo combinations.

The basic of balancing the matrix of promoting Indian flag shipping fleet, the national import bill and the needs of the export-import trade

Shipping goods within India's domestic jurisdiction, that is around India's coastline, from one Indian port to another, is known as "cabotage trade." It is governed in India by the Merchant Shipping Act (MSA) of 1958. Under Section 407 of the Act, only ships registered (or "flagged," in shipping parlance) in India, who follow Indian laws and pay taxes to the Indian government, ONLY such ships are permitted to engage in cabotage trades. The foreign-flagged ships, on the other hand, can only do so if they obtain a prior license from the Directorate General of Shipping (DGS) who represents the Union Government. These licenses are granted only in situations when there are no Indian ships available for a particular shipment. This is ascertained by the DGS by obtaining a No Objection Certificate from the Indian National Shipowners' Association (INSA) – a Mumbai based trade association and policy advocacy group of Indian shipping companies that is based in Mumbai. This is the process that happens whenever an application for a license is made by a foreign ship. INSA then issues the certificate only if none of its members show an interest in carrying the consignment and if they are unwilling to match the rate offered by the foreign ships.

International shipping, between an Indian port and a foreign port, is open to all ships, both Indian and foreign. The system in Indian shipping mirrors the Indian airline sector – as only Indian airlines can operate domestic flights, carrying passengers within the country while both Indian and foreign airlines can operate international flights.

Through this policy structure, Indian ships try to maintain an effective "right of first refusal" over all coastal shipping and export-import trades that takes place in India. While the practise may seem like a throwback to the "license raj," in fact it is in line with international practices in place in comparable import-dependent countries with large coastlines like the United States and China.

What this regime of "right of first refusal" has meant in practice is that despite the unsavoury means of shipping market capture by the global shipping companies, the Indian flag shipping fleet has at least managed to retain a miniscule foothold in the Indian coastal and export-import trades.

The law intends to protect the domestic shipping industry and the Indian economy as a whole by maintaining optimum freight levels. This is because a strong and large shipping fleet is an important national security asset and a country's bulwark against freight and trade subjugation.

The strategic importance of coastal shipping is significantly enhanced by the practice of "transshipment." In world trade, transshipment is one of the principal methods used by shipping firms to improve efficiency and margins. Trans-shipping refers to the aggregation of cargo from several different locations at one port, or vice-

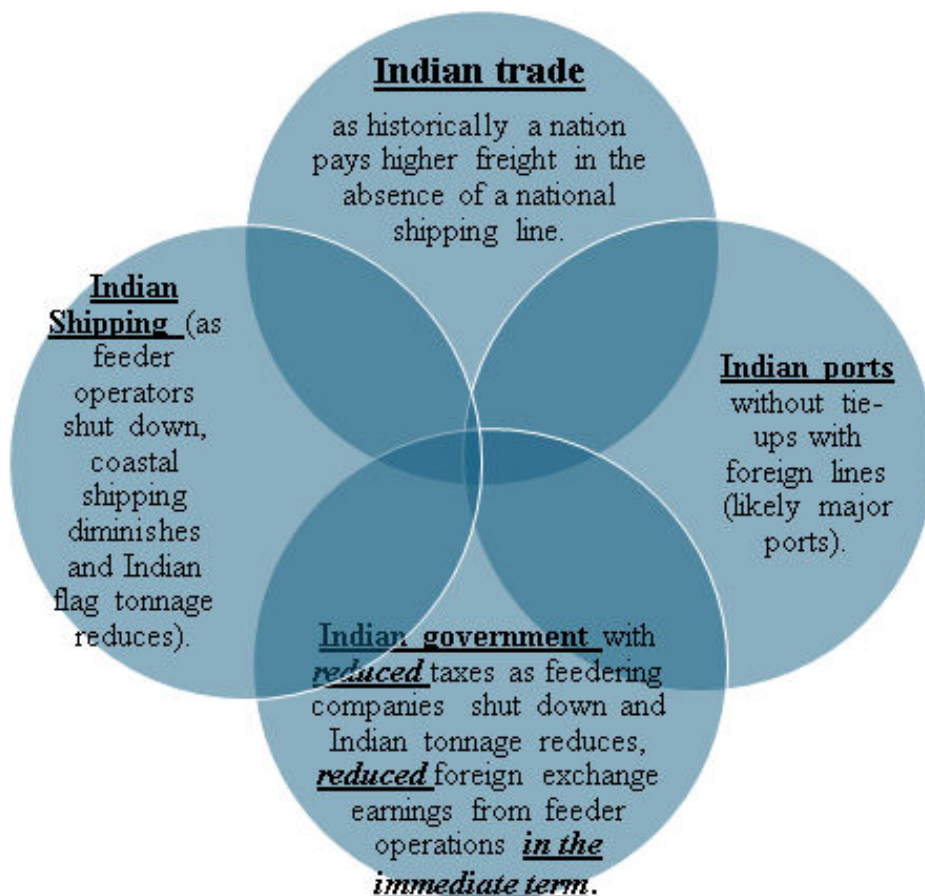
versa. It is to some extent inevitable because of the different sizes of vessels owned by shipping lines and large variations in traffic generated at different ports. A large ship operating between continents usually does not find it feasible to dock at different ports in one region to pick up or discharge small parcels of cargoes. Instead, the shipping firm can arrange for smaller ships, called feeders, to tranship cargo from different locations to one hub port, where the mainline ship, often a massive vessel, can pick up the aggregated cargo. Similarly, a mainline carrier bringing cargo for different locations in one region can offload them at a hub, where feeders can pick up cargo meant for different final destinations. Container shipping lines, hence, sub-contract this job to a fleet of smaller feeder ships to aggregate cargoes from and distribute to different ports in a region. Foreign container lines typically own foreign-flagged feeder vessels. A point to be noted is that while transshipment is a revenue earning source for a shipping company, it adds to costs of the importer and importing nation due to the additional handling and deviation.

Prior to 2018, the foreign shipping lines were not permitted to operate their feeder ships along India’s coastline. The global container shipping companies used this to justify their actions of servicing Indian cargo only from nearby foreign ports using their foreign-flagged feeder ships. The ports that they typically favoured were the Colombo Port in Sri Lanka, the Jebel Ali Port in Dubai in the United Arab Emirates, and the Singapore Port which serviced all the international shipping routes. Roughly, two-thirds of Indian container transshipment takes place from these ports even now.

Following the General Order 1 of 2018, the restriction on transshipment within India by foreign flagged ships has been relaxed for the entire export/import segment. Specifically, Section 23.1 of the notification reads “The provisions of sub-section (1) of Section 407 [of the MSA] shall not apply to...foreign flag ships engaged, in full or in part, for transportation of EXIM [export/import] laden containers for transshipment.” According to the government’s reasoning as laid out in the notification, this will promote transshipment along India’s coast and lead to the development of certain Indian ports into transshipment hubs.

In effect, however the result has been that there has been a major shift in the balance of cargo – from Indian shipping companies to foreign ships and from government run ports to private ports.

The macro impact of General Order 1 of 2018



<b>Objective</b>	<b>Actual Impact</b>
Reduction of transshipment of India's EXIM cargo over Colombo	<ul style="list-style-type: none"> <li>Containers volumes from India transhipped over Colombo have remained at the 2018 levels even in 2021.</li> </ul>
Reduction in freight for Indian Exporter and Importer	<p>There has been no reduction in freight for the exporter or Importer.</p> <ul style="list-style-type: none"> <li>Foreign container lines imposed additional surcharges on Indian export and import containers.</li> <li>Currently, Indian EXIM trade faces a scarcity of empty containers.</li> </ul>
Increased movement of agriculture, horticulture, fisheries, and animal husbandry commodities on coast	ZERO movement of Agri products
Increased movement of Fertilizer on the coast	All Fertilizer in containers continues to move on Indian flag ships efficiently.

**CONCLUSIONS**

Shipping companies have the fungibility to flag ships outside India. So, while this disrupts short term revenues and business continuity plans of Indian shipping companies, there is always a possibility of Plan B that is to flag out of India and seek alternate employment.

Yet the said notifications have resulted in a situation best explained by saying that we have shot ourselves in the foot -- given that containers were the fastest growing shipping segment in Indian shipping with a 20% CAGR in tonnage growth from FY14 to FY18 and yet we handed over this business on a platter to foreign shipping companies.

In the immediate aftermath of the notifications, Indian container companies had to deal with empty capacities of 4 million container TEUs per year. Further, these container companies increased the peak season surcharge 8 times from May to September 2018. The surcharge is levied in addition to freight and is timed to hurt Indian exports. In short, growth of the Indian economy is punished and used to profiteer.

But the damage of diluted Section 407 of MSA has not been limited to Indian shipping alone as it has had worse and wider implications. It has damaged all government owned ports as cargo has got cannibalized from existing Indian government owned ports. For example, all the cargo handled and destined for JNPT has been diverted to Mundra Port to increase cargo volumes there. This has reduced the pre-eminence of JNPT Port which is India's biggest government owned port. In the same manner Paradip Port is expected to suffer as Dhamra Port would gain volume at the cost of the former.

These notifications have given foreign companies the ability to re-route their schedules and timetables for increasing the efficiency of their operations. There has been no lowering of logistics costs for Indian trade. In fact, it has made Indian exports non-competitive and imports costlier. This has been red flagged in the Economic Survey of 2022.

So, this debate of transshipment has been needlessly generated to increase multiple handling of Indian cargo so that these foreign companies can earn repeatedly from the same cargo and drain Indian economy. For example, they will not bring cargo from London to JNPT directly. The foreign container companies have been given the ability to route it via Dubai, Colombo and then Mundra and then JNPT. And Indian trade has been paying for this multiple handling. This is a continuous play with fire.

The COVID pandemic and its aftermath has driven home this fact as cost and time overruns are routine which is making Indian manufacturing exports non-competitive. What has made matters worse for India and Indian trade is that it has now laid bare our vulnerability to the machinations of foreign container shipping companies. This situation was fully exploited by the foreign container shipping companies as they made the most of it by earning super normal profits in 2021 and 2022.

It needs to be noted that not much research has gone into the various commercial dimensions of business of the Shipping Industry in India and the endeavor has been to explore this industry through research.

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**TOWARDS A CASHLESS FUTURE: A STUDY OF MUMBAI SUBURBAN RETAILERS' PAYMENT PREFERENCES****Dr. Sadhana Venkatesh<sup>1</sup> and Ms. Shalini Clayton<sup>2</sup>**<sup>1</sup>Associate Professor, Department of Commerce, Tolani College of Commerce (Autonomous) Andheri<sup>2</sup>Research Scholar, Tolani College of Commerce (Autonomous) Andheri**ABSTRACT**

*This research paper aims to understand the retailers' preferences for cashless future in Mumbai Suburban. The study aims to identify and analyze the factors that influence the retailers' in adopting or resisting the integration of cashless payment methods. It also helps understand the motivational factors and challenges faced by retailers towards cashless transactions. The findings highlight the significance of convenience, security, and transaction fees in shaping retailers' payment choices as well as the impact of demographic factors and technological infrastructure on retailers' adoption of cashless payments. The primary data survey technique was utilized as data collection tool, with 110 respondents selected through convenience sampling. Data analysis was conducted using percentage analysis and ANOVA. The result of the present study revealed that there is significant relationship between the awareness and motivational factors towards cashless transactions.*

*Keywords: business, cashless transactions, digital, preference, retailers'*

**1. INTRODUCTION****1.1 Cashless Transaction**

A cashless transaction occurs when funds are electronically transferred between buyers and sellers of goods or services, typically over the internet or a network. In simpler terms, it is a form of payment that utilizes various digital or non-cash methods rather than physical currency. In a cashless transaction, there is no physical exchange of money within the economy; instead, the payment is processed electronically using methods such as debit or credit cards, e-wallets, IMPS, NEFT, RTGS, checks or demand drafts, AEPS (Aadhaar Enabled Payment System), or USSD (Unstructured Supplementary Service Data).

**1.2. Banking Cards (Debit/Credit)**

Banking cards provide consumers with unmatched security, convenience, and autonomy compared to other payment methods. With a diverse range of options such as credit, debit, and prepaid cards, users enjoy unparalleled flexibility. These cards incorporate two-factor authentication, ensuring secure transactions through methods like secure PIN and OTP. Examples of card payment systems include RuPay, Visa, and MasterCard. Payment cards empower individuals to make purchases in various settings, including in-store, online, via mail-order catalogs, and over the phone. They streamline transactions, saving time and money for both customers and merchants, facilitating seamless transactions.

**1.3 Aadhaar Enabled Payment System (Aeps)**

AEPS operates as a bank-centric model, facilitating online interoperable financial transactions at Point of Sale (PoS) or Micro ATMs. This system utilizes the Business Correspondent (BC) or Bank Mitra of any bank to conduct transactions, leveraging Aadhaar authentication.

**1.4 Unified Payments Interface (Upi)**

The Unified Payments Interface (UPI) integrates multiple bank accounts into a single mobile application, regardless of the participating bank. It consolidates various banking functions, including seamless fund transfers and merchant payments, into one platform. UPI also facilitates "Peer to Peer" collect requests, which users can schedule and pay according to their needs and preferences. Each bank offers its own UPI application for Android, Windows, and iOS mobile platforms.

