# Enlight

An edited volume on Indian Economy

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Muhammed Rafi N

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## *An Edited Volume on Indian Economy*

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*Editor*

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Wayanad, Kerala
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# Preface

It is with great pleasure that we announce that the Academic Publications Wing of the Postgraduate Department of Commerce at WMO Arts and Science College, Muttil, has published the fourth ISBN-numbered edited volume. The purpose of this volume is to compile thirty-three articles that are thought-provoking and were written by renowned academics from different parts of India. These papers delve into the many different facets of the Indian economy. The collection exemplifies the lively conversation that is taking place on the present economic difficulties, opportunities, and policy perspectives that are having an impact on our country. I am confident that this collection will serve as a very useful resource for a wide range of individuals, including students, academics, and policymakers. I would like to convey my deepest gratitude to all of the writers and reviewers who have made this book much better with their dedication and intellectual rigour through their contributions. I hope that this book will serve as a spark for further investigation and dialogue that is informed by thought.

## *Message of Head of the Department*

It gives me immense pleasure to present "***Enlight – An Edited Volume on Indian Economy***", the fourth publication of the Academic Publications Wing of the PG Department of Commerce, WMO Arts & Science College, Muttil.

This volume is a sincere academic endeavour aimed at fostering critical thinking and research among students, scholars, and faculty members from various educational institutions. The themes selected reflect contemporary issues that shape and redefine India's economic landscape. We are proud to provide a platform that encourages interdisciplinary academic engagement and meaningful dialogue on national development.


Mr. Shabeerali Pulikkalakath
Head of the Department & Assistant Professor
PG Department of Commerce
WMO Arts & Science College, Muttil, Wayanad

# Principals' Message

It gives me immense pleasure to extend my heartfelt congratulations to the Department of Commerce on the successful publication of this edited volume, a collection of insightful and conceptual research papers on the Indian economy. The Indian economy, with its vast diversity and dynamic nature, continues to offer rich ground for scholarly inquiry, critical analysis, and innovative policy discussions.

This volume reflects the academic commitment and intellectual depth of our faculty and contributors, who have examined various dimensions of the Indian economy, from multilateral co-operation, rural economy and poverty alleviation to entrepreneurship, sustainable growth, and financial inclusion. Such academic initiatives not only enrich the discipline but also strengthen the role of the institution as a centre of learning and research. The efforts of the editorial team, faculty, and contributors deserve sincere appreciation for their dedication and scholarly contributions.

WMO Arts and Science College stands as a beacon of academic excellence and meaningful research, inspiring generations of learners and scholars. This book will serve as a valuable resource for students, researchers, policymakers, and all those interested in understanding and contributing to India's economic journey.

Congratulations and best wishes to the editorial team, faculty members, and all contributors for their commendable work. May this publication inspire further research and meaningful explorations towards shaping the future of our nation's economy.

Dr. Viji Paul,
Principal, WMO Arts & Science College, Muttil,
Wayanad, Kerala - 673122

## *About the Editor*

**Muhammed Rafi N** is a distinguished scholar and researcher, presently holding the position of Assistant Professor of Commerce at WMO Arts and Science College, Muttil, Wayanad. He holds an M. Com and a B.Ed., and has successfully passed both the State Eligibility Test (SET) and the National Eligibility Test (NET). Driven by a profound enthusiasm for study and the transmission of knowledge, he has presented more than 30 talks at numerous national and international conferences and published over 20 research articles in esteemed journals. Muhammed Rafi N, a seasoned editor, has edited and published three volumes with ISBNs—*Retail Sector of India, Rural Development of India, and Sketches on Economic Development of India: A Socio-Economic Perspective*—each demonstrating his profound involvement with India's dynamic economic landscape. He has finalised two research projects funded by the University Grants Commission (UGC), New Delhi, and the Kerala State Higher Education Council, Thiruvananthapuram. He is currently undertaking his PhD in Behavioural Finance at the University of Calicut, focusing on investor psychology and market anomalies. His commitment to academia, research, and community development consistently inspires both students and fellow scholars.

**Articles Contributed by Various Institutions**

| Sl. | Institution | State |
|---|---|---|
| 1 | Ahalia School of Management, Ahalia Campus, Palakkad | Kerala |
| 2 | Sree Krishna College, Guruvayoor | Kerala |
| 3 | Ayyankali Memorial Arts & Science College, Pathanapuram | Kerala |
| 4 | Christian college, Kattakada, Trivandrum | Kerala |
| 5 | Co-operative Arts & Science College, Madayi, Kannur | Kerala |
| 6 | Department of Management Studies, Visvesvaraya Technological University | Karnataka |
| 7 | Department of Rural Studies, Tripura University | Tripura |
| 8 | GFG College, Harugeri, Belgaum | Karnataka |
| 9 | Government College Kodanchery, Calicut | Kerala |
| 10 | GVHSS Pullanoor, Malappuram, Kerala | Kerala |
| 11 | IISWBM, Kolkata, West Bengal | W. Bengal |
| 12 | Lady Doak College, Madurai. | Tamil Nadu |
| 13 | MES Asmabi College, Kodungallur, | Kerala |

| | | |
|---|---|---|
| 14 | NMSM Government College, Kalpetta, | Kerala |
| 15 | NSS Hindu College, Changanassery. | Kerala |
| 16 | PGDAV College Eve | Delhi |
| 17 | PSMO College Tirurangadi | Kerala |
| 18 | Safi Institute Of Advanced Study, Vazhayoor East | Kerala |
| 19 | Sree Kerala Varma College, Thrissur | Kerala |
| 20 | St. Joseph College Autonomous, Irinjalakuda. | Kerala |
| 21 | WMO Arts & Science College, Muttil. | Kerala |

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## Role of Artificial Intelligence in Advancing Financial Inclusion in India: Opportunities and Challenges

**Arun Kumar. P**[1]
[1]Assistant Professor, Ahalia School of Management, Ahalia Campus, Palakkad, Kerala

**Abstract:** India stands at a crucial crossroads in its financial inclusion journey, with artificial intelligence emerging as a powerful catalyst for transforming access to financial services among underserved populations. Though India still trails other developing countries with just 78% of the adult population owning bank accounts compared to higher rates in Brazil (84%), China (89%), and Russia (90%), the Reserve Bank of India's Financial Inclusion Index (FI-Index) climbed to 64.2 in March 2024, showing consistent growth at a CAGR of 5.75% since 2017. In this context, artificial intelligence has become more and more important; the fintech industry is driving AI adoption at 18%, compared to an average of 9% in other industries. Total AI adoption in important industries is almost 48% in FY24. This paper examines how AI technologies are creating innovative pathways to financial inclusion through credit scoring alternatives, personalized services, and enhanced risk management, while also addressing critical challenges including data privacy concerns, algorithmic bias, the digital divide, and regulatory compliance requirements that must be navigated to achieve truly inclusive financial systems.

**Keywords**: Artificial Intelligence, Financial Inclusion, Digital Banking, India, FinTech, Rural Development, AI in Finance

**Introduction:** Financial inclusion is the process of guaranteeing that people and businesses, especially those from low-income and vulnerable areas, have access to reasonably priced, relevant, responsible financial products and services, including savings, credit, insurance, and payment systems delivered



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sustainably. In India, financial inclusion is not just a development objective but a need for equitable economic growth, poverty reduction, and socio-economic fairness.

Driven by policy measures including the Pradhan Mantri Jan Dhan Yojana (PMJDY), Aadhaar-enabled services, and the Unified Payments Interface (UPI), India has seen a transforming trip in its financial inclusion scene over the last ten years. These projects have put millions into the official banking system. Still, especially in rural and distant areas, major obstacles remain in closing the last-mile gap. Amid these challenges, Artificial Intelligence (AI) has emerged as a transformative force capable of accelerating financial inclusion. AI technologies encompassing machine learning, natural language processing (NLP), computer vision, and predictive analytics are being increasingly integrated into India's financial sector to enhance service delivery, personalize financial products, detect fraud, and assess creditworthiness, especially for the unbanked or underbanked.

AI-driven systems can generate financial profiles for people without formal credit histories by examining alternative data sources including mobile usage patterns, social media activity, utility payments, and transaction histories. This paves the way for investment services, insurance, and microloans that were formerly unreachable for many people. Furthermore, artificial intelligence may enable financial institutions to lower operating expenses, enhance risk management, and expand their services to far-off areas at scale.

The evolving revolution of Industry 4.0 which includes the integration of digital technologies like AI, IoT, and big data analytics, is having a deep impact on financial inclusion in India. The country is, at the moment, strategically placed to take advantage of AI-driven finances because the opportunity for all-embracing growth rests on the combination of advanced digital architecture, policy advancement, and technological ingenuity.

These issues, however, are also accompanied by consequences like data privacy concerns, algorithm discrimination, digital inequality, and lack of regulatory policies — all having the potential to marginalize already vulnerable


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people which would heighten the issues of social inequality instead of mitigating them.
This research intends to analyze how AI technology affects the progress of financial inclusion in India. It evaluates the practical applications through several case study assessments, analyzing the many potentialities and challenges posed while providing strategies aimed towards ethical and socially responsible provisions through the use of advanced technologies.

**Review of Literature**
Jameel & Razzak (2024) argue that AI-driven innovations like predictive analytics and machine learning have played a significant role in improving credit accessibility and risk management for previously excluded populations.

Sinha, Kumar, and Siddharth (2024) observed that digital platforms powered by AI algorithms significantly reduced the cost of outreach for banks while enabling service customization for low-income customers.

Poddar and Chaudhary (2024) focused on young rural women in Ranchi and found that AI applications in micro-finance contributed to economic empowerment.

Mishra, Kandpal, and Srivastava (2024) emphasized that financial inclusion has a ripple effect on socio-economic development, and integrating AI can accelerate this process.

**Objectives of the Paper and Methodology**
- To investigate the impact of AI on financial inclusivity in India
- To develop a conceptual framework highlighting the interactions between AI technologies and financial inclusion outcomes.
- To identify the challenges and opportunities associated with deploying AI in inclusive finance.


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**Current state of financial inclusion in India**

Financial inclusion means providing affordable, suitable financial resources to individuals and businesses, especially those without banking services. Banking, credit, insurance, and digital payment infrastructure improve stability, entrepreneurship, social divides, and equitable development, boosting economic progress. The Indian government has sponsored microfinance institutions, SHGs, the PMJDY, and digital banking infrastructure to incorporate previously excluded people to bridge the financial gap. These initiatives and technical advances like mobile banking and the UPI have increased banking access nationally with legislative and governmental support. Financial inclusion in India is low by global standards. After 13 years, rural banking outlets rose from 67,694 in March 2010 to 16.48 lakh in December 2023, while BSBDA rose from 7.3 crore to 70 crore. The digital revolution has changed all financial services with UPI payment transactions growing over 10 times from FY20 to FY24. Availability of real-time credit information and fraud detection still restrict broad financial inclusion. In remote places, micro-ATMs helped banks serve rural unbanked individuals without branch networks. However, the Reserve Bank of India is building Antardrishti, a Financial Inclusion Dashboard, to track financial inclusion in India and release it soon. The central bank is modifying priority sector lending guidelines and aiming for "100% coverage in 50 percent districts" for digital payments by March 2025 to promote financial inclusion.

Role of AI : A brief Discussion on Role of AI is given under the following heads.

**AI technologies transforming Financial Services.**

Disruptive technology like Artificial Intelligence is reshaping the entire fintech ecosystem in India. India is leveraging AI to device better customized financial services to suit the needs of people who previously did not ahve access. Studies also state that AIs has already been adopted widely with an increase of 5-7% projected in FY25 - making AI an innovation hallmark for the future of financial services. There is already a visible impact AI on risk assessment and



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compliance functions where fintech companies are utilizing AI far quicker than other sectors and it's apparent that those in use of technology have inclusion gaps are trying to address with AI. AI captures, scans, and understands heaps of data around and helps determine valuable insights which are otherwise not been able to be eliminated with traditional methods, proving AI's worth for supporting services like financial aid. Ascribing credit scores the modern way through alternative data is being done by machine learning algorithms including random forest, Gradient boosting and neural networks, enabling credit facilities to individuals without any prior banking history.

These advanced analytical capabilities are complemented by natural language processing technologies that enable communication in local languages, removing linguistic barriers that have historically limited access to financial services in diverse linguistic regions across India.

India's tech-savvy population, with its growing smartphone usage and internet access, has set the stage for exciting AI-driven financial innovations. As more people seek accessible and personalized financial services, fintech companies are stepping up by using AI to analyze user data—like transaction history, financial goals, and risk tolerance—to provide tailored recommendations and services. This move away from generic solutions towards highly personalized financial offerings meets the rising consumer demand for instant gratification and customized experiences, fundamentally transforming how financial services are crafted and delivered to those who have been overlooked in the past.

**AI powered credit scoring Models**

Tradition credit scoring methods, especially in rural areas, exclude large parts of India's population since they demand official financial records, which few have. However, AI is changing credit rating algorithms to utilise mobile phone usage, social media activity, and informal financial transactions. These AI-driven models use advanced machine learning algorithms to correlate



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alternative data points to repayment behaviour, enabling under-represented populations to obtain funding. Indian fintech startups' AI-based credit evaluation algorithms could help small farmers and rural businesses without credit histories. These systems use agricultural output figures, mobile money transactions, and behavioural trends to create credit profiles that accurately reflect rural borrowers' financial capacity and reliability. This method eliminates traditional banks' inability to assess credit risk for rural informal economy workers, a major financial inclusion obstacle in India. AI credit rating algorithms can increase financial inclusion, but also present ethical issues. Credit choices using more non-financial data about individuals create a delicate balance between access and privacy. Algorithmic bias can occur if training data reflects previous prejudices or models accidentally discriminate against specific demographic groups. To ensure access, fairness, openness, and privacy for all, AI-driven credit scoring systems need strong legal frameworks.

**AI Implementations**

A few instances of the implementations of AI are given in the following table

| Institution / Platform | AI Application | Target Segment | Impact / Outcome |
|---|---|---|---|
| **HDFC Bank – Eva** | AI chatbot for multilingual customer support | General public, including rural users | 5M+ queries handled, reduced branch dependency, enhanced digital access |
| **ArthImpact (Happy Loans)** | AI-based alternative credit scoring | Small merchants, gig workers | Instant microloans using mobile and alternative data, empowering the underserved |
| **Paytm** | AI for fraud detection and | Digital payment | Enhanced security, tailored financial |



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| | | | |
|---|---|---|---|
| | personalised offerings | users, new borrowers | products, wider reach in rural/semi-urban areas |
| **ICICI Bank – iPal** | Conversational AI and process automation | Low-literacy, semi-urban customers | 6M+ queries/month, automated KYC and loan processing, improved access |
| **Gramcover** | AI-powered rural insurance distribution | Rural households, farmers | 1.2 M+ policies issued, customised affordable insurance for rural areas |
| **SBI – YONO (You Only Need One)** | AI-based digital banking and financial marketplace | Youth, rural users, and small businesses | Access to loans, investments, and insurance via a unified app with voice/AI |

**Opportunities for AI Financial Inclusion.**

Artificial intelligence is paving the way for an unprecedented level of hyper-personalization in financial services, changing the way people engage with and benefit from the financial system. By leveraging advanced data analytics, AI can analyze user transaction patterns, spending habits, income streams, and financial goals to offer highly tailored recommendations and services that meet the specific needs of each customer. For instance, AI systems can provide personalized savings tips based on individual spending behaviors or offer investment advice that aligns with particular risk tolerances and financial aspirations. This degree of personalization makes financial services more relevant and accessible to a wide range of people, including those who have historically been overlooked or underserved by traditional banking institutions.


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The blend of AI with the Aadhaar identification system has sparked some incredible opportunities for boosting financial inclusion throughout India. By analyzing data linked to Aadhaar, AI can tailor financial services to individuals, like creating credit scoring models that evaluate creditworthiness based on verified identity and transaction history. This powerful combination has made know-your-customer (KYC) processes much more efficient, cutting down the time and costs that used to hold back financial institutions from profitably serving lower-income groups. Thanks to these efficiency improvements, banks and fintech companies can now reach out to populations that were once left out, all while keeping their business models sustainable and supporting ongoing efforts to expand financial inclusion.

AI-driven virtual assistants and chatbots are stepping up to fill crucial gaps in customer service, especially for those who are just getting acquainted with formal financial systems. Utilizing large language models, these smart interfaces can engage with customers in everyday language, help them navigate complex financial tasks, and offer timely support without the need for in-person visits or long waits on the phone. The ease and accessibility of these AI-powered support systems are particularly beneficial in remote areas where traditional banking options are scarce, effectively opening up access to financial advice and services that were once only available to people in well-served urban locations.

**Challenges and Regulatory Considerations.**

However, data privacy and security issues pose significant challenges in the realm of AI-driven financial inclusion, especially as companies gather and process a wider range of personal information. The Digital Personal Data Protection Act 2023 has laid down comprehensive guidelines on how organizations should manage personal data, requiring strong encryption methods and cybersecurity measures to safeguard against unauthorised access


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and data breaches. Fintech companies must now navigate strict requirements for obtaining explicit user consent, maintaining transparency in data handling practices, and implementing measures to prevent data misuse. While these regulations protect consumer interests, compliance demands substantial resources and expertise that may strain smaller fintech providers seeking to deploy AI solutions for underserved markets.

The gap in digital access and the challenges of technological literacy are still holding back the potential of AI-driven financial inclusion, especially in rural and economically struggling areas. Even though we've seen a lot of progress in digital infrastructure, many places still grapple with issues like poor connectivity, limited access to devices, and low levels of digital literacy, all of which make it tough to embrace advanced financial technologies. These challenges are made even tougher by the fact that implementing AI is resource-heavy, needing significant investments in tech infrastructure, skilled workers, and ongoing maintenance. If we don't take strategic steps to tackle these basic issues, AI-powered financial inclusion efforts might end up helping only those who are already well-off, leaving the most vulnerable even further behind.

On top of that, algorithmic bias is a serious ethical issue that could jeopardize the inclusive promise of AI in financial services if we don't handle it properly. When AI systems learn from historical data that carries societal biases, they risk continuing or even worsening these biases in their decision-making. For instance, credit scoring algorithms built on data from populations that have traditionally had access to banking might unfairly disadvantage people from communities that have had limited access to formal financial services, even if they are creditworthy. Tackling these issues means we need to put in place thorough fairness assessments, use diverse training datasets, and establish ongoing monitoring systems to spot and reduce bias in AI applications, ensuring that technological advancements truly promote inclusion instead of deepening existing inequalities.


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**National Strategy and Policy Framework.**

The Indian government, through NITI Aayog, has rolled out an ambitious National Strategy for Artificial Intelligence, highlighting financial inclusion as a key area where transformative technologies can make a real difference. This strategy is built on the belief that India has the potential to lead the world in AI innovation, promoting a unique vision of "#AIforAll" that taps into the country's strengths to foster social and inclusive growth. The plan zeroes in on how India can leverage AI to tackle pressing societal challenges across five main sectors: healthcare, agriculture, education, smart cities and infrastructure, and smart mobility and transportation. While financial services aren't singled out as a distinct sector, financial inclusion is acknowledged as a vital enabler that supports development goals across all these priority areas.

NITI Aayog has pinpointed several significant hurdles that need to be overcome to realize the #AIforAll vision. These include a shortage of widespread expertise in AI research and application, a lack of supportive data ecosystems, high costs of resources, limited awareness about AI adoption, and concerns around privacy and security. To tackle these issues, the government is forming partnerships with leading AI tech companies to launch proof-of-concept projects in crucial areas and is dedicated to building a dynamic AI ecosystem that fosters innovation while ensuring responsible development and deployment. These efforts are backed by regulatory measures like the Digital Personal Data Protection Act 2023, which encourages responsible data collection and processing practices among fintech firms, ultimately boosting user trust and confidence in digital financial services.

The policy framework that supports AI-driven financial inclusion strikes a balance between fostering innovation and ensuring consumer protection by introducing clearer transparency requirements. Fintech companies are now required to present straightforward and easy-to-understand privacy policies to their users, outlining how personal data will be collected, stored, and


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processed. This approach not only builds trust but also empowers consumers to make informed choices regarding their data privacy. Moreover, the regulatory framework offers legal support for secure data transfers and sharing under controlled conditions, allowing fintech companies to work alongside trusted partners, service providers, and regulatory bodies while staying compliant with data protection laws. This structure promotes the smooth exchange of information within the fintech ecosystem, which is crucial for AI systems to operate effectively while safeguarding consumer privacy.

**Conclusion**

Artificial intelligence is a game-changer in promoting financial inclusion across India, providing innovative solutions to age-old barriers that have kept many from accessing vital financial services. With AI-driven credit scoring models that utilize alternative data, personalized financial advice systems, and more efficient service delivery methods, those who were previously excluded can now engage more fully in the formal financial landscape. The integration of AI with foundational systems like Aadhaar has further enhanced these advantages, creating more efficient routes to financial inclusion while lowering operational costs for service providers. Additionally, the emphasis on AI development by NITI Aayog and other government bodies highlights a national commitment to leveraging these technologies for inclusive growth and development.

To truly unlock the potential of AI for financial inclusion, we need to tackle some serious challenges that could hinder or skew its effectiveness. Issues like data privacy, algorithmic bias, the digital divide, and the costs of implementation are all significant hurdles that require careful navigation through smart policy-making, collaboration across industries, and continuous tech innovation. The Digital Personal Data Protection Act 2023 is a crucial step toward setting up guidelines for responsible AI use, but we'll need to keep refining our regulatory strategies as technology advances and new applications


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come into play. It’s especially important to ensure that AI systems are transparent, accountable, and aligned with our broader social values of fairness and inclusion, so we don’t end up creating new forms of exclusion or discrimination with these technological advancements.
Moving forward, achieving AI-driven financial inclusion in India will demand a multifaceted approach, with various stakeholders working together toward common goals. Government agencies should keep fostering supportive policy environments and invest in vital digital infrastructure. Financial institutions and tech providers need to team up to create inclusive AI solutions that cater to the specific needs of underserved communities while sticking to ethical standards and regulatory guidelines. Civil society organizations have a crucial role to play in voicing community interests, monitoring results, and ensuring that vulnerable groups genuinely benefit from these technological advancements. By working together in this way, India has a remarkable chance to harness artificial intelligence as a powerful tool for building more inclusive financial systems, empowering all citizens to engage in and reap the rewards of economic growth and development.

**Future Directions**

As AI transforms India's financial landscape, strong ethical frameworks are needed to guarantee these technologies promote true inclusion rather than more inequality. Future AI applications should be transparent about how algorithms make judgements, enabling consumers understand how their finances are affected. Financial institutions and tech providers must collaborate to develop algorithmic fairness guidelines to prevent marginalised groups from being excluded from crucial financial services and ensure that AI systems don't accidentally exclude vulnerable populations. Regular bias audits and ongoing monitoring should also be implemented to identify and address unintentional biassed trends as AI systems mature and manage more diverse datasets. Public-private collaborations will accelerate responsible AI deployment for financial inclusion, especially in underprivileged places where market forces


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may not work. Government agencies, financial institutions, tech businesses, and civil society organisations should collaborate to establish shared infrastructure that reduces implementation costs and promotes financial sector AI adoption. To bridge the digital divide and provide AI-enhanced financial services to everybody, these collaborations should prioritise digital connectivity and literacy programs. Further, cooperative research should produce lightweight AI systems for low-resource settings that may be deployed in locations with inadequate technological infrastructure while maintaining key functionality and security.
AI-driven financial inclusion requires a joint effort to enhance human capital at multiple levels. Education institutions must include AI and financial technology to train a consistent stream of skilled individuals to create and implement inclusive finance solutions. We should also provide focused training for financial service providers, especially those serving rural and low-income populations, to help them understand and apply AI technologies. We need accessible digital and financial literacy education programs for end-users, especially those new to formal financial institutions. This allows them to confidently use AI-powered services, guaranteeing that technological advancement empowers India's diverse people financially.

## References

Birau, R. (2023). *Acceptance and adoption of digital financial inclusion by the rural population of India: A case study*. ResearchGate. https://www.researchgate.net/

Jameel, K., & Razzak, L. (2024). *Harnessing artificial intelligence for digital financial inclusion: Transforming economies in the era of Industry 4.0*. The Critical Review of Social Sciences Studies.

Kumar, A., & Sharma, R. (2023). *Artificial intelligence for financial inclusion in India*. ResearchGate. https://www.researchgate.net/

Mehta, A. (2023). FinTech and the future of banking in India. *Indian Economic Review, 48*(1), 34–49.

Mishra, D., Kandpal, V., & Srivastava, B. (2024). Financial inclusion and its ripple effects on socio-economic development: A comprehensive review. *Journal of Risk and Financial Management*.



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NITI Aayog. (2021). *Responsible AI for all: Strategy document*. Government of India. https://www.niti.gov.in/

Poddar, S., & Chaudhary, D. A. K. (2024). Impact of AI on investment decision and financial inclusion of rural India: A study on young rural women near Ranchi district. *International Journal for Research in Applied Science and Engineering Technology*.

Sengupta, R., & Mitra, S. (2022). AI and financial inclusion in India. *Journal of Emerging Technologies, 14*(2), 56–72.

Singh, P., & Verma, R. (2024). Introduction of AI: A transformative approach to achieve digital financial inclusion in India. *Academy of Accounting and Financial Studies Journal, 28*(3), 1–10.

Sinha, V., Kumar, A., & Siddharth, T. (2023). The effect of artificial intelligence on digital financial inclusion in India. *Journal of Informatics Education and Research*.

Sirtaine, S. (2024). AI's promise: A new era for financial inclusion. *CGAP Blog*. https://www.cgap.org/blog

World Bank. (2022). *Financial inclusion overview*. https://www.worldbank.org/en/topic/financialinclusion



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## Analysis of the Practice of Artificial Intelligence in banking sector

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**Introduction:** The banking sector increasingly adopts Artificial Intelligence (AI) to improve services, streamline operations, and enhance customer experiences. AI allows banks to analyze data rapidly, identify patterns, detect fraud, automate processes, and personalize services. A recent report shows 83% of Indian bankers – higher than the global 79% – believe AI will work alongside humans in the next two years. The rise of AI and data security challenges emphasises the need for robust measures to ensure safe, ethical AI use in banking. This highlights the importance of balancing innovation with safeguarding customer trust and privacy. As AI integrates into banking systems, data security challenges grow due to a lack of skilled data scientists; only a few are available in India. The industry must collaborate with universities to develop talent and train employees for AI implementation. Cybersecurity professionals ensure AI systems are protected from cyber-attacks, data breaches, and intrusions. Since AI manages financial transactions, customer data, and decision-making, it becomes a high-value target for cybercriminals, who attempt ransomware, DoS attacks, and data manipulation to compromise AI models.

AI can prevent fraud and increase compliance through data analytics, making it the future of banking. Financial institutions use AI to analyse vast volumes of data to predict market, currency, and stock developments. Advanced machine learning tools assess market mood and advise investments. John Mccarthy was a major figure in this discipline. He is known as the "Father of Artificial Intelligence" for his groundbreaking computer science and AI work.



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McCarthy introduced "artificial intelligence" in the 1950s. He called it "the science and art of making intelligent machines"

**Meaning of artificial intelligence**

Artificial Intelligence makes computers, robots, and products think like smart humans. AI learns how humans think, behave, learn, decide, and work. It aims to solve problems and produces intelligent software. Artificial intelligence is frequently called machine intelligence in computer science, in contrast to human intelligence. Artificial intelligence refers to machines that perform cognitive processes like learning and problem-solving like humans. AI aims to increase computer reasoning, learning, and problem-solving. Three sorts of AI exist: analytical, human-inspired, and humanised. Analytical AI simply generates cognitive representations of the world and learns from prior experience to make judgements. Intellectual and emotional intelligence are combined in human-inspired AI, which considers emotions in decision-making.


**Use of AI in different sectors:**

Where is artificial intelligence technology being applied?

• Healthcare - AI applications are being used to deliver personalized medicine, providing patients with reminders about when to take their medicine, and suggestions about which specific exercises they should perform.



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• Retail - AI technology is applied in retail environments to handle stock management, design more effective store layouts, and provide personalized shopping recommendations via Amazon's "You May Also Like" suggestions, as well as personalized viewing suggestions via Netflix's machine learning driven recommendation algorithm.

• Manufacturing - AI solutions are used to forecast load and demand for factories, ensuring they're run as efficiently as possible by helping to make better decisions about logistics and planning for materials ordering, timetables to project completion, etc

. • Banking - AI systems are being used to review financial transactions to detect fraudulent activity, assess credit scores with greater accuracy, and automate tasks requiring manual data input and data management.

• Life Sciences - AI technology is being applied to test new medicines, allowing organizations to bring them to market sooner, and to analyze large and complex data sets that help discover new, more effective therapies and pharmaceutical drugs

**Reasons of use of AI:** Technology is the face of this generation. There is a growing demand for answers to all of this generation's problems. And find solutions at your fingertips. On the other side of the screen there might be a computer handling the problem or someone working as a communications manager. Big data is the industry standard today, and all sectors are working to make the most of unstructured data stores. The application of big data in banking is already transforming the industry. And then there's artificial intelligence. Not only utilizing the benefits of AI in extracting and structuring the data in hand, finance, and banking sectors are stepping in to use this data to improve customer relations. Today the amount of data that is generated by both humans and machines far outspaces humans ability to absorb, interpret, and make complex decisions based on that data. Artificial Intelligence forms the basis for all computer learning and is the future of all complex decision


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making. Computers are extremely efficient at calculating these combinations and permutations to arrive at the best decision. AI (and it's logical evolution of machine learning) and deep learning are the foundational future of business decision making.

**Importance of data standardization:** Independent banks and other financial organizations are in the process of developing internal practices by using XBRL and other data standards. Data standards would expedite mainstream adoption of AI in the financial sector. Non- uniform digitization of data will lead to issues on interoperability of the individual services as well as their usability. This will also improve regulatory compliance and adaptability to changing requirements.

**Data protection and privacy**: AI systems require huge amounts of training data as inputs. Consumer data is continuously collected by tracking online and offline consumer behavior, stored, merged with other data sources, to generate big data sets and extract further information about consumers through profiling. Recording the online actions of individuals can create huge databases. These data sets typically contain information about an individual's transactions, email, video, search 28 queries, health records and social networking interactions. While AI improves decision-making, it also creates the potential for unauthorized access to sensitive data. Malicious insiders, hackers, or even rogue AI systems could gain access to confidential information, leading to breaches of data security. Ensuring that only authorized individuals or systems can access this data is a critical challenge for banking

**Vulnerabilities in AI Algorithms**: AI models, particularly machine learning algorithms, are only as secure as the data they are trained on and the algorithms themselves. Malicious actors can exploit vulnerabilities in AI models through techniques such as adversarial attacks, where they manipulate the input data to deceive the AI system and lead to incorrect predictions or decisions. For



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instance, in fraud detection, adversarial attacks could trick the system into failing to recognize fraudulent transactions, thereby compromising security.

**Data Encryption and Protection:** AI systems in banking need to ensure that the sensitive data they process is adequately encrypted both in transit and at rest. While encryption is a standard practice for protecting data, the complexity of AI systems—especially in cases where large datasets are involved—makes it challenging to implement effective encryption strategies. Additionally, AI models need to be secured to prevent attackers from accessing or tampering with the data they contain. A lack of encryption or improper encryption practices could lead to severe data security vulnerabilities.

**Automated Decision-Making Risks:** AI is often used to automate decision-making processes in the banking sector, such as credit scoring, loan approvals, and fraud detection. While automation can improve efficiency, it also introduces security risks if the underlying AI systems are compromised. For instance, if an AI system that makes credit decisions is manipulated, it could result in incorrect decisions, such as granting loans to high-risk individuals or denying loans to creditworthy applicants. If attackers manipulate automated systems, the damage can be wide-reaching and difficult to reverse.

**Lack of AI Model Transparency (Black Box Issue):** Many AI models, particularly deep learning algorithms, are considered "black boxes," meaning their decision-making process is opaque to humans. This lack of transparency poses a significant challenge for identifying and mitigating security risks. For example, if a vulnerability exists within the model, it may be difficult for security teams to identify and patch it. Moreover, the lack of explain ability can make it hard to trace security breaches or to validate that security measures are working as intended, increasing the difficulty of maintaining a secure AI infrastructure.

**AI Tools and Service of AI in Banking:** The banking industry is swiftly embracing new AI tools for investors and AI banking technology to


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revolutionize its operations. These advanced tools, highlighted in the table below, empower banks to personalize customer interactions, enhance security, and optimize workflows. As AI, continues to advance, its incorporation into mobile banking and operational efficiencies promises to reshape traditional banking practices.

Artificial Intelligence is the future of banking as it takes the power of advanced data analytics to contest fraudulent transactions and improve compliance. AI algorithm achieves anti-money laundering activities in few seconds, which otherwise take hours and days.

1. AI also allows banks to manage huge volumes of data at record speed to derive valuable perceptions from it. Features such as AI bots, digital payment advisers and biometric fraud detection mechanisms lead to higher quality of services to a wider customer base.
2. All this explains to increased revenue, reduced costs and boost in profits.
3. Artificial intelligence Technology systems used in banking sectors are :
   - Robotics
   - Computer vision
   - Language
   - Virtual agents
   - Machine learning



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**Adoption of artificial intelligence in banking sector**

- To recognize fraud and security risk
- To accomplish large volume of data.
- To make decision successfully.
- To assist the customer for their queries.
- Easily find the credit worthiness of an individual and a company
- To improve operational efficiency

**Table1.1 AI Tools and Benefits**

| Banking sector | AI tools | Impact of AI tool |
|---|---|---|
| **Customer Experience** | Adobe Sensei IBM Watson Assistant sales force Einstein open AI GPT-4 | AI tools enable banks to personalize digital interactions by analyzing customer behavior, tailoring content, and providing quick query responses and transaction support |
| **Fraud Detection** | SAS Fraud Management Abrigo's Fraud Detection Feedzai | These tools enable banks to strengthen fraud detection through real-time monitoring, advanced analytics, and adaptive machine learning. They help analyze transaction patterns, detect anomalies, and provide |


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| | | |
|---|---|---|
| | | risk scoring to minimize false positives |
| **Operational Efficiency** | UiPath DataRobot SBP Core Platform | These AI tools enhance operational efficiency in banking by automating repetitive tasks, enabling rapid predictive analytics, and streamlining core banking functions. Facilitates quicker decision-making and reduces operational costs |
| **Mobile Banking** | Pindrop OneSignal IBM Watson | These AI tools help integrate targeted push notifications and in-app messaging to enable personalized communication, informing customers about account activity, promotions, and essential updates. |

**Areas of artificial intelligence in banks:**

Many areas where banks are utilising Artificial Intelligence to efficient the processes:

- Fraud and cybersecurity.
- Customer service.



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- Compliance
- Financing and loan ( credit assessment)
- Business process management.
- Marketing.


Common uses of Artificial Intelligence in banks:

- Fraud Detection: Anomaly detection can be used to increase the accuracy of credit card fraud detection and antimoney laundering.
- Support and Helpdesk: Humanoid Chatbot interfaces can be used to increase efficiency and reduce cost for customer interactions.
- Risk Management: Tailored products can be offered to clients by looking at historical data, doing risk analysis, and eliminating human errors from hand-crafted models.
- Security: Suspicious behaviour, logs analysis, and spurious emails can be tracked down to prevent and possibly predict security breaches.
- Digitization and automation in back-office processing: Capturing documents data using OCR and then using machine learning/AI to generate insights from the text data can greatly cut down back-office processing times


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- Wealth management for masses: Personalized portfolios can be managed by Bot Advisors for clients by taking into account lifestyle, appetite for risk, expected returns on investment, etc.
- ATMs: Image/face recognition using real-time camera images and advanced AI techniques such as deep learning can be used at ATMs detect and prevent fraud.

**Chatbot: The main form of AI:**

Chatbots is a form of artificial intelligence (AI). This tool helps convenience for customers they are automated programs that interact with customers like a human. In banking sectors, Chatbots allow customers to manage requests quickly and efficiently while acting as a listening network so that banks can better understand user behaviours, customer actions and deliver personalized offers and facilities.

**Data Security In Banking Sector**

**Distributed Denial of Service Attack (DDoS):** A DDoS attack targets a bank's online services, websites, and payment systems with excessive traffic, making them slow or completely inaccessible to customers. Attackers use this as a distraction while carrying out fraud. In 2021, a large European bank was hit by a DDoS attack that incapacitated its online banking portal for several hours. During this downtime, attackers tried to breach customer accounts and initiate unauthorized fund transfers.

**Data Breaches:** A data breach takes place when sensitive banking information is exposed due to cyber attacks, human error, or poor security controls. This results in identity theft, financial fraud, and regulatory fines. In 2022, a global bank suffered a data breach when hackers exploited an unknown vulnerability in its servers, leaking millions of customer records onto the dark web.

**Phishing Attack :** A phishing attack involves sending fraudulent emails, texts, or website links to trick users into revealing sensitive banking information,


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such as login credentials. Attackers often impersonate banks or financial institutions to deceive customers or employees banks or financial institutions to deceive customers or employees. In 2023, a phishing campaign targeted bank employees, sending fake security alerts that redirected them to a fake login page. Several accounts were compromised, leading to fraudulent transactions worth millions

**Effective Cyber Security Solutions for Banks:** To counter sophisticated threats like ransom ware, banks must adopt an approach that combines end-to-end encryption, authentication, and AI-driven monitoring.

Here are some solutions to ensure cyber security in banking sector.

**Multi-factor Authentication (MFA):** MFA adds an additional layer of security beyond passwords, requiring users to verify their identity through one-time passwords (OTPs), biometrics, or security tokens. This reduces the risk of unauthorized access, even if login credentials are stolen. Implementing biometric authentication (fingerprint & facial recognition) for mobile banking logins can prevent unauthorized access even if a customer's password is stolen through phishing.

**End-to-end Data Encryption:** Encryption ensures that sensitive financial data is converted into an unreadable format, protecting it from unauthorized access. Banks enforce strong encryption standards like AES-256 for securing customer transactions, personal information, and communication between banking systems. Encrypting customer credit card details in a payment processing system using AES-256 encryption prevents data leaks even if hackers intercept network traffic.

**Conclusion:** AI in banking offers many benefits and complicated issues, particularly in data security. AI is used by banks for fraud detection, customer support, and personalised financial solutions, making data privacy even more important. AI systems improve productivity and decision-making but can expose banks to new dangers, making data security a priority. In conclusion,


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AI adoption in banking has transformative benefits, but data security must be addressed to safeguard consumer trust and ensure secure and responsible AI use.

**References:**

1. A Study on Artificial Intelligence In Banking Sector B.Vijaya Lakshmi-International Creative Research Thought
2. Bonnie G. Buchanan, P. F. (2019, April). Artificial Intelligence in finance. Retrieved 5 22, 2020, from the Alan Turing Institute.
3. Noreen, U., Shafique, A., Ahmed, Z., Ashfaq, M. (2023) Banking 4.0: Artificial Intelligence (AI) in Banking Industry & Consumer's Perspective. Sustainability, 15(4):3682
4. Hickam Sadok, F. S. (2022). Artificial intelligence and bank credit analysis: A review. Cogent Economics & Finance, 2-10. 5)
5. Ali, M. S., Swiety, I. A., & Mansour, M. H. (2022). Evaluating the Role of Artificial Intelligence inthe Automation of the Banking Services Industry: Evidence From Jordan. Humanities and SocialSciences Letters10(3), 383–393.https://doi.org/10.18488/73.v10i3.3090
6. Ashta, A., & Herrmann, H. (2021). Artificial intelligence and fintech: An overview of opportunities and risks for banking, investments, and microfinance. Strategic Change 30(3), 211–222. https://doi.org/10.1002/jsc.2404
7. Nguyen, P., Tran, H., & Pham, M. (2021). AI adoption in the banking sector: Benefits and challenges. AI in Finance, 8(4), 7625-7635.
8. Priya, V., & Sharma, P. (2023). Data processing challenges in AI adoption in banking. Journal of AI and Finance, 8(4), 107912.
9. Romao, J., Silva, S., & Marques, L. (2019). Complexity of AI adoption in the banking
Industry. Journal of Technology and Finance, 15(2), 142-154.
10. Rani, P., Sharma, R., & Kumar, V. (2020). The role of AI in IT infrastructure Management. Journal of IT and Artificial Intelligence, 4(3), 105–120.



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# The Role of Business Incubators in Higher Education: Fostering Innovation and Entrepreneurship

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**Abstract:** Business incubators within higher education institutions have emerged as powerful mechanisms for driving innovation, supporting startups, and preparing students for entrepreneurial success. This chapter explores the structure, operational models, and strategic roles of business incubators in higher education. It examines the impact on students, institutions, and the broader economy, highlighting both the challenges and opportunities they face. Through case studies of successful business incubators, the chapter provides insights into best practices and future directions for enhancing their effectiveness in fostering entrepreneurship.
**Keywords**: Business Incubators, Higher Education, Entrepreneurship, Startups

**Introduction:** Business incubators are essential to higher education's business ecosystem. University and college strategic frameworks have increasingly included business incubators to foster innovation, commercialise research, and enable students to become successful entrepreneurs over the past two decades. Business incubators have grown as entrepreneurship is recognised as a source of economic growth and employment creation. Higher education institutions must now teach practical skills, encourage risk-taking, and help start new businesses. Business incubators integrate academic knowledge with real-world business processes, helping students and researchers create commercial goods and services. Business incubators in higher education are crucial for supporting student entrepreneurs by providing money, mentoring, and strategic direction.


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b. Offer physical infrastructure and technology access.
c. Encourage innovation and entrepreneurship among students and faculty.
d. Foster collaboration between academia, industry, and government.
A business incubator provides facilities, mentorship, financial aid, and networking to companies. These incubators foster entrepreneurial growth, reducing new venture risks.

**The Need for Entrepreneurship Education in Colleges:** Entrepreneurship education is an essential component of education in today's economy. The current global marketplace is more dynamic, competitive, and technology-driven than ever before, and traditional career paths are no longer a guaranteed path to success (Banha et al., 2022). Therefore, it is vital to introduce entrepreneurship education in colleges to help students develop the mindset, skills and knowledge they need to become successful entrepreneurs. Entrepreneurship education focuses on cultivating a sense of creativity, critical thinking, and problem-solving skills. It also provides students with practical skills such as market research, product development, financial management, and communication skills. These skills are valuable not only for those who aspire to start their own business but also for those who wish to join established businesses or non-profit organizations. Now, incubation centres step in as practical workshops, where these newfound skills are put into action. They offer a hands-on experience, providing guidance, resources, and a supportive environment for transforming ideas into viable businesses. It is a dynamic partnership where education sets the stage and incubation centres provide the real-world arena for aspiring entrepreneurs to apply what they have learned, fostering a cycle of continuous learning and practical application. Together, they form a powerful duo, fuelling the growth of innovative ventures and shaping the future of entrepreneurship.

**Structure and Models of Business Incubators in Higher Education:** Business incubators within higher education institutions are structured in


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diverse ways, depending on the nature of the institution, available resources, and strategic goals. The most common models include:

**Models of Business Incubators in Higher Education**

There are various models of business incubators in universities, each tailored to the institution's objectives and resources.

**University-Led Incubators:** A University-Led Incubators means these are Fully owned and managed by the university concerned. MIT Martin Trust Centre for Entrepreneurship, Stanford StartX are some of the examples of these kind of universities. These kind of business incubators are supported by university funds and research grants and it mainly focuses on student and faculty startups. This kind of incubators offers access to university research and intellectual property.

**Corporate-University Partnership Incubators:** These kind of business incubators are jointly managed by universities and corporations to drive industry-oriented innovations. Microsoft Innovation Centers in universities are one of the best examples of Corporate-University Partnership Incubators. These kind of business incubators focuses on the commercialization of technology and it provides real-world industry insights and market access. One of the key features of this kind of incubators is that offers direct funding from corporate partners.

**Government-Supported Incubators:** As the name indicates it is funded and supported by government initiatives, often in collaboration with universities. India's Atal Incubation Centres (AICs), EU-backed Horizon 2020 incubators are some of the best examples of these kinds of business incubators. The main feature of this kind of incubators is to encourage startups in key sectors especially agriculture, healthcare, sustainability in the country by providing government grants, research funding, and policy supports. Most of the



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incubators focuses on public-private partnerships for innovation and entrepreneurship.

**Accelerator-Linked Incubators:** An Incubators that work in collaboration with startup accelerators to fast-track venture growth is called accelerator-linked incubators. Y Combinator university affiliates a benchmark example for this kind of business incubator. These incubators focus on rapid startup scaling by providing short-term intensive mentorship programs. It helps startups secure investment and market expansion also.

**Virtual Incubators**

A virtual incubator is a digital platform offering incubation services remotely by Eliminates geographical barriers and by Providing online mentorship, networking, and funding access. These kinds of incubators are ideal for tech-driven and SaaS startups. Startup India Virtual Hub, EdTech incubators are the main examples for these kind of business incubators

**Technology-Based Incubators:** Technology-based incubators focus on supporting startups in sectors such as information technology, biotechnology, and engineering. These incubators are often linked to research centres and laboratories, providing access to cutting-edge technologies and research infrastructure (Etzkowitz & Leydesdorff, 2000).

**Sector-Specific Incubators:** Some incubators are designed to support businesses in specific industries, such as healthcare, finance, or renewable energy. These incubators provide sector-specific mentorship and market insights, helping startups navigate industry regulations and competitive landscapes.

**Social and Non-Profit Incubators:** Social incubators focus on supporting ventures that address social and environmental challenges. These incubators prioritize social impact alongside financial returns, fostering a new generation of social entrepreneurs (Allen & McCluskey, 1990).



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**Virtual Incubators:** With the rise of digital platforms, some higher education institutions have established virtual incubators. These incubators provide remote access to mentorship, funding opportunities, and market intelligence through online platforms.

**Hybrid Models**

Many universities adopt a hybrid approach, combining elements of technology, social, and sector-specific incubation to offer a comprehensive support system for student entrepreneurs.

**Role of Business Incubators in Higher Education:** Business incubators play a strategic role in higher education by enhancing entrepreneurial skills, providing resources, and facilitating industry linkages:

**Enhancing Entrepreneurial Skills:** Business incubators offer training programs, workshops, and boot camps to equip students with critical business skills, including market analysis, financial planning, and marketing strategies (Shane, 2004).

**Providing Access to Resources:** Incubators provide startups with access to office space, research facilities, and technological infrastructure. They also facilitate access to seed funding, venture capital, and government grants.

**Bridging Academia and Industry:** By connecting students with industry leaders, business incubators enable startups to access mentorship, market insights, and strategic partnerships. This fosters a more practical and industry-oriented learning experience (Rothaermel & Thursby, 2005).

**Facilitating Research Commercialization**

Many business incubators focus on commercializing research outcomes by supporting the development of patents, licensing agreements, and spin-off companies.

**Impact of Business Incubators on Student and Institutional Success:** The presence of business incubators within higher education institutions has



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measurable impacts on student success, institutional performance, and regional economic development:

**Startup Creation and Employment:** Universities with well-established business incubators report higher rates of student-led startup creation and job generation. Startups emerging from university incubators often become significant contributors to local and national economies (Mian, 1997).

**Enhanced Institutional Reputation:** Successful incubators enhance the reputation of higher education institutions, attracting talented students, researchers, and industry partners.

**Intellectual Property and Patents:** Business incubators contribute to increased patent filings and intellectual property generation within universities.

**Challenges and Limitations:** Despite their benefits, business incubators in higher education face several challenges:

**Financial Constraints:** Sustaining business incubators requires significant financial investment. Many incubators rely on government grants and philanthropic funding, which may not be sustainable in the long term (Phan et al., 2005).

**Lack of Skilled Mentors:** Access to experienced mentors remains a challenge, particularly for sector-specific incubators.

**Regulatory Barriers:** Navigating intellectual property rights, taxation policies, and labor laws can be complex for startups within higher education settings.

**Measuring Long-Term Success:** Quantifying the long-term success and economic impact of business incubators is often difficult due to the time lag between startup formation and market success.

**Best Practices for Effective Business Incubators in Higher Education:** To enhance the effectiveness successful running of university-based business incubators, the best practices should be implemented in higher education institutions.


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**Strong University-Industry Collaboration:** There should be a strong collaboration with corporations and investors for mentorship and funding in the program. By developing internship program and job opportunities for students in startups will attract more students to entrepreneurial mind.

**Access to Early-Stage Funding:** By Establishing university-led venture capital funds or creating angel investor networks, institutional level business incubators will be more competitive.

**Multidisciplinary Approach:** By encouraging collaboration between students from different fields like engineering, business management, design, electronics etc, business incubators can foster innovative ideas to the market.

**Continuous Mentorship and Training:** By Provide structured mentorship from alumni members and experienced entrepreneurs, the business incubators can lead successfully in the higher education institutions. This is possible through organize hackathons, bootcamps, and skill-development workshops etc to the students.

**Focus on Long-Term Sustainability:** By Implementing follow-up support for incubated startups post-graduation and creating alumni networks for the support of new start ups, higher education institution can successfully implement this program.

**Case Studies of Successful Business Incubators**

**Stanford University's Stanford Technology Ventures Program (STVP)** has helped over 300 startups, including Google and LinkedIn. Academic research and industrial collaboration make it successful (Etzkowitz, 2000). Funding, coaching, and access to a global network of investors and industry professionals are available from the MIT Innovation Centre. **IIM Bangalore**: NSRCEL Focusses on women's entrepreneurship, social enterprises, and tech companies since 2002. It succeeded due to industry relationships and a solid finance approach. NSRCEL startups include Razorpay (fintech unicorn) and Amagi (cloud-based broadcasting). Over 600


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firms were fostered, $1 billion raised, and women-led businesses helped. **The Startup Incubation and Innovation Centre (SIIC) at IIT Kanpur**, founded in 2000, is a leading hub for technology-driven startups and social innovations, with a focus on deep tech and healthcare solutions. After incubating over 100 firms, SIIC has been crucial to the Indian startup ecosystem. Its successes include Noccarc Robotics, which made affordable ventilators during the COVID-19 pandemic, and Phool.co, which makes sustainable incense from flower waste. SIIC promotes technology innovation and entrepreneurship nationwide through funding, coaching, and infrastructure.

**Hyderabad's T-Hub T-Hub**, India's largest startup incubator, was founded in 2015 in Hyderabad and focusses on deep tech, AI, IoT, fintech, and sustainability. Over 1,800 firms have received mentorship, investment, and worldwide networking. ChitMonks, a blockchain-based chit fund platform, and Paymatrix, a fintech rental payment network, are T-Hub firms. T-Hub drives innovation and entrepreneurship in India through its ecosystem. **Kerala Startup Mission (KSUM)**: Established in 2006, Kerala Startup Mission (KSUM) drives entrepreneurship and innovation in Kerala. KSUM has built a robust startup ecosystem in the state by fostering agritech, IoT, biotechnology, and women entrepreneurs. More than 2,500 firms have received infrastructure, coaching, and capital from it. KSUM-backed firms include Genrobotics, which invented robotic scavengers to replace manual scavenging, and Sastra Robotics, which uses AI to solve robotic problems. KSUM's initiatives have advanced technological and socially impacting companies in Kerala.

**Y Combinator, US:** Founded in 2005 in Silicon Valley, Y Combinator is a leading business incubator. It covers technology, AI, fintech, SaaS, and biotechnology. With almost 4,000 businesses, Y Combinator has helped Airbnb, Dropbox, Stripe, and Reddit become worldwide giants. By investing, mentoring, and connecting early-stage startups to a broad investor network, the incubator has revolutionised the global startup ecosystem with a portfolio of over $600 billion.

Cambridge Innovation Centre (CIC), USA: The Cambridge Innovation Centre



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(CIC) in Massachusetts has become a leading science and technology innovation hub since 1999. It mostly funds biotech, cleantech, and software firms. CIC was instrumental in the early development of marketing automation leader HubSpot and COVID-19 vaccine pioneer Moderna. CIC has assisted thousands of companies and advanced cutting-edge technologies across industries by providing co-working facilities, mentorship, and a collaborative environment.

**Station F, Paris:** The world's largest startup campus, Station F, opened in 2017 and houses over 1,000 firms. Station F is a global innovation and entrepreneurial hub focused on AI, fintech, deep tech, media, and gaming. It has supported firms like Doctrine, which utilises AI for legal research, and Agricool, which pioneered urban gardening. Station F is a global startup ecosystem leader due to its substantial resources, international networking opportunities, and considerable global investment.

**Level39, UK:** The leading European fintech incubator, Level39, was formed in 2013 in London to promote fintech, cybersecurity, and smart city technology innovation. It has provided experienced mentorship, investment, and a collaborative workplace to over 200 high-growth firms. Global finance upstart Revolut and cybersecurity firm Digital Shadows are among its most notable successes. Level39 continues to shape European financial technology and digital security.

**Chinese Tsinghua University Technology Incubation Centre:** Tsinghua University's Technology Incubation Centre, founded in 1999 in Beijing, is a global leader in AI, biotechnology, and robotics. It has helped nurture some of China's most valuable digital businesses, including facial recognition leader Face++ and AI-driven chatbot maker Turing Robot. As a pioneer in AI-focused incubation, the institute has helped China become a tech superpower by providing entrepreneurs with research, coaching, and commercialisation support.

**Recommendations and Future Directions:** Strengthening industry-academia collaboration to ensure market relevance of incubated startups.



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Developing sector-specific incubation models to address industry-specific challenges.
Encouraging greater participation from faculty and alumni in mentoring programs.
Expanding funding sources through partnerships with venture capital firms and government agencies.

**Conclusion:** Business incubators in higher education institutions are powerful tools for promoting innovation, supporting startups, and preparing students for entrepreneurial success. By providing access to resources, industry networks, and financial support, incubators enable students to translate their ideas into viable businesses. Strengthening the infrastructure and strategic management of business incubators will ensure their continued success and long-term impact on economic and social development. Addressing challenges such as funding and scalability will ensure the long-term success of incubators in higher education institutions.

**References**

1. Allen, D. N., & McCluskey, R. (1990). Structure, policy, services, and performance in the business incubator industry. Entrepreneurship Theory and Practice, 15(2), 61-77. https://doi.org/10.1177/104225879001500206.
2. Etzkowitz, H., & Leydesdorff, L. (2000). The dynamics of innovation: From National Systems and "Mode 2" to a Triple Helix of university–industry–government relations. Research Policy, 29(2), 109-123. https://doi.org/10.1016/S0048-7333(99)00055-4
3. Phan, P. H., Siegel, D. S., & Wright, M. (2005). Science parks and incubators: Observations, synthesis, and future research. Journal of Business Venturing, 20(2), 165-182
4. Rukmana, A. Y. (2017). Analisis pengaruh pembelajaran di smk dan keahlian kewirausahaan terhadap niat dan sikap kewirausahaan siswa smk pelita bandung (Doctoral dissertation, Tesis Program Magister Management Universitas Widyatama Bandung).



ISBN: **978-93-5786-070-3**
March 2025

5. Hardie, B., Highfield, C., & Lee, K. (2022). Attitudes and values of teachers and leaders towards entrepreneurship education. Research Papers in Education, 1-25.
6. Harkema, S. J., & Schout, H. (2008). Incorporating student-centred learning in innovation and entrepreneurship education. European Journal of Education, 43(4), 513-526.
7. Aaboen, L. (2009). Explaining incubators using firm analogy. *Technovation, 29*(10), 657-670. https://doi.org/10.1016/j.technovation.2009.05.002



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# Impact of Increasing Divorces and Extramarital Relationships: A Detrimental Effect on Society

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**Abstract:** Nuclear families and the disintegration of traditional joint families have caused familial division and isolation in modern society. The repetitive life of speed, getting more money, and racing after spectacle has led to divorces, extramarital relationships, and family darkness. The digital world and the desire for all the world's luxury goods in a short time have imprisoned people without mental calm. The pursuit of money has left people desperate and distressed. They lack family, social, enjoyment, and a healthy life. Only opulent and ostentatious life remains. This has led to more family-destroying games and puts children at risk in society. Families lack mutual understanding and respect, thus they don't share thoughts and ideas and may neglect their children. Children are suffocated and not allowed to express their feelings.Face book, Instagram, and other social media platforms have encouraged people to interact extensively, often causing family conflict. This is rising in families, causing youngsters to be concerned by parental misbehavior among themselves and with their children. Since it has been aggravated nationwide, this must be addressed or the civilization would end up without culture or conscience and die in the near future. Separation and divorce have various causes. Below are contributing factors:

1. Domestic Violence
2. Favoring the male child
3. Conflict with in-laws
4. Partner incompatibility
5. Avoiding Traditional Culture and Norms.



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6. Disrespect for marriage institution
7. Career and growth progress (High expectations for both genders)
8. Extravagant lifestyle
9. Social Media
10. Modern device, AI-driven tech

Thus, the foregoing elements are the main causes of the gender divide in society, and both are indomitable in avoiding the future of their children once they marry. The mental and physical mismatch occasionally becomes apparent after marriage, prompting the decision to separate, which disrupts family stability and the children's peace of mind.
Thus, the government, PPP, and NGOs may work together to prevent marriage breakdown and social and cultural damage.

**Key Words:** Extravaganza, Monotonous Life, Physical and Mental Health Issues, Economic Self-Sufficiency, Religious and Cultural Activities, Education.

**Objective:** Marriage is a sacred institution that bonds two people (male and female) and perpetuates humanity.
Thus, with the blessings of the almighty and family, we must protect this tradition of unity of the two souls for a future civilization. All religions revere marriage, which is celebrated in front of friends, well-wishers, and family members. They attend the ceremony to bless the newlyweds from the heart. The 193 UN General Assembly members accepted "Transforming our World: the 2030 Agenda for Sustainable Development" on September 25, 2015. This lists the 17 SDGs and 169 objectives. Good health, well-being, and gender equality.
According to the SDGs (Sustainable Development Goals), we must focus on citizen health and gender equality to achieve holistic development.
NGOs and government schemes have created Sukanya Samriddhi Yojana (2015) to help girl children (0–10) with schooling and marriage costs.
The 2015 Beti Padao Beti Bachao campaign promotes girl child education and


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addresses falling CSR. The government also created One Stop Centres (2015) to help women victims of violence. Distressed women receive medical, police, counseling, legal, and shelter services from the centers. Urbanization, globalization, and digitalization, although promoting economic growth and progress, destroyed society's traditional values, ethos, and principles with little patience, mutual respect, and honor for each other and families. Today's men and women prioritize self-satisfaction over family. Thus, work pressure, goal attainment, and poor thinking lead to extramarital affairs and divorce quickly after marriage. Adultery, misbehavior, substance abuse, domestic violence, cruelty to wife, and dowry harassment are the social aspects of divorce. Women today, with higher qualifications and economic independence, cannot bear the torture and oppression and are protesting in the form of separation or divorce. In rare situations, women use IPC 498A to harass men and their families, while men are usually the culprits and request divorce. In both cases, children are victims and expect a poor future. Couples considering separation, divorce, or extramarital affairs should think twice before dividing their families. Otherwise, families will disappear from society.

**Focus Group:** Urban and rural married couples (men and women). Kids of divorced parents. Before a consensual divorce, both couples should receive enough counseling to consider the future of their children. The couple should realize they have a child and avoid ego conflicts. After their divorce is finalized, they will be independent, but mental harassment starts in a child's brain and harms their development.

**Statistics and Information:** In India, 0.24 percent of married people divorce, which is lower than in Western countries. Separation is much greater than divorce, showing many couples split without divorcing. While divorce rates remain modest, they are rising more in cities than rural areas. State divorce rates vary widely in India. At 1.8%, Mumbai has a high divorce rate. Bangalore's heavy work pressure and migration contribute to Karnataka's 1.6% divorce rate. Kolkata contributes to West Bengal's 1.5% divorce rate. In contrast, Telangana and Kerala have low divorce rates. Data on extramarital


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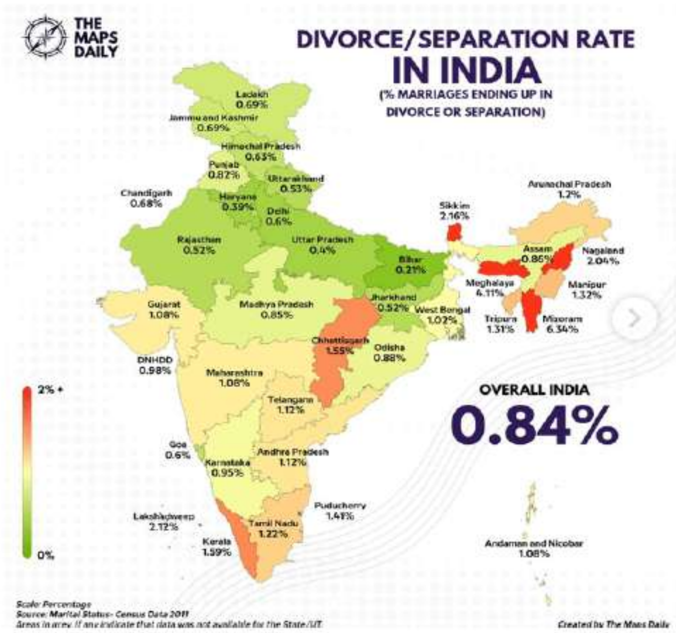
relationships reveals that a considerable percentage of married people have committed infidelity, breaching societal and cultural standards. Women's economic independence, higher credentials, cultural transformation, urbanisation, digitalisation, globalisation, and shifting societal norms have affected divorce rates across India. Some areas underreport divorce due to stigma.




**Research Methodology:**

**A. Primary Data:** Primary Data is the actual data from the grass root level and is very much authentic in nature. We can obtain such type of data through the following measures:-

**1. Questionnaire Method:** The typed question papers both open and closed ended can be used in case of the sample population assorted.

**2. Survey method:** A sample population is to be identified for the survey to be undertaken and the features to be taken into consideration.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**Case Studies:** This is another important tool used in the Research methodology.
In several case studies the respondents come up with a secret version of their real scenario at their households.
**Interview method:** This is also another significant tool used in the Research methodology where several members from the target group can be interviewed to get their pulse on their issues.
**3. Focus Group Discussions (FGDs):** The FGDs can be conducted to have an open and clear discussion where both the parties( appeared for divorce) can ventilate their day to day problems and have temporary or permanent solutions by expert counsellors depending upon their issues.
**4.Workshops:** Workshops to be held in order to identify the needs of the distressed women( in case of divorce) so that they need the counselling or the training programmes or the continuation of study or some handholding support for income generation.
**5.Direct Observations:** Sometimes the family members are not very keen to be in the interview process pertaining to these delicate issues and try to avoid the research people and hamper the process. In those cases the direct observation method can be very helpful to identify the problems for the suffering woman or man (at times).
**6. Role Plays:** The role plays are also very important tool to mitigate the problems of social issues to a large extent.
The emergence of Buladi had a great impact in the society in order to prevent the ill effects of HIV-AIDS and control the same in the 90s.
Similar icons can be generated to provide some mental boost up for the sufferer that with the passage of time one has to come out of the odds and bloom in to a newer future.
**7. Secondary Data:** We can harness and explore the already established data in the society pertaining to the contemporary and burning issue of the today's


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society - separation and divorce along with extra marital relationship. Thus we can get the relevant and very useful data in order to continue with the research work.

**Data Analysis and Processing of Data:** A Simple Random Sample would be used for the data handling and its proper compilation. There should be use of pie diagrams, bar graphs, use of excel sheets and when required the software has to be used for computing data and also in the compilation of the acquired data. In case of complex Data handling we can use the SPSS Software from where we can derive the mean, variance, co-relation and regression.

**Remedial solutions / Recommendations:-**

1. Mutual respect between husband and wife is essential, followed by respect for family elders.
2. Parents should have effective family planning and child development methods.
3. Before separating or divorcing, couples should consider their child's future and social upbringing.
4. Maintenance or alimony cannot replace parental love and care for a kid.
5. After divorce, the male may have a second marriage and have children from it. The woman usually keeps her first-marriage child and does not remarry. So this child is deprived of his/her biological father, which is dangerous.
6. The youngster develops into a human with mental and psychological disorders, which might negatively impact their life style when maintaining a family.
7. Children may experience physical concerns such as obesity, desperation, or shyness after parental divorce.
8. Children may become angry and antisocial due to a lack of mental and environmental development in a joyful and healthy family setting.



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9. Panchayats and Municipalities should have access to appointed family counselors to handle first conflicts between parents.
10. Family courts should prioritize preserving marriages over dissolving them.
11. Couples should consider the future of their child before filing for divorce.
12. Alimony from the husband does not fully fulfill his responsibility to the ex-wife and children.
Many men in society have second marriages after divorce and claim to be paying alimony to their ex-wives and children.
13. A father's love and care cannot be replaced by money, which can buy goods and fancy items but not respect and dignity in society.
14.The couple should seek guidance and therapy from family, friends, and close neighbors to resolve any family disputes.
15. Resolve household and couple ego disputes early to avoid undesirable outcomes like separation or divorce.
16. Dowry and related harassment persist in society, adopting new forms and contributing to divorce rates. Divorce cases are rising and must stop.
17. Parents should prioritize their daughter's education and economic development in rural and urban areas, rejecting dowry.
18. The couple should not be sidetracked by the lawyer's statements. Sometimes lawyers take advantage and gain double profits from both parties, prolonging the litigation without a resolution.
19. The court allows couples ample time to reflect and offer their marriage a second chance to avoid breakup.
20. Couples should engage in regular tours and religious/cultural activities to break up the monotony of work and financial pressure.
21. The couple should participate in religious worships together, without third parties interfering.


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22. Encourage students to participate in extracurricular activities such as music, painting, swimming, yoga, and computer classes to maintain their mental and physical health and motivate them in life.
23. Families and couples should respect marriage as they have taken vows to support each other in good and bad times. Our culture believes that "Marriages are made in Heaven" and should continue throughout life.
24. Embrace modernization and new cultures while respecting traditions, beliefs, and cultural ethos of Indian society.
25. Our tradition and culture are our roots, which can be modified to remove social problems but must be maintained.

**Limitations:** Research can face limitations when proper data isn't available due to adverse on-the-spot circumstances, leading to diversified approaches to enhance its comprehensiveness. Exploring new avenues may foster innovative thinking in the research process.

**References:**


1. Census (2011) ( Image)
2. IPC 498 A
3. SDGs (Sustainable Development Goals)
4. Sukanya Samriddhi Yojana ( 2015)
5. The Beti Padao Beti Bachao(2015)
6. One Stop Centres (2015)
7. Human Development Report(2023-24)




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## Effectiveness of agricultural subsidies in Wayanad district

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**Introduction:** Three ways a nation can acquire affluent appear. Romans first pillaged their conquered neighbours by war. Robbery. Trading second, who cheats? The third and only honest option is agriculture, where God offers man a true increase of the seed he plants in return for his blameless life and honourable industry. Benjamin Franklin States and the central government subsidise farmers. Farmers receive subsidies to adopt new technologies and cut costs. Farming benefits the economy. Over 70% of rural households depend on agriculture. India grows the most wheat, rice, cotton, milk, pulses, and spices, and has the largest cattle herd. India produces second-most rice, wheat, cotton, sugarcane, farmed fish, sheep, meat, fruit, vegetables, and tea. In 2021–2022, the Indian agricultural industry employed 152 million people and contributed 18.8% to GDP. The country has 328.7 million hectares, of which 139.4 million are net sown and 200.2 are gross cropped with 143.6 percent cropping intensity, according to 2016-2017 land use statistics. Net sowing is 42.4% of total areas. Net irrigated area is 68.6 million hectares. Farmers receive incentives and price support from the government to increase productivity and self-sufficiency. Growth-boosting agriculture subsidies work best. Government subsidies stabilise food prices, stimulate production, protect farmer incomes, and improve the agricultural industry. It helps farmers and agribusinesses increase income, manage commodity supply, and influence market pricing and supply. The Indian government subsidises fertiliser, seed, irrigation, equipment, finance, and export. For growth and prosperity, Indian farmers need agriculture subsidies. Organic fertiliser, seeds, and insecticides are subsidised to lower production costs. Government subsidies help farmers and enhance agriculture. It's vital to assess agricultural subsidies.


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**Significance of the study:** More than 70% of rural people depend on agriculture in India and its linked occupations. Indian agriculture has grown rapidly in recent decades. Food grain production rose from 51 million tons in 1950-1951 to 250 million tons in 2011-2012, the highest since independence. Indian agriculture exports rank 9th globally. Indian farmers face issues include climate change, fluctuating crop prices, and government policies. India needs agricultural subsidies to improve farming. Central and state governments offer agricultural welfare programs. However, central and state government schemes have caused farmers many headaches. Checking the cause of farming difficulties is crucial. Thus, agriculture subsidy Scheme efficacy must be assessed.

**Statement of the problem**:In recent years, agriculture's share of GDP of India has declined. Lack of technology, irrigation, and energy in rural areas has slowed agricultural expansion. Agriculture subsidies help India's agricultural economy grow. Agriculture development is tough without subsidies. Every country distributes agricultural subsidies; however India has a high dependency rate and a low percentage. India took substantial steps to expand its agriculture sector, and farm subsidies are a key strategy. Farmers in India receive government subsidies to improve agriculture. These plans aren't enough to reduce farmer losses. The functional efficacy of agricultural subsidies regimes is examined in this study.

**My study aims to**:

- Assess farmer awareness of agricultural subsidies.
- Analyze factors affecting farmer stability in agriculture.
- Assess the impact of agricultural subsidies on production.
- Evaluate problems farmers experience in obtaining agricultural subsidies.

**Methodology for research**: Research methodology outlines and guides the task. Research challenges are solved scientifically and methodically. Data from primary and secondary sources is then collected.


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**Results:** Farmers are aware of central and state government agricultural subsidies, but not private institution subsidies.

• Farmer stability in agriculture depends on various elements, including economic, environmental, technological, policy, institutional, social, and infrastructure considerations.

• Subsidies impact agricultural production. It enhances agricultural output, farmer income, crop selection, and technology adoption.

• Getting agricultural subsidies is difficult for most farmers. Favoritism and corruption are major factors.

**Conclusion:** Subsidies have beneficial and negative effects on agriculture, but without them, development is difficult. The study "Effectiveness of agricultural subsidies in wayanad district" found that all Wayanad farmers know about agricultural subsidies but not central government schemes and their advantages. However, farmers may not be interested due to lack of information of schemes, insufficient funds, delayed subsidy payments, etc. Thus, government must promote awareness and make procedural changes to reduce procedural difficulties.

**Reference**

https://www.3ieimpact.org/sites/default/files/2019-01/SR41-Agriculture-input_0.pdf

https://scholar.google.com/citations?user=SqrH-d0AAAAJ&hl=en&oi=sra

https://scholar.google.com/citations?user=aGVkcp8AAAAJ&hl=en&scioq=effectiveness+of+agricultural+subsidies+&oi=sra



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# A Legal Framework for Consumer Protection in the Digital Market

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**Introduction:** After paying the vendor, a consumer buys goods or services. Transaction alternatives abound. Options include online, offline, and teleshopping. Electronic commerce involves buying and selling online. E-commerce can make anything under one roof. Customers can buy 'n' products with one click. However, it has drawbacks. Every part of existence is going digital. Our neighbourhood convenience store allows electronic payments. E-commerce also affects people's life. Here are some easy ways to save. Through its larger platform, it has established easy time-saving solutions. A recent study found that over 90% favour the online platform. Before buying, consumers should know their rights and responsibilities.