**1.5 Mobile Wallets**

A mobile wallet serves as a digital alternative to carrying cash. It allows users to link their credit or debit card details to a mobile wallet app, or they can transfer money online to the wallet. Instead of using physical cards, purchases can be made using a smartphone, tablet, or smartwatch. To load funds into the digital wallet, individuals need to link their accounts to it. Many banks offer their own e-wallets, and there are also options from private companies such as Paytm, Freecharge, Mobikwik, and others like Oxigen, mRuppee, Airtel Money, Jio Money, SBI Buddy, itz Cash, Citrus Pay, Vodafone M-Pesa, Axis Bank Lime, ICICI Pockets, and SpeedPay.

**1.6 Point Of Sale**

A point of sale (PoS) is where transactions are conducted. At a larger scale, it could be a mall, market, or city. At a smaller scale, retailers view it as the specific area where a customer finalizes a purchase, like a checkout counter. This location is also referred to as a point of purchase.

**1.7 Internet Banking**

Internet banking, referred to as online banking, e-banking, or virtual banking, is an electronic payment system allowing customers of a bank or financial institution to perform various financial transactions via the institution's website. This includes services like National Electronic Fund Transfer (NEFT), Real Time Gross Settlement (RTGS), Electronic Clearing System (ECS), and Immediate Payment Service (IMPS).

**1.8 Mobile Banking**

Mobile banking is a service offered by banks and financial institutions, enabling customers to perform various financial transactions using a mobile device like a smartphone or tablet. Utilizing software, often referred to as an app, provided by the respective banks or financial entities, users can conveniently access these services. Each bank typically offers its own mobile banking application for Android, Windows, and iOS mobile platforms.

**1.9 Micro Atms**

A Micro ATM is designed to enable millions of Business Correspondents (BC) to provide essential banking services. These BCs, which could include local shop owners, will act as "micro-ATMs" to conduct immediate transactions. The platform operates through inexpensive devices connected to banks nationwide, allowing individuals to deposit or withdraw funds instantly, regardless of their bank affiliation. These devices, functioning via mobile phone connections, will be widely accessible through BCs. Customers simply need to authenticate their identity to perform banking activities such as depositing, withdrawing, transferring funds, and checking balances. BCs essentially serve as banks for customers, verifying their identity using their UID (Unique Identification Number).

**1.10 Retailers'**

Retailers in India represent a diverse and dynamic sector that encompasses a wide range of businesses engaged in selling goods directly to the consumers. In this study the focus was given to the small, neighbourhood convenience stores commonly found in the residential areas. They typically sell a variety of daily essentials and grocery items and are operated as independent or family-owned businesses. The retail sector in India is poised for significant growth and transformation in the future, driven by evolving consumer behaviour, technological advancements, policy reforms and changing market dynamics.

**2. LITERATURE REVIEW**

**Jakubowska M (2017)** the researcher investigated how widespread cashless transactions are in Poland, focusing on how many businesses accept card payments. They used previous studies and statistical methods to analyze data. The hypothesis proved that there is correlation between the number of cashless transactions made with payment cards as per capita in the EU and the size of the shadow economy, which they tested using Pearson's correlation coefficient t-test. The researcher concluded that boosting cashless transactions could effectively reduce the shadow economy.

**Vimal Raj et al. (2021)** in their research paper examined whether the level of a country's advancement towards a cashless economy impacts people's preference to use cashless transactions. A structured questionnaire was used to survey 375 participants at various locations in Greater Chennai city Corporation, India. Exploratory factor analysis was employed to uncover new underlying factors from the variables identified to gauge individuals' perception of their country's advantages in adopting a cashless economy. The findings from regression analysis demonstrated a positive and statistically significant influence of newly identified factors like Perceived Economic Offense Reduction (PEOR), Perceived Economic Benefit (PEB), and Perceived Economy's Security (PES) on people's behavioral intentions to engage in cashless transactions.

**Ruchi Todi (2022)** this research journal examines financial transactions conducted through electronic media. The study reveals that rural communities are largely aware of cashless transactions but face challenges such as limited access to financial service platforms, a scarcity of Point of Sale (PoS) devices and other factors such as illiteracy. Smartphones are prevalent in rural areas, primarily using android systems. However, there is apprehension among residents about conducting transactions via smartphones. As a result, the cheque system remains the primary method for going cashless, and ATMs are mainly used for withdrawing money.

**Anushia Chelvarayan et al. (2022)** the researchers analysed the e-wallet application that enable users to download payments card using a mobile device. The data was collected from 140 respondents from a Malaysian



private institution. Convenience sampling was used to select sample and the questionnaire was circulated in google form. Descriptive analysis, reliability analysis, and multiple regression analyses were utilized to analyse the data. The study focused on four variables perceived usefulness, perceived ease of use, perceived risk and trust. It was found that the three independent variables of this research were found to have significant relationship with intention to use e-wallet.

**Amanka et al. (2023)** this study integrates the Health Belief Model (HBM) and Theory of Planned Behaviour (TPB) to investigate workers' intentions to adopt e-wallet payment options during the COVID-19 pandemic. Findings suggest that attitudes, subjective norms, and perceived susceptibility influence workers' intentions to use e-wallets, while perceived behavioural control does not. The study reveals no significant differences in e-wallet usage intentions between formal and informal sector workers in Ghana. It recommends policy interventions to promote e-wallet usage for pandemic control and cashless economy goals. While limited to Ghanaian workers, the study's insights offer valuable implications for practitioners and policymakers in emerging economies. This research uniquely applies HBM to e-wallet adoption, contributing to literature on digital payment behaviour and providing practical insights for mobile wallet service providers.

### 3. OBJECTIVES OF THE STUDY

- 1) To identify and analyse the factors that influence retailers' decisions to either adopt or resist the integration of cashless payment methods.
- 2) To measure the extent of retailers' motivation regarding various cashless transaction methods available in the market.
- 3) To understand the challenges and to propose policy recommendations based on research findings that could facilitate the increased adoption of cashless transactions among retailers.

### 4. HYPOTHESES OF THE STUDY

#### 4.1 Awareness and retailers' motivational factors towards cashless transactions.

**Null Hypothesis: ( $H_{10}$ ):** There is no significant relationship between awareness and motivational factors towards cashless transactions.

**Alternative Hypothesis: ( $H_{11}$ ):** There is a significant relationship between awareness and motivational factors towards cashless transactions.

#### 4.2 Payments received and challenges faced by retailers towards cashless transactions.

**Null Hypothesis ( $H_{20}$ ):** There is no significant association between payments received and challenges faced by retailers towards cashless transactions.

**Alternative Hypothesis ( $H_{21}$ ):** There is a significant association between payments received and challenges faced by retailers towards cashless transactions.

### 5. RESEARCH METHODOLOGY:

In this study, the data was obtained from both primary and secondary sources. The primary Data was collected using the questionnaire method, and secondary data was collected from the books, newspapers, magazines, and websites.

**Sample Design:** The method of convenience sampling has been used to collect the data from the respondents.

**Sample Size:** The sample size was 110 respondents.

**Data Analysis and Interpretation:** The data was analysed and interpreted using Microsoft Excel 2007.

### 6. LIMITATIONS OF THE STUDY:

- 1) The study was limited to Jogeshwari because of time constraints.
- 2) The sample size used for the study was small. Hence, the results cannot be taken as universal.
- 3) The accuracy of the figures and data is subject to the respondent's view.

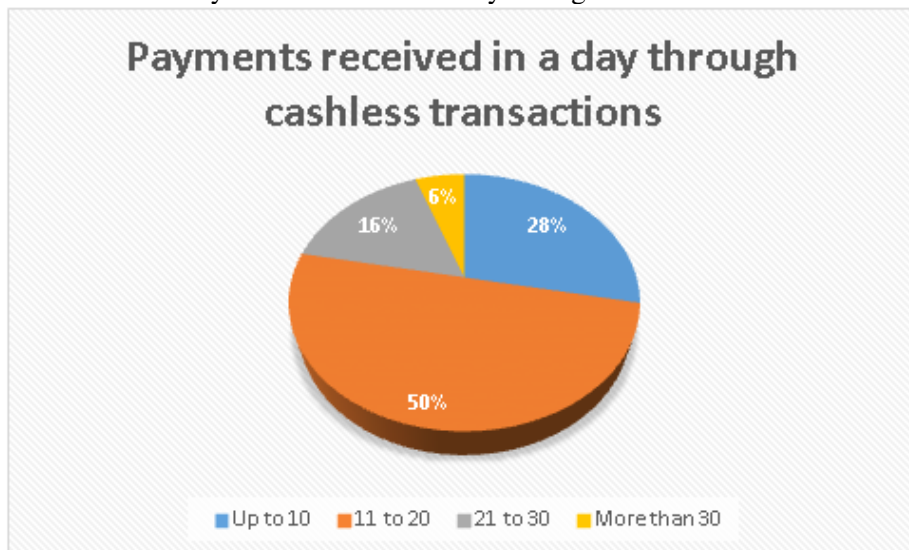
7. Data Analysis and Interpretation

Table: 1. Socio economic factor of respondents

Particulars	Categories	Frequency
Gender	Male	90
	Female	20
Age	Less than 25	32
	25 to 40	42
	41 to 55	24
	Above 55	12
Education	Primary	6
	Secondary	12
	Higher Secondary	25
	Diploma	0
	Under Graduate	55
	Post Graduate	12
Acceptance of cashless transactions after	Digital India	72
	Demonetization	6
	Covid 19	32
Mode of digital payments usually allowed for making transactions	Banking Cards	0
	AEPS (Aadhar Enabled Payment System)	0
	UPI (Unified Payment Interface)	110
	Banks Prepaid Cards	0
	Internet Banking	0
	Average amount of daily transactions received from customers through cashless transactions	M-Wallets
Point of Sale (POS)		0
Micro ATMs		0
Other		0
Average amount of daily transactions received from customers through cashless transactions	Up to Rs.500	32
	Rs.501 to Rs. 2000	54
	Rs.2001 to Rs. 5000	12
	More than Rs. 5000	12

Source: Primary data

Table: 2 Payments received in a day through cashless transactions



**Table: 3** Awareness and retailers’ motivational factors towards cashless transactions.

Groups	Count	Sum	Average	Variance
Are you fully aware about various aspects of cashless transactions?	110	165	1.5	0.362385
<b>Motivation factors for adoption of cashless transactions by small retailers</b>				
Customer satisfaction increases by providing various payment options	110	474	4.309091	0.600834
Customers may go for shopping of more than required without tension of having enough cash	110	458	4.163636	0.688574
Accuracy in bills	110	452	4.109091	0.336614
Accuracy in payments	110	453	4.118182	0.435446
Easy record maintenance	110	496	4.509091	0.25221
No fake bills can be produced	110	477	4.336364	0.225271
Tax collection becomes easy with online payments	110	459	4.172727	0.804754
Service quality improves	110	434	3.945455	0.400667
Customers can be attracted by giving membership plastic cards	110	427	3.881818	0.435446
Loyalty points or reward points helps in making customers more purchase	110	447	4.063636	0.280317
Discount offers on using plastic cards increases the sales	110	459	4.172727	0.364387
Details of customers can be easily kept in case of cashless transactions	110	466	4.236364	0.402335
Customers can be later reached through their details for offering other products	110	447	4.063636	0.390409
Direct transfer to bank saves the time for depositing cash into bank	110	490	4.454545	0.3603
Brings transparency in the payment system	110	471	4.281818	0.314345
No fear of fake notes paid	110	478	4.345455	0.668557
Easy to match the online payment records with the invoices instead of counting cashes	110	484	4.4	0.352294
No fear of theft or robbery at shops	110	490	4.454545	0.3603

Anova						
Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	831.7923	18	46.21069	109.2662	6E-284	1.608835
Within Groups	875.8636	2071	0.422918			
Total	1707.656	2089				

ANOVA single factor test was performed to examine the relationship between awareness and retailers’ motivational factors towards cashless transactions. The result of the test indicates that there is significant relationship between the awareness and motivational factors towards cashless transactions as the  $F > F_{Critical}$ . So null hypothesis is rejected and alternative hypothesis is accepted.

**Table: 4** Payments received and challenges faced by retailers towards cashless transactions.

Groups	Count	Sum	Average	Variance
How many payments in a day are received used cashless transactions?	110	219	1.990909	0.669641
<b>Problems faced by small retailers in adoption of cashless transactions</b>				
Lack of safety	110	460	4.181818	0.920767
Payment got stuck in between bank and customer did not pay again	110	444	4.036364	0.952794
Direct transfer to bank account and lack of liquid cash in the shop for making other payments	110	465	4.227273	0.507506
Problem due to network connectivity	110	476	4.327273	0.460717
Cost of establishing POS and sometimes different types of POS in case of chip plastic cards	110	471	4.281818	0.534529
Cost of maintaining the online platform for payment gateway	110	471	4.281818	0.534529
Auto debit charges by bank on credit amount	110	465	4.227273	0.72769
Huge cost of renewal every year	110	477	4.336364	0.555546
Illiteracy of customers for using plastic cards	110	441	4.009091	0.999917
Cost of web or app development for accepting cashless transactions	110	483	4.390909	0.570559
Lack of knowledge about technology	110	453	4.118182	0.875813
Lack of financial literacy	110	453	4.118182	0.765721
Unclear terms for while operating bank accounts for such purpose	110	471	4.281818	0.534529
Long documentation or complex process to start online payment gateways	110	490	4.454545	0.470392
Fear of customers for hijack of ID or card details via auto save option	110	459	4.172727	0.58457
Lack of access to mobile/laptop for accepting cashless transactions	110	471	4.281818	0.754712
Decline of plastic cards of customers waste time	110	466	4.236364	0.732611
Lack of trust among customers in making cashless transactions	110	447	4.063636	0.830776
High charges per transactions by bank makes customers less interested	110	465	4.227273	0.72769
Processing time of banks for transactions	110	466	4.236364	0.512427
Problems in matching invoices if payment made twice by customers in case of card decline or network problem	110	471	4.281818	0.534529
Fear among customers for leak of personal information	110	453	4.118182	0.65563

ANOVA						
Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	553.1992	22	25.14542	37.52172	2.8E-137	1.546303
Within Groups	1680.082	2507	0.670156			

Total	2233.281	2529				
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ANOVA single factor test was performed to examine the relationship between payments received and challenges faced by retailers towards cashless transactions. The result of the test indicates that there is significant relationship between payments received and challenges faced by retailers towards cashless transactions as the  $F > F_{Critical}$ . So null hypothesis is rejected and alternative hypothesis is accepted.

## 8. FINDINGS

- 82% of the retailers were male.
- 38% of the retailers belonged to the age group 25 to 40.
- 100 % of the retailers accepted UPI (Unified Payment Interface) as a digital payment method.
- In a day, 6% of the daily transactions consist of more than 30 transactions received through cashless transactions.
- After the Digital India initiatives, 65% of retailers are using cashless transactions.

## 9. SUGGESTIONS

- Educate customers and retailers about the benefits and convenience of cashless transactions.
- Stay updated with emerging technologies and trends in cashless payments to adapt and innovate accordingly.
- Regularly evaluate the effectiveness of cashless solutions and seek feedback from customers for ongoing improvements.
- Utilize government programs like “Digital India” that encourage digital payments. These initiatives can provide small retailers with resources, training, and financial support (subsidies) to help them adopt and use cashless payment methods effectively in their businesses.
- Retailers must use reliable payment systems and educate customers on how to keep their personal information protected. This helps ensure that transactions are secure and builds trust with customers about the safety of their data.

## 10. CONCLUSIONS

The findings of this research emphasize the increasing prominence of cashless transactions within the retail sector, with a significant majority of surveyed retailers demonstrating acceptance and utilization of digital payment methods, particularly UPI. Demographic insights reveal a predominant male presence among retailers, with a notable representation in the 25–40 age group. Moreover, post-Digital India initiatives, a substantial proportion of retailers have reported heightened engagement in cashless transactions, indicating the efficacy of government-led programs in driving adoption. To capitalize on this momentum, educational outreach is crucial to familiarize both customers and retailers with the benefits and convenience of cashless transactions. Technological adaptation and continuous evaluation of cashless solutions, alongside government support through programs like Digital India, can further enhance adoption rates among small retailers. Additionally, prioritizing security measures and soliciting feedback from customers are essential for building trust and ensuring the long-term viability of cashless payment systems within the retail landscape.

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**ADVANCEMENTS AND CHALLENGES IN RENEWABLE ENERGY DEVELOPMENT IN INCREDIBLE INDIA****Mrs. Sampurna Sarode**

VPM's R Z Shah College of Arts, Science and Commerce, Mulund

**ABSTRACT**

*Renewable energy has emerged as a pivotal component of India's energy transition, driven by a combination of technological innovation, policy support, and environmental imperatives. This research paper explores the evolution of renewable energy in Incredible India, analyzing key trends, initiatives, and challenges. By examining the diverse landscape of solar, wind, hydro, and other renewable energy sources, this paper provides insights into India's quest for energy security, sustainability, and economic growth. By envisioning a future powered by clean and abundant energy sources, this paper offers insights into the transformative potential of renewable energy in shaping a prosperous and resilient society*

**INTRODUCTION**

Amrit Kaal, denoting a period of prosperity and development, presents a strategic opportunity for India to shift its energy paradigm towards sustainability. With a burgeoning population and rapid economic growth, the demand for energy is escalating. This paper delves into the advancements in renewable energy technologies, policy measures, and the socio-economic impact of transitioning to a green energy economy.

**Technological Advancements**

India has made significant strides in harnessing renewable energy, particularly solar, wind, and biomass. The National Solar Mission aims to establish India as a global leader in solar energy, with ambitious targets of achieving 100 GW of solar capacity. Technological innovations in photovoltaic cells, solar thermal systems, and energy storage solutions are critical to this mission. Similarly, advancements in wind turbine technology and offshore wind projects are contributing to the diversification of India's energy mix.

**Technological Advancements in Renewable Energy are as follows:**

**Solar Energy:** Advancements in photovoltaic (PV) technology, solar tracking systems, and thin-film solar cells

**Wind Energy:** Innovations in wind turbine design, offshore wind farms, and vertical axis turbines

**Hydroelectric Power:** Next-generation hydroelectric dams, tidal energy, and wave energy converters

**Emerging Technologies:** Biomass conversion techniques, geothermal energy extraction, and hydrogen fuel cells

**Policy Framework and Initiatives:**

The Indian government has introduced several policies to promote renewable energy. The implementation of the National Action Plan on Climate Change (NAPCC) and the establishment of the International Solar Alliance (ISA) reflect India's commitment to global climate goals.

Incentives such as tax benefits, subsidies, and feed-in tariffs are designed to attract investments in renewable energy projects. The Renewable Purchase Obligations (RPOs) mandate that states procure a certain percentage of their energy from renewable sources, further driving the adoption of clean energy.

**Socio-Economic Impact:**

The transition to renewable energy is expected to generate substantial socio-economic benefits. It is anticipated to create millions of jobs in the renewable energy sector, from manufacturing and installation to maintenance and operations. Moreover, decentralized renewable energy solutions can provide reliable power to rural and remote areas, fostering inclusive development. The reduction in greenhouse gas emissions and air pollution will also have significant health benefits, improving the overall quality of life.

**Challenges and Solutions:**

Despite the progress, several challenges persist in the renewable energy sector. Issues such as grid integration, intermittent power supply, and high initial investment costs need to be addressed. Strengthening grid infrastructure, developing efficient energy storage systems, and fostering public-private partnerships are essential for overcoming these hurdles. Additionally, international cooperation and technology transfer can accelerate the adoption of advanced renewable energy technologies.

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**CONCLUSION**

As India enters the Amrit Kaal, the focus on renewable energy is crucial for achieving sustainable and inclusive growth. The amalgamation of technological innovation, robust policy frameworks, and socio-economic benefits positions India to become a global leader in renewable energy. By capitalizing on these opportunities, India can pave the way for a sustainable future, ensuring energy security and environmental sustainability for generations to come. The vision of a green and self-reliant India by 2047 is not only achievable but imperative for the nation's progress and global climate commitments.



**RESURGENCE OF PROSPERITY: THE IMPACT OF AMRIT KAAL ON INDIA'S BANKING AND FINANCE INDUSTRY****Mrs. Sangeeta R Jain**

Prahladrai Dalmia Lions College of Commerce &amp; Economics

**ABSTRACT**

India's economic scenario is characterized by a mix of opportunities and challenges. Historically, India has been recognized for its vast potential as an emerging market, boasting a large and diverse population, a huge middle class, and a dynamic entrepreneurial spirit. However, despite these strengths our country faces several hindrances in the banking and financial sector which is hampering the growth of our economy. Some major lacunas being limited financial inclusion, infrastructure gaps, NPA (Non-Performing Assets) Crisis, Regulatory challenges, limited capital market developments.

The introduction of Amrit Kaal is expected to usher in a new era of growth, innovation, and stability in India's banking and financial sector. By leveraging technology, fostering competition, and strengthening regulatory oversight, Amrit Kaal has the potential to unlock new opportunities, improve access to finance, and drive sustainable economic development across the country. It aims to promote financial inclusion, enhance infrastructure, address NPA issues, streamline regulations, and foster the development of vibrant and resilient capital markets.

This research delves into the resurgence of prosperity in India's finance industry, focusing on the impact of Amrit Kaal, a transformative economic policy. Through a comprehensive, this study examines the multifaceted effects of Amrit Kaal on various sectors within the finance industry, including banking and investment. The research investigates how Amrit Kaal's implementation will catalyze innovation, foster greater financial inclusion, and stimulate economic growth. The findings explain the important role of policy interventions in revitalizing and reshaping financial ecosystems, offering insights for policymakers, practitioners, and scholars alike. Amrit Kaal, as a transformative economic policy, is likely to have profound effects on India's banking and financial sector. The extent and nature of these effects will depend on the specific policy measures implemented, as well as broader economic and market conditions.

*Keywords: Amrit Kaal, NPA, Financial Inclusion*

**INTRODUCTION****Vision for Amrit Kaal – an empowered and inclusive economy**

Union Finance Minister highlighted that “Our vision for the Amrit Kaal includes technology-driven and knowledge-based economy with strong public finances, and a robust financial sector”. To achieve this, Jan Bhagidari through Sabka Saath Sabka Prayas is essential, she added.

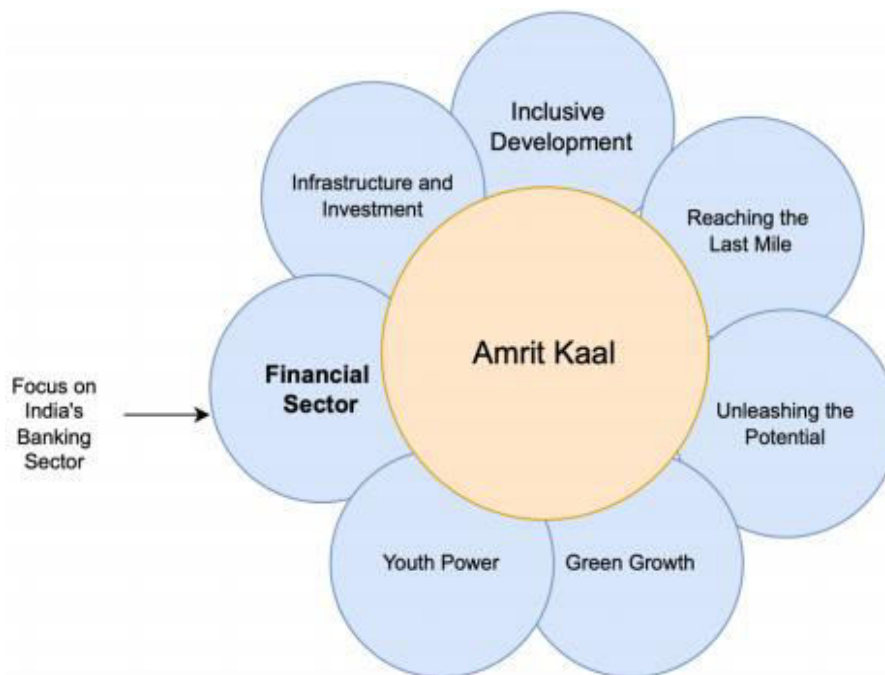
The economic agenda for achieving this vision would focus on three priorities:

1. facilitating ample opportunities for citizens, especially the youth, to fulfill their aspirations.
2. providing strong impetus to growth and job creation; and
3. strengthening macro-economic stability

**Saptarishi: Seven guiding priorities of Budget 2023-24**

The Union Finance Minister announced the first budget in Amrit Kaal will be guided by seven priorities that complement each other and act as the ‘Saptarishi’.

1. Inclusive Development
2. Reaching the Last Mile
3. Infrastructure and Investment
4. Unleashing the Potential
5. Green Growth
6. Youth Power
7. Financial Sector



### Sabka Saath Sabka Vikas

The Union Budget 2023–24 places a strong emphasis on inclusive development. The government's philosophy of Sabka Saath Sabka Vikas has facilitated inclusive development covering in particular, farmers, women, youth, OBCs, Scheduled Castes, Scheduled Tribes, divyangjan and economically weaker sections, and overall priority for the underprivileged.

The Finance Sector plays a pivotal role in the development of the economy. A strong financial sector is a sign of a healthy economy. It acts as the lifeblood of the economy, facilitating the flow of funds, managing risks, and providing a robust platform for investment and economic growth. Its effective functioning is essential for the overall development and stability of the Indian economy.

### The efficacy of financial system depends on few parameters like:

1. **Digital Transformation:** Digital Transformation has touched almost every industry, and banking is no exception. Today customers expect the same level of convenience and accessibility from the financial services as they get from other online services. To meet these demands and stay competitive, banking institutions are facing the need for digital transformation. Digital transformation for banks is not just about technology, it's more about customer-centric experience. By accepting digital transformation, banks can ease the operations, increase security, and can work for customer satisfaction.

Amritkal might quicken the current banking and finance industry's digital transformation. To improve efficiency, accessibility, and customer experience, banks and other financial institutions may increase their investments in digital platforms, online banking services, and fintech collaborations. This is done with an emphasis on digital infrastructure and technology adoption.

2. **Financial Inclusion:** By increasing access to banking and financial services, particularly in underserved and rural areas, the policy may encourage a higher degree of financial inclusion. Prioritizing initiatives like microfinance, mobile payments, and digital banking could help increase the number of people and businesses using the official financial system.
3. **Credit Expansion:** Amritkal may persuade banks to extend credit to infrastructure, agriculture, and small and medium-sized businesses (SMEs) as well as other important sectors. Easy access to finance and credit could encourage investment, entrepreneurship, and economic expansion.
4. **Regulatory Reforms:** The strategy might include regulatory changes meant to strengthen governance, simplify the banking and financial industry, and improve risk management procedures. This could involve taking steps to improve accountability and transparency, deal with non-performing assets (NPAs), and bolster regulatory monitoring.
5. **Foreign Investment:** Amrit Kaal may draw more foreign capital to India's banking and finance industry as a result of growth prospects, market liberalization, and advantageous regulatory changes. Through joint

ventures, acquisitions, or the establishment of new businesses, international banks and financial institutions may increase their market share in India.