**Problem Statement**: E-commerce provides instant access to a global market, lower shipping costs, time savings, and better customer relationships, but legal and security problems persist. Customer and merchant security are crucial to e-commerce. E-commerce poses major threats to consumer and merchant protection, including privacy invasion, intellectual property rights infringement, online piracy, unauthorised business ads, spamming, free speech restrictions, censorship, and fraud. E-commerce is regulated by law. This study examines the ethical and legal issues posed by e-commerce, the national legal framework, and solutions.

**Literature Review:** The researcher reviewed several important and credible papers in this field. It comprises several important books and journal and website writings and analyses. This topic's book and law are:

Books

- Coteanu, C. (2017). Unfair trade and cyber consumer legislation. Routledge.
- Law on IT by Dr. Ishita Chatteijee



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• E-Commerce by Kenneth C. Laudon & Carol Gureicier TraverT. Rammappa discusses legal difficulties in electronic commerce.• E-Commerce Laws: Law and Practice (2019 Edition) by Ammu Charles.
Statutes
• The 1986 Consumer Protection Act, No.68.• The Consumer Protection Act, 2019.
• Information Technology Act, 2000, No. 21 in 2000.• The Indian Penal Code, 1860, No. 45

**Objectives of the Study:** A. To verify e-commerce ethical and legal concerns. B. Assess the national law against unfair commercial practices in e-commerce. C. To examine India's online consumer recourse options.

**Research Method**: This study employed descriptive methods. The researcher examined e-commerce consumer protection law and compliance. The jurisdictional factor for e-commerce conflicts has also been thoroughly investigated. The researcher used many secondary sources to set study aims.

**E-Commerce Consumer Protection Threatened**: E-commerce makes it easier for consumers to buy and sell goods and services, but it also raises the risk of fundamental rights violations. E-commerce offers firms and customers many benefits, including:
More variety and global access; Better service and competition; The mass customization and personalization of products and services decreased intermediaries and product availability; greater efficiency and cost-effectiveness; New business and product opportunities.
However, consumer concerns about worldwide fundamental rights violations have resulted. The main consumer protection concerns in e-commerce are:
1) Consumer exposure to deceptive marketing Poor disclosure of return policies, cancellation terms, and warranties
Contractual terms like legality Business tactics like underperformance and lateness for goods and deliveries
d) Payment, such as credit card fraud recovery.
g) Cancellation and transaction confirmation policies: clients may not know they can cancel an online transaction, even if they committed a mistake.
f) Fraud and deception lack online product authentication tools.


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2) Dangerous items. 3) Customer data privacy. 4. Vendor name. 5) Strong grievance and legal procedures are available if something goes wrong. 6) Protection against the harmful effects of overly competitive markets, such as offering the same commodity at different prices. 7) The customer must receive the expected quantity, quality, and description of the goods. 8) Product delivery on time and place. 9) Unsafe payment. 10) Privacy invasion. 11) Personal data misuse and risk. 12) Personal data abuse, computer fraud, infections, hacking, and financial data manipulation are other difficulties. The evidence above shows that e-commerce transactions often violate consumer rights. As proven, a legal regulatory framework is needed to promote, promote, and defend consumers' rights in competitive markets. Internet shopping does not change consumer rights.

**Important for E-Commerce Protection**: People are using e-commerce more effectively, and the government is promoting it. Even with unethical corporate tactics, consumers lack confidence. Deceptive advertising, product quality, warranties, and other unfair business activities are the Act's main concern. The statute does not address incomplete source or item information. Protection from the same is needed for consumers.

The court's jurisdiction over an e-commerce dispute is a crucial legal concern. The usual approach requires territorial and party jurisdiction for the court. Some e-commerce provisions provide long-arm jurisdiction.

Information Technology Act of 2000, Sections 75 and 1(2) According to its terms, the Act applies to all of India and foreign violators. The Act also applies to criminal acts involving Indian computer networks committed abroad.Electronic signatures are valid under the IT Act if they follow its rules. Additionally, this Act provides electronic signature regulations and guidelines.

(B) 1869 Indian Penal Code Section

3.According to Section 3 of the IPC, overseas offenders suffer the same punishments as domestic offenders. No clear standards regulate the court's authority to handle e-commerce cases.

C) Lok Adalats/PIL Providing fast justice protects customers. Lok Adalats are vital to India. This plan prioritises fast trials and cures. Public interest



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litigation, required by Article 32 of the Indian Constitution to safeguard liberty, follows.

**Key Consumer Protection Growth Highlights in India:** The first Indian consumer protection law was passed in 1986. No explicit provisions cover e-Commerce. Consumers lack confidence despite provisions 2 (1) g and 2 (1) r addressing service problems and unfair commercial practices. The problem stems from the Act's coverage of misleading advertising, product quality, warranty, and other unfair commercial practices. The statute does not address incomplete source or item information.

In Amazon Seller Service Private Limited vs. Love Kumar Sahoo2, the consumer had broken merchandise replaced three times but was still dissatisfied because they had minor faults. Because Sahoo complained 15 days after purchase, the store denied his return. He subsequently complained to the district consumer forum. The IT Act may not be protecting consumer rights adequately. Lack of jurisdiction has plagued consumers. Rajinder Singh Chawla v. Make MyTrip.com was dismissed for lack of jurisdiction. E-commerce has no geographical constraints, so the court couldn't hear the case. The court concluded in Marwar Engineering College and Research Centre v. Hanwant Singh that customers can complain to the National Commission based on their transaction location.

The 2015 Consumer Protection Bill includes crucial jurisdiction and information adequacy clauses.

• Purchases have a 30-day cooling off period. If any of these fails, section 2 (41) of this bill considers it unfair business practices.

• A new territorial jurisdiction clause allowed consumers to bring complaints in their home territory.• Court-attached mediation cells offer fast justice for clients.

In 2016, the Ministry of Consumer Affairs established the "online consumer mediation centre" to resolve disputes. Even after consumer protection enhancements, the Supreme Court has ruled that the government has access to justice. The following consumer protection laws were introduced in 2017. This measure combats deceptive advertising and poisoned food. Such cases result in fines and prison terms. The bill also created a central consumer protection


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body to safeguard consumers.
An expanded consumer protection bill was introduced in 2019. The Consumer Protection Act 2019 created the Central Consumer Protection Authority (CCPA) on July 20, 2020, along with other major changes to consumer rights protection and enforcement. The CCPA investigates consumer rights violations and unfair commercial practices and deceptive advertising. This Act protects consumer rights through Consumer Protection Councils, Consumer Dispute Redressal Commission, Mediation, and more. Important legal amendments are debated below.
The act's consumer definition is the first and most visible change. We encompass online and offline consumers.
Consumers in any jurisdiction can file complaints in district or state consumer courts. Only financial problems will be considered. This changes Caveat Emptor to Caveat Vendor.

• Product responsibility follows. Under this policy, consumers may be paid for bodily or mental injury caused by product or service defects.
• Contracts that harm consumers or favour one party are unfair.
• Consumers can complain to the CCPA about deceptive advertising or descriptions.
• It also altered court financial jurisdiction. up to 1 crore for district, 10 crores for state, and 50 crore INR for national commission cases.
•The new Act created mediation cells in district and state consumer forums.
• The new Act penalises producers and sellers who deceive in advertisements with a Rs. 10 lakh fine or a 2-year prison sentence. If the crime is repeated, the maximum fine is 15 laths and the maximum prison term is 3–5 years.

The Consumer Protection Act of 1986 and 2019 address consumer protection. No independent regulator handles with consumer issues. The CCPA (Central Consumer Protection Authority) regulates similar disputes.
Defendants' offices can receive the complaint. The complainant might register the complaint in any nearby consumer court. Product responsibility is absent; consumers must sue in civil court. Consumer courts can compensate consumers. Pecuniary jurisdiction: Up to 20 laths in district;


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1 crore in district. State: 20 lakhs to 1 crore State: 1 crore to 10 crores Above 1 crore Above 10 crore

**Suggestions**

Thus, India has a well-organised consumer rights system. Despite the Consumer Protection Laws protect customers, yet many are unenforceable.

• Price manipulation should be defined clearly so everyone can understand it. Discuss whether e-commerce companies should charge for cancellations.

• The e-commerce company should use straightforward language instead of unclear terminology to overcome hurdles.

• Commercials, awareness campaigns, etc. must inform people of the new consumer rules.

**Conclusion**: Consumers are becoming essential to internet stores. Consumer rights are being closely protected by government officials. In contrast, E-Commerce platforms utilise all their might to attack consumers' distrust. Therefore, they should disclose enough information about their products and services, legal status, and transaction details. The administration should address the public's confusion to improve tomorrow.

**References**

Awais, M., & Samin, T. (2012). Advanced SWOT Analysis of E-commerce. International Journal of Computer Science Issues (IJCSI), 9(2), 569.

Chanana, N., & Goele, S. (2012). Future of e-commerce in India. International Journal of Computing & Business Research, 8(1).

Dash, D. K., & Sarkar, J. (2017). Complaints against E-commerce Companies Top List at National Consumer Helpline, The Times of India.

Deivanayagi, H. (2022). E-Commerce vs. Consumer Rights. Issue 3 Int'l JL Mgmt. & Human., 5, 1476.

Patil, A. R., & Narayan, P. (2017). E-consumer protection in India: trends and challenges. Revista de Interés Publico, 1.



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# From Psychological Error to Existential Choice: Authenticity and Hamartia in Girish Karnad's *Hayavadana*

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**Abstract:** Authenticity is a central subject in Existentialism. Famous Western existential thinkers like Kirkegaard and Camus were attracted by 'in/authenticity'. Unlike the uncontrolled suppressed powers that took control over 'rational man', the existentialists presented the dialectics of authenticity and inauthenticity, which reimposed 'rationality' on man by making him responsible for his actions. Thus, man could no longer point to irrational psychic powers in the human psyche as 'hamartia'. This authenticity, which is based on 'responsibility' without avoiding, will illuminate this Aristotelian concept of hamartia by divorcing it from its unconscious ground. Hayavadana by Girish Karnad uses hamartia to intensify tragic pain, even though it's not a tragedy. This research paper will evaluate hamartia in determining the authenticity of Padmini in selected works and to redefine repentance by detaching it from unconsciousness and affirming it with responsibility as enunciated by existentialist philosophers.

**Introduction:** Plays are shaped by action. From the Greco-Roman period until the postmodernist century, dramatists and critics focused on action since it determined a play's meaning. Playwrights always experimented with new action styles to captivate audiences. The character's logic and relatedness drive a play's action. Action has cause and effect and conflict. A reaction should always follow an action, and this dialectical relationship drives the plot. Action doesn't just appear out of thin air; it has psychological or materialistic



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antecedents. Since Freudian psychology links the antecedent of action to repressed human urges and inexplicable 'unconscious powers', the former domain of reason often aligns with it, making one a puppet in the hands of a puppeteer and limiting authenticity. However, materialist logic associates human activity with conscious and rational choices, making one responsible for his acts without blaming things out of his control, affirming authenticity. This study reads Hayavadana from the perspective of existentialist authenticity, giving hamartia a new meaning as the most important action that takes the story into a new dimension. Padmini in Hayavadana is a tragic heroine because of a major blunder. Like an Aristotelian tragic hero, Padmini suffers from hamartia and repents for her fatal imperfection. The tragedy chosen distinguishes Aristotelian tragic heroes from Shakespearean ones. Choice here is not Existentialist responsibility, but it frees a tragic hero from supernatural beings by allowing him to be logical. Padmini, however, resembles a Hellenistic tragic hero who makes the least sensible decision when committing a terrible act. For Western tragic heroes, hamartia defines their terrible life. Hamartia should lead to anagnorisis or fatal fault awareness for catharsis or purgation. The tragedy's cycle is completed by this sequence of events. The recognition phase causes tragic pain for the hero/heroine. Only by linking the fatal defect or hamartia to supernatural forces can this suffering be mitigated. The tragic hero is controlled by a mystic power or supernatural entity and 'unknowingly' causes his own catastrophe. The intriguing thing about hamartia is that it strips a hero of his distinction from the average people, turning him into a brute-libidinal beast. Dramatists use this momentary change of character to emphasize the need of rationality in life, whereas the former, which is nihilistic and chaotic, is animalistic. Existentialist philosophers find authenticity the most troublesome concept when trying to understand human beingness. The post-Hegelian and Heideggereans define authenticity as 'being-in-itself-for-itself' (Golomb 47). In honesty, consciousness takes on new meaning. Responsibility is the essence of authenticity. Failure to do so makes one inauthentic. Once authenticity is questioned for interpreting a hellanistic tragic hero, the first criticism is that hamartia typically leads to repentance owing to the intense emotional state (unconscious?) of the action. However,


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Heidegger and Sartre believed that man cannot act unconscious. Their definition gives this condition additional meaning. Former existentialist thinkers believed that the rationality of humans requires true and inauthentic consciousness, not unconsciousness. Everything one does is a deliberate act; if it fails, it doesn't suit one's beingness. By holding one more accountable for every action he performs, the scope for effect beyond your beingness is greatly diminished. Repentance has little place in one's genuineness. The three terms Aristotle uses in his Poetics (translated by Malclom Heath)—hamartia, anagnorisis, and catharsis—represent unrestrained emotional beingness. Thus, existentialist philosophers' core concepts—responsibility, rationality, and 'freedom' of choice—are excluded from the 'fatal flaw' debate. What happens when the existentialist interpretation of this fatal fault, considered the essence of human nature, is applied? What happens to tragic suffering, which is believed to come from error, when it becomes conscious act? How will the hamartia be regarded if the character must take responsibility for his actions without blaming supernatural entities? Finally, if a tragic hero repents for his fatal flaw, does he lose authenticity? Is it insincere?

**Padmini: A Designer of Desire -** Padmini in Hayavadana is a person whose beliefs match their actions. Girish Karnad's Hayavadana revolves around Padmini, Devadatta, and Kapila. Padmini marries Brahmin Devadatta after falling in love. Many admire him as a polymath. Kapila, Devatta's buddy, helps the couple reunite. Kapila, a lower caste wrestler, is masculine and well-built. When three buddies visit Ujjan, things get tricky. They went into a jungle to get Padmini some Fortune Lady's flower. While Kapila was collecting flowers, Devadutta was reminded of his commitment to give his life upon marrying Padmini, so he went to the Temple of Kali to sacrifice. Padmini orders Kapila to get her husband from the shrine when she notices his disappearance. Unfortunately, Kapila was stunned at his friend's beheading and committed himself. Padmini searches for the two alone after getting frustrated. Padmini became dizzy after seeing the tragedy and was about to stab herself. Padmini was stopped by Goddess Kali's incarnation. Goddess Kali promised Padmini that joining two men's heads together in their severed bodies would revive them. Padmini's fatal fault makes her a tragic heroine. Her hastiness and


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darkness caused her to misplace the heads, resulting in two genetically modified hybrids. Was she psychologically choosing existentially wrong? Padmini is initially frightened by her option, but she calmly analyzes the situation and draws a conclusion, making her accountable. Padmini picks the Kapila-Devadutta hybrid. In the bushes, poor 'Other' is disposed. In contrast to western tragedies, tragic heroines commit horrible acts instead of murder to sympathize. Thus, repentance is possible. She repents but shows the most important attribute of authenticity by taking responsibility and using her reasonable mind to act. Thus, repentance or anagnorisis fails in a tragedy. Three aspects must be considered before assessing Padmini's choice's existential authenticity: how to characterize Devadutta's sacrifice? Two, why did Kapila commit suicide? Three, does Padimin's choice of "mixing-heads" indicate her existential choice? Devadutta's promise to God to give his life to reunite with his beloved appears strange yet true. Jacob Golomb begins In Search of Authenticity by discussing Abraham's sacrifice. Why did Abraham never repent after sacrificing Isaac? Kirkegaard believed religion detached from aesthetic and ethical life. Does it endorse violence? It's not about violence, but a fictional character's terrible situation. Extreme pain and situations reveal our true selves. Thus, if Devadutta committed suicide after marrying his girlfriend, it was a fictitious interpretation of religion.

> Abraham cannot analyse himself or immerse himself in endless reflection. Because of his great passion, he is not paralysed at the moment of truth—or rather of truthfulness. For Kierkegaard the ideas of passion and uncertainty are interrelated; it is the most uncertain thing that excites our most burning passion. Thus Abraham has to risk the possibility that it is not God who summons him to sacrifice Isaac, but Satan, or an unconscious urge, or a delusion. After all, Abraham's decision to sacrifice Isaac might be a horrible temptation, what Kierkegaard terms an *Anfechtung* in several places.32 This is the 'dread' that makes Abraham choose the quest of authentic faith. Here, not


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> reflection, but only action, can attest to the self's authenticity. (Golomb, p.40)

What about Kapila? Kapila's shame drives him to suicide, opposing Devadutta. In existential terms, suicide is nihilism because it fails to understand the infinite possibilities of 'becoming'. The restricted feeling of "being" encourages suicide. Golomb says, "Physical suicide may not be the solution because it creates a hierarchy of values with one ultimate action. Thus, suicide implies choosing one action over all others (p.127). Kapila's suicide makes him an inauthentic person, not a 'hero of faith' Padmini embodies authenticity through her responsible decisions for 'becoming' what she should be. By mingling severed bodies, she demonstrates this mindset. She wanted both, but societal and institutional barriers prevented it. The dialectical clash between Devadutta 'and' Kapila doesn't offer her a solution, hence dialectics doesn't work. She must choose 'either' Devadutta or Kapila instead of 'and', making the existential option personal. She chooses the hybrid with Devadutta's head, but later she changes her mind and becomes close to the Other hybrid, which symbolizes her limitless life rather than essence, totality, and conformity. She designs her desire by being fake. A positive inauthentic being acknowledges its ontological constraints and wants to break them. Looking attentively at Padmini's biography shows Dasein's journey from primatial authentic Being to mundane ontological inauthentic self to discoveries of 'becoming' and back to its primatial owness. The blending of body parts illustrates her existential freedom. She will never be free, but she can enjoy life by exercising her freedom. This is the 'essence' of authenticity. She never lets others decide her activities or adheres to institutional practices, therefore she never gets involved in interpellation. For Heidegger, unlike Nietzsche and Kierkegaard, the problem of authenticity's viability has less to do with society and ethics than with freedom's ontology (p.73), according to Golomb. Thus, merging severed body parts was an existential choice, not a psychological blunder. Padmini mocks Devadutta, "Aw, shut up, don't I know how liberal and large-hearted you are?" You're not jealous. "You won't miss me until my bloated corpse floats up if I fall into a well tomorrow" (p. 17). Padmini's attitude shows that she didn't act unconsciously owing to repressed libidinal energy. She created


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art from her libidinal impulses, creating hybrids. She is mindful, creative, and productive, not repressive. Can a 'Authentic' Hero Repent Politically? Hamartia, the most significant element of Hellanistic play, was the starting point for this paper. To allow repentance, hamartia required an emotional imbalance that hijacked the character's conscious-rational capability. Thus, repentance works best when the wrong is committed during a hallucination, and Freudian psychology correlates this phase of 'mind' with symbols related to the person's repressed-dark repository of libidinal impulses. As stated in the outset of this paper, what if the error is intentional? How will the hamrtia work? As per Malcolm Heath,

> The Greek word *hamartia* covers making a mistake or getting something wrong in the most general sense; so the word itself gives little help in interpreting Aristotle's precise meaning, and we must be guided by the context. This at once excludes the interpretation of *hamartia* as a moral flaw: the second time Aristotle uses the word he speaks of a 'serious' *hamartia*; but a serious moral flaw would be precisely the wickedness that Aristotle has ruled out. To avoid this inconsistency some interpreters have concluded that *hamartia* has no moral content at all. On this view, Aristotle is referring exclusively to intellectual errors - to ignorance and mistakes of fact. This dovetails well with his account of reversal and recognition; both arise out of a misinterpretation of the circumstances in which a person is acting. (Poetics, p.5)

Aristotle allows divine presence to confirm the irrationality of the erroneous conduct that follows, not a conscious grounding. This supernaturality gained credence among the public when it was attributed 'scientificality' (logic, reason, and symbolic signification) and semantically tailored to the unconscious. The unconscious often takes responsibility for outrageous behavior, forsaking its duty for libidinal desire. Padmini is a libidinal-being lost in possible realizations. Jacob Golomb argues that authenticity prioritizes



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possibility above fact, which is polluted by inauthentic modes (p.87). The main question is: does she repent? Traditional Western tragedy links repentance to Anagnorisis, which leads to tragic disclosure. Reconciliation is typically related to unconsciousness to maintain audience reverence for the hero. Hamartia makes a hero tragic, but it doesn't grow from him; it takes the form of giving up rationality. Instead of finding the fundamental cause of hamartia, one should look for the antecedents of this choice to give up rationality. That is, while deep libidinal energy may create hamartia, giving up rationality to allow libidinal-carnal energy is an intentional act. Repentance makes heroes politically inappropriate. Because a hero becomes politically wrong when they deviate from their self-image. Villains can repent, but they should take responsibility for their actions rather than blame the unconscious. Taking accountability makes a hero or villain real. Padmini shows her libidinal longing for Kapila throughout the performance. She chose the hybrid with Devadutta's head and Kpila's body most clearly. Kapila's masculine body is fascinating when he climbs the tree throughout their excursion. Her creativity in achieving authenticity is what I'm highlighting here, not infidelity or adultery. She should not remorse for her hamartia because she did it knowingly. Existentialism views guilt of "voice of conscience" as signs of sincerity, not repentance. Instead of bringing one to the unfathomable caves of tragic remorse, one becomes more productive by encouraging him to explore the vast possibilities of being. Padmini subsequently regrets her choice and joins the Other hybrid, but feels no remorse since Dasein is authentic (Golomb, p.154), reminding us that authenticity is possible. Therefore, a real hero repenting is oblivious of his becoming-authentic. In other words, authenticity is an endless becoming, so the whole process is filled with guilt, making one action (like mixing bodies) not be separated from a long chain of guiltiness (that make up beingness), detaching an authentic-being from repentance. Padmini retreats to the wilderness when she feels inauthentic because authenticity has no value in a societal structure. Her determination to travel through the woods for the Ujjan festival, the key occurrence in the woods, and her return to the forests to discover the Kapila-hybrid. She is spontaneous and never lets morals interfere with her pursuit for authenticity. Action, not idle thought, characterizes her.


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She declares separation from traditional morality and ethics to express her authenticity despite her ontological and ethical limits.

**Conclusion**: One can reconcile authenticity and hamartia by arguing that authenticity is necessary for the unconscious to act, making the former the base. Padmini never repents or becomes a tragic heroine because she acts out her freedom of choice to be real. Padmini's choice to mingle severed body parts was an existential choice that modeled her authenticity on creativity. Padmini takes advantage of watching the tragic tragedy to make her existential choice. She made a snap judgment without considering ethics or morals. She followed her conscience, resulting in genuineness.

**Reference**


- Aristotle, & Heath, M. (1996). *Poetics*. Penguin Books.
- Flynn, T. (2006). *Existentialism: A Very Short Introduction*. Oxford University Press.
- Fromm, E. (2013). *Escape From Freedom*. Open Road.
- Karnad, G. (2020). *Hayavadana*. Bloomsbury Publishing.
- Golomb, J. (2012). *In Search of Authenticity: From Kirkegaard to Camus*. Taylor and Francis.



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## Reviving Kerala's Forgotten Cities: Harnessing Digital Reconstruction for Cultural Heritage and Tourism

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**Abstract:** Indian culture is intertwined with the legends of its ancient cities, some flourishing, some forgotten. Kerala, known for its lush scenery and rich culture, has several historic urban settlements that have disappeared from public awareness. This article examines how digital reconstruction can revive Kerala's lost cities through heritage tourism and digital technology. The article claims that digital heritage efforts may preserve historical knowledge and promote a more inclusive and economically sustainable future through immersive storytelling, community involvement, and cutting-edge technology.
**Keywords:** Digital heritage reconstruction, Kerala cultural tourism, immersive technology in archaeology, virtual preservation of ancient cities, community-led heritage revival, sustainable digital tourism

**Introduction:** Urban centers have always been commercial, cultural, and intellectual hubs. Many Indian cities have disappeared due to colonization, fast urbanization, natural calamities, and changing economic paradigms. Kerala is known for its backwaters and biodiversity, but Muziris, Tyndis, and Nelcynda were ancient port towns that traded across the Indian Ocean. Today, scattered literature and scant archeological finds hint at their presence. Digital reconstruction can reconnect modern society with its past as globalization changes how people interact with cultural assets.
This study posits that digital reconstruction is both a technological and cultural approach to reclaim these destroyed urban cores. It explores how VR, AR, 3D modeling, and GIS may restore and recontextualize Kerala's lost urban legacy. Through participatory design and ethical participation, these digital efforts can



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enhance historic tourism and provide socio-economic and cultural advantages. Following the footsteps: Ancient Kerala's Urban Landscapes and History Kerala's ancient past is related to Indian Ocean marine trade networks. Cultural exchange between the Indian subcontinent and the Roman Empire, Arabia, and Southeast Asia was facilitated by port cities like Muziris (now Pattanam). Roman coins, amphorae, Mediterranean wine jars, and inscriptions in diverse scripts found during archaeological excavations show that these sites were cultural, religious, and commercial hubs. Natural disasters like the 1341 CE Periyar River flooding, which disrupted trade routes, caused many of these cities to fall. Colonial involvement disadvantaged these communities and shifted economic priority to newer administrative centers. The cultural memory of these sites disappeared when their physical remains degraded or were buried. Reviving these cities requires rebuilding their physical layout and socio-cultural character. Memory Technologies: Digital Reconstruction as Experiential Archaeology Digital reconstruction uses 3D modeling, laser scanning, and immersive media to recreate historical structures, surroundings, and relics. Digital reconstruction allows Kerala residents to perceive and interact with lost cities. Historians, students, visitors, and local people can learn and experience their cultural past. High-resolution 3D scanning and photogrammetry allow precise reconstructions of archaeological remains to be created to picture these cities in their heyday. VR lets viewers wander through restored ancient marketplaces, temples, and dockyards, while AR lets them superimpose these reconstructions on modern settings for a rich historical experience. GIS mapping gives spatial and environmental context, helping scholars understand how these towns interacted with nature. AI and machine learning can also guess missing data points by examining trends from similar sites and providing probabilistic reconstructions. These tools can customize material to user preferences, making the experience more engaging. Finally, digital reconstruction offers a new type of archaeological narrative that stresses participation, immersion, and interpretation.

**Economic Pathways Through Heritage:** Integrating Digital Reconstruction into Kerala's Tourism Economy Kerala has long relied on its backwaters and Ayurveda for tourists. Digital reconstruction can help promote heritage


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tourism, which has untapped potential. Visitors want meaningful experiences with local culture and history as experiential and knowledge-based tourism grows worldwide. Reconstructed heritage sites can attract tourists interested in history, technology, and community narratives. Digital reconstructions can attract cultural visitors, academic delegations, and historical aficionados to diversify Kerala's tourism offering. These reconstructions aid field investigations and immersive learning for students and researchers. Economically, tourism can employ local craftspeople, hospitality workers, digital storytellers, and tour guides. Heritage tourism avoids the seasonality of eco-tourism and leisure travel by being year-round. The Muziris Heritage Project shows that such projects are feasible and popular. Physical repair and traditional museology are the foundation, but virtual walkthroughs, interactive kiosks, and mobile apps can increase reach and engagement. International cooperation and exhibitions can raise Kerala's digital heritage tourism profile. Digital democracy: community-led design and local participation Digital reconstruction must draw from local knowledge and experiences. Human-centered design ensures that technology reflect local values, narratives, and goals. Community interaction provides authenticity and relevance over externally created history. This technique emphasizes storytelling. Working with local historians, cultural custodians, and artists may create rich narratives that reflect Kerala's diversity. This collaboration promotes heritage democratization by letting underrepresented voices affect public memory. Digital skills training can help local youngsters co-create digital heritage content, boosting cultural pride and economic opportunities. Language accessibility matters too. Multilingual digital experiences in Malayalam, English, and other languages increase inclusivity and community participation. Mobile apps and participatory exhibitions can encourage active technology use. Communities actively preserve and reinvent their histories in this model.

**Navigating Ethics and Infrastructure:** Digital Heritage Landscape Challenges Digital reconstruction can transform, but it has problems that must be addressed carefully. Balance between historical truth and creative interpretation is important. Since artistic imagination is inevitable, it must be



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expressed honestly to avoid misrepresentation. Ethical guidelines should distinguish experimentally validated aspects from hypothetical reconstructions.

Technology access is another major concern. These programs may not serve rural and economically underprivileged communities with poor infrastructure or digital literacy. Investment in digital inclusiveness and community-centered infrastructure is needed. Intellectual property and data ownership are also contested. Participatory governance and legal safeguards must address the ownership and control of digital cultural heritage representations. Credit and protect oral and community indigenous knowledge systems to prevent exploitation and theft. The risk of commodifying culture is turning great historical events into entertainment. Tourism and economic development are crucial, but cultural integrity and depth must be protected. An approach that prioritizes education, honesty, and community benefit is necessary. **Strategic blueprints:** multi-stakeholder approaches for scalable implementation. Multi-stakeholder coordination is needed to complete Kerala's digital rebuilding projects. First, public-private collaborations can raise funds and expertise. Technology corporations can provide expertise and infrastructure, while government agencies can ensure policy alignment and public interest. Research, authenticity verification, and content development should involve academic institutions. Digital legacy artifacts can be made available to educators, students, and the public through open access repositories. Workshops, feedback, and participatory content production must formalize community involvement. These engagements keep digital reconstructions fresh, trustworthy, and inclusive. Serious games, interactive documentaries, and mobile AR can also engage younger audiences and promote intergenerational learning. Policy integration matters. Kerala should integrate digital heritage into its tourism, education, and cultural plans. This assures institutional backing, scalability, and longevity. A unified vision that puts human connection at the heart of digital innovation and crosses disciplinary and institutional boundaries is essential for successful implementation.


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**Conclusion:** The silent remains of Kerala's ancient towns are more than just architecture—they remember a lively culture. Reconstructing these stories digitally allows them to be relived, reinterpreted, and rejoined. Kerala is well-positioned to spearhead a paradigm change that combines technology sophistication with cultural authenticity as global tourism moves toward meaningful, immersive experiences. Digital reconstruction of lost cities is a forward-thinking cultural strategy that honors the past and empowers the future. Kerala can revive its neglected urban legacy via ethical innovation, inclusive involvement, and sustainable development.

**Reference:**

Bandyopadhyay, R. (2019). Digital heritage: Applying digital imaging to cultural heritage preservation. Springer. https://doi.org/10.1007/978-3-030-03727-2

Bose, S. (2011). A hundred horizons: The Indian Ocean in the age of global empire. Harvard University Press.

Chakrabarti, D. K. (2016). Ancient India: A historical outline (2nd ed.). Oxford University Press.

Evans, G. (2003). Hard-branding the cultural city – From Prado to Prada. International Journal of Urban and Regional Research, 27(2), 417–440. https://doi.org/10.1111/1468-2427.00455

Gill, M. (2020). Virtual reality and the future of heritage interpretation. Museum International, 72(1–2), 14–25. https://doi.org/10.1080/13500775.2020.1796250

India Foundation for the Arts. (2021). Digital preservation of cultural heritage in India. http://www.indiaifa.org



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## From Home to Global: E-Commerce as a Catalyst for Women Entrepreneurship

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**Abstract:** E-commerce has changed entrepreneurship worldwide, especially for women. Women entrepreneurs have shown promise as knowledgeable and energetic entrepreneurs in recent years. With improved internet access and digital literacy, women are doing business online. Over the past five years, NASSCOM reports, women-led digital firms have grown by over 50%. Amazon, Flipkart, and Snapdeal train aspiring women entrepreneurs through programs and workshops. This paper investigates how e-commerce affects women entrepreneurship, including possibilities, problems, and prospects.

**Keywords:** women entrepreneurs, development, opportunities, challenge, e commerce, digital world

**Introduction:** Economic innovation and prosperity depend on entrepreneurship, and women entrepreneurs are crucial. Entrepreneurship has become more diverse, creative, and inclusive as women-led businesses have grown worldwide. Understanding the relationship between women entrepreneurs and entrepreneurship highlights the socio-economic benefits of empowering women through business. In our developing economy, Indian women must build their careers and take care of the home. Women's entrepreneurship has grown in popularity, notably in the 20th and 21st centuries. Despite only 19% of working-age women employed in India, women-owned MSMEs account up 20% of the 63 million micro, small, and medium-sized businesses that employ 22 to 27 million people. Women-owned enterprises in the US have increased 5% since 1997. Government programs



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and private-sector partnerships have also helped women into e-commerce. Stand Up India, Start-up India, Mahila e-Haat, Amazon, Saheli, and Meesho are helping women entrepreneurs expand their businesses, get investment, and learn from experts. These programs help first-time women entrepreneurs, especially rural and semi-urban ones. Women entrepreneurs proved resilient during the pandemic. Despite COVID-19 regulations, many women used internet platforms to pivot their enterprises, adjust to market trends, and generate money. E-commerce proved flexible and powerful as a sustainable method for women's economic engagement in crisis. Empowering women through e-commerce is not only an issue of equity—it is a strategic economic necessity that can promote inclusive growth and innovation at scale.

**Problem Statement:** Despite improvements in gender equality and women's economic engagement, women entrepreneurs face major challenges in starting, operating, and developing their firms, especially in traditional marketplaces. Lack of finance, mobility, societal expectations, and market exposure have often limited their entrepreneurial potential. With the rise of e-commerce as a transformational business model, women may reach more markets, work from home, and reduce infrastructure dependence. E-commerce's effects on women entrepreneurs, particularly on long-term sustainability, profitability, digital literacy, and inclusion, are unknown. This research examines how e-commerce has affected women's entrepreneurship, including its opportunities and limitations. Understanding if e-commerce empowers women economically or if structural hurdles prevent their full involvement and success in the digital economy is crucial. Literature review 1. This study illustrates how institutions create gender-specific entrepreneurial pushes and pulls. Their research shows that while unenthusiastic gender ideas in our culture can limit personal options, gender imbalance hinders growth and development. Gender imbalance can attract and hinder business due to a lack of social capital and financial resources. Gender equality increases female labor force participation (Baughn, Chua, & Neupert, 2006).

2. The essential causes of women's entrepreneurship in our nation are identified in this study. This study project examines business startup challenges. The study found that social rejection, a lack of interaction with successful business


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owners, gender discrimination, bankers giving female entrepreneurs who lend business loans less priority, poor networking, and heavy family responsibilities are the biggest barriers to women's entrepreneurship.

3. The study links e-commerce to women empowerment in several developing nations. Empowering women in e-commerce requires training, planning, gender analysis, design, execution, assessment, and pay (Mellita & Cholil, 2012).

4. The study seeks to explain the rise in women's entrepreneurship since India's pre-independence British colonial period. This study investigates why female entrepreneurs are committed to their startups. The development of women entrepreneurs was examined in four phases using qualitative and quantitative methods: pre-independence (before 1947), post-independence (after 1947), post-liberalization (after 1991), and post-global recession (after 2008). Indian women entrepreneurs benefit from our extensive support networks, according to the study (TripathyLal, 2012).

5. International Bank BNP Paribas' 2015 Global Entrepreneurialism Report ranked India first among women entrepreneurs. Conducted in 17 US markets with 2,500 entrepreneurs. European, Middle Eastern, and Asian survey indicated 49% of Indian entrepreneurs were women. India beat Hong Kong and France, which were next.