**6. Development of Capital Markets:** By encouraging equity investments, bond issuance, and other capital market activity, the policy may aid in the growth of India's financial markets. One way to encourage long-term investment and diversify funding sources is to give priority to initiatives aimed at deepening the bond market, facilitating corporate fundraising, and drawing in institutional investors.

Overall, Amrit Kaal's impact on the banking and financial sector is likely to be multifaceted, with potential implications for market structure, competition, innovation, and systemic stability. The extent and nature of these effects will depend on the specific policy measures implemented, as well as broader economic and market conditions.

## LITERATURE REVIEW

In recent years, India's banking and finance industry has witnessed a remarkable resurgence, driven by various economic reforms, technological advancements, and strategic initiatives. This literature review aims to explore the key factors contributing to this resurgence and analyze the challenges and opportunities faced by the sector.

**Economic Reforms and Policy Initiatives:** The liberalization policies initiated in the 1990s laid the foundation for the growth of India's banking and finance industry. Studies by Bajpai and Biberman (2020) emphasize the positive impact of economic reforms on the financial sector, fostering competition, efficiency, and innovation in the recent years from 2020.

**Technological Advancements and Digital Transformation:** The advent of digital technologies has revolutionized the banking landscape in India. A study by Swarglary et al (2024) looked into how India's post-pandemic economic growth has been affected by digital transformation, or DT. The study aimed to investigate the correlation between digital transformation (DT) and economic growth. Additionally, it sought to evaluate the present state of digital transformation in various sectors, pinpoint the primary motivators and obstacles, investigate the effects on productivity and innovation, and analyze how DT can improve the competitiveness of Indian enterprises. The implementation of initiatives like Unified Payments Interface (UPI) and Aadhaar-enabled Payment System (AePS) has facilitated seamless transactions and boosted financial accessibility.

**Government Initiatives and Regulatory Reforms:** Government-led programs like the Insolvency and Bankruptcy Code (IBC), the Jan Dhan Yojana, and the Pradhan Mantri Mudra Yojana have been crucial in advancing financial inclusion, assisting small enterprises, and fortifying the resolution system. Padhy's (2023) studies highlight the importance of regulatory reforms in improving the banking industry's transparency, governance, and stability.

**Challenges and Future Outlook:** The banking and finance sector in India continues to face several obstacles despite tremendous advancements, such as non-performing assets (NPAs), cybersecurity threats, and regulatory compliance. Ghandour's (2021) research highlights the necessity of taking proactive steps to tackle these issues and maintain the growing pace. Furthermore, the advent of fintech companies and the integration of cutting-edge technology like blockchain and AI offer traditional banking models both opportunities and challenges.

## Digitalization in Banking and Finance Sector

We are one of the fastest growing economies of the world and steps have been taken by the incumbent government to bring everyone in one network. For every economy it is necessary to have access to information at all times and to optimally utilize the benefits of the schemes provided by the government.

Uprooting corruption and promoting good governance, transparency, speed etc can be possible because of digitalization. With digitalisation, the government is likely to save funds in various schemes because bogus accounts could be traced easily. Fraudulent activities can be caught with all the things becoming a part of the highly interconnected and integrated digital network. Digitalization as stated earlier also is likely to reduce the dependence on middlemen. With reduction of dependence on middlemen and the direct linkage of the government to the beneficiaries, fraudulent activities could be easily caught and benefits could be directly transferred in the account of the beneficiary. An important impact would be, having everyone in the banking channel which is a prerequisite for JAM to operate. With this even the speed and productivity of the transfers will improve. With greater transparency and more accountability, corruption is likely to be reduced, which is in itself a good impact of digitalisation on the society as a whole.



An essential aspect of digitalization in banking is ensuring universal access to financial services, a prerequisite for the success of initiatives like JAM (Jan Dhan-Aadhaar-Mobile). When everyone is integrated into the banking system, the efficiency and speed of financial transactions are bound to increase manifold. This widespread inclusion not only streamlines processes but also enhances productivity across various sectors.

### CORE ELEMENTS OF DIGITAL TRANSFORMATION

1. **Customer understanding:** Leveraging data analytics and AI, banks enhance customer understanding to personalize services and anticipate needs, fostering deeper relationships.
2. **Customer Touch Points:** Banks optimize customer touch points by offering seamless omnichannel experiences, from mobile banking to virtual assistants, ensuring convenience and accessibility.
3. **Digitally modified business:** Embracing digital technologies, banks reimagine their business models, integrating fintech solutions and creating agile structures for rapid adaptation.
4. **Top line growth:** Digital transformation drives top-line growth as banks innovate new revenue streams through value-added digital services and enhanced cross-selling opportunities.
5. **Process digitization:** Process digitization streamlines operations, reducing costs and improving efficiency while ensuring compliance and security standards are met.
6. **Performance management:** Performance management in banking evolves with real-time data analytics and KPI tracking, enabling proactive decision-making and continuous improvement strategies.



**Recent Technical Developments in Banking and Finance Sector**

In recent years, the banking and finance sector has experienced significant digital transformation, driven by technological advancements and changing consumer behaviors like Digital Banking Platforms, Mobile payments, Blockchain, Robotic Process Automation and many more. The influence of AI is pivotal, permeating every aspect of the sector—from revolutionizing customer service to reshaping financial management tools and streamlining back-office operations. These advancements, when effectively harnessed, have the potential to deliver more efficient, innovative and cost-effective solutions in banking, finance, investment.

Banks are leveraging big data analytics to gain insights into customer behavior, market trends, and risk management. This helps them make data-driven decisions, develop targeted marketing strategies, and enhance customer experiences

- Axis Bank KYC in 10 minutes instead of 3 to 4 days. AI reads the scanned uploaded documents and it is able to detect if there are any identity theft or inaccuracies in the data. Cheque authentication done by an AI system can catch minute blots or anomalies that may not be visible to human eye
- HDFC Bank's AI –powered robot Ira helps customers fill out forms, carry out basic transactions and guides them to the correct bank teller

However, they also present challenges that must be addressed to ensure these changes are implemented safely and ethically. Overall, these digital transformations are reshaping the banking and finance sector, leading to improved efficiency, greater convenience for customers, and increased competition among financial service providers.

JPMorgan Chase introduced IndexGPT in May 2024, a thematic investment tool developed with the assistance of OpenAI's GPT-4 model, a year after speculation arose regarding its trademark application. IndexGPT automates the creation of thematic investment baskets by generating keywords associated with a theme, which are then analyzed through natural language processing to identify relevant companies from news articles. While not revolutionary compared to the AI frenzy gripping Wall Street, IndexGPT represents a cautious step towards utilizing AI in finance, where regulatory scrutiny and the need for validated use cases present significant challenges amidst the quest to harness AI's potential for market mastery.

**CONCLUSION**

"Amrit Kaal" symbolizes a transformative vision for India, a beacon of hope illuminating the path towards a future brimming with boundless opportunities across all facets of existence. It encapsulates the collective aspirations of a nation poised to transcend its limitations and carve out a destiny steeped in progress and prosperity. However, the realization of this dream demands concerted efforts and unwavering dedication from every stratum of society. It necessitates a paradigm shift in attitudes, behaviors, and policies to unleash the full potential of India's vast human capital and abundant resources.

At its core, "Amrit Kaal" embodies the ethos of resilience, innovation, and inclusive growth. It envisions a society where every individual, regardless of background or circumstance, has the opportunity to thrive and contribute meaningfully to the nation's development journey. Achieving this lofty ambition requires a multifaceted approach, encompassing economic reforms, social initiatives, and technological advancements tailored to address the unique challenges and opportunities of the 21st century.

In the economic sphere, "Amrit Kaal" heralds a new era of dynamism and competitiveness, characterized by robust growth, sustainable development, and equitable distribution of wealth. It calls for bold reforms that stimulate entrepreneurship, attract investments, and foster a conducive environment for business expansion and innovation. Empowering micro, small, and medium enterprises (MSMEs) emerges as a key priority, as they serve as the backbone of India's economy, driving job creation, income generation, and regional development.

Moreover, "Amrit Kaal" recognizes the pivotal role of human capital in driving sustainable development and global competitiveness. It underscores the importance of investing in education, healthcare, and skill development to equip the workforce with the requisite knowledge and capabilities to thrive in an increasingly interconnected and technology-driven world. By fostering a culture of lifelong learning and innovation, India can harness the transformative potential of its demographic dividend and position itself as a knowledge powerhouse on the global stage.

Furthermore, "Amrit Kaal" encompasses a broader vision of social inclusion and empowerment, where every citizen enjoys access to basic rights, opportunities, and dignified living standards. It advocates for

policies and programs that promote gender equality, social justice, and environmental sustainability, recognizing the interconnectedness of human well-being and planetary health.

In essence, "Amrit Kaal" represents a rallying cry for collective action and shared responsibility towards building a brighter, more prosperous future for India and its citizens. It transcends political ideologies and temporal constraints, uniting individuals and institutions in a common quest for excellence and progress. As India embarks on this transformative journey, guided by the principles of inclusivity, innovation, and integrity, it has the potential to emerge as a beacon of hope and inspiration for the world, embodying the timeless values of resilience, compassion, and solidarity.

### **SUGGESTIONS**

The resurgence of prosperity in the banking and finance sector hinges upon a fundamental transformation in education and training methodologies tailored to align with industry standards. Today's generation represents the future workforce, and empowering them with the requisite knowledge and skills is paramount. Introducing digital training initiatives stands as a pivotal strategy in bridging the gap between traditional education frameworks and the dynamic demands of the banking and finance sector in the digital age.

The landscape of banking and finance is rapidly evolving, propelled by technological advancements and shifting consumer preferences. In this era of digitalization, proficiency in digital tools and platforms is no longer an option but a necessity. Digital training programs can equip aspiring professionals with competencies in areas such as financial analytics, blockchain technology, cybersecurity, and fintech innovations. By imparting practical skills and fostering adaptability to technological disruptions, such initiatives can cultivate a highly skilled talent pool capable of driving innovation and sustainable growth in the sector.

However, alongside efforts to enhance skill sets, it is imperative to fortify the regulatory framework to safeguard against emerging threats such as cybercrimes and fraudulent activities. Governments play a pivotal role in establishing and enforcing robust regulatory measures to maintain the integrity and stability of the financial system. Collaborative endeavors between regulatory authorities, financial institutions, and technology experts are essential to identify vulnerabilities, anticipate potential risks, and implement preemptive measures to mitigate them effectively.

Furthermore, the aspirations of a new and empowered India rest heavily on the shoulders of its youth. The youth demographic represents not just a demographic dividend but also the driving force behind socio-economic progress and national development. Realizing the full potential of this demographic dividend necessitates concerted efforts to nurture talent, foster innovation, and create avenues for meaningful participation in the economy. Empowering the youth with quality education, training, and opportunities for personal and professional growth is essential for unleashing their creativity, entrepreneurial spirit, and leadership potential.

In essence, the resurgence of prosperity in the banking and finance sector is intricately linked to the transformative power of education, digitalization, and regulatory efficacy. By aligning education curricula with industry requirements, leveraging digital technologies for training, and implementing robust regulatory frameworks, stakeholders can catalyze a paradigm shift towards a more resilient, inclusive, and prosperous financial ecosystem. Moreover, by investing in the potential of the youth and enabling them to realize their aspirations, India can chart a course towards sustainable development and global leadership in the 21st century.

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## STUDY OF STARTUP SECTOR IN MUMBAI IN AMRITKAL

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## ABSTRACT

The above mentioned study is carried to analysis the impact of Startup and Small Business Sector in Mumbai during Amrit Kal. This study will cover limited part of Mumbai as there is a limitation of time. I selected this topic as I felt Small sector is now covering most of the dynamic and innovative business ideas in small investment. It leads to generate the employment as well as boost economy in financial manner also. Due to the impact of several government schemes, the country is witnessing a wave of entrepreneurial spirit today. In every household, regardless of status and background, people want to start businesses and establish their own companies. It has been established that innovation clubbed with a passion for problem-solving can create a startup ecosystem. **India is the third-largest startup ecosystem in the world.** But Still Startup Sector is having their own limitation and problems. To Analysis the Limitation of Startup sector I prepared this research paper.

Keywords: Startup Sector, Amrit Kal, Small Sector Business

## INTRODUCTION

Since 2014, when there were just 350 startups in India recognised by the Department for the Promotion of Industry and Internal Trade (DPIIT), there are now **1.15 lakh startups registered** (as of November 2023). India's youth has shown the world the power of their 'can do' spirit by making India **home to 1 out of 10 unicorns globally!** Owing to schemes like **Startup India and Stand-Up India**, India's startup journey has taken off. The country is home to **over 100 unicorns**, and **52% of these startups are from tier 2 and tier 3 cities**. In 2022 alone, it saw the rise of 22 unicorns with a total valuation of \$29.2 billion. The future for the country's startups looks bright as more and more Indian unicorns are on their way to becoming **decacorns** (obtaining a valuation of \$10 Billion).