6. In his work “A study on e-commerce industry in India: growth in pandemic phase and future challenges,” Sunil Kumar Khatri (2022) showed that consumer use of information technology and computers has changed business. Increased internet users and smartphone penetration have provided tremendous opportunities in rural areas for e-commerce. With e-commerce growing, the COVID-19 epidemic increased digital discovery but also uncertainty. Customers explored online access to a wide range of items and services from home during the lockout. This identified significant elements that promoted e-commerce development throughout the epidemic and potential challenges.

7. Ranjana Singh (2017) examined women entrepreneurs' issues in her thesis, “Problems and Prospects of Women Entrepreneurship with Special Reference to MSMEs in The State of Gujarat”. The researcher used a systematic timetable to gather and analyze primary data in MS Excel and SPSS. She used frequency


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distribution, cross tabulation, percentages, graphs, Chi-square test, etc. She observed that Gujarati MSME women entrepreneurs are highly educated, with 25% of them pursuing postgraduate degrees. Women entrepreneurs are 68% graduates or undergraduates. Lack of awareness prevents 76% of women entrepreneurs from joining entrepreneurship development programs (EDPs). 24 percent of female entrepreneurs attended EDP. They acknowledged that EDP helped them establish their firm and increase profits by 10–15%. Lack of financial management and technological awareness are women entrepreneurs' biggest issues. In current times, Gujarat has more women entrepreneurs. The researcher suggested smart financial management, experience-sharing seminars, focusing on potential industries, vocational training, etc. for women entrepreneurs.

8. Marisetti Sindhuja, R Nandhini, R Bhuvaneshwari, and P Naresh (2018) examined Indian women entrepreneurs' current position in "Women Entrepreneurship in India- Challenges". Researchers evaluated women entrepreneurs' obstacles. They discovered why India needs more female entrepreneurs. Government and non-government groups should help women entrepreneurs.

9. Drs. Sonia Justin Raj, Anshul Vyas, and Bhanu Pratap Singh ratore (2018) collected primary and secondary data for their article "E-commerce Vs Women Entrepreneurship". Researchers used a structural model to interview. They gathered secondary data from newspapers, journals, and studies. They observed that women ecommerce entrepreneurs suffer lack of awareness, competition, goods supply chain and reliable logistics, market suitability, financial funds, client retention, and business knowhow.

10. In their study "Issues and Challenges Faced by Women Entrepreneurs: An Indian Perspective," Tasleem Ara Wani, Faiza Ali Dhar, and Sumaira discuss Indian women entrepreneurs' issues. Lack of capital, fierce competition, high production costs, limited raw material access, lack of entrepreneurship skills, and gender inequality are the main issues. Women entrepreneurs must also balance family and career obligations, overcome socio-cultural barriers, navigate a male-dominated business environment, deal with travel issues, low self-confidence, and low literacy and educational attainment.



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11. In his work "Women Entrepreneurship in Tamil Nadu: A Study with Reference to the MSME Sector in Chennai," Paranthaman E (2023) used SWOT analysis to assess women entrepreneurs' strengths, weaknesses, opportunities, and threats. The report suggests numerous business support initiatives for women. Paranthaman stresses the importance of established support systems for women entrepreneurs. Entrepreneurs and their employees should receive comprehensive training, according to the report. The report also recommends establishing Women Entrepreneur Cells in every taluk to improve skill levels, productivity, and managerial competency to help women succeed in the competitive business climate. These cells would empower women entrepreneurs locally by providing guidance, mentorship, and resources. Commercial banks are also important for women's financial access.
12. In her work "Impact of E-Commerce on Women Entrepreneurship: A Study in Indian Context with Reference to Jammu," Sugandha Soni (2018) examines why Jammu women entrepreneurs use e-commerce platforms. The report shows that women, regardless of whether they have children under 18, are increasingly using e-commerce to become economically independent. They then seek chances in the rising e-commerce sector and flexible working hours to improve work-life balance.
Based on age demographics, women in the 30–34 age bracket pick e-commerce platforms for business potential, next financial freedom, and finally flexible work arrangements. The study also found that housewives start e-commerce businesses to gain economic autonomy, with flexibility and the growing e-commerce landscape as secondary motivators. Women entrepreneurs who run their enterprises online often do so to grow their professions, but their main goal is financial independence.
13. In "Impact of E-Commerce on Women Entrepreneurship: An Empirical Study of Gujarat State," Darshanaben Girishbhai Upadhyay (2022) explores how e-commerce affects women entrepreneurs' business success. The survey found that many women entrepreneurs struggle with awareness, technology knowledge, gender disparity, male domination, and managing personal and professional commitments. Despite these obstacles, e-commerce has become a strong tool for women to manage their personal and professional life.


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E-commerce boosts women-led enterprises, especially when combined with entrepreneurial motivation, according to studies. It underlines that online platforms' flexibility and accessibility have helped women overcome traditional hurdles and succeed in entrepreneurship.

**Theoretical framework**

**E-Commerce**: E-commerce allows women entrepreneurs to start and build enterprises from home while juggling work and life. Most women entrepreneurs sell their items online, and e-commerce is driving India's internet revolution. E-commerce has empowered thousands of women to sell things online, according to eBay India's head of marketing, Shivani Suri.

**The SWOT Analysis**: **Streagth:** 1. Increased Market Access E-commerce platforms remove regional barriers, giving women entrepreneurs local and worldwide customers. Women in rural or remote locations who have limited access to physical marketplaces need this. They can sell worldwide on Amazon, Etsy, or their websites.

2. Flexibility, Work-Life Balance A major benefit of e-commerce is flexibility. Women with family or caregiver duties can run their enterprises from home and establish their own hours. This flexibility makes balancing work and life easier, encouraging more women to become entrepreneurs.

3. Lower Startup and Operating Costs Online businesses usually demand less money than brick-and-mortar ones. No space rental, staffing, or storefront required. This cost efficiency lowers the entry hurdle for women, especially those with modest financial resources.

4. Empowerment through tech and digital skills E-commerce helps women learn social media marketing, website management, data analysis, and customer service. These abilities boost their confidence, employability, and business opportunities.

**Weakness:** 1. Skills and Digital Literacy Gap Women in rural and poor communities sometimes lack fundamental digital skills including smartphone use, internet surfing, and e-commerce platform operation. Even with entrepreneurial talent, this hinders online business startup and sustainability.

2. Financial constraints and funding shortages Women entrepreneurs have trouble getting loans, venture capital, or government assistance. Lack of funds



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can make digital marketing, website development, and logistics difficult in e-commerce.

3. Cybersecurity, trust issues Women may avoid e-commerce due to concerns about fraud, scams, and theft. Small or new digital women-led firms may also struggle to gain client trust, which hurts growth and retention.

4. Poor Business and Marketing Knowledge E-commerce platforms can help women with online marketing, economics, and developing their business, but many still struggle. Digital competition can limit success and sustainability for those without experience.

**Opportunities:** 1. Institutional and Government Support Many governments and NGOs are developing digital programs to empower women entrepreneurs. These include financial subsidies, training, grants, and government-backed e-commerce websites for market access. This support helps women scale their enterprises despite customary hurdles.

2. Growing Social Media and Digital Marketing Tools acebook, Instagram, WhatsApp, and TikTok are effective, low-cost marketing and sales platforms. These platforms allow women to create brand visibility, communicate directly with customers, and make money with minimum advertising.

3. Online Payment and Logistics Infrastructure Growth Secure online payment channels and efficient delivery services ease entrepreneurs' burdens. Third-party payment and shipping platforms let women focus on product quality and client interactions.

4. Ethical, niche market need Global interest in ethically sourced, sustainable, and handmade items is expanding. Women entrepreneurs in local crafts, textiles, and organic items can capitalize on this desire and develop niche businesses.

**Threats**: 1. Fierce competition: E-commerce platforms are competitive, with thousands of suppliers selling comparable goods. Women entrepreneurs, especially new ones, may struggle to compete with established brands or companies with higher marketing expenditures.

2. Cybersecurity Risks Online commerce puts women entrepreneurs at danger of hacking, data theft, phishing, and fraud. Loss of critical customer or


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corporate data due to cybersecurity ignorance can damage confidence and finances.

3. Logistics and Operations Issues For rural and underprivileged women, shipping, refunds, and inconsistent delivery systems can be challenging to manage. These issues might hurt business reputation and client satisfaction.

4. Market Dynamics and Technology Changes The quick pace of digital innovation requires constant technological, tool, and trend changes. In a fast-changing market, women with limited time, education, or IT experience may lag behind.

**Findings:** 1. According to secondary and primary research, most women entrepreneurs are 20–40 years old.

2. It recognizes that married and unmarried women differ greatly in competition and awareness.

3. Due to convenience and low cost, 60% of women entrepreneurs use WhatsApp, Facebook, and Instagram as their primary business channel rather than traditional e-commerce websites, according to research.

4. Most participants had trouble getting technical help and digital marketing abilities, restricting their online business growth.

5. GST registration, business licencing, and return/refund rules were unfamiliar to some.

6. Many surveys indicated that over 65% of women entrepreneurs worked in fashion, food, cosmetics, and handicrafts, which are traditional skills that have found new life online.

7. It recommended digital literacy, logistics, and online consumer engagement training.

**Suggestions**: 1. Online entrepreneurship may encourage investors, journalists, researchers, educators, and entrepreneurs, especially women entrepreneurs, to adopt design thinking or innovations for greater commercial chances. According to this research, women entrepreneurs only partially use e-commerce due to a lack of awareness, knowledge, and infrastructure.

2. A helpful social system should help them progress.

3. Government should provide awareness, workshops, financing, etc. for development.



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4. Get women the digital tools and education they need to establish internet enterprises.

**Conclusion:** Modern women are not limited to one field. Modern life allows people to explore and share their innovations, skills, and ideas. Women entrepreneurs manage many issues to balance work and life. E-commerce adoption helps women balance work and life and inspires them to establish businesses.Women entrepreneurs are rising in our country. Education is crucial for highlighting entrepreneurial traits. Government-sponsored development operations have benefited only a small section of society; more work is needed. Effective initiatives must encourage women's skill development and entrepreneurship. To encourage, inspire, and motivate female entrepreneurs, large-scale awareness campaigns on business-starting domains are needed. (Kumbhar (2013). Overall, e-commerce has helped women entrepreneurs by increasing accessibility, flexibility, and market access. We can empower them and help them succeed in digital business by conquering their challenges.

**Reference**

Tasleem Ara Wani, Faiza Ali Dhar, Sumaira(2022) "Issues and Challenges faced by Women entrepreneurs: An Indian perspective" The business school, University of Kashmir

Paranthaman E(2023)"Women Entrepreneurship in Tamil Nadu: A Study with Reference to the MSME Sector in Chennai", University of Madras.

Sugandha Soni (2018)"Impact of E-commerce on Women Entrepreneurship: A Study in Indian Context with Reference to Jammu

Darshanaben Girishbhai Upadhyay (2022) "Impact of E-commerce on Women Entrepreneurship: An Empirical Study of Gujarat State"

NASCOM REPORT , Shodhganga, Research scholar

Rajan, K., & Venugopal, D. R. (2019). Women entrepreneurship in e-commerce sector- Problems and opportunities. Journal of Emerging Technologies and Innovative Research , 6 (2), 408 – 415.



ISBN: **978-93-5786-070-3**
March 2025

Mellita, D., & Cholil, W. (2012). "E-commerce and Women Empowerment: Challenge for Women-Owned Small business in Developing Country". International Conference on Business Management & IS (NO. 1). Singapore.

Sindhuja, M., R, N., R, B., & P, N. (2018). "Women Entrepreneurship In India-Challenges". IOSR Journal of Business and Management (IOSR-JBM) , 20 (5), 73-77.

Banad, M. M., & Talawar, M. (2009). Status of Indian women entrepreneurship in context to liberalization, privatization and globalization. Paper presented at the Industrial Engineering and Engineering Management, 2009. IE&EM'09. 16th International Conference on.

TripathyLal, A. (2012). Women Entrepreneurs in India-Over the Years. Fore School of Management.

Singh, G., & Belwal, R. (2008). Entrepreneurship and SMEs in Ethiopia: Evaluating the role, prospects and problems faced by women in this emergent sector. Gender in management: An international journal, 23(2), 120-136.

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# Economic Implications of Healthcare Access: Insights from PHCs in Belgaum District of Karnataka State. (2018-2022)

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**Abstract:** The study examines gender-based economic insights into IPD and OPD use across all PHCs in rural Belgaum District. Belgaum District in northern Karnataka has a diverse socioeconomic terrain and a large rural population. Despite Karnataka's healthcare infrastructure improvements, regional utilisation trends vary. This study examines healthcare utilisation data to investigate economic factors affecting gender-based healthcare access. The findings are critical for politicians, healthcare professionals, and researchers working to improve access and reduce gender inequities. Access to healthcare improves productivity, lowers healthcare costs, economic growth, equitable development, public-private partnerships, lifespan, poverty, education outcomes, infant mortality, and communities empowerment, according to the study. Conversely, it addresses the economic burden of healthcare access, including out-of-pocket prices, limited resources, travel costs, indirect costs, infrastructure issues, health inequities, emergency treatment, preventative care, economic inefficiencies, and financial limits. Tabulation, averages, percentages, and bar graphs are used to analyse secondary data from Belgaum District Communicable Diseases Reports. The study's goals are to evaluate rural Karnataka's healthcare facilities' value, examine PHCs' economic burden and advantages, and assess patient care trends. This research helps promote rural participation in Karnataka's development, supporting Viksit Bharat. The study addresses gender inequities in healthcare to enable equitable access to basic health services for rural development and national progress.


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**Keywords:** Healthcare Access, Economic Implications, Primary Health Centers (PHCs), Gender Disparities, Patient Care Trends, In-Patient Department (IPD), Out-Patient Department (OPD), Healthcare Costs, Economic Growth, Health Disparities, and Preventive Care

**Introduction:** Healthcare is a human right, but demographic gaps persist. Understanding gender variations in healthcare-seeking behavior and results is essential for creating equitable and effective policy. This study examines gender-based economic insights into IPD and OPD treatment consumption across all Primary Health Centers (PHCs) in rural Belgaum District, Karnataka, India. Northern Karnataka's second capital, Belgaum District, offers a diverse socioeconomic terrain. At the 2011 census, the district's population was 4,779,661, with 74.66% in rural regions. There are 1,811,094 men and 1,757,372 women in rural areas, 50.75% and 49.25%, respectively. A useful backdrop for studying these disparities is this study. Despite Karnataka's healthcare infrastructure and access improvements, regional utilization trends vary. PHC patient numbers provide a complete picture of rural Belgaum District healthcare access. Analyzing these services by gender highlights the barriers and facilitators to healthcare use for men and women. This study examines Belgaum District healthcare utilization statistics from 2018 to 2022 to better understand economic factors affecting gender-based healthcare access. Policymakers, healthcare professionals, and academics working to improve healthcare access and gender gaps need this study's findings. The research aims to educate gender-equitable healthcare access and use interventions by exposing these discrepancies. This study illuminates rural Karnataka healthcare and outlines potential delivery and policy reforms. This research will help promote rural participation in Karnataka's development, supporting Viksit Bharat. We can promote rural development and national progress by addressing gender inequities in healthcare and



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ensuring that all people have equal access to critical health services.

**Objectives of the study**: 1. How rural Karnataka health care facilities matter.
2. To examine Belgaum PHC healthcare access's economic effects.
3. The economic burden of rural PHC access in Karnataka.
4. Understand Belgaum District PHC healthcare access perks.
5. Assess healthcare access and patient care trends in all Belgaum PHCs.

**Methodology:** Belgaum District Communicable Diseases Reports provide secondary data for the study. The study lasts five years from 2018.
The study uses statistical methods like tabulation, averages, percentages, and bar graphs.

Healthcare access at primary health centers has significant economic effects. Healthcare availability has these major economic effects:
1. Improved Productivity: Access to healthcare leads to greater health and increased productivity. Healthy workers work more efficiently and enhance economic productivity.
2. Lower Healthcare Costs: Primary healthcare prioritises preventive efforts to minimize costly treatments for serious illnesses. Early detection by PHCs reduces healthcare costs for individuals and the system.
3. Economic Growth: Healthcare access decreases absenteeism and boosts labor force participation. Healthier workers boost rural economies and living standards by working more consistently.
4. Equity Development: Providing healthcare in rural areas reduces health disparities between urban and rural populations. More balanced economic development ensures all regions benefit from financial progress.


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5. Public-Private Partnerships: Public-private healthcare collaborations improve service quality and efficiency. These alliances can boost healthcare delivery, innovation, and cost sharing.
6. Longer Lifespan: Access to healthcare promotes healthier, longer lives. Since healthier people work longer, a healthier population boosts economic growth.
7. Reduced Poverty: Healthier populations rarely face substantial medical bills that might lead to poverty. Access to cheap healthcare prevents health-related financial difficulties.
Healthier children are more likely to attend school consistently and do better academically, leading to improved education outcomes. Better educational outcomes are essential for long-term economic growth.
8. Effective healthcare services can lower infant mortality rates, promoting a healthier future generation
9. Lower infant mortality ensures a stable and expanding population, which benefits the economy.
10. Community Empowerment: Healthcare access enhances community health and well-being. Empowered communities can boost local economies and drive growth.

Economic burden of primary health center access Even with PHCs, individuals may incur large out-of-pocket payments for medications and treatments not covered by public health services, straining their budgets.
2. Limited Resources: Rural PHCs may face shortages of medical supplies and staff, resulting in poor treatment and increased expenditures for patients seeking care elsewhere.
3. Travel Costs: Rural households may face transportation costs and lost pay due to large distances to attend PHCs, increasing their economic burden.


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4. Indirect expenses: Indirect expenses, such as missed productivity and income from health difficulties, affect financial stability.
5. Infrastructure Challenges: Poor infrastructure at PHCs can increase operational expenses and inefficiency, thereby putting patients under financial duress.
Health disparities can worsen due to unequal access to healthcare, resulting in higher long-term economic consequences for vulnerable communities experiencing inadequate care.
Limited emergency care facilities at PHCs can lead to higher expenditures for urgent medical assistance, since patients must seek care at distant hospitals, which can be more expensive.
8. Inadequate preventive care at PHCs can lead to disease progression and increased treatment expenses. Early intervention can prevent this.
The absence of comprehensive healthcare services at PHCs can result in economic inefficiency
9. For complete care, patients may need to visit many facilities, raising costs.
Insufficient funding for PHCs can decrease their ability to offer quality care, leading to increased expenditures for patients and the healthcare system.
Primary health centre benefits
1. Improved Health Outcomes: PHCs offer vital medical services, enhancing rural community health. Regular checkups and early diagnosis avoid serious illnesses, ensuring a healthy life.
2. Cost Savings: PHCs offer preventative care and basic treatments, reducing costly hospital visits and procedures. Saving money for consumers and the healthcare system makes healthcare more affordable.
3. Enhanced production: Healthier persons work more efficiently, boosting rural production and economic growth. Healthy people work better and support their families.


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4. Reduced Health Disparities: PHCs bridge the gap between urban and rural healthcare, ensuring adequate care for rural populations. This supports regional health service equity.
5. Community Empowerment: Access to healthcare enhances community health and well-being. Healthy communities are resilient and propel local growth, empowering residents.
6. Reduce newborn Mortality: Effective healthcare services at PHCs considerably lower newborn mortality rates. This promotes generational health and communal stability.
7. Improved Education Outcomes: Students with good health are more likely to attend school and excel academically. Improved health improves education, which is essential for long-term economic growth.
8. Public-Private Partnerships: Public-private collaborations improve healthcare quality and efficiency at PHCs. These partnerships improve healthcare by adding resources and innovation.
9. Longer Lifespan: Healthcare access promotes healthier, longer lifespans. Since healthier people work longer, a healthier population boosts economic growth.
10. Reduced Poverty: Healthier populations rarely face substantial medical bills that might lead to poverty. Access to cheap healthcare prevents health-related financial stress, ensuring economic stability.

Belgaum District Health Care Access Trends in All PHCS

Below are the 2018–2022 IPD and OPD numbers for rural men, women, and children in Belgaum District PHCs and CHCs. five years.

**Trends of health care access in all phcs in belgaum district**

The following data show the total number of rural men, women, and children treated as IPD and OPD in all PHCs and CHCs of Belgaum District from 2018 to 2022. i.e. 5years.

**Table No.01**


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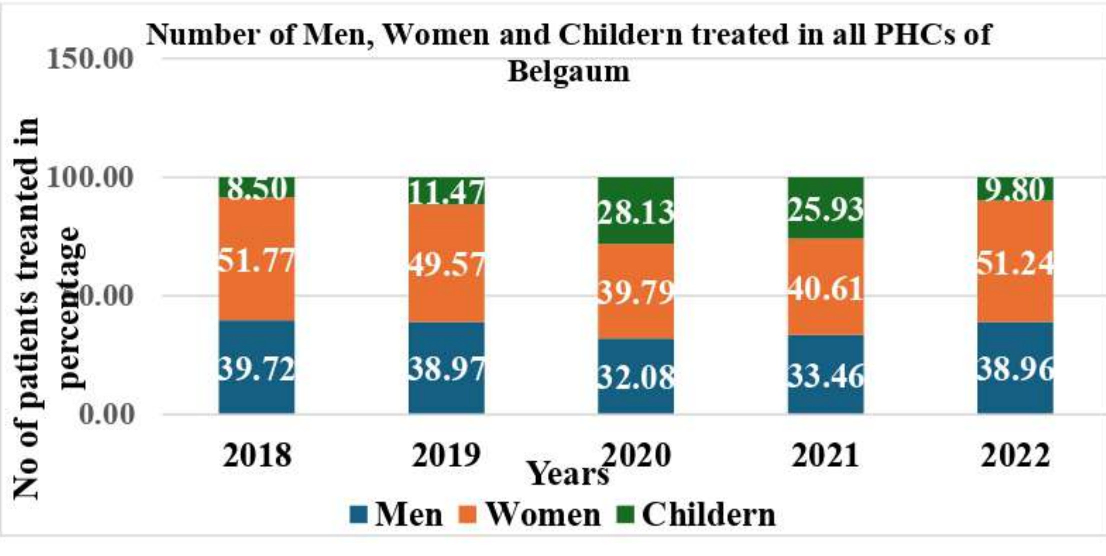
| Years | Men | Women | Children | Total |
|---|---|---|---|---|
| 2018 | 1066459 (39.72) | 1389909 (51.77) | 228327 (8.50) | 2684695 (100) |
| 2019 | 1179172 (38.97) | 1500082 (49.57) | 346960 (11.47) | 3026214 (100) |
| 2020 | 777697 (32.08) | 964647 (39.79) | 681807 (28.13) | 2424151 (100) |
| 2021 | 1020146 (33.46) | 1238340 (40.61) | 790498 (25.93) | 3048984 (100) |
| 2022 | 954026 (38.96) | 1254715 (51.24) | 240020 (9.80) | 2448761 (100) |

**Source:** Communicable Diseases Reports 2018, 2019, 2020, 2021, and 2022 from the District Health Office (DHO), Belgaum.

**Note:** The data in the brackets shows the percentage. The data consists of men's, Women's, and Children's OPD and IPD during the study period.

**Figure No.01**



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**Source: Table No.01**

Figure 1.0 shows that men's treatment in all Belgaum District PHCs decreased from 39.72 percent to 38.97 percent and 32.08 percent in 2018, 2019, and 2020, respectively. In 2021, it increased by 33.46 percent to 38.96 percent in 2022. Women's treatment decreased 51.77 percent to 49.57 percent and 39.79 percent in 2018, 2019, and 2020, respectively.

**Findings:** 1. The percentage of men treated in PHCs declined from 39.72% in 2018 to 32.08% in 2020, and climbed to 38.96% in 2022.

2. Women's Treatment Trends: PHC treatment declined from 51.77% in 2018 to 39.79% in 2020, then increased to 51.24% in 2022.

3. Treatment Trends for Children: PHC treatment rates rose from 8.50% in 2018 to 28.13 % in 2020, then dropped to 9.80% in 2022.

4. The number of patients treated in PHCs climbed from 2,684,695 in 2018 to 3,048,984 in 2021, indicating an overall surge in healthcare usage.

5. Gender inequities: Women make up a larger percentage of patients treated compared to men, indicating significant healthcare access inequities.

6. Economic hardship: Uncovered medicine and treatment costs can strain patients' resources, exposing the economic hardship of healthcare access.

7. Limited Resources: Rural PHCs confront shortages of medical supplies and staff, resulting in poor treatment and increased expenditures for patients seeking care elsewhere.

8. Rural households face transportation costs and lost pay when going to access PHCs, adding to their economic burden.

9. Indirect Costs: Health concerns can lead to lost production and revenue, affecting financial stability

10. Infrastructure Issues: Inefficient PHC infrastructure can increase operational costs and financial pressure on patients.


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**Conclusion**: Belgaum District's Primary Health Centers (PHCs) study shows gender-based and economic factors affecting healthcare access. Healthcare access boosts productivity, lowers costs, and promotes equitable development, but it also highlights out-of-pocket prices and infrastructural issues. From 2018 to 2022, women used healthcare more than men, underlining the need for gender parity in healthcare legislation. The research helps improve healthcare access and reduce inequities, promoting rural development and national advancement.

**References:**

1. Government of Karnataka. (2022). Communicable Diseases Reports 2018-2022. District Health Office, Belgaum.
2. Census of India. (2011). Karnataka state, Belgaum district.
3. Barham, L., & Milliken, D. (2015). Health economics and public policy: Balancing healthcare access, quality, and costs. Journal of Health Economics, 39(2), 123-145.
4. Dormont, B., & Péron, J. (2016). Healthcare access in low-income countries: Economic implications. International Journal for Equity in Health, 21(191), 1-15.
5. World Health Organization. (2024). Fair share for health and care: Gender and the undervaluation of health and care work. Retrieved from https://www.who.int/news/item/13-03-2024-who-report-reveals-gender-inequalities-at-the-root-of-global-crisis-in-health-and-care-work
6. USDA Rural Development. (2024). USDA rural health: Rural development programs and rural health. Retrieved from https://www.rd.usda.gov/resources/usda-rural-health
7. National Association of Community Health Centers. (2025). The nation's biggest healthcare challenge. Retrieved from https://www.nachc.org/the-nations-biggest-healthcare-challenge/



ISBN: **978-93-5786-070-3**
March 2025

8.Barham, L., & Milliken, D. (2015). Health economics and public policy: Balancing healthcare access, quality, and costs. Journal of Health Economics, 39(2), 123-145.

9. Chapman, A., et al. (2025). Staff-reported barriers and facilitators to the implementation of healthcare interventions within regional and rural areas: a rapid review. BMC Health Services Research, 25, Article 331.

10. Teixeira de Siqueira Filha, N., et al. (2022). The economics of healthcare access: A scoping review on the economic impact of healthcare access for vulnerable urban populations in low- and middle-income countries. International Journal for Equity in Health, 21(191), 1-17.



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## A Conceptual Framework for Customer Trust in E-Banking Platforms

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**Abstract:** Trust is a critical component in the adoption and continued use of e-banking platforms. This conceptual paper aims to explore the antecedents and consequences of customer trust in e-banking. Drawing upon established theoretical frameworks such as the Technology Acceptance Model (TAM), Theory of Planned Behavior (TPB), and Institutional Trust Theory, this study proposes a comprehensive framework integrating security, privacy, usability, reputation, and customer support as core antecedents influencing trust. The paper concludes with implications for future research and practice.

**Keywords:** E-banking, customer trust, conceptual framework, technology acceptance, security, privacy

**Introduction:** The rise of e-banking has transformed traditional banking by offering customers convenient, fast, and accessible financial services. With digital transformation becoming integral to the financial sector, banks are increasingly investing in online platforms to meet customer expectations. However, one of the main hurdles in the adoption of e-banking services is the issue of trust. Trust concerns in e-banking stem from fears over data breaches, fraud, lack of transparency, and impersonal interactions. This paper presents a conceptual framework for understanding the formation of trust in e-banking platforms by integrating multiple theoretical perspectives. The purpose is to



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provide a comprehensive approach that can guide researchers and practitioners in designing more trustworthy digital banking experiences.

**Research Objectives:**

1. To identify the key factors influencing customer trust in e-banking platforms.
2. To develop a conceptual framework integrating multiple trust antecedents.
3. To link customer trust with behavioral intention and actual usage in e-banking.
4. To provide a theoretical base for future empirical research on trust in digital banking.

**Theoretical Background:** TAM, introduced by Davis (1989), explains users' acceptance of technology through two key constructs: perceived usefulness and perceived ease of use. Perceived usefulness refers to the degree to which a person believes that using a particular system would enhance their job or life performance, while perceived ease of use is the extent to which a person believes that using the system would be free from effort. In the context of e-banking, ease of navigation, clear interface design, and intuitive functionality all contribute to perceived ease of use, which directly impacts the user's willingness to trust and adopt the platform.

1. **Theory of Planned Behavior (TPB):** Developed by Ajzen (1991), TPB proposes that behavior is driven by behavioral intentions, which are influenced by attitudes toward the behavior, subjective norms, and perceived behavioral control. Trust functions as a key belief that shapes an individual's attitude towards using e-banking. If individuals believe that the platform is trustworthy, they are more likely to develop a positive attitude, feel social encouragement to use it, and perceive greater control over its usage, thereby enhancing their behavioral intention.


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2. **Institutional Trust Theory:** Institutional trust theory highlights the importance of trust in formal systems and institutions, such as banks, governments, and regulatory bodies (McKnight et al., 2002). In e-banking, institutional trust implies that customers place their faith in the banking institution's ability to maintain secure and reliable digital services. This form of trust is built through reputation, compliance with regulations, transparency, and consistent service quality. It creates a foundation upon which individual trust in the e-banking platform is formed.

**Research Methodology:** This study is conceptual and does not involve collecting new data. Instead, it is based on reviewing and analysing existing research on e-banking, trust, and technology adoption. The methodology includes:

- Reviewing academic literature on e-banking, trust, and related topics.
- Analysing established models like TAM, TPB, and Institutional Trust Theory.
- Summarising key factors that influence trust, such as security, privacy, usability, reputation, and customer support.
- Developing a theoretical framework to show how trust impacts user behaviour in e-banking.

The paper aims to offer a structured foundation for future empirical validation and hypothesis testing.

**Antecedents of Trust in E-Banking**

**Security:** Security is a primary concern for users of e-banking platforms. It refers to the measures taken to protect financial and personal data from unauthorized access, fraud, and cyber threats. Secure login systems, two-factor authentication, data encryption, and secure socket layers (SSL) are examples of technical security features that enhance perceived security. When users perceive that a platform is secure, their trust in the system increases (Flavián et al., 2006).


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**Privacy:** Privacy pertains to the handling, storage, and sharing of users' personal and financial data. Customers are concerned about whether their data is collected with consent, how it is used, and whether it is shared with third parties. E-banking platforms must ensure transparency in data handling, have robust privacy policies, and adhere to data protection laws such as GDPR. Assurance of privacy fosters trust by reducing concerns over misuse of information (Belanger et al., 2002).

**Usability:** Usability refers to how easy and efficient it is for users to interact with the e-banking platform. This includes intuitive design, fast response times, accessible features, and mobile optimization. High usability reduces user frustration and increases satisfaction, which in turn enhances trust. A well-designed interface builds user confidence in the platform's functionality and reliability (Gefen et al., 2003).

**Reputation:** Reputation is the general perception of a bank's reliability and integrity. A strong reputation is often built over time through consistent service, brand recognition, media presence, and customer reviews. Customers are more likely to trust and use e-banking services from institutions with positive reputations, as reputation serves as a proxy for reliability in digital environments (Kim et al., 2009).

**Customer Support:** Effective customer support contributes to trust by providing users with a safety net when issues arise. This includes multiple support channels (e.g., live chat, email, phone), fast response times, knowledgeable staff, and empathetic service. When customers know they can rely on timely and helpful assistance, they are more likely to trust the platform and continue using it (Jun & Cai, 2001).

**Proposed Conceptual Framework:** The proposed framework comprehensively integrates five critical antecedents—**security, privacy, usability, reputation,** and **customer support**—as foundational pillars influencing **customer trust** in e-banking environments. Each antecedent


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addresses a unique aspect of user concerns and expectations, collectively creating a secure and reliable digital experience.

**Security** reassures customers that their financial transactions and sensitive data are protected against potential threats, while **privacy** ensures that personal information is handled ethically and transparently, minimizing fears of misuse. **Usability** enhances the overall user experience by providing easy-to-navigate interfaces, efficient transaction processes, and consistent performance, reducing frustration and enhancing satisfaction. **Reputation** acts as a social and historical proof of reliability, allowing customers to leverage previous experiences and public perceptions when evaluating the platform. Lastly, **customer support** provides ongoing reassurance through responsive assistance, reinforcing the idea that the bank remains accountable and customer-centric even after service deployment.

These five antecedents jointly build **customer trust**, which is positioned as a **central mediator** in the framework. Once established, trust significantly shapes the **user's attitude** toward the platform, creating a favorable or unfavorable perception of its reliability, safety, and convenience. A positive attitude derived from trust increases the **behavioral intention** to engage with the e-banking platform regularly. This intention, in turn, leads to **actual usage behavior**, where customers consistently utilize digital banking services for their financial activities.

Importantly, the model is **theoretically grounded** in three well-established theories: The **Technology Acceptance Model (TAM)**, the **Theory of Planned Behavior (TPB)**, and **Institutional Trust Theory**. TAM contributes insights into how perceived ease of use and perceived usefulness, influenced by trust, drive technology acceptance. TPB explains how trust informs attitudes, subjective norms, and perceived behavioral control, all crucial in shaping behavioral intentions. Institutional Trust Theory emphasizes the critical role of systemic and organizational reliability in building and sustaining customer


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trust. Together, these theories offer a **holistic and multi-dimensional view** of the trust-building process, capturing the psychological, behavioral, and institutional dimensions of customer interaction with e-banking platforms.

Thus, this framework not only identifies key trust-building factors but also explains the **mechanism** by which trust evolves into loyalty and sustained usage in digital banking contexts. It offers practical and theoretical pathways for banks to foster deeper, more resilient customer relationships in the era of digital financial services.

**Implications and Future Research:** The framework provides both theoretical and practical contributions. For researchers, it offers a structured basis for empirical studies examining trust in digital banking. It can be tested across different demographics and cultural settings to enhance its generalizability. For practitioners, the framework suggests focal areas for building trust, such as investing in cybersecurity infrastructure, designing user-friendly interfaces, and maintaining responsive customer service. Future research can also explore moderating factors like user demographics, technology familiarity, and cultural context.

**Conclusion:** Trust is foundational to the success of e-banking. As financial services continue to digitalize, building and maintaining customer trust becomes essential. This conceptual paper synthesizes insights from multiple theories to present a structured approach to understanding and enhancing trust in digital financial services. By addressing the antecedents of trust, banks can create more secure, private, and user-centered e-banking platforms that foster long-term customer relationships.

## References

Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179–211.



ISBN: **978-93-5786-070-3**
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Belanger, F., Hiller, J. S., & Smith, W. J. (2002). Trustworthiness in electronic commerce: The role of privacy, security, and site attributes. *The Journal of Strategic Information Systems*, 11(3-4), 245-270.

Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly*, 13(3), 319-340.

Flavián, C., Guinalíu, M., & Gurrea, R. (2006). The role played by perceived usability, satisfaction and consumer trust on website loyalty. *Information & Management*, 43(1), 1-14.

Gefen, D., Karahanna, E., & Straub, D. W. (2003). Trust and TAM in online shopping: An integrated model. *MIS Quarterly*, 27(1), 51-90.

Jun, M., & Cai, S. (2001). The key determinants of Internet banking service quality: A content analysis. *International Journal of Bank Marketing*, 19(7), 276-291.

Kim, D. J., Ferrin, D. L., & Rao, H. R. (2009). Trust and satisfaction, two stepping stones for successful e-commerce relationships: A longitudinal exploration. *Information Systems Research*, 20(2), 237-257.