Startups also significantly contribute to the country's economy by providing direct and indirect employment. So far, **Indian startups have generated over 10.34 lakh direct jobs** and are driving employment expansion in sectors such as e-commerce, Fintech, Edtech, and health tech. These startups are instrumental in fostering the growth of gig economy employment opportunities.



## Funding India's Future: Support to Startups

Numerous initiatives, such as the **Startup India Action Plan**, have been pivotal in laying the groundwork for robust government support, schemes, and incentives. Additionally, the **Credit Guarantee Scheme for Startups** plays a crucial role by providing credit guarantees for loans extended to startups recognized by the Department for Promotion of Industry and Internal Trade (DPIIT) through Scheduled Commercial Banks, Non-Banking Financial Companies (NBFCs), and Venture Debt Funds (VDFs). Since 2016, the government has undertaken over **50 regulatory reforms**, focusing on enhancing the ease of doing business, facilitating capital raising, and reducing compliance burdens within the startup ecosystem. The streamlining of procurement processes through the **Government E-Marketplace**, a **3-year income tax exemption**, and the implementation of **Start-ups Intellectual Property Protection** further empower startups to file applications for patents,

designs, and trademarks. The introduction of a **fast-track mechanism for easy exits** and initiatives connecting Indian startups with global players collectively exemplify the comprehensive measures aimed at nurturing the startup landscape. These concerted efforts have not only significantly assisted existing startups but have also been instrumental in fostering the growth of new startups across the country. By addressing various facets of the startup ecosystem, these measures contribute to an environment that encourages innovation, entrepreneurship, and global connectivity, thereby propelling India's standing as a thriving hub for startups.

However, the growth of these startups has been hampered by a number of factors, including a lack of capital, government support, and infrastructure. Now that startups will be able to take advantage of tax breaks for another year, they will be able to focus solely on capital growth and infrastructure support, such as access to high-speed internet, to help scale up their operations. Tax incentives will also assist companies in lowering their operating expenses. This will enable startups to spend on R&D while concentrating on their core business operations.

Bust still due to lack of access to capital, Indian startups frequently encounter funding issues. Venture capital firms typically target established startups, making it difficult for early-stage businesses to obtain funding. In addition, it is challenging for investors to fund new businesses in India due to the high risk of investing in startups and the difficulties posed by regulations.

### **POSSIBLE SOURCES OF FUNDING**

**Indian startups have access to the following funding options:**

1. Angel Investors: Individual investors who exchange equity for capital.
2. Venture Capitalists: institutional investors who make investments in promising early-stage startups.
3. Government schemes: Startups are supported and funded by a number of government programs, including the Startup India Scheme and the Atal Innovation Mission.
4. Crowdfunding: Startups can raise money from a large number of people through online platforms.
5. Accelerators and incubators: In exchange for equity, these organizations offer startups funding, guidance, and resources.
6. Bank Loans: Loans from banks and other financial institutions are another option for startups, but these loans may require collateral or a strong credit history.

### **TIPS FOR SECURING FUNDING**

**Here are a few hints for new businesses to get financing in India:**

1. Create a comprehensive and precise business plan that emphasizes your vision, objectives, and growth potential.
2. Create a strong team with a diverse set of skills and a track record of success.
3. Utilize your network and look for connections with venture capitalists, angel investors, and other potential investors.
4. Showcase your company and pique the interest of potential investors by participating in startup competitions and pitch events.
5. Use social media and a professional website to build a strong online presence.
6. In order to reach a mutually beneficial agreement, be prepared to negotiate and flexible with investors.
7. Look for government programs and projects that offer startup funding and support.
8. In order to gain access to resources, mentorship, and funding, think about working with an accelerator or incubator.
9. Securing funding can take a long time and be difficult, but persistence can pay off in the end. Be patient and persistent.

There is a another problem of Startup Business is Lack of Skilled Talent. Finding and employing skilled workers is frequently a challenge for Indian startups. Because the country's education system does not always provide startups with the necessary skills and training, there is a shortage of skilled professionals in certain



fields. Startups also struggle to attract and keep talented employees due to established competitors and the lure of high-paying jobs abroad.

### **Possible solutions for acquiring skilled talent**

#### **For startups in India, the following are some options for acquiring skilled workers:**

- Collaboration with educational establishments: Startups can develop programs that provide students with real-world experience and exposure to the startup ecosystem by collaborating with universities and other educational institutions.
- Make compensation competitive: Startups can attract and keep talented employees by offering competitive salaries, equity, and other benefits.
- Make use of online and social media platforms: Startups can use online job boards and social media to attract and hire skilled workers from across the country.
- Take part in work fairs and systems administration occasions: New businesses can go to work fairs and systems administration occasions to meet expected applicants and assemble associations with industry experts.
- Provide professional development and training: Employees can benefit from training and professional development programs offered by startups to enhance their skills and retain them over time.
- Work with other startup companies: Startups can collaborate to pool resources and share talent, addressing a skill gap in particular industries.
- Consider options for working from home: By providing remote work opportunities, startups can reach a larger pool of qualified professionals from across the nation, which helps them in their search for talent.

### **Tips for retaining talented employees**

#### **Startups in India may find it difficult to keep talented employees because there is a lot of competition for skilled workers. Here are a few hints to assist with holding capable representatives:**

- Provide growth opportunities: Your employees should be given chances to learn and grow. Mentoring, education, and training programs are all examples of this. If employees have the impression that their careers are developing, they are more likely to remain with the company.
- Provide flexible work schedules: Think about providing options for flexible working hours, such as remote employment or schedule flexibility. Employees may experience increased job satisfaction and loyalty as a result of this, as it can help them maintain a work-life balance.
- Reward and acknowledge good performance: Bonuses, promotions, and other incentives should be used to recognize and reward good performance. Employees will be motivated by this and will see that their efforts are valued and appreciated.
- Give a clear path for your career: Your employees should be given a clear career path that includes opportunities for advancement and growth within the company. Employees' motivation to stay with your company can be bolstered by this.

Startups in India can improve their chances of keeping talented employees and building a strong, committed team by implementing these suggestions.

## **RESEARCH METHODOLOGY**

### **Objectives**

1. To study Startup Sector in Mumbai in AmritKal
2. To analyse Investment Options of Businessman in Startup Sector
3. To Analyse the Employment Facilitation made due to Start up sector.
4. To Analyse the Limitations of the Startup sector.

### **LIMITATIONS OF THE STUDY**

1. The data collection was strictly confined to secondary sources. Primary data was associated with only the survey through questionnaire in google form.

- The project is unable to analyse each and every individual hence only limited respondents are selected for study.
- Some respondents randomly fill up the form might be responses submitted by the individuals may not give accurate result.

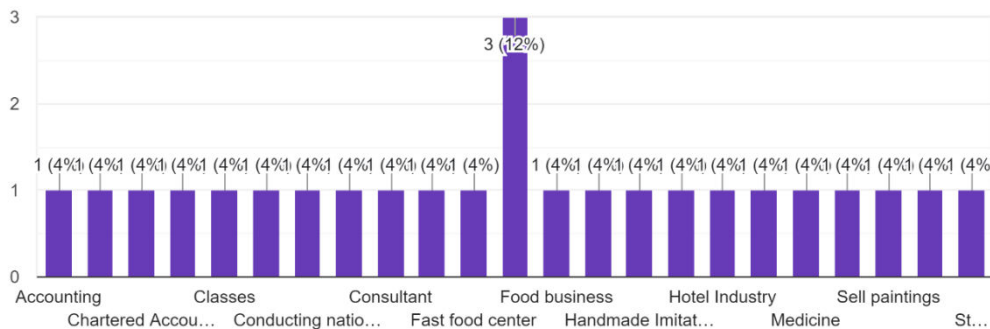
**Sample Size**

The sample size of the study is limited to 25 Startups from various area of Mumbai suburban.

**LITERATURE REVIEW**

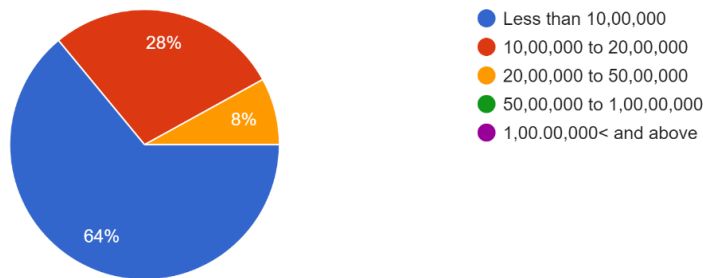
**Data Analysis and Interpretation**

Nature of Business  
25 responses



There are 25 Different Startups businessman’s from different sectors gave their input in the primary data.

Q.2 Amount of Investment required to start the business  
25 responses

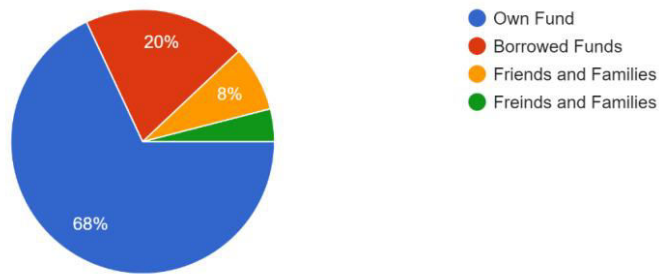


Amount of Investment In Business	In Nos	In %
Less Than 10,00,000	16	64%
10,00,000 to 20,00,000	7	28%
20,00,000 to 50,00,000	2	8%
50,00,000 to 1,00,00,000	-	-
1,00,00,000 < and above	-	-
<b>Total</b>	<b>25</b>	<b>100%</b>

Most of the Startups business Respondents were invested less than Rs.10,00,000. That is Basic capital required only to run operating expenditure with basic infrastructure. Very few Startups can afford to invest more in Business infrastructure and other part.

Q.3 Sources of Finance

25 responses

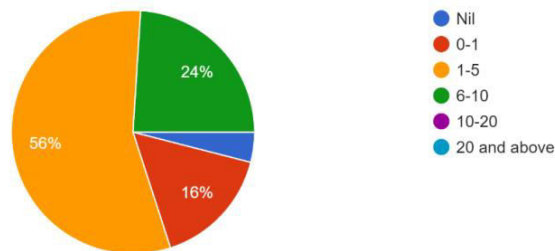


Sources of Finance for Business	In Nos	In %
Own Fund	17	68%
Borrowed Fund	5	20%
Friends and Families	3	12%
<b>Total</b>	<b>25</b>	<b>100%</b>

Majority Startups business Respondents were depend on the own fund for the capital. Due to that Sufficient fund may not be available for every startup.

Q. 4 No. of Manpower utilized for firm

25 responses

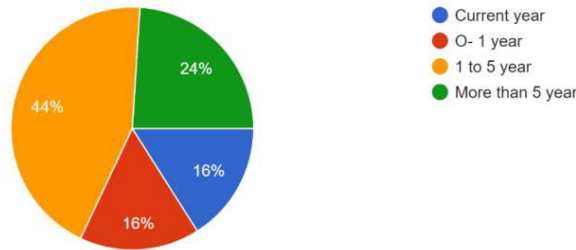


No. of Manpower utilized in startup firm	In Nos	In %
Nil	1	4
0-1	4	16
1-5	14	56
6-10	6	24
10-20	-	-
20 and above	-	-
<b>Total</b>	<b>25</b>	<b>100%</b>

From the Above Analysis it can be interpreted that every startup help to generate employment opportunities for the society.

Q.5 How Many years you are running the above business idea?

25 responses

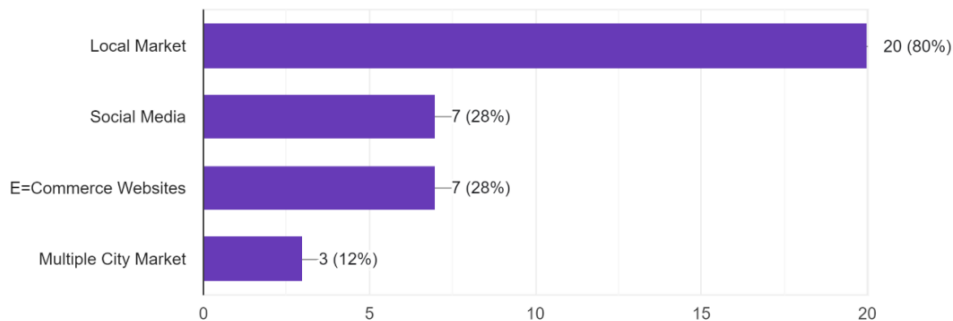


No of years of Business	In Nos	In %
Nil	1	4
0-1	4	16
1-5	14	56
6-10	6	24
10-20	-	-
20 and above	-	-
<b>Total</b>	<b>25</b>	<b>100%</b>

Form The Above Analysis it can be seen that most of the start up businessman’s are new in this sector. There are not having good experienced of market. But still they are trying hard to establish their business.

Q.6 What is target market for your product?

25 responses

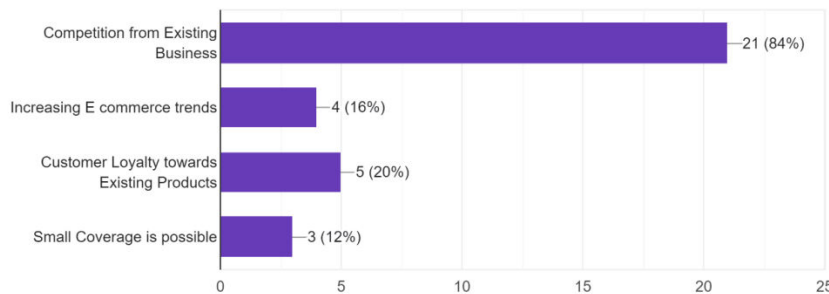


Market Cover by Startup Business	In Nos	In %
Local Market	20	80
Social Media	7	28
E-Commerce	7	28
Multiple City Market	3	12
<b>Total</b>	<b>37</b>	<b>100%</b>

Multiple Respondents were dealing in various markets. But still there are various respondents at their initial stage so probably they still prefer to deal in local market. So there is Scope of extension in another market. Even National As well as International Level Market.