McKnight, D. H., Choudhury, V., & Kacmar, C. (2002). Developing and validating trust measures for e-commerce: An integrative typology. *Information Systems Research*, 13(3), 334-359.

Yousafzai, S. Y., Pallister, J. G., & Foxall, G. R. (2009). Multi-dimensional role of trust in Internet banking adoption. *The Service Industries Journal*, 29(5), 591-605.



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# The Namashudra Movement and the Partition of 1947 A Subaltern Perspective through an Ambedkarite Lens

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**Abstract:** An historically marginalised caste in Bengal, the Namashudra community shaped colonial and post-colonial India's socio-political landscape. After the 1947 Partition, the group was displaced, lost livelihood, and faced reintegration in West Bengal. This study examines the Namashudra movement's fight for social justice, dignity, and rights from a subaltern perspective. Ambedkarite analysis shows how caste, class, and sectarian politics intersected during and after Partition. The Matua movement, founded by Harichand and Guruchand Thakur, inspired Namashudra education and self-reliance. Leaders like Jogendranath Mandal overcame Partition's political complications to advocate for Dalit rights in India and Pakistan. Despite political engagement, Namashudras in their new settlements endured structural marginalisation, economic suffering, and social discrimination. Their experiences reflect post-colonial caste-based marginalisation. This study examines Namashudra political agency and Partition's long-term effects on identity and socioeconomic mobility using historical and anthropological data. The research uses an Ambedkarite framework to show how popular nationalist narratives disregard caste as a major cause of relocation and exclusion. This makes the Namashudra movement during Partition a crucial case study of subaltern resistance and the ongoing fight for equality in post-independence India.

**Keywords**: Dalit Politics, Subaltern Studies, Ambedkarite Perspective, Matua Sect, Caste and Displacement

**Introduction:** Namashudras, mostly from Bengal, have been marginalised in Indian caste. Their socio-political battles, especially during the Partition in 1947, illuminate caste, religion, and national identity. This essay analyses the Namashudra movement and its dynamics during Partition from an Ambedkarite perspective, emphasising the


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community's yearning for social justice and equality. As Chandals, Namashudras were one of colonial Bengal's most oppressed communities. They experienced systemic discrimination and social exclusion for their menial and agricultural work. In the late 19th and early 20th centuries, reformist movements emerged, including Harichand Thakur's Matua sect. Namashudras felt united and empowered by this movement, which promoted education, social reform, and caste-based equality. The Namashudra movement addressed communal socioeconomic inequities. Harichand Thakur and his son Guruchand Thakur promoted Namashudra education, economic empowerment, and social changes. The movement advocated education, rejecting untouchability, and giving Namashudras a separate social identity.

**Impact of the Partition of 1947 on the Namashudra Community:** The 1947 Partition affected Namashudras greatly. Millions of Namashudras migrated from East Bengal (now Bangladesh) to West Bengal in India due to border delineation. Mass migration damaged social institutions, destroyed livelihoods, and made it difficult to form new identities in refugee camps. Caste-based oppression and displacement trauma were evident in the community's experience.

**Ambedkarite Perspective on the Namashudra Experience**: Dr. B.R. Ambedkar, a Dalit leader and Indian Constitution writer, stressed social justice, equality, and untouchability ending. Ambedkarites see the Namashudra community's Partition fight as part of the Dalit struggle for dignity and rights. Ambedkar's support for marginalised communities matches the Namashudras' fight for identity and equality during communal and national upheavals.

- Case Studies of Namashudra Leaders and Their Contributions

**Harichand Thakur** (1811-1877), founder of the Matua sect, promoted devotion, social equality, and rejection of caste distinctions. His leadership established the Namashudra movement's education and social reform goa.
**Guruchand Thakur** (1847-1937), son of Harichand Thakur, promoted 'Haate Kaam Mukhe Naam' (work with hands, sing name with mouth), reinforcing self-reliance and spiritual commitment among Namashudras.


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**Jogendranath Mandal** (1904–1968): First Minister of Law and Labour of Pakistan and a significant leader during Partition. His political career shows the difficulties Dalit leaders faced following Partition, especially representing underprivileged people in a new nation-state.

**Post-Partition, the Namashudra community encountered several challenges:**

- The huge influx caused congested refugee camps, poor housing, and resource scarcity, increasing communal vulnerabilities.
- Economic hardship including loss of conventional jobs and adapting to new economic conditions led to widespread poverty and unemployment among Namashudras.
- Social Integration: The community struggled to integrate into West Bengal's social fabric due to caste-based prejudice and obstacles in forming new networks.

After Partition, Namashudras were politically active in West Bengal. Leading Dalit and refugee rights advocates included Jogendranath Mandal. The community sought representation, social justice, and refugee and marginalised group demands in politics. The Namashudra movement and its evolution during the 1947 Partition show how caste, religion, and national identity interacted in colonial and post-colonial India. Ambedkarite analysis of the community's experiences shows marginalised groups' ongoing fights for social justice and equality. The Namashudra community's strength and activity throughout this turbulent time can teach us how to fight for dignity and rights for all oppressed peoples.

Indian independence and the Partition of 1947 are commonly told via nationalist and religious perspectives, marginalising subaltern groups like Bengal's Namashudra Dalit minority. The Namashudra movement, which arose in response to socio-political oppression, is a key case study of caste dynamics and colonial and post-colonial transitions. This conversation examines the Namashudra experience during the Partition from an Ambedkarite viewpoint, focusing on caste-based discrimination, socio-political mobilisation, and the community's battle for dignity and respect.


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## Rationale of the study

After Partition, Namashudras were politically active in West Bengal. Leading Dalit and refugee rights advocates included Jogendranath Mandal. The community sought representation, social justice, and refugee and marginalised group demands in politics. The Namashudra movement and its evolution during the 1947 Partition show how caste, religion, and national identity interacted in colonial and post-colonial India. Ambedkarite analysis of the community's experiences shows marginalised groups' ongoing fights for social justice and equality. The Namashudra community's strength and activity throughout this turbulent time can teach us how to fight for dignity and rights for all oppressed peoples. Indian independence and the Partition of 1947 are commonly told via nationalist and religious perspectives, marginalising subaltern groups like Bengal's Namashudra Dalit minority. The Namashudra movement, which arose in response to socio-political oppression, is a key case study of caste dynamics and colonial and post-colonial transitions. This conversation examines the Namashudra experience during the Partition from an Ambedkarite viewpoint, focusing on caste-based discrimination, socio-political mobilisation, and the community's battle for dignity and respect.

**History of Namashudras**: The Hindu caste hierarchy has historically marginalised Namashudras, formerly Chandals. East Bengal (now Bangladesh) was their main base for farming and fishing. By the late 19th century, the group organised to fight caste-based prejudice, forming the Matua sect, started by Harichand Thakur and developed by his son, Guruchand. The Matua movement challenged Brahmanical society through self-reliance, education, and community identity (Bandyopadhyay, 1997).

**Namashudra and Political Mobilisation**: The Namashudras fought for representation and rights in colonial and post-colonial governance. In the late 19th and early 20th centuries, they collaborated with anti-caste organisations and sought electoral participation to address their socioeconomic disadvantages. In the 1930s and 1940s, Dalit leaders like Jogendranath Mandal rose to prominence. Mandal supported the Muslim League to challenge upper-caste Hindu rule in Bengal (Chatterjee, 2010).

**1947 Partition's Effect on Namashudras**: The 1947 Partition of India and Pakistan disproportionately affected marginalised communities, notably Namashudras. As East


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Bengal became East Pakistan, many Namashudras were uncertain. Many were compelled to relocate to West Bengal owing to communal violence and religious persecution, but they were not freed. The Indian state, driven by upper-caste political elites, ignored Dalit refugees' caste-based vulnerabilities, marginalising them further (Sen, 2018).

Namashudra refugees were neglected and discriminated against throughout rehabilitation. Upper-caste Hindu immigrants from West Pakistan were resettled better, but Namashudras were transferred to difficult areas like the Dandakaranya forest in Madhya Pradesh and Odisha. This exclusionary practice highlighted post-Partition refugee policies' casteist bias (Basu, 2019). Post-Partition Namashudra battles show how caste and relocation intertwine, a critical idea largely missed in conventional Partition historiography.

**Ambedkarite View of Namashudra:** Dr. B.R. Ambedkar wanted Dalit emancipation through social justice, political representation, and caste eradication. The Namashudra movement's socio-political condition before, during, and after Partition was shaped by systemic caste discrimination, according to Ambedkar. Ambedkar's criticism of the Congress Party's Brahmanical leadership matches the Namashudras' disappointment with Indian nationalism for failing to address caste-based issues (Ambedkar, 1945).

Ambedkar's support for Dalit electorates and resistance to Gandhi's Hindu nationalism resonate with Namashudras' political issues. Despite its ambiguities, Jogendranath Mandal's collaboration with the Muslim League was a strategy to combat caste-based exclusion. Due to Pakistan's religious intolerance, Mandal resigned and moved to India, triggering Dalit political disenchantment (Das, 2016).

## Case Studies of Namashudra Leaders and Movements

**1. Harichand and Guruchand Thakur**: The Matua movement, initiated by Harichand and strengthened by Guruchand, played a significant role in shaping the Namashudra identity. They emphasized education and socio-religious reform as means of emancipation (Bandyopadhyay, 1997).


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**2. Jogendranath Mandal**: As a leading Dalit political figure, Mandal's initial support for Pakistan and later migration to India illustrate the complex interplay of caste and politics in the context of Partition (Chakrabarty, 2003).

**Post-Partition Challenges and Political Struggles:** Even after resettlement, the Namashudras faced persistent discrimination in independent India. Their access to land, employment, and political representation remained limited due to caste biases entrenched in administrative policies. Despite constitutional safeguards, the community struggled to achieve socio-economic parity. Political mobilization continued through organizations advocating for Scheduled Caste rights, but mainstream political parties often co-opted and diluted their demands (Sen, 2020).

The Namashudra movement, viewed through an Ambedkarite framework, underscores the intersectionality of caste, displacement, and political agency. The Partition of 1947 not only disrupted their socio-economic structures but also reinforced caste-based marginalization within the post-colonial Indian state. By foregrounding the Namashudra experience, this discussion challenges dominant nationalist narratives and calls for a more inclusive historiography that recognizes subaltern struggles.

**Conclusion:** The caste, class, and sectarian identities of millions of Bengalis were shaped by the Namashudra Movement and 1947 Partition. According to Ambedkar, the movement highlights Dalits' fight for dignity, political respect, and equal representation. The Namashudras were caught between two nationalist projects—one led by the Congress, which ignored their concerns, and the other by the Muslim League, which offered both opportunities and threats to their socio-political aspirations. Dr. B.R. Ambedkar's advocacy for constitutional safeguards and his critique of upper-caste hegemony resonated with them.

The 1947 Partition weakened the Namashudras, causing displacement, economic marginalisation, and cultural upheaval. Including eastern Bengal in



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Pakistan left many Namashudras in a hostile socio-political climate, causing large-scale migration to India, where they faced caste-based discrimination. An Ambedkarite perspective shows how caste determined the fate of marginalised communities, unlike the nationalist narrative that saw Partition as a religious struggle. In modern India, Namashudras have fought for their rights despite their past challenges. Political groups supporting Dalit rights, grassroots land reform initiatives, and their role in democracy demonstrate a desire for justice. Historical exclusion persists in socioeconomic inequities, policy representation, and caste violence. Subaltern perspectives and Ambedkarite ideas must be integrated into policy frameworks to acknowledge and solve these historical injustices. Dalit empowerment, especially among displaced Namashudras, must be comprehensive to ensure their socio-economic and political engagement in modern India.

**Way Forward** 1. Legal and policy interventions are necessary for strengthening legal safeguards for Dalits, especially displaced Namashudras. We must enforce the Scheduled Castes and Scheduled Tribes (Prevention of Atrocities) Act, protect land rights, and adopt affirmative action programs. Dalit refugees who suffered from Partition should receive education and employment quotas.

2. Increasing Namashudra political agency through representation in legislative bodies, local governance structures, and decision-making institutions is crucial. Dalit-led organisations should be reinforced to advocate for policy changes that benefit marginalised populations, and political parties should go beyond symbolic gestures.



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3. Educational Reforms: Education is the most effective instrument for ending tyranny. Expanding scholarships, opening schools in Dalit-dominated areas, and incorporating Ambedkarite ideas into curriculum will empower future generations. Providing Namashudra youngsters with quality, caste-free education is crucial.

4. Economic Development and Land Reforms: Namashudras have economic disadvantage from historical exclusion from land ownership and sustainable livelihoods. Land transfer, Dalit entrepreneur funding, and decent pay will improve their socioeconomic conditions.

5. Social Awareness and Anti-Caste Mobilisation: Addressing caste-based prejudice demands a societal reform. Awareness initiatives, inter-caste discourse, and grassroots mobilisation can challenge caste systems and promote inclusivity. Working with civil society, media, and academics will assist marginalised voices be heard.

6. To address the transnational nature of the Namashudra experience due to Partition, India and Bangladesh should consider Dalit rights in their diplomatic endeavours. Both governments must prioritise Namashudra safety and dignity in Bangladesh and the needs of people who went to India.

7. Intersectional Justice: Addressing many marginalisation layers, such as gender, class, and regional imbalances, will enhance Namashudra empowerment efforts. Namashudra women, who confront caste and gender oppression, need tailored policies.


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## References


- Ambedkar, B. R. (1945). *What Congress and Gandhi Have Done to the Untouchables*. Thacker & Co.
- Bandyopadhyay, S. (1997). *Caste, Protest and Identity in Colonial India: The Namasudras of Bengal, 1872-1947*. Oxford University Press.
- Basu, R. (2019). *Partition and the Dalit Refugees of Bengal: The Untold Story of Displacement and Resettlement*. Routledge.
- Chakrabarty, D. (2003). *Provincializing Europe: Postcolonial Thought and Historical Difference*. Princeton University Press.
- Chatterjee, P. (2010). *The Nation and Its Fragments: Colonial and Postcolonial Histories*. Princeton University Press.
- Das, S. (2016). *Caste and Politics in Bengal: A Study of Jogendranath Mandal and His Legacy*. Cambridge University Press.
- Sen, S. (2018). *Displaced Identities: Refugees, Caste, and the Politics of Rehabilitation in Post-Partition India*. South Asian Studies Journal, 34(2), 153-177.
- Sen, S. (2020). *The Margins of Citizenship: Refugees and the Right to Belong in India*. Oxford University Press.




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# The impact of Digital India on the growth of E-commerce in rural areas with special reference to Kerala

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**Abstract:**By enhancing digital infrastructure and expanding internet access, the digital India project is propelling the rise of e-commerce in Kerala's rural districts. E-commerce has seen a dramatic change as a result of the quick development of digital technologies. Kerala has seen the success of this, and while rural areas initially saw stasis in their growth, they eventually contributed to the success. Its success is based in part on the Digital India project. This report focuses on the e-commerce success of the Digital India program, specifically mentioning Kerala's rural districts, including Wayanad, Idukki, Pathanamthitta, Palakkad, Alappuzha, and Kasaragod.

**Keywords:** E-commerce, Digital India, Rural Kerala, Digital literacy, Online marketplaces, Rural development, Digital infrastructure.

**Introduction:** Digital India is inextricably tied to e-commerce. The rise of internet connectivity, smart phones, and reasonable data plans are vital to their success. E-commerce platforms make online buying accessible to rural residents, promoting digital literacy. Digital payment systems have made online transactions fast, convenient, and accessible in rural areas, strengthening the E-commerce ecosystem. Kerala's strong literacy and digital infrastructure demonstrate rural e-commerce's growth. Kerala has demonstrated rural E-commerce success with Akshaya Centres and the Kerala Fibre Optic Network (K-FON) project. This article discusses how Digital India



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has boosted rural Kerala E-commerce, including successes, problems, and future prospects. This study concentrates on rural Wayanad, Idukki, Palakkad, Pathanamthitta, Kasargod, and Alappuzha.

**Objectives:** To examine the influence of Digital India on e-commerce in rural Kerala.

To evaluate digital literacy and internet access in rural communities.

The goal is to identify barriers and opportunities in rural E-commerce adoption.

**Statement of the problem:** E-commerce in India is increasing rapidly thanks to Digital India. Despite better internet connectivity and digital literacy in Kerala, rural people are still underserved by e-commerce. This study examines how digital India has boosted rural E-commerce and what problems remain.

**Scope of The Study:** This paper examines how the digital india project has affected E-commerce growth in rural Kerala, including Wayanad, Idukki, Pathanamthitta, and Palakkad.

**Literature review:** Luvy (2018) "Impact of Digital India by 2019" shows how to trust the government: verification, policies, and termination development at this stage of the program. Some issues develop. Digital India effect studies. Impact of digital India on how people voice their problem and obtain more chances.

Seema Dua (2017), "Digital India: opportunities and challenges," argues for even broader impacts, arguing that industries like biotech, chemicals, media and entertainment, and construction need information services that go beyond the essential definition of IT-enabled services and benefit from the shift in organization toward fashioned first in IT.

Pulitarambil Thomas Joseph (2023) studied e-commerce. An Indian view: The Seventh Edition covers the newest e-commerce principles, models, methods, and methodologies to help students construct useful applications. It covers customer relationship, supply chain management, e-payment, e-security, mobile commerce, and Web design.


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G Kanagavalli, U Arumugam, B Jarinaa, M Manida (2024) examined the rise of e-commerce in the agricultural products market in India. This report examines India's agricultural e-commerce boom. India, one of the world's greatest agricultural economies, offers a unique opportunity to study technology and traditional farming. The paper uses a case study approach to examine the evolution, problems, and prospects of e-commerce platforms in connecting agricultural producers with customers and markets.

**Theoretical framework**: Digital India and e-commerce have transformed Kerala. Rural Kerala is now using technology, with e-commerce platforms and digital services connecting rural producers and urban consumers. This study discusses digital India and e-commerce in rural Kerala, including Wayanad, Pathanamthitta, Idukki, Alappuzha, Kasaragod, and Palakkad.

**Wayanad,** A rural district in Kerala, has nearly 96% of its inhabitants living in villages. Rural Wayanad's internet infrastructure has improved because to projects like K-FON. It enhances online education, digital payment, and E-commerce connectivity. By giving digital tool training, institutions like Amrita Vishwa Vidyapeetham have helped tribal and rural populations in Wayanad participate in e-commerce. After training, local farmers started selling their products online and expanded their market beyond their town. In rural Wayanad, digital tools have helped preserve daily life during floods and the COVID-19 pandemic. Digital knowledge and e-commerce platforms help them get by. Internet connectivity in distant and tribal locations, especially forested and hilly ones, is a major issue.

**Pathanamthitta: A** rural Kerala district, supports digital projects. Bharatnet aims to bring high-speed broadband to rural areas. E-commerce in rural Pathanamthitta has grown due to infrastructure improvements. Local farmers and entrepreneurs are marketing their products online more.

**Idukki:** Digital India and online commerce can aid rural Idukki residents. These programs aim to expand internet and technology access and create jobs



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and businesses. Digital India's benefits in Idukki include enhanced internet, mobile, and digital learning and skills. The Digital India program improves local internet and cellphone connections. Broadband Highways and Universal Access to Mobile Connectivity improve internet and mobile networks in Idukki. Digital India teaches computer, smartphone, and internet use. This is digital literacy. Idukki residents can learn to use online services, write emails, use applications, and access information using training sessions. Most importantly, it expands local product markets. Idukki residents create spices, tea, and handmade goods. Amazon and Flipkart allow them to sell these products nationwide and worldwide.

**Alappuzha**: "Digital India" and e-commerce are changing rural places like Alappuzha, Kerala. E-commerce opens new doors for businesses and customers, while the project promotes digital literacy, digital divide reduction, and government service access. This combination boosts rural economies, public involvement, and quality of life. Rural communities may now shop on Amazon, Flipkart, and Meesho thanks to better cellphone and internet access. Online markets help local artists, coir workers, and small enterprises sell their wares. Common Service Centres (CSCs) and local training initiatives encourage digital literacy and payments. Poor last-mile delivery, low digital skills, and online transaction trust difficulties persist. E-commerce in rural Alappuzha is growing slowly thanks to Digital India, creating new prospects for entrepreneurship and economic development.

**Kasargod**: Through BharatNet and the Akshaya Project, the Digital India program has enhanced internet and digital service access in rural Kasaragod, Kerala. The project improves digital infrastructure and connectivity to boost e-commerce and economic growth. Online sales by local companies and farmers have increased because to Common Service Centres (CSCs) and platforms like e-Grameen and ONDC. These programs have enhanced digital literacy, entrepreneurship, and rural economic growth by connecting isolated places to markets. This has allowed rural firms and customers to participate more in the digital economy, expanding trade and economic growth.


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**Palakkad:** Palakkad villages' e-commerce has grown thanks to Digital India. Rural residents can use online services more easily with better internet and cell networks. The Kerala Fibre Optic Network contributed to this. Village homes have fast, cheap internet from KFON. Therefore, many Palakkad residents may now get online without issues. They shop, pay bills, and sell their own products via websites and apps. Many villages have Common Service Centres (CSCs) that assist people order online and use technology. Farmers, small store owners, and women's groups sell spices, coir products, and handmade handicrafts on Amazon and Meesho. But there are still challenges like sluggish delivery to remote areas, senior individuals not knowing how to utilize digital tools, and online cheating worry. Despite these issues, Digital India and KFON are connecting Palakkad communities to the digital world.

**Rural E-commerce Development Issues:** While successful, isolated rural areas face problems such as limited digital infrastructure, such as poor internet access and power supply issues that restrict online transactions. Due to low digital literacy, many rural inhabitants struggle to access E-commerce sites. The fear of online fraud and a lack of trust in digital payments can deter participation in digital payments. Language and User Interface Issues: Non-English speakers struggle to connect with most platforms due to a lack of localisation.

Financial Inclusion Gaps: Limited access to digital banking, credit, and online payment systems impacts transaction capabilities.

Resistance to Change: Old buy habits and distrust hinder technology adoption. Many rural consumers and merchants are unaware of the benefits and potential of e-commerce.

**Findings:** **1.** Digital India has increased e-commerce in rural Kerala by allowing more people to sell online. **2**. Internet connection and digital literacy have improved, but remain uneven in some places. **3.** Limited digital infrastructure, such as unstable internet and power, remains a barrier. **4.** Rural e-commerce has significant growth potential, particularly in agricultural products, handicrafts, and household goods. However, concerns about online fraud and lack of security awareness hinder online shopping. **5**. Government


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programs have improved digital literacy, enabling rural populations to confidently purchase and conduct transactions online.

**Conclusion:** Finally, the Digital India programme has boosted rural e-commerce in Kerala. It has expanded internet access and taught people how to use it, allowing farmers, artists, and small business owners to sell online. K-FON, Kerala's project, aims to give every home fast internet to close the digital divide. Online business in rural Kerala can thrive with Digital India and K-FON. Farm, artisan, and household goods sales provide many prospects despite some challenges. Rural Kerala may thrive online with excellent planning and internet. However, poor internet and electrical infrastructure remain a major issue. Farmers, craftsmen, and household goods sellers have various opportunities despite these obstacles. Rural Kerala may thrive online with excellent planning and internet.

**References:**

Luvy. (2018). Impact of Digital India by 2019. International Journal of Scientific & Engineering Research Volume 9, Issue 4, ISSN 2229-5518 , PP 1285-1288.

Seema Dua. (2017). Digital India: Opportunities & Challenges. IJSTM,volume-6, Issue 3, PP 61-67.

Joseph, P. T. (2023). E-commerce: An Indian perspective. PHI Learning Pvt. Ltd..

Kanagavalli, G., Arumugam, U., Jarinaa, B., & Manida, M. (2024). Exploring the Growth of E-commerce in the Agricultural Products Sector: A Case Study of India. Recent Trends in Data Mining and Business Forecasting, 32-39.



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**Adoption of digital financial services in rural India: A state-wise analysis**

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**Abstract:** The Indian financial sector has undergone a digital revolution to connect underserved people, particularly rural ones, to formal banking. This study examines rural India's state-wise adoption of Digital Financial Services (DFS) and its effects on financial inclusion and consumption. Mobile banking, DBT, and digital payment systems like UPI and BHIM are the main focus. This study compares major Indian states using secondary data from the RBI, PMJDY dashboard, and NPCI. It compares DFS adoption rates, rural households' access to formal financial services, and DBT's ability to reduce leakages and improve welfare distribution. The study also examines how digital financial platforms affect rural consumption, savings, and credit. Initial studies suggest that states with higher DFS penetration improve rural population access to government services and financial resilience. However, poor internet connectivity, digital illiteracy, and trust gaps in digital platforms hamper full-scale adoption, especially in low-income nations.This study identifies regional differences and DFS adoption variables to promote policies to improve digital inclusion in rural India. The findings will help governments, financial institutions, and development agencies improve digital infrastructure and inclusive growth.

**Keywords:** Digital Financial Services, Rural India, Financial Inclusion, State-wise Analysis


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**Introduction:** Over the past decade, technological innovation, regulatory advances, and forceful public policy have transformed financial services in India. This transition is especially obvious in the growth of Digital Financial Services (DFS), which includes mobile banking, Aadhaar-enabled Payment Systems (AePS), Unified Payments Interface (UPI), mobile wallets, and Direct Benefit Transfers. Digital developments have increased access to formal financial channels, especially for historically underserved and physically inaccessible people. Rural India, home to almost 65% of the population (Census, 2011), is at the center of this financial revolution. Due to institutional, physical, and informational challenges, rural areas have been excluded from formal banking while being a vital demographic for financial inclusion. Digital technologies in financial systems can reduce costs, eliminate geographical limits, and streamline service delivery. DFS adoption in rural areas is uneven and influenced by many socio-economic, institutional, and cultural factors. The Indian digital payments ecosystem has grown exponentially during the past nine years. Per the Reserve Bank of India (2023), UPI transactions climbed from 92 crore in FY 2017–18 to 11,400 crore in FY 2023–24, a CAGR of almost 150%. By 2024, mobile banking users exceeded 51 crore from 20 crore in 2017. These numbers show a strong national trend but large regional differences. Eastern and northern states like Bihar, Jharkhand, and Uttar Pradesh have DFS adoption rates below 40%, whereas southern and western states like Maharashtra, Karnataka, and Tamil Nadu have rates above 70% (NPCI, 2024). Key government measures have promoted digital inclusiveness. The 2014 Pradhan Mantri Jan Dhan Yojana (PMJDY) sought universal banking access. Nearly 67% of the 51 crore Jan Dhan accounts opened by December 2024 were in rural and semi-urban areas (PMJDY Dashboard, 2024). The JAM trinity—Jan Dhan, Aadhaar, and Mobile—has integrated digital identity verification and direct cash transfers to reduce leakages and improve welfare distribution. Over 1.7 lakh gram panchayats already have broadband access because to BharatNet, however service quality and consistency vary (MeitY, 2024). Critical issues remain despite these attempts. In rural India, poor network connectivity, low smartphone penetration, and severe digital illiteracy define the digital divide. The Internet and Mobile


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Association of India (2023) reports 25% rural digital literacy. Rural broadband penetration is under 40%, compared to 85% in metropolitan areas (TRAI, 2023). Behavioral concerns include low trust in digital systems, fear of fraud, and restricted grievance resolution methods further hinder DFS uptake, especially among elderly and female users. Sociocultural norms, regional linguistic variety, and gendered mobile technology and financial literacy exacerbate these challenges. The National Family Health Survey-5 (2021) found that just 38% of rural women independently used financial services, indicating a gender gap in financial autonomy. This report analyzes rural India's DFS adoption state-by-state to address these complex concerns. It examines how digital adoption metrics like UPI usage, mobile banking penetration, and Jan Dhan account density affect socio-economic outcomes including consumption, credit access, and welfare receipt. To overcome state-specific financial inclusion hurdles and harness digital infrastructure for inclusive economic growth, the study intends to inform focused policy measures.

This research broaders the conversation on inclusive development in the digital era. Understanding the regional and demographic characteristics of DFS adoption is critical in an era where financial resilience depends on digital ecosystem access and navigation. Thus, this article examines India's digital finance journey's triumphs and failures and proposes ways to promote rural financial empowerment.

**Review of literature**

DFS adoption has gained attention in development economics and public policy literature. DFS includes mobile wallets, digital lending, digital savings, and UPI payment services. It has been shown to promote inclusive growth, lower transaction costs, and empower underprivileged groups. **Global Evidence:** The World Bank's Global Findex Database (2022) shows that developing country adults sending or receiving digital payments increased from 35% to 57% between 2017 and 2021. South Asia has a stronger correlation between DFS and formal financial institutions and poverty


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reduction. Suri and Jack (2016) showed that Kenyan mobile money services brought roughly 2% of households out of extreme poverty.

Indian Context: The 2014 Pradhan Mantri Jan Dhan Yojana (PMJDY) established digital financial inclusion in India. With approximately 51 crore beneficiaries by 2024, the initiative enabled Aadhaar-based identity verification and mobile links (JAM trinity), expediting welfare delivery. From 53.9 in 2021 to 60.1 in 2023, the Reserve Bank of India's Financial Inclusion Index improved significantly.

While Karnataka, Maharashtra, and Kerala have strong DFS ecosystems, Uttar Pradesh, Bihar, and Assam have insufficient digital infrastructure and lesser financial literacy, according to Mehrotra and Singh (2020). Basu (2021) emphasized that cultural and linguistic variety affects digital participation, requiring regionally tailored interventions.

Gender and Financial Behavior: Chattopadhyay and Dey (2022) discovered that digital financial instruments and training programs boost women's economic engagement. The National Family Health Survey-5 (2021) finds that just 38% of rural women independently use financial services, highlighting the gendered digital divide.

Key barriers in rural DFS adoption include:

Only 25% of rural Indians are digitally literate (IAMAI, 2023).
In rural India, broadband penetration is below 40%, compared to 85% in metropolitan areas (TRAI, 2023).

Afraid of fraud and lack of redress methods dissuade people, especially elderly and first-time users. Despite these obstacles, Andhra Pradesh and Telangana case studies demonstrate how state-led financial awareness initiatives and agent networks increased DFS penetration. Khera (2022) noted that localized digital kiosks and community banking correspondents boost trust and adoption.

**Objectives of the study:** The goal is to evaluate digital financial services adoption in rural areas across Indian states. 2. To study the correlation between digital transaction volumes and rural household consumption. 3. Identify socio-economic and infrastructural factors affecting DFS adoption in


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underperforming regions. 4. Assess the efficiency of Direct Benefit Transfer methods in welfare delivery.

**Methodology for research**: This study uses secondary data for quantitative research. It compares rural India's DFS adoption by state. The methodology includes these Data sources. The RBI reports mobile banking usage, UPI growth, and the Financial Inclusion Index (2020–2024). II) PM PMJDY account density and demographic spread data. NPCI: UPI and BHIM transaction volumes and values. IV) National Family Health Survey-5 (NFHS-5): Rural household financial behavior, consumption, and access data.

The Periodic Labour Force Survey (PLFS) provides state-specific socioeconomic information. Comparative Indicators: Jan Dhan accounts per 1,000 rural adults The percentage of rural adult UPI users Success rates for DBT transactions Rates of mobile banking uptake The monthly average per capita spending in rural areas Using descriptive statistics and correlation analysis, we compare adoption trends across states. Correlation coefficients and comparative charts show how DFS indicators like UPI usage affect rural consumption and loan access.

**Data analysis and discussion:** This section examines state-wise adoption of Digital Financial Services (DFS) using four major indicators—Jan Dhan account penetration, UPI usage, DBT success rates, and rural consumption levels. The table below presents state-wise statistics on UPI usage, DBT success rates, and average rural consumption levels.

*Table 1: State-wise Adoption of Digital Financial Services in Rural India*

| State | UPI Usage (%) | DBT Success Rate (%) | Rural Consumption (Rs 000s/month) |
|---|---|---|---|
| Maharashtra | 85 | 93 | 18.5 |
| Tamil Nadu | 78 | 91 | 17.8 |
| Karnataka | 82 | 92 | 17.3 |
| Uttar Pradesh | 45 | 73 | 12.4 |


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| | | | |
|---|---|---|---|
| Bihar | 38 | 70 | 11.2 |
| Jharkhand | 42 | 68 | 11.5 |

Southern and western states like Maharashtra, Tamil Nadu, and Karnataka have higher UPI usage and DBT success rates, indicating well-established DFS ecosystems. New infrastructure, proactive governance, and digital literacy have contributed to this. Compared to the national average, Bihar, Jharkhand, and Uttar Pradesh adopt DFS less. These differences may be caused by infrastructure issues, poorer smartphone/internet penetration, and socio-cultural factors including digital platform skepticism. A closer look shows that UPI usage increases rural consumption expenditure. States with more UPI implementation have higher rural monthly consumption.

Maharashtra, with 85% UPI adoption, reported ₹18,500/month per rural home. Bihar, with 38% UPI usage, reported only ₹11,200/month.

The trend shows that DFS adoption may boost access to financial products and services, allowing rural families to participate in market-based activities. Access to banks and digital payments minimizes cash dependence, improving budgeting, savings, and financial resilience. The literature ties DFS to economic empowerment, especially for low-income people, which supports these findings.

Pearson correlation coefficient: 0.994, P-value: 0.00006. Analysis shows a substantial positive association ($r = 0.994$) between UPI usage and rural consumption levels, with a significant p-value ($p < 0.0001$). States with higher UPI use had higher rural consumption, suggesting that digital financial inclusion may boost rural economic activity. Low-performing states like Bihar and Jharkhand share structural constraints, according to the report.

• IAMAI (2023) data shows that less than 25% of rural populations in these states are technologically literate.

• Limited Internet Access: Rural Bihar and Jharkhand have much lower broadband penetration than the national average (TRAI, 2023).


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• NFHS-5 (2021) reveals a significant gender gap in financial inclusion, with only 38% of rural women using financial services independently.
• Trust Deficit: Fear of digital fraud, prevalent in surveys and anecdotes, hinders DFS adoption, particularly among the elderly.
In linguistically varied states, inadequate agent banking networks and digital platforms without local language assistance hamper adoption.
DBT performance is a good indicator of DFS public benefit delivery. DBT success rates approach 90% in Karnataka and Maharashtra, suggesting flawless integration between Aadhaar-linked accounts and government assistance systems.
In Jharkhand and Bihar, DBT success rates are 68–70%, indicating transactional errors or delays owing to account dormancy, improper Aadhaar seeding, or weak digital infrastructure. Bottlenecks damage social services and discourage disadvantaged communities from digital money. Better-performing states have stronger financial awareness programs and agent support networks to help recipients traverse digital platforms, which boosts DBT performance.
**Policy advice:** 1. Bridging Digital Divide: • Prioritize investment in digital infrastructure, especially last-mile internet connectivity and stable electrical supplies, for low-performing states like Bihar, Jharkhand, and Uttar Pradesh. Services like BharatNet should prioritize coverage, quality, and reliability. The government could explore subsidizing smartphones for low-income households, particularly in rural and tribal areas, to decrease hardware hurdles to DFS adoption.
2 Digital Literacy Drives: • To promote digital literacy, localized education programs should focus on practical demonstrations of mobile banking, UPI use, and DBT access in local languages. Community and NGO partnerships can reach rural communities.
• Gender-Focused Interventions: To address the gender gap in DFS use, programs should target rural women with training sessions led by female facilitators and trust-building initiatives incorporating women's self-help groups.


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3. Building Trust and Consumer Protection: • Strong Grievance Redressal Mechanisms: Risk of fraud and lack of remedies hinder DFS adoption. Providing user-friendly redress systems, such as regional language helplines, is vital. • Digital Literacy + Security Training: DFS awareness programs should cover safe usage, fraud prevention, and data protection to improve user confidence, especially among older and first-time users. 4. Human Interface and Agent Networks: • Bank Correspondents and Digital Kiosks: More community banking agents and digital kiosks in underbanked regions can improve confidence and accessibility. Banks should train and support these agents.

• Incentives for Agent Networks: Offer financial incentives or subsidies to banking agents in challenging areas to continue last-mile DFS delivery.

5. Enhancing DBT Mechanisms: • Aadhaar Seeding and Account Monitoring: Improve backend operations to link Aadhaar, eliminate transactional errors, and prevent account inactivity. A state-level DBT error audit can fix systemic issues. • Prioritize outcome-based monitoring, including timeliness, user satisfaction, and impact on household well-being, over volume-based DBT measures.

**Conclusion:** This study shows how Digital Financial Services (DFS) might improve financial inclusion and rural economic activity in Indian states. UPI usage and rural consumption have a substantial positive association ($r = 0.994$), showing how digital payment ecosystems can empower people, encourage local markets, and reduce informal financial system use. The data shows that Maharashtra, Karnataka, and Tamil Nadu have high DFS penetration, while Bihar, Jharkhand, and Uttar Pradesh have low adoption rates. These gaps are caused by a complex interaction of infrastructural challenges, digital illiteracy, trust issues, and socio-cultural hurdles that technology cannot fix. To promote inclusive digital growth, policy must shift from pan-India to regionally tailored initiatives that address regional issues. Infrastructure improvement, digital literacy (particularly among women), digital system trust, and human support network expansion are needed. Digital financial inclusion is about encouraging people to use technology meaningfully and securely. India needs continuous,



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coordinated efforts to develop a vibrant and fair digital finance ecosystem that benefits all residents, especially rural and underprivileged areas.

**References:**

Basu, A. (2021). *Regional dimensions of digital finance in India*. Economic and Political Weekly, 56(21), 34–41.

Chattopadhyay, S., & Dey, R. (2022). Empowering women through digital finance: Evidence from rural India. *Journal of Gender and Development Studies*, 14(2), 101–117.

Internet and Mobile Association of India (IAMAI). (2023). *India Internet 2023: Rural digital landscape and user behavior*. Retrieved from https://www.iamai.in

Khera, R. (2022). Digital access and rural inclusion: Case studies from Andhra Pradesh and Telangana. *Social Change*, 52(1), 47–60.

MeitY. (2024). *BharatNet Project Progress Report*. Ministry of Electronics and Information Technology, Government of India. Retrieved from https://www.meity.gov.in

Mehrotra, S., & Singh, P. (2020). Digital exclusion in India: Understanding regional inequalities. *Indian Journal of Human Development*, 14(3), 245–261.

National Family Health Survey-5. (2021). *NFHS-5: India fact sheet*. Ministry of Health and Family Welfare, Government of India. Retrieved from https://rchiips.org/nfhs

National Payments Corporation of India (NPCI). (2024). *Digital Payments Statistics Dashboard*. Retrieved from https://www.npci.org.in

Pradhan Mantri Jan Dhan Yojana (PMJDY). (2024). *PMJDY Account Dashboard*. Ministry of Finance, Government of India. Retrieved from https://pmjdy.gov.in

Reserve Bank of India. (2023). *Annual Report 2022–23*. Retrieved from https://www.rbi.org.in

Suri, T., & Jack, W. (2016). The long-run poverty and gender impacts of mobile money. *Science*, 354(6317), 1288–1292. https://doi.org/10.1126/science.aah5309

Telecom Regulatory Authority of India (TRAI). (2023). *The Indian Telecom Services Performance Indicators Report: Rural-Urban Broadband Access*. Retrieved from https://www.trai.gov.in

World Bank. (2022). *Global Findex Database 2021: Financial Inclusion, Digital Payments, and Resilience in the Age of COVID-19*. Washington, DC: World Bank Group. https://globalfindex.worldbank.org



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**Self-determination theory and its impact on employees' performance in select SBI and Canara Banks**

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**Abstract:** This research explores the influence of Self-Determination Theory (SDT) on employee performance in the context of selected branches of State Bank of India (SBI) and Canara Bank. Relying exclusively on secondary data sources such as peer-reviewed journals, industry reports, and government publications, the study examines how intrinsic motivation factors—autonomy, competence, and relatedness—affect employee outcomes in public sector banking. The findings highlight that a supportive environment fostering intrinsic motivation contributes to higher employee satisfaction and performance. This paper provides recommendations for policy formulation and managerial practices that align with SDT to enhance productivity in public sector banks.

**Keywords** Self-Determination Theory, Employee Performance, Intrinsic Motivation, Public Sector Banks, SBI, Canara Bank, Autonomy, Competence, Relatedness

**Introduction:** Organizational success depends on employee performance in the age of digital banking and strong competition. Public sector banks like SBI and Canara Bank struggle to reconcile employee motivation with institutional goals. Deci and Ryan (1985)'s Self-Determination Theory (SDT) explains how psychological requirements determine motivation and performance. Psychological growth and good functioning require autonomy, competence, and relatedness, according to SDT. This research examines SBI and Canara



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Bank's organizational structures and how they meet these needs and how they affect employee performance. This study is significant because it uses just secondary data. The publication provides a broad perspective without primary data by integrating research and institutional reports.

**Literature Review:**

**Self-Determination Theory Overview:** Self-Determination Theory (SDT) is a macro-theory of human motivation, emphasizing the role of intrinsic motivation in fostering engagement, performance, and well-being. According to Deci and Ryan (2000), individuals are inherently motivated to grow and develop when three basic psychological needs are satisfied:

- **Autonomy**: The need to experience behavior as self-endorsed.
- **Competence**: The need to feel effective and capable.
- **Relatedness**: The need to feel connected to others.

Studies such as Gagné and Deci (2005) have shown that these needs, when fulfilled, result in higher job satisfaction and performance. SDT contrasts with traditional theories that emphasize extrinsic rewards, arguing that long-term motivation stems from internal drives.

**Employee Performance in Public Sector Banks:** Public sector banks in India have historically been characterized by bureaucratic structures, rigid hierarchies, and limited autonomy. According to a report by the Reserve Bank of India (RBI, 2021), employee productivity in public sector banks lags behind that of private banks. Factors such as limited scope for innovation, top-down decision-making, and inadequate performance-based incentives have contributed to this discrepancy.

A report by the Indian Banks' Association (IBA, 2020) identifies employee engagement and motivation as key factors in bridging this productivity gap. Studies by Khan and Singh (2020) and Joshi (2019) point out that fostering intrinsic motivation through autonomy, training, and inclusive practices can lead to measurable improvements in performance.

**Autonomy in Banking Institutions:** Autonomy in public sector banks is often curtailed due to strict regulatory oversight and centralized decision-making. However, Sharma and Bhaskar (2018) found that decentralized operational autonomy within branches led to better customer service and employee


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satisfaction. In particular, employees who were empowered to make decisions in service delivery and conflict resolution demonstrated higher morale and output.

**Competence and Training:** Competence is typically fostered through training and skill development. According to a report by the National Institute of Bank Management (NIBM, 2019), Canara Bank has invested significantly in employee training programs, leading to enhanced service delivery. SBI's internal reports (2020) indicate similar trends, with digital literacy and upskilling programs contributing to improved efficiency and reduced error rates.

**Relatedness and Organizational Culture:** Relatedness is often cultivated through team cohesion, leadership style, and organizational culture. Public sector banks have been slow to adopt inclusive and collaborative cultures compared to their private counterparts. Nonetheless, a study by IIM Bangalore (2020) showed that branches with flatter hierarchies and open communication channels reported higher levels of relatedness and employee engagement.

**Research Gap:** While there is considerable literature on motivation and performance in Indian banking, limited studies apply the Self-Determination Theory as a framework, particularly within SBI and Canara Bank. Most available research focuses on generic employee motivation or uses outdated theoretical models. Furthermore, existing studies do not comprehensively link SDT constructs to specific performance metrics in public sector banking.

**Research Methodology:** This study is based entirely on secondary data analysis. The methodology includes:

- **Sources**: Academic journals, RBI reports, internal publications from SBI and Canara Bank, white papers, and case studies from institutions like NIBM and IBA.
- **Data Collection**: Systematic literature review using databases such as JSTOR, Scopus, Google Scholar, and institutional repositories.
- **Analytical Approach**: Thematic synthesis of qualitative findings and descriptive analysis of quantitative performance metrics related to employee productivity, customer satisfaction, and training outcomes.



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**Objectives:** To examine how autonomy influences employee motivation and performance in SBI and Canara Bank.

1. To evaluate the impact of competence-enhancing programs on service delivery.
2. To assess the role of interpersonal relationships (relatedness) in fostering team cohesion and job satisfaction.
3. To propose strategies for enhancing intrinsic motivation in public sector banks through SDT principles.

**Explanation and Analysis**

**Autonomy and Performance:** According to Sharma and Bhaskar (2018), branches that allowed employees some discretion in handling customer complaints reported a 15% higher customer satisfaction score. SBI's "Employee Suggestion Scheme" also showed a positive impact on innovation when employees felt their inputs were valued. However, the top-down structure often limited the implementation of these ideas.

**Competence through Training:** The NIBM (2019) report highlights that Canara Bank conducted over 2000 hours of employee training per branch annually, focusing on financial products, regulatory compliance, and digital tools. SBI's digital transformation program in 2018 led to a 25% reduction in transaction processing errors and a 10% improvement in cross-selling, as per their annual report (2019).

**Relatedness and Organizational Culture:** According to IIM Bangalore (2020), branches with frequent team-building activities and open-door management policies showed lower attrition rates and higher morale. Canara Bank's "Team Synergy Initiative" was particularly effective in creating a culture of mutual support, which positively correlated with performance metrics such as service turnaround time and issue resolution.

**Comparative Analysis:** While both SBI and Canara Bank show efforts in aligning with SDT principles, Canara Bank appears to have a more structured approach toward employee development and autonomy. SBI, on the other hand, has shown innovation in digital empowerment but needs to address hierarchical rigidity.


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**Conclusion:** This study shows that Self-Determination Theory can improve employee performance in public sector banks like SBI and Canara Bank. Banks may boost performance, employee well-being, and organizational loyalty by meeting basic psychological demands including autonomy, competence, and relatedness.The secondary data analysis found that organized training, inclusive policies, and autonomy-supportive workplaces boost intrinsic motivation. In a competitive market, SDT-based policy reforms and HR interventions can help public sector banks improve service quality and employee engagement.

**References**

1. Deci, E. L., & Ryan, R. M. (1985). *Intrinsic motivation and self-determination in human behavior*. Springer. https://doi.org/10.1007/978-1-4899-2271-7
2. Gagné, M., & Deci, E. L. (2005). Self-determination theory and work motivation. *Journal of Organizational Behavior, 26*(4), 331–362. https://doi.org/10.1002/job.322
3. Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist, 55*(1), 68–78. https://doi.org/10.1037/0003-066X.55.1.68
4. Kuvaas, B. (2006). Work performance, affective commitment, and work motivation: The roles of pay administration and pay level. *Journal of Organizational Behavior, 27*(3), 365–385. https://doi.org/10.1002/job.377
5. Pink, D. H. (2009). *Drive: The surprising truth about what motivates us*. Riverhead Books.
6. Sharma, N., & Bhaskar, A. U. (2018). Impact of autonomy on job satisfaction in Indian banks. *IIMB Management Review, 30*(3), 210–217. https://doi.org/10.1016/j.iimb.2018.05.004
7. Joshi, S. (2019). Employee engagement in public banking sector. *Journal of Human Resource Management, 7*(2), 20–28. https://doi.org/10.11648/j.jhrm.20190702.11
8. Khan, A., & Singh, R. (2020). Motivation and performance in Indian public sector banks. *Indian Journal of Industrial Relations, 55*(3), 450–472. https://www.jstor.org/stable/26927519



ISBN: **978-93-5786-070-3**
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9. Deci, E. L., Olafsen, A. H., & Ryan, R. M. (2017). Self-determination theory in work organizations: The state of a science. *Annual Review of Organizational Psychology and Organizational Behavior, 4*, 19–43. https://doi.org/10.1146/annurev-orgpsych-032516-113108
10. Banker, R. D., Chang, H., & Pizzini, M. J. (2004). The balanced scorecard: Judgmental effects of performance measures linked to strategy. *The Accounting Review, 79*(1), 1–23. https://doi.org/10.2308/accr.2004.79.1. 1
11. Kuvaas, B., Buch, R., Weibel, A., Dysvik, A., & Nerstad, C. G. (2017). Do intrinsic and extrinsic motivation relate differently to employee outcomes? *Journal of Economic Psychology, 61*, 244–258. https://doi.org/10.1016/j.joep.2017.05.004
12. Indian Banks' Association. (2020). *HR practices in Indian banking sector*. Mumbai: IBA. [No DOI – Institutional Report]
13. Reserve Bank of India. (2021). *Annual report 2020–21*. Mumbai: RBI. Retrieved from https://www.rbi.org.in
14. State Bank of India. (2019). *Annual report 2018–19*. Mumbai: SBI. Retrieved from https://www.sbi.co.in
15. Canara Bank. (2020). *Employee engagement and performance overview*. Bangalore: Canara Bank.
16. Nair, S. R., & Kotha, R. K. (2021). The role of employee motivation in enhancing bank productivity. *South Asian Journal of Management, 28*(1), 55–70. https://doi.org/10.1177/09718907211003350
17. National Institute of Bank Management. (2019). *Training effectiveness in Indian banking sector*. Pune: NIBM.
18. IIM Bangalore. (2020). *Organizational culture and performance in Indian banks: A comparative study*. Bangalore: IIMB.
19. Vallerand, R. J. (1997). Toward a hierarchical model of intrinsic and extrinsic motivation. *Advances in Experimental Social Psychology, 29*, 271–360. https://doi.org/10.1016/S0065-2601(08)60019-2
20. Rigby, C. S., & Ryan, R. M. (2018). Self-determination theory in human resource development: New directions and practical considerations. *Advances in Developing Human Resources, 20*(2), 133–147. https://doi.org/10.1177/1523422318756954


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# Empowering Innovation: A Study on Kerala Startup Mission's Role in Fostering Entrepreneurship

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**Abstract:** Kerala Startup Mission (KSUM), the state's key body for entrepreneurship development and incubation, is a cornerstone of the startup ecosystem. This article evaluates KSUM schemes that foster innovation, give finance, infrastructure, and mentorship to young entrepreneurs. Innovation and Entrepreneurship Development Centres (IEDCs), Women Entrepreneur Support Programs, Innovation Grant and Seed Fund Schemes, International Exchange Programs, Patent Reimbursement, and Rent Subsidy Schemes are analyzed. New reports, case studies, and secondary sources are used to assess the tangible results, including increased startup registrations, global collaborations, and student entrepreneurship. The findings show that KSUM's comprehensive and inclusive approach has helped Kerala develop a strong startup culture, making it a model for other Indian states. To expand these schemes' scope and impact, suggestions are made.

**Keywords**: Kerala Startup Mission, KSUM, entrepreneurship development, startup schemes, innovation grants, women entrepreneurs, seed funding, startup ecosystem, Kerala economy, incubation support.

**Introduction:** India's startup ecosystem has risen fast in the past decade due to governments' proactive promotion of entrepreneurship, innovation, and job creation. Kerala's pioneering Kerala Startup Mission (KSUM) has fostered a vibrant and diversified entrepreneurship environment. KSUM, created in 2006, is the Kerala government's main tech entrepreneur support organization, providing funding, mentoring, incubation, and global exposure. KSUM has



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established the state as a startup hub by merging local talent with global best practices and focusing on youth, women entrepreneurs, and tech-driven ideas. This study examines how KSUM's plans, structure, and impacts assist entrepreneurs thrive in the post-pandemic digital economy.

**Objectives of the study:** 1. Examine the founding and development of the Kerala Startup Mission. Analysis of KSUM schemes and initiatives. 2. Assess the impact of KSUM on startup growth and job creation in Kerala. 3. Identify difficulties faced by Kerala entrepreneurs and KSUM's solutions. 4. Share success stories and case studies of KSUM-supported startups. 5. To recommend ways to enhance the startup ecosystem in Kerala.

**Research methodology**:The Kerala Startup Mission's impact and efficacy are examined in this descriptive and analytical secondary data analysis. This study used data from KSUM reports and publications, Kerala state and central government policy documents, academic journals, and reputable news sources and startup portals. To investigate KSUM's projects' patterns and results, startup-specific websites, case studies, and whitepapers were studied. The analysis focuses on Kerala's startup environment from 2015 to 2024. The methodology uses qualitative text analysis and comparative data analysis to find patterns, evaluate schemes, and highlight KSUM-supported firms' accomplishments and challenges. Through secondary data, the study seeks to understand KSUM's function in

**Limitations of the study:** Secondary data may not provide the most recent or detailed insights, especially about the challenges and full impact of specific skill development initiatives supporting innovation and entrepreneurship in Kerala.

**Literature review:** According to P. Noufal and Dr. K.V. Ramachandran (2017), entrepreneurship, skills, and knowledge promote social and economic growth in Kerala's industrial economy. The report examines Kerala's business startup environment and how entrepreneurship development boosts economic growth.

2. According to The Hindu (17 December 2022), Kerala Startup Mission (KSUM) proposes community innovation centers to support rural innovators and increase access to the startup ecosystem. With a trial phase in 10


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constituencies, KSUM plans 140 innovation centers. According to Mr. Ambika, these centers would underline that technology is not restricted to IT and that everyday tasks may be technological innovation.

3. According to The Economic Times (16 December 2022), Kerala has the potential to become a worldwide startup hotspot. KSUM's activities have made the state an Indian ‘startup powerhouse’. The ecosystem is maturing and recognized by Brunsehiug, the Council General of Switzerland and Swissnex India CEO, for its potential.

4. Jyotsana Thomas and Georgee KI study the influence of incubation centers on the startup ecosystem in Kerala. Their study, “A study on the incubation centres and startups: A study on Kerala’s Startup ecosystem”, investigates incubator amenities and founder satisfaction.

5. The research shows that while incubation institutions like St. Teresa's College (Autonomous) in Ernakulam help companies, more centers are needed to support them.
According to The Economic Times (5 September 2022), KSUM has granted over 25 crores to businesses in high-tech industries like as agritech, fintech, healthtech, hardware, IoT, and SaaS since 2017. The state promotes sustainability and growth in these industries to keep Kerala's startup environment competitive.

6. The Lean Startup movement, founded by Eric Ries, describes a startup as a new company developing innovative products or services under unpredictable conditions. Startups are vital to company innovation, employment creation, and competition. Ries stresses the significance of a strong support environment for entrepreneurs to test business models to identify the best one. Using a multi-method approach, Al-Mubaraki and Schrödl's study on innovation centers and company incubation in Innovation: Management, Policy & Practice assesses program effectiveness. They found four major indicators of incubator program health: business graduation, longevity, job generation, and client compensation. These indicators help determine the effect and success of company incubation programs, which are vital to the startup ecosystem.

**Introduction to Kerala Startup Mission (KSUM)**


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State government's Kerala Startup Mission (KSUM) promotes innovation and entrepreneurship. Founded in 2006 to help young entrepreneurs scale their businesses. Technology, healthcare, and agriculture startups receive funding, coaching, and networking from KSUM. It supports startups with innovation hubs, accelerators, and co-working spaces. Startup boot camps, hackathons, and innovation challenges promote student and professional entrepreneurship at KSUM. Kerala Startup Mission provides financial resources and an ecosystem to make Kerala an innovation and entrepreneurial hub.

**KSUM schemes**

**Soft Loan Scheme for Women Entrepreneurs:** Through a soft loan program, the Kerala Startup Mission (KSUM) provides working money to women-owned businesses up to Rs. 15 lakhs so they can carry out projects and work funded by Kerala's public sector enterprises and government departments. The loan amount is restricted to 80% of the purchase order, and it is disbursed as an advance against the client-agreed milestone payment. With 6% simple interest, the soft loan must be paid back within a year or upon full project settlement, whichever comes first. The startup is responsible for ensuring that the product or service indicated in the purchase order is delivered correctly, and the second installment will be paid out once a client-certified milestone has been completed. The maximum loan balance that can be owed is Rs. 15 lakh.

**Key Highlights of the Soft Loan Scheme for Women Entrepreneurs**

- **Increase in Women Startups**: The number of women startups under KSUM rose to 233 in the first three months of 2023, up from 175 during all four quarters of the previous year.
- **Financial Support**: In the last financial year, KSUM provided financial support of approximately ₹1.73 crore to women/women-cofounded startups, with ₹1 crore disbursed as loans.
- **Funding Programs**: Women startups secured around ₹8 crore through various innovation programs, including Productization Grants of up to ₹12 lakh, Scaleup Grants of ₹20 lakh, and technology transfer support with a ceiling of ₹10 lakh.


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**2. Innovation and Entrepreneurship Development Centres (IEDC)**
Engineering, management, arts and science, and polytechnic colleges created Innovation and Entrepreneurship Development Centers to offer students creative opportunities. IEDCs launch students' entrepreneurial journeys with cutting-edge technology, world-class infrastructure, high-quality coaching, early risk capital, and global exposure. The Kerala Startup Mission's flagship activity, IEDC, promotes innovation and entrepreneurship among students and faculty at Kerala's educational institutions. An umbrella program, it promotes academic innovation. IEDC strives to foster innovation and entrepreneurship in schools and establish institutional frameworks for techno-entrepreneurship to create jobs and income. Kerala educational institutions with the infrastructure and experience host IEDCs.

**Outcomes of IEDCs in Kerala:** Innovation and Entrepreneurship Development Centres in Kerala have fostered student entrepreneurship. Mentorship, money, infrastructure, and networking are provided by IEDCs to grassroots entrepreneurs. Results and triumphs demonstrate these facilities' efficacy.

**1. Student Startup:** Creation IEDCs create collegiate student-led businesses. MES College of Engineering, Kuttippuram students' startup 'GenRobotics' won national praise by creating 'Bandicoot,' a hands-free scavenger. Their IEDC supported the initiative with mentorship, KSUM rewards, and financial networks.

**2. Encouragement of Entrepreneurship**: IEDCs foster creativity and experimentation. St. Joseph's College of Engineering and Technology, Palai, has more students entering business model competitions and startup challenges after established an IEDC. At IEDC Summit and Startup Yatra, students switch from "job-seeking" to "job-creating."

**3. Seed money and infrastructure**: KSUM-supported IEDCs offer FabLabs, Tinkering Labs, and Innovation Hubs to students. Amal Jyothi College of Engineering student startup 'Hastpa' received IEDC prototyping and seed funding. Social effect with personalized 3D-printed prosthetics.

**4. Industry-academia cooperation improved**: At IEDCs, students work with industry mentors and entrepreneurs. IEDC worked with corporations to present


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students real-world issues at Mar Baselios College of Engineering and Technology (MBCET) in Trivandrum. This improved their entrepreneurial skills and made non-entrepreneurial students more employable.
**5. Awards and acknowledgement**: IEDC startups win state and national accolades. Government Engineering College, Barton Hill student startup Robo Inventions earned an IEDC Summit award for low-cost instructional robotics kits. Recognition improves confidence and encourages similar class choices.
**6. Social impact and employment creation:** Local employment creation and social innovation come from IEDC-backed businesses. By using technology, Thrissur's Government Engineering College's Farmology connects farmers with customers. With KSUM's early support, their IEDC produced the idea and formed a firm.

**Outcomes of Startups Benefiting from the International Exchange Programme**

**Kochi-based HMI startup Sastra Robotics** exported 150 robots to a top UK IT company. International events through KSUM's Global Exposure Programme were vital to this success. **Kalady-based Ufarms.io's** breakthrough agriculture innovations made headlines worldwide. KSUM's support at Dubai and Israel events gave them visibility and networking opportunities, boosting their global profile.

**Fusion Innovations** won the AgriTech4 Innovation Challenge in Uzbekistan, earning headlines. Their success shows KSUM's significance in promoting startups' innovations worldwide.

**From Areekode, Kerala, Interval Learning** has expanded to over 30 countries. Partnerships with Finland's Talent Boost Project and India's Finance Minister demonstrate KSUM's global reach.

**CareStack:** Cloud-based dental software global deployment showcases Kerala's entrepreneurial spirit. Their story highlights how KSUM helps startups go global.

**At national startup events, InIT Solutions** was recognized for their temple administration CRM system 'BookSeva' They show KSUM's success fostering unique startups.



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**Evelabs,** a medical monitoring firm, attended Slush in Finland. KSUM Global exposure has helped them expand and collaborate globally.

**Successful startups supported by KSUM**

**1. ChargeMod**: ChargeMod, a leading EV infrastructure firm, uses IoT software to build smart charging stations and networks. ChargeMod helps Kerala towns build sustainable EV charging ecosystems for India's clean energy goals. KSUM investment and incubation enabled the firm grow swiftly and support Kerala's EV objective. ChargeMod boosts electric vehicle adoption, reducing carbon emissions and promoting green transportation.

**2. Limore AI:** Limore AI provides healthcare, banking, and customer service AI solutions from Kerala. AI automates medical diagnostics, fraud detection, and chatbot customer service. From KSUM, Limore AI received seed funding, training, and high-tech labs. Innovations get them national and international attention. Limore AI helps companies adopt AI technology to alter and improve operations.

**3. Genrobotics:** The KSUM portfolio startup Genrobotics is famous. It created Bandicoot, a manhole-cleaning robot, to replace dangerous and cruel hand scavenging. After installing Bandicoot robots in over 100 Indian municipalities, the startup received national and international praise. Genrobotics got prototype funding, mentoring, and visibility from KSUM. Genrobotics enhances work dignity and sanitation.

**4. Interval learning**: The Areekode-based edtech business Interval Learning offers competitive test microlearning. Spaced repetition and bite-sized lectures boost platform memory and understanding. Over 100,000 learners from 30 countries have been reached by KSUM incubation, digital marketing, and coaching. High-quality, accessible education for remote students from Interval Learning is democratizing education and empowering students through technology.

**Challenges faced by Start-ups in Kerala:Venture Capital Access Limited**: KSUM's seed money and early-stage support are vital, but many growing companies battle for venture capital. Startups sometimes lack follow-up financing, which hinders growth and industry entry.



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**Regulations and red tape**: Long regulatory approvals and bureaucratic processes can slow startup growth. Administrative red tape can slow entrepreneurs' progress.
**Limited Post-Incubation Help**: Startups rarely receive mentorship, support, or resources after incubation. Insufficient support can hinder business growth, operations, and market dynamics.
**Kerala has a paucity of AI**, blockchain, and deep-tech experts despite its highly educated workforce. These niche firms struggle to hire skilled staff, hindering innovation and expansion.
**Market presence and penetration**: KSUM marketing support plans aside, companies struggle to build brand awareness and contact additional customers. In a competitive market, smaller businesses, especially startups, struggle to recruit clients and gain market momentum due to finance constraints.
**No Industry-Specific Incubators**: Incubation and coaching are needed for many startups, especially exotic ones. Kerala needs agritech, healthtech, and AI incubators to help companies gain resources, skills, and networks. Startups may struggle to perfect and sell their goods without such support.
**Infrastructure and Operations Issues**: Kerala has various co-working spaces and innovation hubs, however rural and Tier-2 startups need affordable and good amenities. Lack of infrastructure limits local startups' scaling.
**Global Collaboration and Exposure:** Many Kerala companies don't benefit from KSUM's global exposure or foreign expansion. Their limited global networks and resources impede their ability to scale and recruit clients and investors.
**Scalability and Sustainability:** Without funding, mentorship, and business networks, many Kerala startups fail to scale. Without sufficient resources and infrastructure, scalability is difficult after product creation and market entry.
**Overreliance on government programs:** Startups need KSUM's programs, but government aid may be dangerous. Private investment and market-driven strategies help startups become financially independent and resilient.
**Social and Cultural Barriers for Women Entrepreneurs:** Despite a rise in women-led businesses, Kerala women entrepreneurs face social and cultural barriers that make it difficult to navigate the startup ecosystem. Gender bias,


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poor network connectivity, and a lack of a women-entrepreneur-friendly ecosystem are examples.

**IP and Patent Issues:** Startups often lack IP protection skills and money. Despite the Patent Reimbursement Scheme, many startups struggle with patent application due to high expenses, legal issues, and confusion.

**Findings:** 1. With programs like the Soft Loan Scheme for Women Entrepreneurs, women-led enterprises increased from 175 to 233 in 2023. 2. KSUM gave women entrepreneurs ₹1 crore in loans last year, totaling ₹1.73 crore in financial support. 3. Kerala has over 140 Innovation and Entrepreneurship Development Centres (IEDCs) that promote entrepreneurship. 4. IEDCs like GenRobotics prove KSUM's programs work. 5. Student entrepreneur Hastpa made 3D-printed prosthesis using KSUM's startup funding program. 6. KSUM has boosted Kerala's tech ecosystem by supporting agritech, healthtech, finance, and IoT startups. 7. KSUM's International Exchange Program has enabled Kerala startups Sastra Robotics, CareStack, and Ufarms.io grow globally. 8. KSUM promotes green and profitable startups. 9. Co-working spaces and innovation hubs help startups collaborate and scale. 10. KSUM's mentorship initiatives helped CareStack and Toffee Ride scale up after early challenges. 11. KSUM-supported firms like Farmology and Hastpa created local jobs and linked rural and urban markets. 12. IEDCs improve educational-company partnerships by applying academic knowledge to real-world situations. 13. KSUM-supported Fuselage Innovations and Interval Learning gain global recognition, demonstrating their potential. 14. More incubation facilities are needed to support startups and scale existing enterprises. 15. Venture investment is scarce, therefore many firms need follow-up funding to scale. 16. KSUM promotes rural enterprises, fostering innovation and entrepreneurship. 17. KSUM-supported enterprises have created many technical, manufacturing, and agriculture jobs in Kerala. 18. KSUM has held workshops and training to help entrepreneurs and startups succeed. 19. KSUM networking events foster collaboration between entrepreneurs, investors, and industry experts, connecting entrepreneurs. 20. Government programmes like KSUM have helped Kerala's startup scene by providing state-led funding and policy support. 21. The Patent Reimbursement


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Scheme reduces the financial burden of intellectual property protection for Kerala-based firms, encouraging innovation and patent culture. 22. The Rent Subsidy Scheme saves early-stage enterprises infrastructure costs, allowing expansion and product development. 23. Technology Commercialisation Support helps startups commercialise prototypes. 24. The R&D Grant funds advanced R&D startups to promote deep-tech innovation. 25. The Marketing Support Scheme funds promotional initiatives to help entrepreneurs build brand awareness and market share. 26. ChargeMod promotes Kerala's green energy goal by showcasing KSUM's sustainable and smart EV infrastructure. 27. Limore AI shows KSUM's guidance in healthcare and finance AI solutions. 28. KSUM's early support of Genrobotics ends manual scavenging, benefiting society. 29. Interval Learning shows how KSUM has enabled scalable EdTech solutions that democratize learning through technology and innovation.

**Suggestions:** 1. Since scaling enterprises generally struggle to get venture capital beyond initial investment, KSUM may provide finance. 2. International professionals in mentorship programs can broaden firms' perspectives and worldwide market access. 3. Focus on industry-specific incubators to help unique businesses. 4. KSUM can encourage innovation and worldwide connections with global incubators and accelerators. 5. Improved IEDC-corporate ties can give entrepreneurs technical and operational skills, leading to scalable business concepts. 6. To maintain company longevity, KSUM should improve post-incubation support. 7. Advocating for government policies can assist firms overcome regulatory issues. 8. Women entrepreneurs can thrive in the startup ecosystem with financial opportunities. 9. A strong alumni network may help KSUM-supported enterprises share information, fundraise, and network. 10. Sector-specific pitch events and investor connect programs may assist KSUM companies secure capital for their business models. 11. Increase patent filing awareness efforts and workshops to help entrepreneurs succeed. 12. Introduce co-working and shared offices to rural or Tier-2 areas to promote decentralized startup growth. 13. Promote industry collaboration and pilot programs to speed startup product validation. 14. Use milestone-based funding and mentorship milestones to maximize grant use. 15. Help startups execute with digital marketing bootcamps and marketing pros.


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16. Use this help strategy for solar energy and battery storage. 17. Establish AI-focused startup clusters with computation and data infrastructure. 18. CSR partnerships and government procurement pipelines promote socially relevant inventions. 19. Reach underrepresented language groups with additional vernacular and regional content.

**Conclusion:** Kerala Startup Mission (KSUM) has transformed entrepreneurship in Kerala, creating a thriving and inclusive startup ecosystem. KSUM has fostered innovation through seed funding, incubation, technological commercialization, and specialized initiatives for women entrepreneurs and rural innovators. KSUM's sponsorship has helped firms like ChargeMod, Genrobotics, and Limore AI succeed in green energy, robotics, and AI. Despite these successes, entrepreneurs still struggle to raise venture financing and navigate bureaucracy. Many startups lack post-incubation support, which might hurt their longevity. KSUM must urgently expand mentorship programs, develop collaborations with corporates and worldwide incubators, and improve scaling finance. KSUM might further increase its influence by targeting specialty industries like AI, green technologies, and vernacular content entrepreneurs. KSUM can foster more varied inventions for underprivileged populations by doing so. Startups can reach worldwide markets by building an alumni network and fostering international relationships. In conclusion, KSUM has laid the groundwork for Kerala's startup ecosystem, but continuing evolution and adaption to the global startup landscape, along with increasing sectoral collaboration, can help it become a vital enabler of entrepreneurial success in India. KSUM can strengthen Kerala's worldwide leadership in innovation and sustainable entrepreneurship by addressing the problems and adopting the recommendations in this report.

## References

1. Kerala Startup Mission (KSUM). (2024). KSUM Schemes and Programs for Startups in Kerala. Retrieved from https://startupmission.kerala.gov.in
2. LEAP Kerala. (2024). Launch Empower Accelerate Prosper: Co-working Spaces by KSUM. Retrieved from https://leap.startupmission.in/



ISBN: **978-93-5786-070-3**
March 2025

3. Kerala Technology Innovation Zone (KTIZ). (2024). Innovation Infrastructure and Startup Incubation. Retrieved from https://www.innovationzone.in
4. IndiaFilings. (2023). Kerala Startup Mission – Government Support for Innovation and Entrepreneurship. Retrieved from https://www.indiafilings.com/learn/kerala-startup-mission-ksum
5. The Hindu. (2023). Women Start-ups, Entrepreneurs on the Rise in Kerala: KSUM Report. Retrieved from https://www.thehindu.com/news/national/kerala/women-start-ups-entrepreneurs-on-the-rise-in-kerala-ksum-report/article66592161.ece
6. Times of India. (2024). KSUM to Launch 'WE Grow' Incubation Program for Women Startups. Retrieved from https://timesofindia.indiatimes.com/city/thiruvananthapuram/ksum-to-launch-we-grow-initiative-for-women-startups/articleshow/117703451.cms
7. Enterslice. (2023). Kerala Startup Mission: A Detailed Overview of Its Schemes and **Mathrubhumi English** *Title: Kerala Startup Ecosystem: A Global Model URL:* Mathrubhumi Article
8. **The Hindu Business Line** *Title: KSUM's Role in Fostering Tech Startups in Kerala URL:* The Hindu Business Line
9. **Inc42 Media** *Title: Government Support to Startups in Kerala: An Analysis of KSUM's Schemes URL:* Inc42 Article
10. **YourStory** *Title: How KSUM is Empowering Women Entrepreneurs in Kerala URL:* YourStory Article


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## Beyond Individual Responsibility: Structural Barriers to Equitable Access and Participatory Frameworks for Redress

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**Abstract:** Does crowdfunding's ethical problem stem from platforms that encourage unscrupulous actors? This essay challenges the idea of individual moral responsibility by revealing institutional processes that affect, restrain, and exploit crowdfunding users. Although crowdfunding is touted as democratic and inclusive, opaque algorithms, cultural biases, and regulatory gaps favor the wealthy. These intrinsic inequities affect ethics by determining who is seen, funded, and how. Instead of ethical individualism, the study proposes stakeholder-centric equity, openness, responsibility, privacy, and solidarity. Through multi-method research and grounded case analyses, it thinks participatory platform governance, inclusive algorithm design, and ethical education are necessary for power and responsibility transfer. Structure-just crowdfunding is ethical.