Q.7 Did you face any problems in business?

25 responses



Problems Faced by Startup Business	In Nos	In %
Competition from Existing Business	21	84
Increasing E Commerce Trends	4	16
Customer Loyalty towards Existing Products	5	20
Small Coverage is Possible	3	12
<b>Total</b>	<b>33</b>	<b>100%</b>

There are multiple problems faced by startup business in day to day life. As they are new in this line. and one of the biggest challenge is now competition from existing business from same line.

**CONCLUSION**

1. It has been concluded from the research that in Amrit Kal Startup Business Get Boost. Due to That No of ideas in various ideas in various sectors are come up to set up new startup business.
2. It was also Observed that government also empowered the startup sector of Mumbai with various schemes.
3. It further observed that in spite of government of support, Startup sector is not able to establish at initial level due to lack of sufficient funding and skilled working.
4. It was further observed that startup sector need to face competition from existing well versed branded product which affect overall market share of the start up business.

**SUGGESTIONS**

1. It Is suggested to Government to bring some schemes to motivate long term finance for startup ideas so that they can explore at national and international level which ultimately helps to generate employment for nation and growth for Indian Economy.
2. It is also Suggested to Startups Business man to Explore new and innovative business idea and take help of e – commerce to reach to the large public without investing huge capital.
3. To Sustain in the existing Market startups has to make their product and service innovative, attractive and easily available for every common public.

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**EVALUATING THE EFFECTIVENESS OF CRISIS COMMUNICATION STRATEGIES IN FOOD INDUSTRY THROUGH THE LENS OF MCDONALD'S FAKE CHEESE CONTROVERSY**

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**ABSTRACT**

*In the current fast paced world connected through social media, organisational crises are becoming more prevalent. Crisis communication is an essential tool to navigate through such crises. Literature review shows that use of social media in addition to traditional tools is essential for handling crises. This study examines the effectiveness of crisis communication strategies in the food industry through the lens of the McDonald's fake cheese controversy that took place in February 2024. The study analyses different communication tools used by McDonald's such as press statements, social media posts, influencer collaborations and its impact on shaping public perception. The analysis highlights the importance of having prompt, transparent, evidence based communication during a crisis. The lessons learnt from McDonald's crisis management provides valuable insights for the food industry in developing effective communication plans to foster consumer trust.*

*Keywords: crisis communication, crisis handling, crisis management, communication strategies*

In today's digitally connected and fast paced world, organisations can find themselves entangled in a crisis in a short span of time. A crisis is said to take place when the stakeholder expectations are perceived to be violated, potentially harming the organisation and its stakeholders. The focus here is on organisational crises instead of disasters or emergencies, as organisations manage the crises themselves and governmental bodies handle disasters (Coombs, 2018).

Effective crisis communication strategies turn out to be crucial for organisations to navigate through such crises and preserve stakeholders' trust. Crisis communication is an ongoing act of developing shared understanding amongst various groups, communities, individuals, and agencies within the context of a crisis. Its objectives are to anticipate, address, and minimise the threats and harm. This definition emphasises the varied roles that senders and receivers play, as well as the practical aspects of communication during a crisis. Additionally, the communication process promotes collaboration among individuals, groups, communities, and agencies to develop frameworks for understanding and action, even amidst the uncertainty and challenges of a crisis (Sellnow & Seeger, 2021). Transparency, instant response, correct use of social media, consistency in all messages, and personal touch are some of the principles for effective crisis communication.

Any crisis presents an opportunity to the organisations to learn and develop. It is essential to conduct a comprehensive post-crisis evaluation to assess the effectiveness of the communication strategies used during a crisis.

**REVIEW OF LITERATURE:**

The study revealed social media communication crises can occur unpredictably within companies which threatens the reputation of the company. Organisations can overcome these crises and protect their reputation through timely and appropriate response to such issues on social media platforms (Diana & Ayuningtyas, 2023). For effective communication management during crises, leading organisations employ specialised crisis communication plans and teams, meticulously identifying possible crisis situations along with the protocols that align with them. These plans are thoroughly tested and practised so as to be prepared for the difficult times (Tomić et al., 2024). In order to fulfil customer expectations and improve overall satisfaction, it is essential to utilise different communication tools. Transparency and effective communication are essential while handling crises especially for companies in the aviation sector (SERENGİL & Gülay, 2024). Organisations should place a high priority on transparent, authentic, and responsive communication tactics to successfully manage the crises caused by false information. The study also highlights the pivotal role of senior executives in setting the tone during crisis management. They can promote open communication with all stakeholders, and show dedication to ethical communication standards (Gasana, 2024).

It is important to incorporate digital media and social media into crisis communication plans. Organisations can understand public sentiments better, formulate appropriate responses by monitoring online discussions, and actively engaging with stakeholders via social media platforms. It is equally important to maintain a delicate balance between promptness and precision in order to minimise the spread of misinformation (Kingori, 2024). The study suggests, crisis communication efforts should focus on micro and emerging media platforms other than the traditional mass media. This shift is driven not just by broader reach of these channels but also by their

enhanced quality and potential for fostering a dialogue (Frandsen & Johansen, 2011). The study looked at crises and crisis communication systems (CCS) in relation to social media crisis management (SMCM), depicting how fragmented channels and emerging communication methods have transformed traditional CCS. After undertaking a thorough review of literature, the study found gaps in prior research and proposed an interactive and communication (ICC) model that integrates the established CCS theories with emerging SMCM literature (Cheng, 2018). Stakeholders from different demographics and experiences, generally place varying degrees of value on the essential elements proposed, while also recognising situational factors such as organisational responsibility. Actions, apologies, and leadership emerged generally as the most important aspects, whereas crisis history and timelines were typically deemed less critical (Karinshak et al., 2024).

### **RESEARCH GAP**

Strategies for communication during crises have been studied extensively in the past. However, there exists a gap in understanding the effectiveness of these strategies in the digital era and how social media affects public perception. This study aims to bridge the gap by analysing the McDonald's fake cheese controversy as a case study.

### **Rationale of study**

The food industry operates in a highly competitive and an image conscious market. Trust from the general public and perception of consumers towards food quality is vital for the success of any business operating in the food industry. After the fake cheese controversy, McDonald's faced a critical challenge to win back the trust of consumers. McDonald's fake cheese controversy serves as an appropriate case study to examine the effectiveness of PR strategies in handling crises in the food industry.

### **Crisis faced by McDonald's**

McDonald's India was facing trouble in February 2024. This was mainly due to news reports stating Maharashtra's FDA had accused the company of using fake cheese. In October 2023, the agency had conducted an extensive month-long investigation. The agency found that McDonald's had been using cheaper cheese substitutes, like vegetable oil, in their burgers and nuggets. McDonald's faced accusations of misleading customers by using these alternatives without proper labelling. Further, FDA suspended the licence of the Ahmednagar outlet and insisted McDonald's to accurately disclose the ingredients in the menu by removing the term- cheese from certain menu items. In December 2023, McDonald's notified the FDA that they have altered the names of their products based on interim guidance by removing the term- cheese. It is important to note that the renaming happened solely to adhere to the interim guidelines and cannot not be interpreted as an acknowledgment to any quality issue. Later in March 2024, the Food Safety and Standards Authority of India (FSSAI) verified that McDonald's exclusively utilises authentic cheese in its products.

### **Crisis Communication Objectives of McDonald's**

The main focus of McDonald's communication objectives was on regaining public trust. This required addressing Maharashtra FDA's investigation findings in a transparent manner, complying with new regulations regarding menu labelling, and reassuring customers about quality and safety of their ingredients. In order to accomplish this, McDonald's needed to communicate effectively with multiple stakeholders including customers, media, regulatory bodies, and their employees.

### **RESEARCH OBJECTIVES**

1. To study the crisis communication tools used by McDonald's during the fake cheese controversy
2. To analyse the effectiveness of crisis communication strategies used by McDonald's during the fake cheese controversy
3. To assess the role of social media in shaping public opinion
4. To suggest measures to improve PR practices for crisis communication in the food industry

### **RESEARCH METHODOLOGY**

This study has used secondary data techniques namely:

1. Content Analysis: Analysing the press releases, press statements, social media posts, and other media coverages related to the fake cheese controversy.
2. Case Study Analysis: Conducting an in-depth analysis of McDonald's response during the crisis.

**FINDINGS**

**Crisis Communication Tools used by McDonald's:**

1. **Statement to the Media:** Through a statement to the media, a spokesperson from McDonald's India (W&S) informed customers that they exclusively use only real and quality cheese in all cheese based products. This statement was issued after removing the word 'cheese' from the menu at McDonald's stores. The spokesperson also emphasised that they are actively working on the issue with the relevant authorities.
2. **Statement to the Employees:** In a letter addressed to the employees, the Managing Director of Westlife Foodworld mentioned that they may have seen recent media coverage regarding allegations on McDonald's using non-genuine cheese, as reported by the Maharashtra FDA. The Managing Director acknowledged that such claims may have raised concerns amongst employees. At the same time, he assured that these allegations were entirely untrue.
3. **Social Media Posts:** McDonald's started sharing a series of responses in February 2024 from the day the news report of the cheese controversy started cropping in the media. Initially they posted about how they use real cheese and shared their commitment to transparency in the ingredients used. In another post they shared that their licence has not been revoked due to any cheese misconception. They also shared that the use of cheese substitutes is a misconception.
4. **Youtube Videos:** The senior leaders of McDonald's India took centre stage by sharing videos affirming the company's commitment to quality, use of real cheese, and their collaborative efforts with the authorities to resolve the issue.
5. **Collaborations on Instagram:** McDonald's collaborated with nutrition based influencer- Suman Agarwal popular home chef- Gujju ben na nasta and chef Sanjeev Kapoor. In these posts, it was discussed how McDonald's employs rigorous quality processes and highlighted that its cheese has been validated as authentic by regulatory authorities and confirmed through NABL lab testing. The videos also showcased the entire cooking process of their burgers.

**Table 1: Analysis of Communication Tools:**

Communication Tool	Positive Aspects	Weaknesses
<b>Statement to the Media</b>	<ul style="list-style-type: none"> <li>● Emphasised commitment to adhering to all regulations</li> <li>● Using only authentic cheese in its products</li> </ul>	<ul style="list-style-type: none"> <li>● Lacked clarity as it didn't address the reason for modification. Changes seem to be a temporary response to the 'interim' guidelines.</li> </ul>
<b>Statement to the Employees</b>	<ul style="list-style-type: none"> <li>● Acknowledged the issue, as ignoring could lead to distrust</li> </ul>	<ul style="list-style-type: none"> <li>● Lacks transparency as it does not offer any evidence to support their claim</li> <li>● Fails to offer reassurance in terms of quality standards followed</li> </ul>
<b>Social Media Posts</b>	<ul style="list-style-type: none"> <li>● Early response</li> <li>● Transparency in ingredients used</li> </ul>	<ul style="list-style-type: none"> <li>● Lacks details on quality standards followed</li> <li>● Lacks evidence to support their stand</li> </ul>
<b>Youtube Videos</b>	<ul style="list-style-type: none"> <li>● Humanises the brand</li> <li>● Demonstrates commitment of top</li> </ul>	<ul style="list-style-type: none"> <li>● Lacked professional touch</li> <li>● No subtitles</li> </ul>



	leaders	<ul style="list-style-type: none"> <li>● No branding in the background</li> </ul>
<b>Collaborations</b>	<ul style="list-style-type: none"> <li>● Third party validation</li> <li>● Encourages trust</li> </ul>	<ul style="list-style-type: none"> <li>● The target audience of Gujjuben na nasta doesn't align with that of McDonald's</li> </ul>
<b>Overall</b>	_____	<ul style="list-style-type: none"> <li>● Inconsistency in sharing posts only on McDonald India's south &amp; west page and not on north &amp; east page</li> <li>● Can raise concern and speculations among customers</li> </ul>

**Analysis of Role of Social Media in shaping Public Opinion**

1. **Amplifying the Issue:** The initial news about the Maharashtra FDA's accusations had spread quickly on social media platforms, sparking public outrage and discussion.
2. **Prompt and Transparent communication:** McDonald's response strategy heavily utilised social media. They used social media platforms like Instagram, X (formerly Twitter), Facebook, Youtube for a series of communications aimed at addressing the issue. By using social media, McDonald's provided a space for consumers to express concerns in a transparent form.
3. **Reaching to Wider Audience:** By using multiple social media platforms and influencer collaborations, McDonald's could effectively reach a broad audience in a short timeframe during such crucial times.
4. **Shaping the Narrative:** The comments on social media posts, collaborations with influencers significantly influenced how people view the situation and the clarification issued by McDonald's.
5. **Build Trust:** The videos by senior leaders on Youtube helped to build trust amongst consumers as it had a personal touch and authenticity involved. Collaborations with influencers contributed to the credibility of McDonald's as it included third party endorsements.