**Keywords:** Crowdfunding ethics, Platform governance, Power asymmetry, Algorithmic bias, Participatory frameworks

**Introduction:** The positive narrative about platform capitalism presents crowdfunding as a democratic movement that offers remarkable financial prospects and enhanced opportunity to raise funds outside of established institutions. The platform claims to empower people to achieve financial objectives and social participation despite historical marginalization from


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traditional finance. The optimistic view of crowdfunding ignores the underlying power dynamics that drive crowdfunding networks. Due to algorithmic decision processes, regulatory constraints, and cultural rules in their digital domains, crowdfunding platforms are not neutral. Multiple factors decide which projects are examined, funded, and under what conditions, making impartial playing fields impossible. The main mistake is ethical individualism because system employees are responsible for most ethics. Literature and public discussions focus on advocate truthfulness, donor conduct, and recipient allocation accountability (Snyder, 2023). The approach ignores systemic issues that influence user behavior and ethical boundaries. Online system algorithms favor visual standards and performance statistics, hiding unorthodox campaign kinds to safeguard their essential functions even if vulnerable people require help. Social economic-based cultural advantages allow upper-class people to campaign, perpetuating inequities. The opaque operational methods behind platform governance systems make it difficult for stakeholders to evaluate operations and limit their participation in platform decision-making.This study examines individualist frameworks using an ethical structural approach that addresses power imbalance and stakeholder connections and shows how participatory governance can change motivation systems. The paper shows that ethical transgressions like fund misuse, privacy breaches, and exclusive fees are systematic platform architecture issues. The core topic is why crowdfunding power inequalities have ethical consequences and how to prevent exploitation without compromising trust. The study uses academic methods, real-world analytics, and expert talks to create a stakeholder-focused ethics framework. The concept spreads crowdfunding responsibilities across platforms that include stakeholders and develops accountability criteria based on participant experiences. Overcoming the myth of ethical autonomy can make crowdfunding a truly inclusive and just financial framework (Snyder, 2023).


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**Critique of Ethical Individualism: The Autonomous User Myth**: The ethical individualism that underpins crowdfunding ethics assumes that contributors and campaigners are economically educated independent persons who can make such decisions. This perspective places ethical responsibility in individual hands since donors must evaluate campaigns before donating and campaigners and recipients must be honest and transparent when spending cash. Practical digital crowdfunding requires complex power relations and emotional biases, therefore the scenario explaining why crowdfunding works is unrealistic. During medical emergencies, donors struggle to receive campaign legitimacy and recipient needs information (Snyder, 2016). A gray area of ethics exists in well-intentioned donations since receivers rarely give honest accounts and donors lack campaign information. Campaigners must use self-commodified stories to meet platform algorithm requirements and donor expectations, which degrades their dignity and privacy. Dressler & Kelly (2018) say campaigners are incentivized to depict themselves or their beneficiaries as suffering, vulnerable, and morally good. Storytelling reflects audience prejudices and platform requirements, but donors only see portions of truth that support their opinions. The process forces a moral choice between sharing truth and keeping dignity to survive. Aid recipients may not be direct campaigners, but they nonetheless feel forced to expose public details of their personal lives. Medical crowdfunding uses this method because receivers or caregivers share personal and medical information to draw empathy (Snyder, 2023). Since vulnerability is the key condition for support, people must provide personal details to receive it. Mental health costs, reputational damage, and emotional labor make up the whole cost of obtaining help. Because structural factors affect crowdfunding participants' behavior, the autonomous ethical framework fails. Crowdfunders must work under systems that reward and punish certain behaviors. The crowdfunding ecosystem—platform creators, donor communities, government agencies, and society organizations—should


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share ethical responsibilities. Many obstacles prevent ethical accountability in crowdfunding, therefore a just and responsible system demands a redistribution of responsibilities.

**Who Controls and Pays for Structural Barrier Mapping?**: Asymmetrical power structures that affect platform operations and donor actions and weak regulatory frameworks that safeguard stakeholders greatly impact crowdfunding morality. Through digital crowdfunding platforms, protection measures control campaign exposure, approval status, and reputation. Platform algorithms employ popularity and donor engagement indicators to rank fundraising campaigns and link them to brand values. Programmatic procedures operate with societal preconceptions while minimizing visibility. Rhue and Clark (2016) found that Black Kickstarter candidates perform worse than white candidates despite having same content. Cutolo & Kenney (2019) show how platform governance systems transmit biases without transparency. The platforms decide which charities can fundraise and which cannot. Standardized costs on these sites hurt fundraisers with less money. These processes worsen economic disadvantages for vulnerable groups. Since it does not bear legal responsibility for unsuccessful campaigns and fraud, the platform is not liable. Campaigns employ platform service agreements to defend against money misuse and donor deceit while denying stakeholders reasonable solutions. Donations and donor culture strongly influence financing campaign success. Donors choose causes while being unselfish. Snyder (2023) found that cultured language, professional visuals, and standardized healthcare depictions boost sales. Preferred cultural standards affect gift distribution because initiatives that deviate from them are ignored even when the need is great. This platform's social empathy relies on visual appeal and emotional intensity rather than assistance needs. The democratization support system marginalizes those who cannot build appealing narratives about their requirements and lack technological or cultural mastery of popular formats.



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Donation-based crowdfunding in underdeveloped nations like India and Indonesia lacks legislative regulation, therefore these issues persist (Gupta et al., 2024). Platform operators might ignore financial transparency, user protection, and ethical norms due to regulatory inadequacies. Since existing security measures cannot detect real campaigns or monitor expense allocations, fund misuse and fraud increase. Since internet platforms don't effectively secure users' privacy during data gathering and disclosure, personal data analysis is crucial. Platforms benefit from user data or lack data protection, increasing breach risk. Stakeholders, especially vulnerable campaigners and donors, cannot report harm. Crowdfunding is harmful for vulnerable people since there are no legal standards for dispute resolution, ethical protection, or compensation (Tondoyekti et al., 2024). Platform power, donor influence, and regulatory failure reveal that crowdfunding ethical infractions have systemic repercussions. To fix these difficulties, digital fundraising governance, equality, and ethics must be reformed.

**Systemic Ethics Violations**: Digital fundraising platforms have design problems that cause ethical violations, fund diversion, disinformation spreads, and privacy infringement. The English Common Law showed that power dynamics discriminate against marginalized people and enable platform protection. To get sympathy from donors, medical crowdfunding recipients must provide their diagnoses, treatment plans, and intimate photos. Medical crowdfunding turns crisis patients into goods and forces them to recount their health issues for money. Financially disadvantaged people lose their dignity and face copyright issues while granting consent (Snyder 2023; Dressler & Kelly 2018). Platform governance fails to handle privacy breaches, misallocation, and fraud. Kitabisa.com is criticised for misusing donations due to poor internal audit practises (Tondoyekti et al., 2024). Nontypical donation usage and fraud instances damage single campaign credibility and crowdfunding confidence. Platforms lack standard accountability criteria,


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which increases security risks for funders and recipients. Crowdfunding discriminates against racially underrepresented groups and lowers high-end contributor support, raising ethical concerns. Despite defined criteria, Black-led or Black-focused fundraising fails for 17% of the population (Rhue & Clark, 2016). Because algorithmic platforms and donor choices promote online racial inequities, digital racism against Black people is evident. Crowdfunding systems promote healthcare access as an individual's obligation to portray oneself efficiently to obtain needed services, according to Moysidou & Fotaki (2024). To shift blame on vulnerable assistance clients, this presentation skips public welfare system flaws. These offenses require systemic change and justice, openness, and solidarity in platform management and system design.

**Methods for Studying Power Asymmetries**: Mixed-methods research utilizing quantitative and qualitative approaches is needed to analyze how power inequalities affect crowdfunding ethics. Absolute platform data analytics finds crowdsourced campaign disparities using numbers. By scraping metadata on campaign location, language, campaigner demographics, and success rates, researchers find structured patterns that indicate algorithmic bias, visibility imbalances, and donor involvement differences across geographical regions. English language and urban campaigning had disproportionate success rates, highlighting vulnerable rural populations' persisting challenges (Rhue & Clark, 2016; Snyder, 2023). Second, stakeholder interviews reveal real-life experiences within these patterns. Interviewing campaigners, donors, platform administrators, and regulators helps understand ethical issues in practice. Interviews show how platform regulations, donor demands, and cultural information distribution methods discreetly or blatantly exercise control. Qualitative study shows psychological and emotional traits that quantitative research cannot. Investigators can analyze ethical breaches by studying failed marketing campaigns. Failed projects can show how algorithmic transparency, storytelling, and passive platform support affect legitimate needs. These


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breakdowns are caused by institutional issues, not human fault. These approaches have many crucial issues during implementation. Business policies, regulatory limits, and institutional review board regulations prevent platform data access, while the review process restricts vulnerable people and sensitive groups. The analysis requires context-sensitive interpretation because donor behaviors vary per culture considering compelling narrative content. This strong methodological triangulation is necessary to discover a stakeholder-focused ethical structure through factual data analysis in complicated real-world scenarios (Tondoyekti et al., 2024; Shneor & Torjesen, 2020).

**Core Values: A**n ethical crowdfunding system is based on key values of justice, inclusivity, and human dignity. Snyder (2023), Shneor & Torjesen (2020), and Tondoyekti et al. (2024) identify equity, openness, accountability, privacy, and solidarity as five fundamental values. Equity requires systematic bias reduction in resource availability and results. One priority is correcting algorithmic unfairness that disadvantaged minority campaigns, developing access tools for underrepresented groups, and reducing financial limits based on language and racial or regional privilege. The platform must have open visibility for all operational elements, including algorithm-based campaign presentation, money distribution, and eligibility assessment. Well-disclosed methods let donors make educated decisions and treat campaigners fairly (Shneor & Torjesen, 2020). Users need accountability tools to report unethical behavior, raise fund allocation concerns, and seek solutions. Accessible and fair processes must safeguard whistleblowers. Privacy requires absolute safeguards. Platforms should not incentivize users to share confidential information for visibility (Snyder, 2023). Users require assurance that their data will be secured. Solidarity transforms ethics by replacing shallow pity-based donations with coordinated care between empathic community members. Under solidarity principles, crowdfunding fights systematic inequities through community solidarity (Tondoyekti et al., 2024). These qualities can make crowdfunding a participatory justice system and ethical


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redistribution platform when followed holistically. Participative Platform Governance Platform management must move from individual rulemaking to direct stakeholder contributions whose experiences largely interact with platform policies to provide equitable and trustworthy crowdfunding. To improve crowdfunding, advisory boards must include campaigners, donors, civil society leaders, and ethicists. The boards should have the capacity to establish platform principles, content moderation standards, and campaign entry restrictions based on actual experiences, not business objectives. Covering policy enforcement gaps with low-income campaigns and underrepresented groups improves governance (Shneor & Torjesen 2020). The strategy must include transparent algorithm audits. Platform-based analytics control campaign prominence but keep their working mechanics private. By favouring commercial content with professional narrative and high social standing, algorithms reinforce cultural prejudices (Rhue & Clark, 2016). Independent third-party audits should be public and include demographic assessments to detect systematic group disadvantages. Users need full awareness into algorithmic processes to resolve bias and build trust when their material is misrepresented or alienated. Platform policies must create communities that review campaigns for validity and ethics. Decentralized review panels with local culture knowledge examine campaign legitimacy and ethics. A diverse team of approved volunteers should conduct campaign assessments that include technical screening, human accuracy checks, human dignity issues, and harm prevention analysis. By empowering community members to oversee operations, check functions are shared and ethical accountability is shared. These new rules make crowdfunding more multi-stakeholder to ensure accountability and fairness (Shneor & Torjesen, 2020; Snyder, 2023).

**Blockchain for Transparency** Blockchain-based crowdfunding models offer a unique way to increase openness, accountability, and confidence at various crowdfunding levels, especially in areas where traditional crowdfunding platforms lack transparency and control. Unalterable distributed ledgers for permanent transaction records that securely trace donations from contributors to distribution are the most promising blockchain feature (Tiwari et al., 2023).


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Blockchain technology's immutability is crucial because contributors and financial regulators may verify transactions in real time or historically to preserve financial transparency. Smart contracts on the blockchain provide self-enforcing agreements that release payments when predefined conditions are met. Smart contracts can deliver medical crowdfunding money only when hospitals and independent third parties validate treatment progress and results. Conditional fund distribution promotes donation trust by preventing money misuse and ensuring funds are handled wisely, boosting project authenticity. Additionally, blockchain technology reduces the need on centralized platforms, a major ethical concern in current crowdfunding methods. Traditional platforms can push or hide campaigns based on obscure algorithmic factors, making them gatekeepers. Decentralized blockchain systems provide for democratic governance, allowing community members to discuss decisions or incorporate them into smart contract logic. Centralized bias may exclude minority consumers, while decentralized bias empowers them.

Despite its potential, blockchain crowdfunding has downsides. Technical literacy remains a challenge, especially for people unfamiliar with cryptocurrency wallets or decentralized apps. Adoption costs, including development and transaction fees, can hinder small-scale fundraisers. Legal uncertainty about blockchain transactions, data protection legislation, and consumer rights in blockchain settings raises concerns for platforms and consumers. To fully benefit from blockchain, barriers must be removed by inclusive design, capacity-building, and explicit regulations (Tiwari et al., 2023).

**Advice on policy**

**Reg Reform** To address the growing ethical and regulatory issues in crowdfunding, governments must take a more proactive and disciplined approach to regulation, especially for donation-based crowdfunding, which is mostly in a grey area in many countries. First, we need quick policy change and focused regulation for donation-based crowdfunding, knowing its risks and differences from equity/reward-based models. The first bill should define qualifying rules for platforms and campaigners and best practices for openness



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and accountability expenditure. Platforms without regulation risk fraud, privacy breaches, and other ethics violations. Second, governments should require campaigns to disclose how they are selected in aggregate, how they use donor and recipient data, the fees algorithm used to determine a winner, and how disputes are resolved. Disclosures must be clear, bilingual, and transparent so all users can accurately disclose. Additionally, crowdfunding platforms should strictly regulate the gathering and use of personal data, especially sensitive medical/financial data. Appeal/grievance procedures must contact contributors and campaigners for fund misuse, platform carelessness, data ligaments, etc. Finally, governments should appoint independent ombudspersons or guardians of public good to monitor crowdfunding platforms and handle stakeholder complaints. These bodies need the power to investigate improper procedures, crime ethics, and disagreements. Ombudspersons, as neutral third parties, may help build public trust and keep crowdfunding for good rather than exploitation. This powerful financial tool needs an ethically controlled and legally accountable crowdfunding ecosystem to safeguard vulnerable users and restore legitimacy.

**Ethics Education:** A robust crowdfunding ecosystem requires ethical education for all stakeholders, especially campaigners and donors. Ethics literacy modules could teach storytelling, informed consent, and human dignity. The modules should incorporate best standards for non-glamorous personal narrative reporting, and information campaigns should not be a backdoor to rape or violate confidentiality. They must prioritize consent attitude shifts and the ethics of asking, especially for minors, clinically disabled people, and third-party beneficiaries. Platforms must cooperate with civil society organizations to co-deliver workshops that go beyond online trainings and encourage conversation reflection and community-based learning. These seminars can address real-world ethical dilemmas and allow funders, campaigners, and platform representatives to co-create standards that reflect the national context and lived experience. With their legitimacy and ethics, civil society movements should be at the intersection of platform governance and public ideals. Participatory pedagogy-based ethical education at all digital literacy levels can mitigate


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harm (or at least not enable it) by fostering caring, solidarity, and collective responsibility in the crowdfunding ecosystem.
**Algorithm Design for Equity:** Equity must be intentionally designed into platform algorithms to determine crowdfunding ethics. A big first step is to regularly conduct bias audits to measure how algorithmic logic can be exploited for discrimination or exclusion. Audits should identify whether initiatives conducted by underserved communities (such as persons of color, non-English speakers, or rural users) are persistently omitted from top search results, trending categories, etc. Conducting such audits requires transparency (summarizing findings and allowing third-party evaluations) and trust, which allows for corrective action. In addition to diagnostics, platforms must calculate "equity weights" in scores. Equity weighting using algorithmic unintentional tilt balances the transparency of underdog campaigns, which may not have Dewey's social capital/storytelling fluency/pre-existing donor networks. A rural or low-income neighborhood campaign may have a higher baseline score to compete with city sophisticated campaigns. Algorithmic affirmative action corrects ballots in a field of systemic inequality, not to prefer. Platforms must also provide homophily-fighting personalization filters. Homophily: the more similar we are, the more likely we are to share preferences, might increase exclusion by magnifying feedback loops that incentivize privileged users. By letting individuals filter campaigns by their social, geographic, or cultural bubbles, platforms may encourage more varied and equal donating. They might be opt-in features so funders can support initiatives in underrepresented locations. Methodical algorithm design for equity can integrate and re-calibrate Google, Facebook, and other online philanthropists' ethics toward justice and solidarity.
**Conclusion**: Crowdfunding's digital architecture's underlying disparities threaten its democratic financing potential. Crowdfunding may seem like a more egalitarian model of giving and empowerment, but it is based on algorithmic incompleteness, socio-economic power, and inadequate regulation. Such environments excuse damage as ordinary accepts are formed and accountability disappears, not just to fuel bad behavior. This report highlights ethical issues such campaigner commodification, donor bias, and


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platform opacity as indications of systemic failings that have suffocated. This thesis criticizes ethical individualism, which places moral responsibility on campaigners and contributors. A structural critique highlights platform duties and calls for ethical accountability among regulators, platform designers, and civil society players. Power dynamics are crucial to understanding crowdfunding's morality beyond intentions. True ethical reform requires broad frameworks that remove systemic impediments and reshape digital philanthropy's architecture, not simply redress models that fix individual faults. Stakeholder-centered ethical frameworks enable fair and inclusive crowdfunding platforms. Fair and non-exploitative systems can be created when equity, transparency, accountability, privacy, and solidarity are linked with platform design policy and user education. Participatory governance mechanisms like stakeholder advisory boards and localized vetting committees empower minority perspectives and let lived experiences shape institutional norms. Blockchain and algorithmic equity-weighting improve system integrity and fairness. Mutual accountability and solidarity should underpin ethical crowdfunding. Support should empower people to act and promote dignity and justice rather than treating pain as a commodity. Crowdfunding can revolutionize society by incorporating participatory ethics to redistribute power and resources.

## References


- Snyder, J. (2023). *Appealing to the Crowd.* Oxford University Press.
- Dressler, G., & Kelly, S. A. (2018). Ethical implications of medical crowdfunding: the case of Charlie Gard. *Journal of Medical Ethics.*
- Rhue, L., & Clark, J. (2016). Who gets started on Kickstarter? Racial disparities in crowdfunding success. *Social Science Research Network.*
- Moysidou, K., & Fotaki, M. (2024). The ethicality of welfare crowdfunding in the context of the neoliberal welfare state: A Rawlsian perspective. *Business Ethics Quarterly*.




ISBN: **978-93-5786-070-3**
March 2025

- Tondoyekti, K. et al. (2024). Business ethics in fintech and missappropriation of donation funds: A case study of Kitabisa.com. *Jurnal Ilmiah Ekonomi Global Masa Kini*.
- Shneor, R., & Torjesen, S. (2020). Ethical Considerations in Crowdfunding. In *Crowdfunding and Sustainable Development in Emerging Economies*.
- Cutolo, D., & Kenney, M. (2019). Platform-dependent entrepreneurs: Power asymmetries, risks, and strategies. *Social Science Research Network*.
- Gupta, P., et al. (2024). Regulatory framework on governing equity crowdfunding. *Journal of Financial Regulation and Compliance*.
- Tiwari, V., et al. (2023). Blockchain-based crowdfunding: A transparent, distributed, and secure approach. *EAI/Springer Innovations in Communication and Computing*.




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# Privacy in the AI Era: Conceptualizing Data Security in Health Insurance

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**Abstract:** The rapid integration of Artificial Intelligence (AI) into health insurance has transformed the way data is collected, processed, and utilized, offering significant benefits in terms of efficiency and personalization. However, this technological advancement also poses substantial challenges to data privacy and security. This conceptual research paper explores the intersection of AI and data protection in health insurance, examining the ethical, legal, and practical implications of using AI technologies. The paper proposes a comprehensive framework for safeguarding privacy while leveraging AI to enhance health insurance operations and consumer experiences.

**Keywords:** Artificial Intelligence, Data Privacy, Health Insurance, Data Security, Ethical Considerations, Regulatory Frameworks

**Introduction:** AI has transformed health insurance by improving risk assessment, coverage, and customer service (Murdoch, 2021). AI's growing use raises data privacy and security issues. Health insurance businesses acquire massive amounts of sensitive personal data, and using AI algorithms to analyse it may violate privacy and ethical standards (Jiang et al., 2017). This article conceptualizes AI's difficulties and prospects in health insurance, emphasizing



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the necessity for strong data protection. The integration of AI into health insurance is difficult. AI systems leverage vast databases, typically containing personal and sensitive data, making data exploitation and ethical boundaries a major worry (Hosny et al., 2018). Informed consent, openness, fairness, and accountability are essential to consumer trust and legal compliance (IBM, 2025).

The GDPR and HIPAA enable data protection, but AI presents distinct concerns that must be addressed. The EU AI Act and ISO/IEC 42001 provide organized ways to privacy and AI compliance (Healthcare Readers, 2025). This study reviews these difficulties and proposes a data protection framework for AI-driven health insurance.

**Objectives:** 1. Examine how AI affects health insurance data privacy. 2. List AI-driven data processing problems and ethical issues. 3. Review laws and regulations. 4. Provide a comprehensive AI-driven health insurance data protection architecture. 5. Make research and policy suggestions.

**Methodology:** This conceptual study draws from literature, regulatory frameworks, and industry reports. A conceptual framework for data safety in AI-driven health insurance is developed by reviewing relevant publications, analysing current trends, and synthesising findings. The article uses academic journals, industry papers, and regulatory materials to examine this field's challenges and prospects.

**Literature Review**: **Data Privacy and AI**: AI systems love large datasets with sensitive data. AI in health insurance presents worries regarding data misuse, ethical boundaries, and algorithm openness (Murdoch, 2021). If unsecured, AI systems can leak sensitive data (Jiang et al., 2017). PHI is sensitive and safeguarded by rigorous rules, making health insurance a high-risk area for data breaches and misuse. **An ethical perspective:** AI systems can reinforce training data biases, raising privacy concerns. Ethics include informed consent, transparency, fairness, and responsibility (Hosny et al., 2018). Research has shown that AI systems need ethical principles to avoid discrimination (IBM, 2025). AI systems must be fair and impartial to maintain consumer trust and comply with laws. **Legal Frameworks:** The GDPR and HIPAA guarantee data protection, but AI presents distinct concerns that must be addressed. The EU


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AI Act and ISO/IEC 42001 provide organized ways to privacy and AI compliance (Healthcare Readers, 2025). AI-driven data processing is too sophisticated for current regulations, according to legal specialists (Maxthon, 2025).

AI-Driven Health Insurance **Data Privacy and Security Data Gathering and Consent**: Data collecting must comply with privacy regulations and require informed consent. Data collection, storage, and utilization must be transparent in AI-driven systems (IBM, 2025). Research shows that openness and communication boost consumer trust (Healthcare Readers, 2025). Personal health information (PHI) is sensitive and safeguarded by tight restrictions in health insurance, making informed consent crucial. The informed consent process must be transparent and accessible to all. This involves explaining how their data will be used, stored, and secured. **Transparency:** AI systems should explain data processing and utilization clearly. This involves disclosing data kinds, uses, and protections. Compliance with GDPR and HIPAA is crucial for data collecting. This involves strong data governance standards and regular audits to assure compliance. **Data Storage and Security:** Preventing data breaches, illegal access, and cyberattacks is difficult. Data security can be improved by encryption and blockchain (Murdoch, 2021). Jiang et al. (2017) found that blockchain technology can securely and transparently manage health insurance data. Maintaining customer trust and legal compliance requires data integrity and secrecy. Data in transit and at rest must be protected by robust encryption. This includes employing strong encryption techniques and managing encryption keys securely. **Blockchain Technology:** Blockchain can securely store and handle health insurance data. This technology improves data stability and openness while reducing data leaks.
**Access Controls:** Strong access controls are essential to restrict sensitive data access to authorized workers. Multi-factor authentication and role-based access controls are used. Transparency and explanation of AI algorithms promotes accountability and confidence. Federated learning and differential privacy safeguard individual records (Hosny et al., 2018). Research shows that explainable AI boosts consumer trust and **regulatory compliance** (IBM,



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2025). AI systems must be transparent and explainable to retain customer trust and legal compliance.

**Explainable AI:** AI systems must be able to explain their decision-making processes. This covers model interpretability and feature significance analysis.

**Federated Learning:** AI models can be trained on decentralized data, eliminating sensitive data sharing. It can improve data privacy and security while preserving AI algorithm efficacy.

**Differential privacy** is essential for protecting individual records while allowing useful data analysis. This involves adding noise to data to safeguard privacy and maintain AI model accuracy. Fairness requires preventing AI algorithms from reinforcing biases. Biases can be identified and reduced through audits and effect assessments (Maxthon, 2025). Regular audits have been demonstrated to considerably reduce discriminatory outcomes (Healthcare Readers, 2025). AI systems must be fair and impartial to maintain consumer trust and comply with laws.

**Bias detection:** Regular audits and impact assessments are needed to discover and minimize AI system biases. This includes statistically detecting and correcting training data biases.

**Fairness Metrics:** AI algorithm performance must be assessed using fairness metrics. This includes preventing AI systems from discriminating based on race, gender, or age.

**Ethical rules:** AI algorithm development and application require ethical rules. This involves ethical AI development and consumer education best practices.

**Implications and Advice**

**Data Governance:** Create strong data governance policies to comply with privacy and ethical requirements. For bias detection and mitigation, audits and impact evaluations are conducted regularly (Murdoch, 2021). Data governance standards must be broad and adaptive to retain customer trust and regulatory compliance.

**Complete Policies:** Data governance policies must encompass data collection, storage, and processing. Implement data retention, destruction, and sharing rules.

**Regular Audits:** Regular audits are essential to guarantee data governance


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compliance and uncover concerns. Third-party auditors can review data governance processes independently.

**Impact Assessments:** Regularly assessing the risks and advantages of AI-driven data processing is crucial. This includes identifying customer privacy risks and devising mitigation techniques.

**Technical Measures:** Protect data and privacy with modern security technologies. This includes encryption, access controls, and safe data storage (Jiang et al., 2017). Technical measures must be resilient and adaptive to ensure consumer trust and regulatory compliance.

sophisticated **Encryption:** Data in transit and at rest must be protected with sophisticated encryption. This includes managing and using robust encryption techniques.

**Secure Access Controls:** Only authorized people should have access to sensitive data. Multi-factor authentication and role-based access controls are used.

Data must be protected from illegal access and cyberattacks via secure data storage. This includes secure cloud storage and regular data backups.

**Algorithmic Responsibility:** Make AI algorithms public and explainable for fairness and accountability. Federated learning and differential privacy safeguard individual records (Hosny et al., 2018). AI algorithms must be transparent and explainable to maintain customer trust and legal compliance.

**Explainable AI:** AI systems must be able to explain their decision-making processes. This covers model interpretability and feature significance analysis.

**Federated Learning:** AI models can be trained on decentralized data, eliminating sensitive data sharing. It can improve data privacy and security while preserving AI algorithm efficacy.

**Differential privacy** is essential for protecting individual records while allowing useful data analysis. This involves adding noise to data to safeguard privacy and maintain AI model accuracy. Moral Guidelines Create health insurance AI ethics that emphasize informed consent, transparency, justice, and accountability. This covers ethical AI development and customer education best practices (IBM, 2025). Maintaining customer trust and legal compliance requires broad and adaptable ethical norms. Comprehensive rules:



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All parts of AI development and application need ethical rules. This comprises data gathering, processing, and sharing guidelines.

**Best Practices:** Ethical AI development and consumer education require excellent practices. This covers ethical AI training for developers and consumers.

**Education for Consumers:** Consumers must be informed about AI's pros and cons. Provide clear and intelligible information on how AI is utilized in health insurance and how it affects consumer privacy.

## Further Research Potential

1. **Advanced Security Technologies:** Studying blockchain and homomorphic encryption to improve data security (Murdoch, 2021).
2. **Ethical AI Development:** Guidelines and best practises for ethical AI algorithm development (Hosny et al., 2018).
3. **Consumer Education:** Promoting trust and involvement through data privacy and AI education (Healthcare Readers, 2025).
4. **Regulatory Adaptation:** Adjusting health insurance regulations to handle AI challenges (Maxthon, 2025).

## Conclusion

Integrating AI into health insurance offers benefits but raises data privacy and security challenges. A comprehensive data protection framework enables companies to leverage AI while safeguarding individual rights. Future research should develop practical solutions to ensure AI health insurance is efficient and ethical.


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## References

Murdoch, B. (2021). Privacy and artificial intelligence: Challenges for protecting health information in a new era. *BMC Medical Ethics, 22*(1), 122. https://doi.org/10.1186/s12910-021-00687-3

Jiang, F., Jiang, Y., Zhi, H., Dong, Y., Li, H., Ma, S., et al. (2017). Artificial intelligence in healthcare: Past, present and future. *Stroke and Vascular Neurology, 2*(4), 230–243. https://doi.org/10.1136/svn-2017-000101

Hosny, A., Parmar, C., Quackenbush, J., Schwartz, L. H., & Aerts, H. J. W. L. (2018). Artificial intelligence in radiology. *Nature Reviews Cancer, 18*(8), 500–510.

IBM. (2025). *Exploring privacy issues in the age of AI*. IBM. https://www.ibm.com/think/insights/ai-privacy

Healthcare Readers. (2025). *Safeguarding patient data: Privacy, confidentiality & security*. Healthcare Readers. https://healthcarereaders.com/insights/patient-data-privacy-confidentiality-security

Maxthon. (2025, April 22). *Privacy concerns in the AI era and proposed solutions*. Maxthon Blog. http://blog.maxthon.com/2025/04/22/privacy-concerns-in-the-ai-era-and-proposed-solutions



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# AI and Automation: Shaping the Future of Integrated Marketing Communication (IMC)

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**Abstract:** Integrated Marketing Communication (IMC) has traditionally been focused on ensuring message consistency across multiple platforms to create a unified brand experience. With the rapid emergence of Artificial Intelligence (AI) and automation technologies, the IMC paradigm is undergoing a transformative evolution. This conceptual paper explores how AI-driven tools, predictive analytics, chatbots, and automated content generation are reshaping IMC strategies. By examining the changing nature of communication channels, audience engagement, and message personalisation, this paper proposes a revised framework for IMC that integrates AI and automation as core strategic elements.

**Keywords:** Integrated Marketing Communication, Artificial Intelligence, Automation, Personalisation, Predictive Analytics, Chatbots, Digital Marketing, Communication Strategy

**Introduction:** The landscape of marketing communication is being revolutionized by the capabilities of AI and automation. These technologies are reshaping the very foundations of how brands connect with their audiences, allowing for unprecedented levels of personalization, efficiency, and interactivity. AI-powered platforms are now capable of analyzing vast amounts of data in real-time, detecting consumer behavior patterns, predicting future



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actions, and delivering highly targeted messages tailored to individual preferences.

Traditional IMC models, while effective in ensuring brand consistency, were not built to handle the complexity and speed of modern digital communication environments. These legacy systems often depended on static campaign planning cycles, generic content distribution, and reactive audience measurement. In contrast, AI and automation provide marketers with proactive tools that enhance campaign responsiveness, facilitate dynamic content adaptation, and optimize engagement strategies on the fly.

Moreover, the integration of AI is enabling brands to unify fragmented communication channels through intelligent orchestration, ensuring that each consumer interaction—whether via social media, email, web, or mobile—is not only consistent in branding but also contextually relevant and timely. Automation enhances scalability and precision, freeing up creative and strategic resources while simultaneously improving ROI.

As organizations seek more efficient, data-driven, and personalized methods of engaging with consumers, the traditional IMC model must adapt. This paper seeks to explore how technological advancements are transforming IMC practices and propose a conceptual framework to guide practitioners in this evolving landscape (Kumar, Dixit, Javalgi, & Dass, 2021).

Objectives: 1. Examine the limitations of traditional IMC models in the context of modern digital environments. 2. Identify key technological drivers—especially AI and automation—impacting marketing communication. 3. Explore how AI transforms audience engagement, personalization, and content delivery. 4. Propose a conceptual framework for an AI-driven IMC strategy. 5. Discuss the ethical and strategic implications of integrating AI into marketing communication. 6. Provide insights for practitioners and researchers to adapt to emerging IMC practices.


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**Traditional IMC Framework:** IMC sought synergy between advertising, PR, direct marketing, and digital channels. Brand identity and consumer trust were reinforced by communications consistency, clarity, and continuity. The classic IMC paradigm was top-down, with centrally generated communications distributed through regulated channels based on specified communication schedules and campaign durations. This methodology stressed strategic alignment and message homogeneity but required manual planning and execution. Time-bound campaigns made it hard to adapt to market shifts and customer behavior. Due to technology, client data was fragmented or outdated, limiting scaled personalization. Human intuition and prior experiences dominated decision-making, with little empirical, real-time support. This made media spending, client segmentation, and targeting inefficient because campaign impact was measured reactively rather than predictively. The classic IMC paradigm lost relevance and impact as digital media proliferated and audience preferences changed (Schultz & Schultz, 2004).

Drivers of Change: **AI and Automation**

AI and automation change IMC in numerous ways: According to Chatterjee et al. (2020), predictive analytics can provide real-time customer information and forecast behavior. • Chatbots and Virtual Assistants: Automate and personalize consumer interactions instantly. • AI-powered content automation generates copy, videos, and designs at scale while keeping brand tone. • Customer Journey Mapping: Automated systems dynamically track and respond to consumer behavior across touchpoints. AI and automation are strategic shifts toward marketing agility beyond these instruments. AI lets marketers construct real-time, adaptive campaigns by processing and responding to data quickly. These campaigns are dynamic, optimizing content, targeting, and messaging based on performance, context, and consumer signals. Automation also frees marketing teams from repetitive activities to focus on strategy and creativity. AI lets marketers A/B test messages, expand content personalization, and find the best communication channels. This adaptability allows brands to stay



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relevant and anticipate client wants before they are stated. AI forecasting helps marketers invest in high-return channels and initiatives by improving budget allocation and resource management. AI and automation are now key to modern IMC strategy, altering the competitive environment and setting new expectations for customer-centric marketing. Changing Communication Channels: Voice search, smart gadgets, and digital channels necessitate adaptable messaging. AI allows dynamic message modification based on location, device, or behavior (Lemon & Verhoef, 2016). AI also lets marketers integrate future platforms like VR/AR to create immersive and engaging brand experiences that meet changing customer expectations. Personalization and Audience Engagement: AI helps brands go from bulk to hyper-personalized communication. Dynamic segmentation, sentiment analysis, and personalised content delivery are transforming brand-consumer interactions (Rust, 2020). Advanced machine learning algorithms can identify consumer behavior patterns in large datasets, enabling micro-targeting methods that boost engagement, retention, and conversion rates. Rethinking Message Consistency: Consistency is important but flexible now. Automated systems can adapt tone, structure, and content to diverse media and consumers while keeping brand identity. Brands must balance automation and authenticity to make machine-generated content emotionally engaging. It demands ethical oversight and ongoing message effectiveness evaluation. AI-Driven IMC Conceptual Framework A new IMC framework based on AI and automation is proposed in this research to enable real-time responsiveness, individualized communication, and strategic alignment. The model includes these crucial elements: • AI-Driven Insights Core: This centralized intelligence layer collects, processes, and analyzes customer data across channels to provide actionable insights. It uses machine learning for real-time segmentation, behavioral forecasting, and campaign optimization. • Dynamic Content Engine: AI-powered technologies create personalized, adaptable content for specific customer profiles. • Adaptive Messaging Layer: Maintains brand messaging consistency across channels, allowing contextual change based on platform, audience behavior, or customer journey. The Feedback Loop System continuously evaluates customer responses to campaigns, providing


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information to the AI core. This approach helps organizations migrate from static, campaign-based tactics to dynamic, always-on communication ecosystems. It promotes cross-functional collaboration and adapts to different organisation sizes and sectors.