**Recommendations for Crisis Communication in Food Industry**

1. **Internal Training:** Employees should be given training and guidance before the crisis occurs. Such a training should include ways to effectively communicate with all stakeholders during the time of crisis. Training employees beforehand ensures they have the necessary skills to navigate through the crisis situation.
2. **Communicate Early and Frequently:** Organisations must proactively address the issue before it is brought to the attention of the media. By doing so, the organisation can take control of the narrative. Frequent communication is essential to maintain trust with customers.
3. **Communicate through Multiple Channels:** Organisations that communicate through different channels like press releases, press statements, social media posts, etc can reinforce key messages . It also helps in communicating with different stakeholders through their preferred channel.
4. **Provide Evidence:** It is essential to communicate with supporting documents to clarify doubts of the stakeholders. Providing evidence strengthens the credibility of the organisation and builds trust amongst stakeholders.
5. **Communicate with all Stakeholders:** Organisations must communicate with all relevant stakeholders groups such as employees, media, consumers, and regulatory authorities. The key element of effective communication involves ensuring each group feels heard and valued.
6. **Choose Relevant Influencers:** It is important to select relevant influencers to ensure the organisation's message resonates with the intended audience. Engaging the audience through collaborations with influencers who share the organisation's value will increase brand loyalty.

7. Continuous Monitoring: Organisations can learn about the impact of their communication strategies and make necessary adjustments if required by monitoring public sentiment through media coverage and comments on social media.
8. Consistent Messaging: Consistent messaging involves delivering the same message across all channels and platforms. This helps organisations to maintain a unified image of the brand during the time of crisis.

## CONCLUSION

While handling the fake cheese controversy, McDonald's demonstrated prompt and transparent communication through social media and press statements. However there were inconsistencies in certain aspects of their communication efforts. There was a lack of details and inconsistency in delivery of messages. Social media played a significant role in influencing public opinion. While handling crises in the food industry it is essential to have crisis preparedness, proactive approach, evidence based communication and consistent messaging across all channels.

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<https://youtu.be/eZxdNHbxfM4?si=6StCVBvotIZLMraT>

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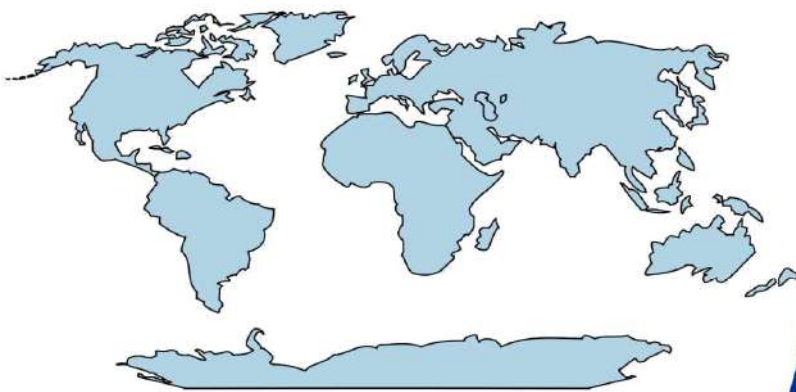
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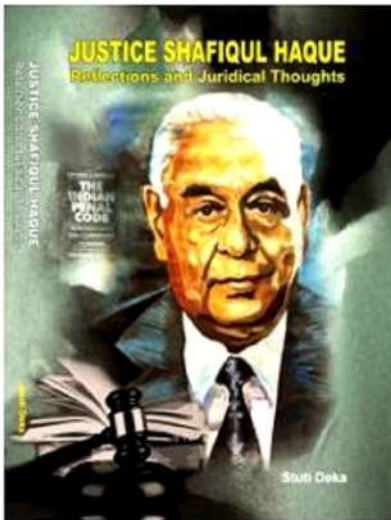


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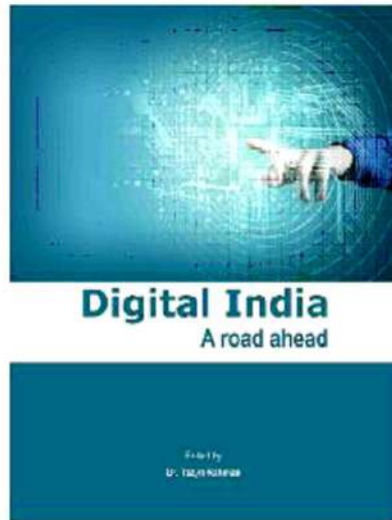
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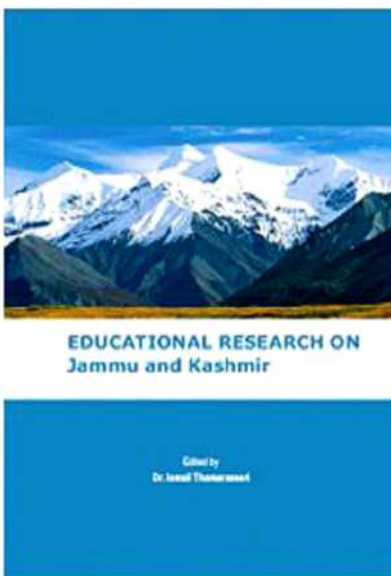
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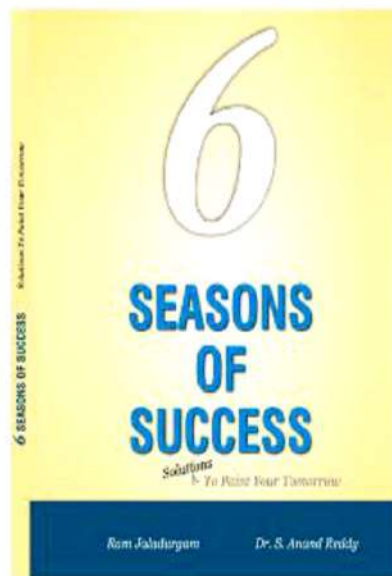
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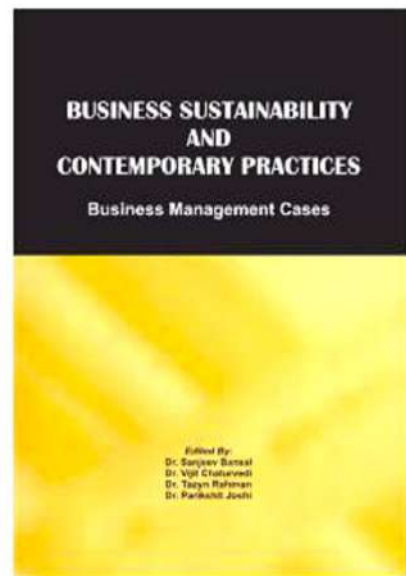
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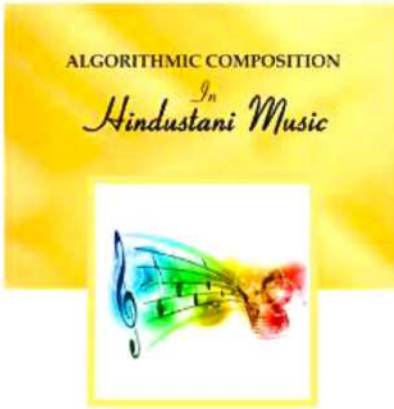


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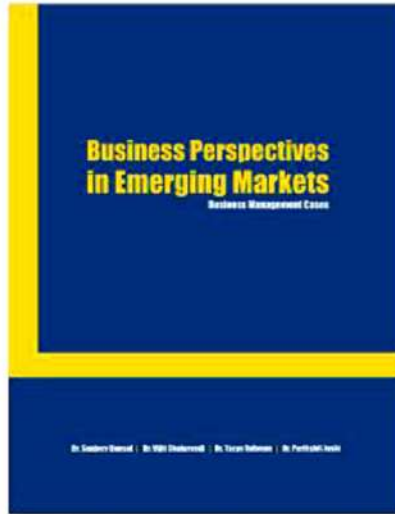




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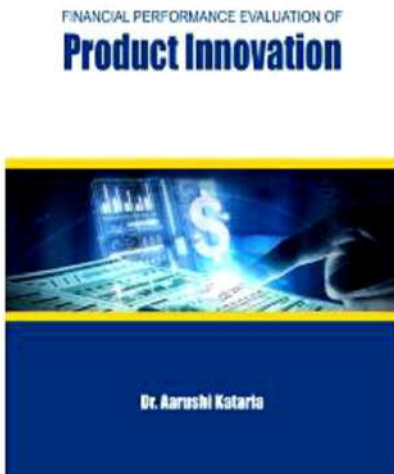


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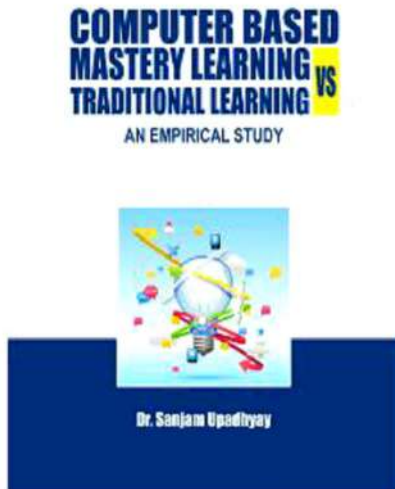
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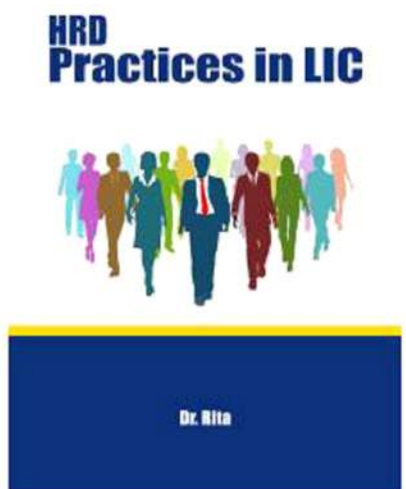
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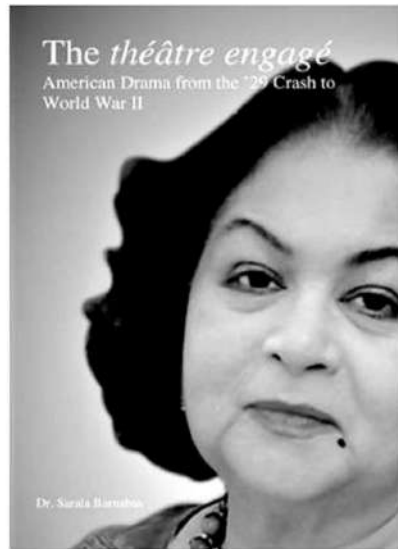
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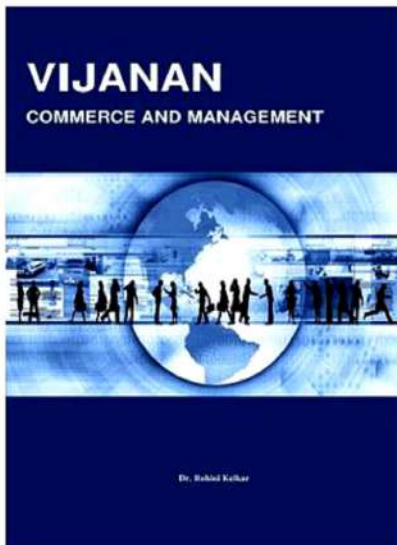
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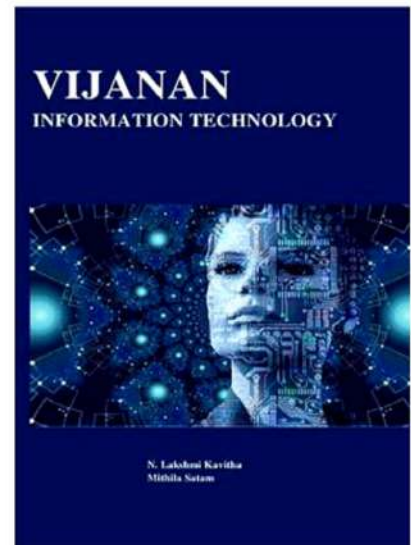
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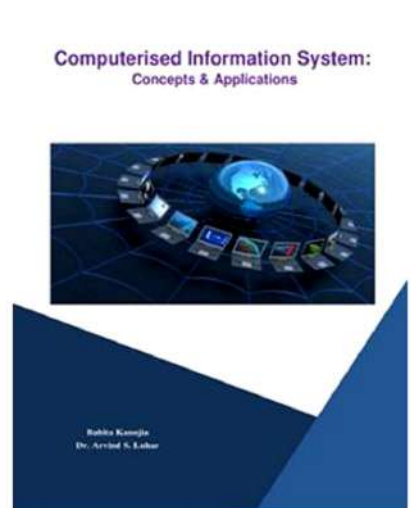
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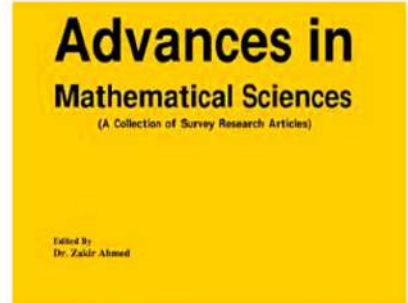
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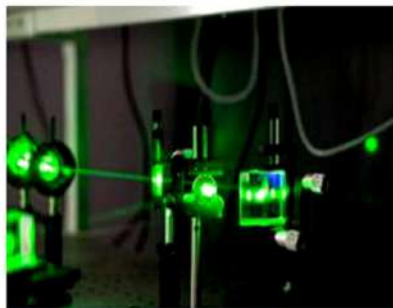


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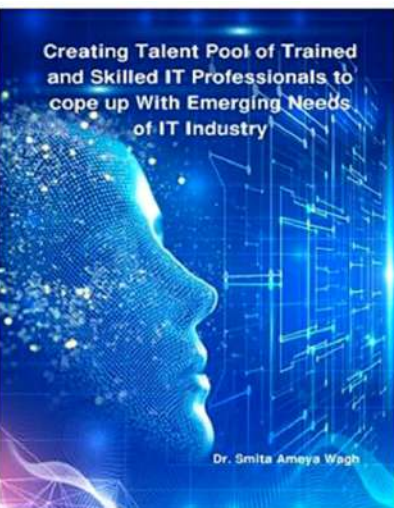
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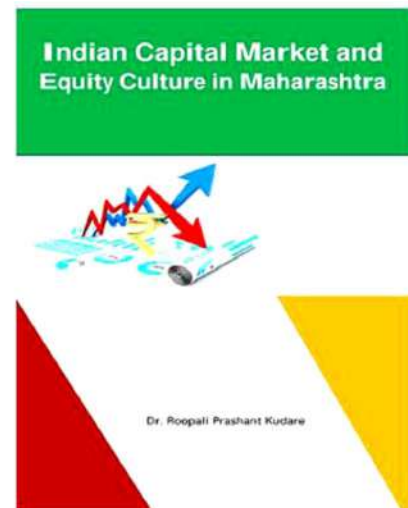
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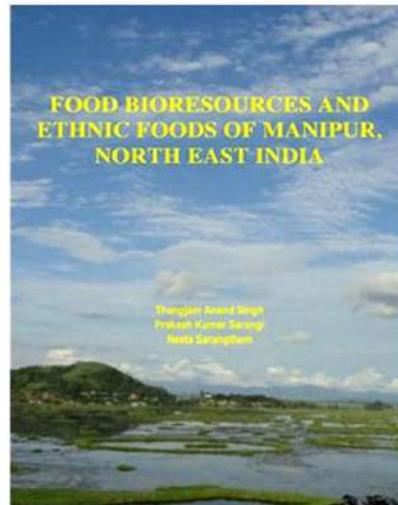




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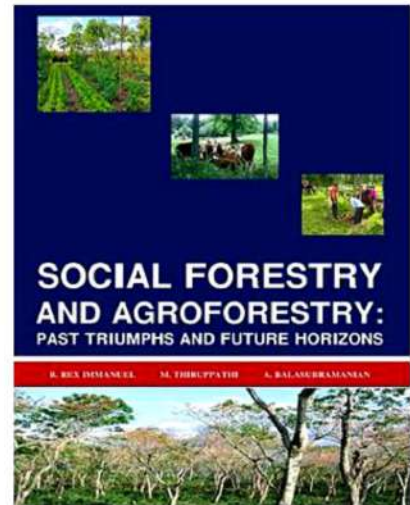
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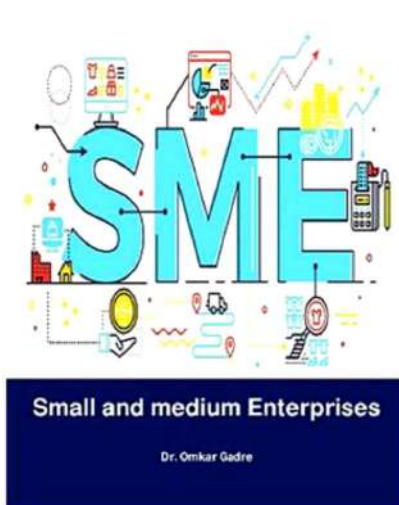
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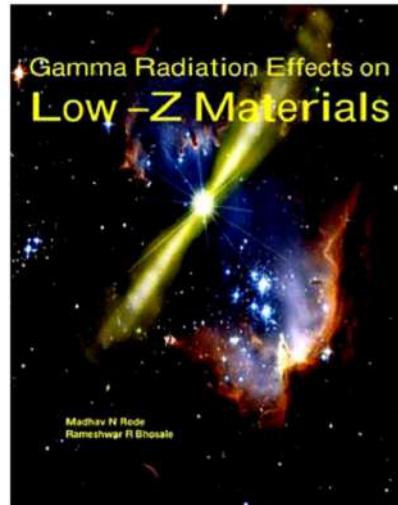
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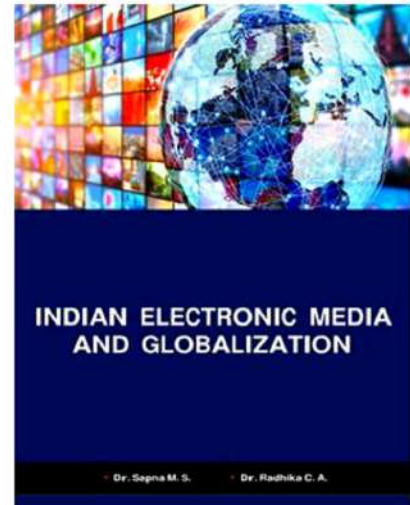
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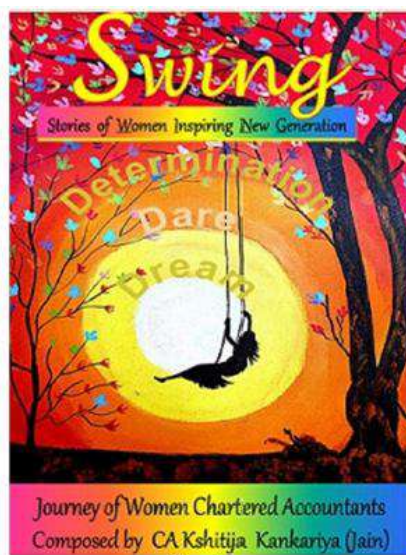
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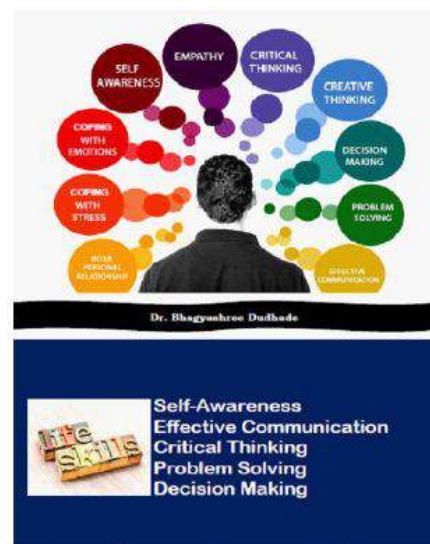


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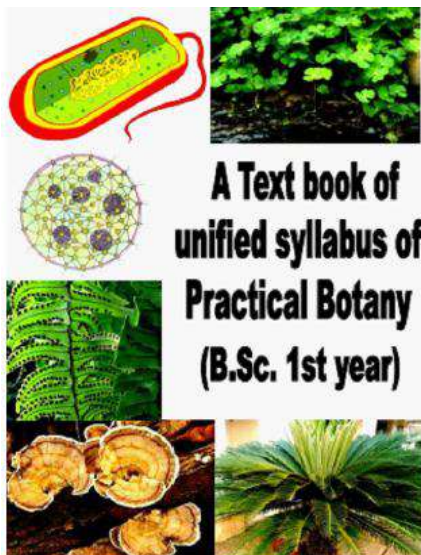


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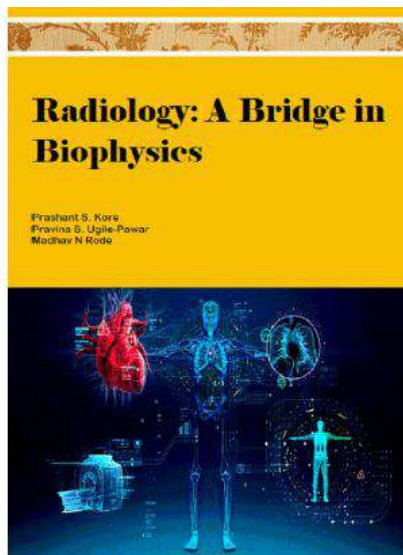
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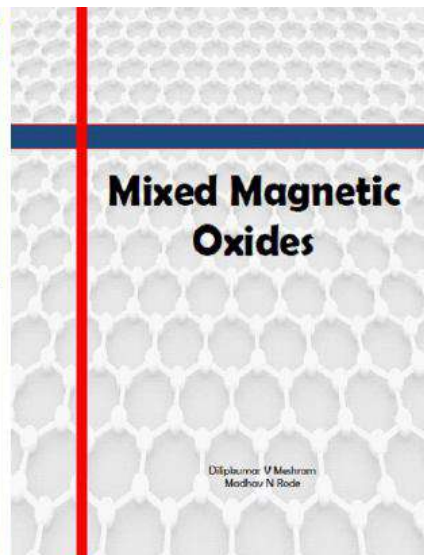
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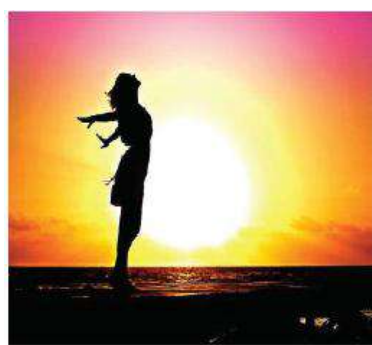
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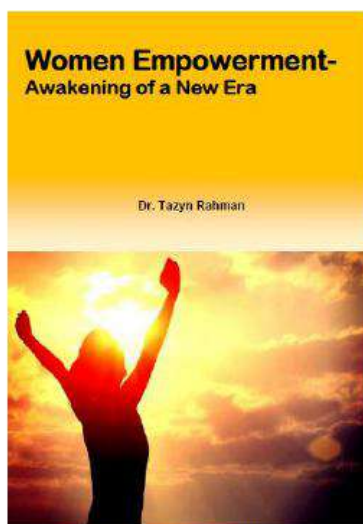
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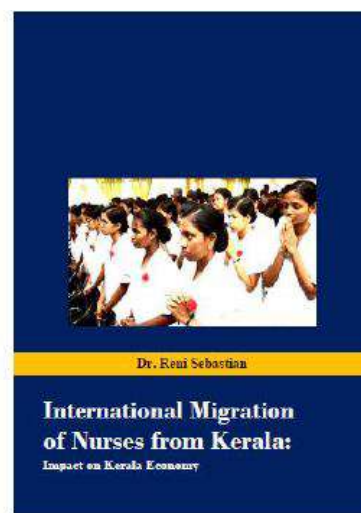
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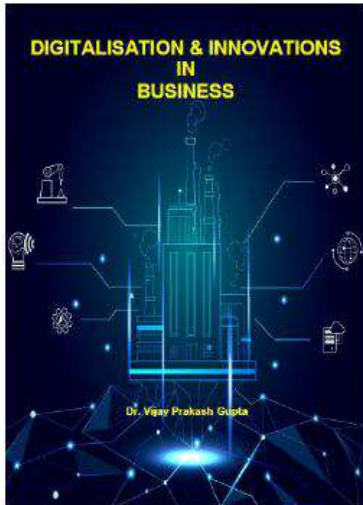
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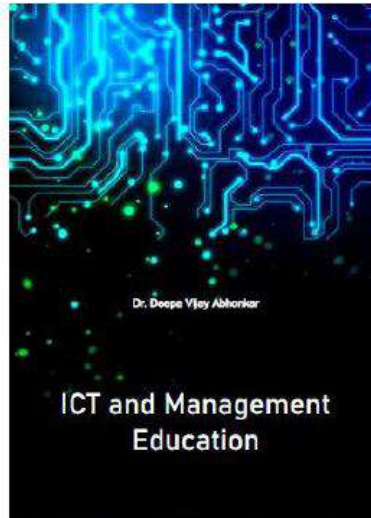
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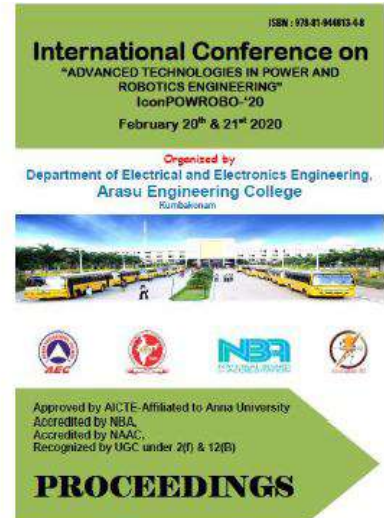
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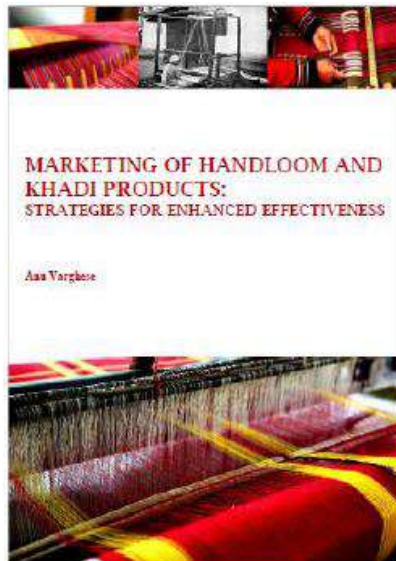
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