**Ethical and Strategic Considerations**

While AI-driven IMC offers benefits, adopting it presents ethical and strategic challenges requiring proactive management (Kaplan & Haenlein, 2019):

• Data Privacy and Consent: Ensure compliance with laws like GDPR, CCPA.

• Algorithmic Bias: Implement bias mitigation.

• Transparency: Provide clear algorithmic explanations.

• Automation and Authenticity: Maintain human oversight.

• Strategic Integration: Foster cross-department collaboration.

Addressing these issues enables responsible AI use, builds consumer trust, and enhances marketing performance.

**Conclusion:** The integration of AI and automation into IMC is not merely an operational enhancement; it represents a foundational shift in how brands communicate. Organizations that embrace this evolution will be better positioned to deliver relevant, timely, and engaging brand experiences in an increasingly complex digital ecosystem.

A proactive approach to ethical governance and cross-disciplinary collaboration will be critical to success. Those who lead with transparency, accountability, and a commitment to consumer-centricity will set the standard for the next generation of marketing communication.



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## References

Chatterjee, S., Rana, N. P., Tamilmani, K., & Sharma, A. (2020). The era of artificial intelligence and machine learning in marketing: Literature review and future research agenda. *International Journal of Information Management, 55*, 102213. https://doi.org/10.1016/j.ijinfomgt.2020.102213

Kaplan, A., & Haenlein, M. (2019). Siri, Siri, in my hand: Who's the fairest in the land? On the interpretations, illustrations, and implications of artificial intelligence. *Business Horizons, 62*(1), 15-25. https://doi.org/10.1016/j.bushor.2018.08.004

Kumar, V., Dixit, A., Javalgi, R. G., & Dass, M. (2021). Digital transformation of business-to-business marketing: Framework and research agenda. *Journal of Business & Industrial Marketing, 36*(1), 139-152. https://doi.org/10.1108/JBIM-07-2020-0344

Lemon, K. N., & Verhoef, P. C. (2016). Understanding customer experience throughout the customer journey. *Journal of Marketing, 80*(6), 69-96. https://doi.org/10.1509/jm.15.0420

Rust, R. T. (2020). The future of marketing. *International Journal of Research in Marketing, 37*(1), 15-26. https://doi.org/10.1016/j.ijresmar.2019.08.002

Schultz, D. E., & Schultz, H. F. (2004). *IMC: The next generation: Five steps for delivering value and measuring returns using marketing communication.* McGraw Hill.



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**Outsourcing in Modern Business: Benefits and Challenges**

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**Abstract:** Outsourcing is a strategy for companies looking to improve efficiency, save costs, and stay competitive in today's international economic climate. This study examines outsourcing's pros and cons in modern business. The research examines operational cost reduction, staff morale, service quality, and technological integration using primary data from employee surveys and secondary data from scholarly sources. Outsourcing provides access to specialized expertise, scalability, and increased focus on essential activities, but it also raises quality control, data security, communication, and personnel issues. The changing impact of AI on outsourcing is highlighted. Strategic planning, cautious partner selection, and continual performance evaluation can help firms use outsourcing for long-term growth and innovation, according to the report.

**Keywords:** Outsourcing, cost control, modern business, quality control

**Introduction:** Organizations must stay competitive, nimble, and cost-effective in the fast-changing global commerce landscape. Outsourcing—transferring internal corporate tasks or services to third-party providers—is a popular way for firms to attain these aims. Modern businesses in IT, finance, customer care, manufacturing, and HR use this technique. technology, communication infrastructure, and globalization have made outsourcing increasingly


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sophisticated and prevalent. Companies outsource software development, analytics, and strategic planning as well as simple, repetitive jobs. Outsourcing reduces operating expenses, increases talent pool, focuses on key business areas, scales, and speeds time to market. Many organizations find outsourcing flexible enough to adjust to changing business needs without hiring full-time workers. Even with these benefits, difficulties remain. Outsourcing can cause data security risks, loss of control, quality inconsistencies, communication issues due to time zone or cultural differences, and vendor dependency. In addition, poor management can lower staff morale and internal opposition. This study examines the pros and cons of outsourcing in modern business. Real-world examples, industry trends, and expert insights are used to help decision-makers understand how outsourcing may be strategically used and the possible hazards.

**Study Significance**: Modern businesses use outsourcing to cut expenses, boost productivity, and focus on their strengths. This study is important because it examines outsourcing's pros and cons in today's fast-paced, globalized industry. As competition and financial strain rise, organizations must learn how to use outsourcing tactics to stay ahead. The study gives managers and executives valuable insights into outsourcing decision-making. Outsourcing can improve operational efficiency and lower costs, but it can also cause communication challenges, quality control issues, and data security risks. These insights can assist managers improve outsourcing strategy, partner selection, and monitoring to assure success. The report helps outsourced service providers understand what businesses want from them. Understanding customer challenges helps suppliers enhance delivery, better meet client demands, and establish trust. This fosters long-term partnerships and client happiness. This work advances company management and international trade research. It's useful for students and academics studying outsourcing's practical uses in many industries. The research connects theory and practice by


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examining current trends and real-life case studies, making it relevant for classroom instruction and academic discussion. The study also informs policymakers and economists. Employment, labor legislation, and local industry development are affected by outsourcing. This research can help create ethical and sustainable outsourcing policies that support domestic job markets. This study's detailed assessment of outsourcing as a strategic corporate practice is significant. It helps firms make educated decisions, identify hazards early, and maximize outsourcing benefits in a dynamic, technology-driven business environment.

**Problem Statement**: Today's competitive and international business climate puts pressure on firms to save expenses, boost efficiency, and stay nimble. Outsourcing non-core corporate tasks to external service providers is a popular way to attain these aims. Outsourcing has advantages including cost savings, specialized skills, and more emphasis on core business tasks, but it also has drawbacks. Outsourcing might fail due to control issues, communication issues, quality assurance issues, and data security hazards. Outsourcing is used throughout industries, yet many companies struggle to balance its pros and cons. Insufficient planning, poorly specified contracts, and company goals not met by vendor skills often result in unsatisfactory results. Rapid technological change and the shift toward knowledge-based services have complicated outsourcing. This study examines outsourcing's pros and cons in modern corporate operations. It seeks to understand the characteristics that make outsourcing successful and analyze business risks. By addressing this gap, the study hopes to clarify how outsourcing might be strategically managed to support organizational growth and sustainability.

**Objectives of the Study: 1.** To identify the key benefits of outsourcing various business functions. 2. To analyze the major challenges and risks associated with outsourcing. 3. To understand how outsourcing impacts employee morale and job security. 4. To explore how outsourcing affects innovation and core


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business strengths. 5. To examine how AI is changing outsourcing, as a threat or an opportunity.

**Research Methodology:** Research methodology is a systematic way to solve the research problem. It gives an idea about various steps adopted by the researcher in a systematic manner with an objective to determine various matters.

**Data Collection:** A structured questionnaire survey will be employed to gather responses from employees across various levels and departments, focusing on their emotional responses and decision-making patterns. And the study data is collected from reports, various journals, magazines, websites, etc.

**Tools for Data Analysis**

Quantitative analysis: **Descriptive Statistics** – Includes measures such as mean and standard deviation to summarize the data.

**Correlation and Regression Analysis** – Used to test and understand relationships between variables.

**Tables and Graphs** – Visual tools for organizing and presenting data clearly.

**Percentage, Average, T-Test, ANOVA, and Chi-Square Test** – Common statistical techniques used to compare groups and test hypotheses.

**Findings:** 1. Organizations can reduce operational and labor costs by outsourcing tasks to regions with lower wage structures. 2. Outsourcing non-essential services allows firms to focus on their core activities, resulting in enhanced performance and strategic growth. Many firms struggle with time zone differences, miscommunication, and lost control over outsourced tasks, which can impact efficiency. 4. Outsourcing may cause job security concerns among employees, reducing motivation and productivity. 5. AI and automation are increasingly used in outsourcing. Despite improving speed and accuracy, it raises worries about job replacement and long-term labor disruptions. 6. Outsourcing makes available specialized talent and technological experience



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that may not be available internally. 7. Organizations can adjust operations swiftly based on demand without hiring or firing staff. 8. Outsourcing can help firms focus on strategic risk management by transferring certain company risks, particularly in operational activities. Companies with specialized external teams benefit faster delivery times, leading to increased customer satisfaction and market speed. Cross-border outsourcing can cause cultural misunderstandings and legal and regulatory challenges for firms.

**Conclusion:** Outsourcing has become an integral part of modern business strategies, offering companies significant advantages such as cost reduction, access to expertise, and operational efficiency. It enables organizations to focus on core competencies while external partners handle non-core tasks. However, it also presents challenges including quality control, data security risks, and cultural differences. The study highlights that successful outsourcing requires careful planning, strong vendor relationships, and constant performance monitoring. While it boosts scalability and flexibility, overdependence on external providers can pose long-term risks. Ultimately, outsourcing is not a one-size-fits-all solution. Businesses must evaluate their goals and capacities before adopting it. With the right approach, it can be a powerful tool for growth and competitiveness in a globalized market.

**Reference**

Kakabadse, A., & Kakabadse, N. (2002). *Outsourcing: A Paradigm Shift*. Journal of Management Development, 21(1), 60–71.

Lacity, M. C., & Hirschheim, R. (1993). *The Information Systems Outsourcing Bandwagon*. Sloan Management Review, 35(1), 73–86.

Quinn, J. B., & Hilmer, F. G. (1994). *Strategic Outsourcing*. Sloan Management Review, 35(4), 43–55.

Deloitte. (2020). *2020 Global Outsourcing Survey*. Retrieved from www2.deloitte.com



ISBN: **978-93-5786-070-3**
March 2025

McIvor, R. (2005). *The Outsourcing Process: Strategies for Evaluation and Management*. Cambridge University Press.
Gartner Reports. (2021). *Future of Outsourcing and Emerging Trends*.
Willcocks, L. P., & Lacity, M. C. (2012). *Global Sourcing of Business and IT Services*. Palgrave Macmillan.
BPO Association of India. (2021). *Industry Reports and Analysis*.
Kremic, T., Tukel, O. I., & Rom, W. O. (2006). *Outsourcing Decision Support: A Survey of Benefits, Risks, and Decision Factors*. Supply Chain Management: An International Journal, 11(6), 467–482.
Business Today. (2023). *Impact of Outsourcing in the Indian IT Sector*.


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## Empowering women through financial inclusion: a study on co-operative bank customers in Wayanad

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**Introduction:** Financial inclusion empowers women by providing them with crucial financial services that can improve their socioeconomic condition. By providing affordable banking services in rural and semi-urban areas, cooperative banks help women access conventional financial institutions. In Wayanad area, where many people work in agriculture and small businesses, financial inclusion is even more important for women's economic involvement. The community-focused orientation of cooperative banks makes them ideal for microloans, savings accounts, and SHG funding. These programs help women invest in enterprises, stabilize households, and gain independence. Financial services are available, but women typically encounter difficulties to using them. Women face socio-cultural norms, financial knowledge, mobility, and bureaucratic barriers to financial engagement. Understanding these difficulties is crucial to designing financial inclusion and economic empowerment measures for women. This study examines how cooperative banks help Wayanad women become financially included. It examines how financial services affect women's socioeconomic status, their hurdles, and ways to empower them financially. The paper addresses these issues to provide cooperative banking policies and solutions to improve women's financial inclusion.

**Study significance:** In Wayanad district, cooperative banks promote women's financial inclusion and economic development, making this study important. It examines the socio-economic impact of financial services on women, access impediments, and solutions. The report addresses these concerns and offers


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policymakers, financial institutions, and development organizations insights into gender-inclusive financial systems. Women's financial participation promotes their well-being and boosts economic growth, poverty reduction, and sustainable development.

**Problem statement:** Despite financial inclusion measures, many women, especially in rural regions like Wayanad district, struggle to use official financial services. Cooperative banks, noted for their community focus, help close this gap. The extent to which these banks empower women financially, their socio-economic impact, and the hurdles to women's financial participation remain priorities. This study examines how cooperative banks in Wayanad promote financial inclusion for women. It evaluates how financial services affect women's economic and social well-being, identifies their obstacles, and explores ways to empower them financially. Understanding these factors is crucial to creating policies and initiatives that make the financial sector more inclusive for women.

**Study goals**: To evaluate the role of cooperative banks in fostering financial inclusion for women. Assess the impact of co-operative bank financial services on women's socio-economic empowerment. Te goal is to examine the obstacles women have while evaluating financial services from cooperative banks. Identify measures to enhance financial empowerment and inclusion for women through cooperative banks.

**Methodology for research**: In Wayanad district, Kerala, cooperative banks promote financial inclusion among women consumers. This descriptive study examines their role. These experiences, problems, and the socio-economic consequences of banking services are studied. Purposive sampling was used to choose 100 women consumers for relevance and depth. Structured questionnaires and personal interviews collect primary data, whereas bank records, published reports, academic literature, and government papers provide secondary data. Mean scores for descriptive analysis, Chi-square tests for categorical variables, and correlation analysis for key variables like financial awareness and banking benefits are used to analyze the data. This method assesses cooperative banks' financial assistance to Wayanad women in a comprehensive manner.



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**Literature review:** 1.Shivangi Bhatia and Gaurav Dawar (2024) study how financial inclusion and economic empowerment mediate women's social and political empowerment. 2. C.Vijay Vishnu Kumar (2024) investigates how banks assist women economically in India. Financial inclusion, especially bank financing, empowers women through entrepreneurship, employment, and skill development, according to the report. 3-Mahwish, S., Bashir, F., Abbassi, F. A., Khan, S. (2024) examine financial inclusion, governance, and women's empowerment in 30 emerging economies from 2004 to 2020. 4-Yoganandham, G., Varalakshmi, D., Kalaivani, M. (2024) investigate how financial inclusion empowers northern Indian women.

5-Ahmad Assaf (2024) analyzes how social entrepreneurship empowers Saudi women through financial inclusion. The study examines financial inclusion programs' collaboration, innovation, diversity, and scalability using Social Entrepreneurship Theory, Women's Empowerment Framework, and Financial Inclusion Models. 6-O. Saluja. B., Singh, P., Kumar, H. (2023) examine challenges and responses to women's financial participation from 2000 to 2020.

H. Moghadam VII. E., Karami, A. (2023) examine how FinTech (FIF) financial inclusion affects worldwide women's financial empowerment (WFE). 8. Arshad. (2023) uses 2004–2019 panel data to examine financial inclusion and women's empowerment in developing nations.

9. Mabrouk, F., Bousrih, J., Elhaj, M., Binsuwadan, J., and Alofaysan, H. (2023) examine how digital financial inclusion affected Saudi women's economic empowerment before and during the COVID-19 outbreak. 10-Abreham Adera and Lamessa T. Abdisa (2023) examine Ethiopian women's economic empowerment and financial inclusion. Women's empowerment and financial inclusion

**Financial inclusion gives women access to savings,** credit, insurance, and digital payment systems, empowering them. These services help women become economically independent, start or grow companies, and boost household income. Economic empowerment frequently increases family and community decision-making, boosting social status and self-confidence. Financial services help women manage risks, invest in health, education, and



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livelihoods, and generate long-term assets. Credit and savings help them weather economic downturns and avoid poverty. Despite these benefits, various barriers prevent women from fully participating in the financial ecosystem. These include low financial literacy, ignorance of services, cultural and societal norms that impede financial mobility and control, and financial institution gender bias. Government and non-government initiatives have addressed the challenges faced by rural and marginalized women, such as lack of formal identification, limited access to mobile phones and internet connectivity, and inadequate family or local governance support. The PMJDY, MUDRA Yojana, Stand-Up India Scheme, and NRLM-formed Self-Help Groups (SHGs) have promoted financial literacy, savings, and micro-credit access. These projects have given millions of women income and liberty. Underserved populations have also benefited from women-centric cooperative banks and digital financial services. Financial institutions increasingly understand the significance of providing gender-sensitive products and services for women's needs and limits. Financial inclusion increases women's negotiating power, asset ownership, and involvement in formal economic organizations, closing the gender gap in development. Since women invest their earnings in their families and communities, it improves health, education, and nutrition. Financial empowerment for women boosts economic growth and reduces poverty. Thus, financial inclusion programs must include gender views to create a more egalitarian, resilient, and inclusive society.

**Data analysis**

Relationship between education and access to cooperative bank services. A Chi-square test was performed to examine if education level affects cooperative bank services (p-value = 0.03258). Given the p-value (0.03258) < 0.05, the result is statistically significant at 5%. Accept the alternative hypothesis ($H_1$) and reject the null hypothesis ($H_0$). Education level significantly impacts access to cooperative bank services. Ranking banking service challenges based on feedback. The Mean score is essential for ranking and comparing factor importance. The mean score quantifies respondents' views on each factor. 4.00-5.00: High



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agreement – serious issue, 3.00-3.9: Moderate agreement, 2.00-2.99: Low agreement, 1.00-1.99: Strong disputes, likely not a concern. Results: Limited digital banking support (4.33), lack of financial service awareness (4.16), high documentation (3.98), loan difficulty (3.83), poor customer service (2.7), and gender discrimination (2.68). A statistical association exists between banking access and socio-economic results. Correlation analysis measures banking access and socioeconomic results. Bank account financial literacy and access to banking services assist start or expand a business have a moderately significant negative connection (0.64576). Strong negative connection (-0.74362) between family financial stability and household financial decisions. This dataset suggests that financial literacy and handling own finances (-0.27263) have a weak negative connection, simply a tiny adverse link. Moderate positive association between business startup and household finances (0.517791). Ability to influence household financial decisions grows with banking access.

**Findings:** • Cooperative banks promote financial inclusion among women, with 69% having access to savings (56%), but limited use of other services like loans and insurance, low financial literacy awareness (27%), and limited accessibility (48%) highlighting the need for outreach, education, and gender-sensitive approaches.

• Cooperative banking services positively impact women's socio-economic empowerment, with 47% stating improved financial situation and 51% citing enhanced financial decision-making. Key benefits include increased financial security (39%), savings (26%), and credit access (26%), with a significant portion remaining neutral, indicating moderate but meaningful empowerment.

• Women face significant barriers to accessing cooperative bank services, including lack of awareness (75%), high documentation requirements (75%), and limited digital support (85%). To address this, banks should improve financial literacy, simplify procedures, and improve digital access for women. To empower women financially, respondents recommend cooperative banks prioritize customer support, reduced documentation, dedicated schemes (62%), enhanced financial literacy (30%), and digital banking services (27%),



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highlighting the need for simplified processes, targeted education, and tech-enabled policies.

**Conclusion:** Financial inclusion empowers women, especially in rural areas where formal financial services are scarce. Without financial inclusion, women's socioeconomic progress is challenging. The study "Empowering women through financial inclusion: a study on cooperative bank customers in wayanad district" found that most Wayanad women have access to cooperative banking services and are aware of fundamental financial products. Limited awareness of the complete range of services and schemes reduces financial inclusion efforts. This limitation is caused by insufficient financial literacy, lack of understanding about women-specific financial schemes, procedural issues, and societal impediments. These obstacles restrict many women from using financial services for personal and economic growth. To expand financial inclusion and empower women in Wayanad district, cooperative banks and the government must run awareness campaigns, streamline procedures, and promote women-friendly financial projects.

**References**

**1** .Bhatia, S., & Dawar, G. (2024). The impact of financial inclusion on social and political empowerment: Mediating role of economic empowerment. Journal of the Knowledge Economy, 15(3), 13727-13744.

**2** .Kumar, C. V. V. (2024). Empowering Women through Financial Inclusion: Insights from the Banking Sector in India. Management, 11(S1), 33-40.

**3** .Mahwish, S., Bashir, F., Abbassi, F. A., & Khan, S. A. (2024). Empowering Women through Financial Inclusion and Governance: Evidence from 30 Developing Economies. iRASD Journal of Economics, 6(1), 98-108.

**4**.Yoganandham, G., Varalakshmi, M. D., & Kalaivani, M. M. (2024). Unlocking Potential: Enhancing Women's Empowerment through Financial Inclusion in Northwestern India. Tuijin Jishu/Journal of Propulsion Technology, 45(1), 2024.

**5**.Assaf, A. (2024). Impact of Social Entrepreneurship on Women Empowerment through Financial Inclusion an Analytical Study from the Kingdom of Saudi Arabi. Pakistan Journal of Life and Social Sciences (PJLSS), 22(1).



ISBN: **978-93-5786-070-3**
March 2025

**6**.Saluja, O. B., Singh, P., & Kumar, H. (2023). Barriers and interventions on the way to empower women through financial inclusion: a 2 decades systematic review (2000–2020). Humanities and Social Sciences Communications, 10(1), 1-14.
**7**.Esmaeilpour Moghadam, H., & Karami, A. (2023). Financial inclusion through FinTech and women's financial empowerment. International Journal of Social Economics, 50(8), 1038-1059.
**8**.Arshad, A. (2023). Nexus between financial inclusion and women empowerment: evidence from developing countries. Gender in Management: An International Journal, 38(4), 561-580.
**9**.Mabrouk, F., Bousrih, J., Elhaj, M., Binsuwadan, J., & Alofaysan, H. (2023). Empowering women through digital financial inclusion: Comparative study before and after COVID-19. Sustainability, 15(12), 9154.
**10**.Adera, A., & Abdisa, L. T. (2023). Financial inclusion and women’s economic empowerment: Evidence from Ethiopia. Cogent Economics & Finance, 11(2), 2244864.

**Websites:**

https://scholar.google.com
http://www.google.com
http://shodhganga.inflibnet.ac.in
https://www.researchgate.net/publication/374337437
https://www.orfonline.org/research/financial-inclusion-of-women-current-evidence-from-india



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# Tourist satisfaction of agro tourism destination with reference to Trivandrum district

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**Abstract:** Agrotourism promoted agriculture as a tourist attraction. We own agricultural land, so farmers can complement their productivity with income. In the digital age, some farmers use traditional practices to give agrotourists an exceptional experience. Agrotourism boosts the economy and creates jobs. Agrotourism protects biodiversity and the environment. Kerala can benefit from agrotourism as a consumer state. Eco-friendly agricultural products can be sold through agrotourism. Agrotourism can solve Kerala's unemployment problem, which is literate. Our only challenge was turning our agricultural land into agrotourism attractions. This supports economic growth and national income. Farming and tourism are combined. Tourists can enjoy numerous activities. They can harvest fruits, feed animals, learn farming practices, and inspect new crops. Agrotourism generates revenue through product promotion. It helps us relax and use our free time productively. It sustains rural development. Kerala has diverse geography, hence we can use agrotourism as a new industry. Responsible tourism is replacing conventional tourism. Visitors experience village life. As cities pollute, agrotourism thrives. Rural road, water, and energy investments improve destination accessibility. Visitors' experience will improve. This location can benefit from government funding for economic growth.

**Key words:** Argo tourism, sustainable development, responsible tourism, eco-friendly, bio diversity


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**Introduction:** Agrotourism enhances the tourism industry and promotes direct marketing of products and eliminates middlemen. It provides educational opportunities to the public. The public get an awareness about how to conserve and preserve biodiversity and agricultural land. Agriculturists can enter into marketing sector and market their products in their brand names. If they have coconut plantation, they can market coconuts, coconut oil products, coconut powder etc. in their own brand names. We can also establish a good relationship with foreign tourists who are visiting us. We can also market our culture and cultural values. We can market our food products as we provide them with accommodations also. As agricultural lands are in rural areas, we can bring about balanced regional development

**Objectives of the study**

- To identify the factors inducing agro tourist for visiting agro tourist destinations
- To identify the problems faced by agro tourist
- To identify whether the customers are satisfied with the facilities of agro tourist destination

**Significance of the study:** In the present scenario the study about tourist satisfaction towards agrotourism in Trivandrum district is important as our state is gifted with distinct features and agricultural crops. We can commercialize agriculture through agrotourism. It provides earnings to the family. Though the male member of the family is employed the female member can concentrate on agrotourism and turn into women entrepreneurship. The visitors also get an idea about culture heritage and traditional practices. They can also promote eco-friendly products which can be easily marketed. They can also promote organic farming. It also bridges the gap between urban dwellers and rural people bringing up balanced regional development

**Statement of problem:** Though agrotourism has lot of opportunities, it suffers from lot of challenges. Some destinations of agrotourism suffers from



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inadequate infrastructural facilities such as poor condition of roads, net facility etc. Visitors may not be satisfied with service provided as the agriculturist are not entrepreneurs. They may market products without branding it. The study focuses on the problems and propose strategies to overcome these problems.

**Research methodology:** Convenient sampling method was used for data collection. Primary data was collected from respondents through questionnaire and secondary data collected from journals, magazines, books, websites, newspapers etc. Chi square and percentage method was used for data analysis. The data was collected from 100 respondents of Thiruvananthapuram district.

**Literature review:** Kiran et al. (2014) describe agricultural tourism as a holiday concept involving visits to operational farms or agricultural setups for leisure, education, or active engagement in farm activities. They highlight India's vast diversity as a significant factor contributing to the potential development of diverse agritourism destinations. In 2002-03, the Ministry of Tourism introduced "Rural Tourism" to showcase rural life, art, culture, and heritage. This initiative aimed to foster economic and social benefits for rural communities while facilitating meaningful interactions between tourists and rural inhabitants. Krishna and Sahoo (2020) examine agritourism within India and internationally, noting its emergence in Europe during the 1980s and wider adoption in North American and Latin American countries. They stress the need for policy and research support to ensure the long-term economic viability of agritourism for small and medium farmers in India.

Agritourism offers significant economic benefits, providing supplementary income for farmers and rural communities. It helps buffer the uncertainties of traditional agriculture and enhances rural economies. Yang (2012) suggests that agritourism can contribute to the economic regeneration of rural areas with limited development options. Barbieri (2003) highlights its potential to generate revenue, enhance local economies, create employment opportunities, and stimulate local businesses. Broccardo (2017) discusses various


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opportunities presented by agritourism, including income enhancement, economic diversification, and seasonal fluctuation mitigation

Zoto et al. (2013) note that agritourism contributes to rural development by improving infrastructure and services in rural areas. Investments in agritourism can lead to better road connectivity, accommodations, and local employment opportunities.

Ramappa et al. (2022) emphasize agritourism's range of experiences, from hands-on farm activities to cultural immersions. It offers tourists opportunities to participate in local festivals, enjoy traditional cuisine, and appreciate rural life.

Agritourism aligns with sustainable tourism principles, promoting conservation and organic practices. It encourages sustainable farming and contributes to biodiversity conservation (Mastronardi et al., 2015; Alves Pinto et al., 2017). Market Diversification Agritourism provides rural communities with direct access to urban markets, reducing dependence on intermediaries and fostering market diversification (Ammirato et al., 2020).

**Data analysis and interpretations**

Table No.1: Gender of respondents

| **Sl. No.** | **Gender** | **No. of respondents** | **Percentage** |
|---|---|---|---|
| 1 | Male | 40 | 40 |
| 2 | Female | 60 | 60 |
| | Total | 100 | 100 |

Source: Primary data

From the table it is inferred that 40% are male tourist and 60% are female tourists who visited agro tourist places

Table No.2: Educational qualification of respondents



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| Sl. No. | Educational qualification | No. of respondents | Percentage |
|---|---|---|---|
| 1 | Primary education | 15 | 15 |
| 2 | Secondary education | 20 | 20 |
| 3 | Graduation | 40 | 40 |
| 4 | Post-graduation and above | 25 | 25 |
| | Total | 100 | 100 |

Source: Primary data

The above table shows that 15% possess primary education 20% of tourists has secondary education 40% have completed graduation and 25% of the respondents have post-graduation and above qualification

Table No.3: Factors inducing agro tourist to visit agro tourist places

| Sl. No. | Factors | No. of respondents | Percentage |
|---|---|---|---|
| 1 | Cost and affordability | 20 | 20 |
| 2 | Recreation | 23 | 23 |
| 3 | Buying of farm products | 30 | 30 |
| 4 | Peace of mind | 27 | 27 |
| | Total | 100 | 100 |

Source: primary data

The table indicates that 20% of the tourists visit agro tourist spot as they are cost effective and tourists can afford them. 23% of respondents visit this place for recreation 30% of tourist visit this place for buying agro products and 27 % of respondents visit this place for getting peace of mind

Table No. 4: Problems faced by agro tourist

| Sl. No. | Problems | No. of respondents | Percentage |
|---|---|---|---|
| 1 | Accessibility | 22 | 22 |


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| | | | |
|---|---|---|---|
| 2 | Change in climate conditions | 28 | 28 |
| 3 | Cost | 18 | 18 |
| 4 | Information gap | 32 | 32 |
| | Total | 100 | 100 |

Source: Primary data

From the above table it is inferred that 22% of the respondents face the problem of accessibility to this tourist spots 28% of respondents face the problem in the condition of climate change 18% of the respondents is of the opinion that cost is a problem faced by agro tourists and 32% of the respondents is of the opinion that lack of information is a problem faced by agro tourists in visiting agro tourist places

Table No.5: Satisfaction of the facilities of agro tourist destinations

| Sl No | satisfaction | No. respondents | Percentage |
|---|---|---|---|
| 1 | Yes | 75 | 75 |
| 2 | No | 25 | 25 |
| | Total | 100 | 100 |

Source: Primary data

From the above table it is inferred that 75% of the respondents are satisfied with the facilities of agritourists destinations Out of 100 respondents 25% are dissatisfied with the facilities of agritourists places

**Chi square test:** H0: There is no significant association between tourist satisfaction and service facilities offered by tourist destinations

H1: There is a significant association between tourist satisfaction and service facilities offered by tourist destinations

Critical value at 5% significant level for df=4 is 9.49. since calculated value is 49.36> 9.49. We reject the null hypothesis

**Interpretation**



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There is a significant relationship between tourist satisfaction and services provided.

**Suggestions:** 1. Respondents visit agritourist locations to purchase agro goods for consumption and processing. Therefore, they can open urban marketing outlets to easily market their items.

2. The government can organize agro fests to promote their products. Agritourism sites can be promoted with considerable advertising and PR.
3. Agrotourism facilities and services contribute to client satisfaction and can be improved.

**Conclusion:** Today, agrotourism is growing. Most people visit agrotourism for calm. To stay competitive, agrotourism sites offer several high-quality amenities. Today, everyone should prioritize client satisfaction. All these sites present several challenges for agrotourists. Government and farmers can overcome this obstacle to go forward and perform marvels in this area.

**Reference**


- Yang, Z., Cai, J., & Sliuzas, R. (2009). Agro-tourism enterprises as a form of multifunctional urban agriculture for peri-urban development in China. *Habitat International*, *34*(4), 374–385.
- Dangi, V. (2018). The scenario of agro - tourism in India: An overview. *Journal of Emerging Technologies and Innovative Research*, *5*(5), 796–801.
- Vasavada, M. (2021). An empirical study to measure perceived behaviour of young adults towards agro tourism in India. *International journal of management*, *11*(12). https://doi.org/10.34218/ijm.11.12.2020.192
- Da Silva, C. A., Baker, D., Shepherd, A. W., Jenane, C., & Miranda-Da-Cruz, S. (2009). Agro-industries for development. In *CABI eBooks*.




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# The impact of behavioural bias and stock market anomalies on investor sentiments

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**Introduction:** Stock market investors are thought to make sensible decisions based on data and analysis. Numerous research demonstrate the market is not rational. Stock price anomalies can result from cognitive biases and emotional responses among investors. These inconsistencies cast doubt on the efficient market hypothesis and financial markets. In this study, introspection is used to understand behavioral biases and stock market abnormalities. Overconfidence, loss aversion, and herd behavior affect investor sentiment, causing asset misplacement and departures from basic values. This research seeks to understand stock market inefficiencies and investor behaviour by investigating these psychological aspects. The main focus is how investor biases affect market patterns, volatility, and bubbles or crashes. Understanding these processes improves investing strategies and market predictability and stability. This introspective study will examine the complicated relationship between psychological characteristics and market behaviour to help investors overcome prejudices and make better financial decisions. Below are several anomalies/biases that inform our questionnaire. Overconfidence Bias: Investors may overtrade and misplace assets due to overconfidence in their knowledge or prediction ability. Overconfidence can cause short-term market volatility. When investors fear losses more than profits, they may hold failing equities longer or sell winning stocks too early, distorting market values. Herd Behaviour: Investors may follow trends, leading to asset bubbles. Collective behavior can cause market abnormalities. Status Quo Bias: Investors may resist favorable portfolio changes due to a preference for the current state of affairs, despite superior options available. By relying on the first piece of information (the "anchor"), investors may make biased decisions, such as focusing solely on the original stock price without considering current market conditions. The availability bias might cause investors to prioritize recent news or occurrences above long-term trends. Social Desirability Bias: Investors may conform to popular



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investment trends despite not aligning with their personal financial goals due to the propensity to show oneself in a positive way. Anomalies in the calendar include the January Effect, where small-cap equities perform better in January than other months. • Weekend Effect: Monday stock returns are lower than other weekdays, according to several studies. • Anomalies in size and value • Small-Firm Effect: Smaller companies (small-cap stocks) sometimes outperform large-cap equities, despite the idea that larger enterprises are less risky and thus offer lower returns. • Value vs. Growth: Value equities (those with lower price-to-earnings ratios) typically outperform growth companies over time, contradicting the premise that stronger growth potential automatically leads to higher returns. Momentum Anomaly: Stocks with strong historical performance outperform short-term, whereas underperforming stocks underperform. This contradicts the EMH, which says past performance shouldn't predict future returns. Low-Volatility Anomaly: Investments in low-volatility stocks generally provide higher risk-adjusted returns than high-volatility companies. This goes against the idea that volatility should increase returns. Studies have revealed that low-volatility assets outperform high-volatility ones, defying risk-return beliefs. After earnings reports are released, stock prices may drift in the direction of the earnings surprise for some time, suggesting that markets may not fully assimilate new information. Stock Splits and Reverse Splits: Companies announcing stock splits generally receive favorable stock price reactions, whereas those announcing reverse splits may have negative reactions, despite neutral intent.

Investor Sentiment and Behavioural Biases: Psychological biases like overconfidence, loss aversion, and herd behavior can cause market oddities. Biases can cause asset mispricing and market inefficiencies.

**Problem statement:** Psychological variables that cause irrational decision-making in investors contribute to stock market oddities such overpricing, underpricing, and volatility. Behavioral biases including overconfidence, loss aversion, and herd mentality can cause stock prices to deviate from underlying value and disturb market efficiency. However, introspection's impact in reducing biases and altering investor mood has not been extensively studied. Behavioral biases have been extensively examined in isolation, but their combined effect on investor sentiment and market anomalies, particularly through introspection, has not. Lack of understanding exists about how self-awareness and reflection on cognitive and emotional biases might influence investors' decisions, increasing or alleviating market inefficiencies. This study addresses this gap by examining how introspective behavioural biases and stock market anomalies affect investor mood. The research will examine how


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introspection can help investors make better rational judgments and reduce the impact of psychological biases on market behaviour by studying the dynamic interaction between psychological biases and investor emotions. Market efficiency, investor sentiment, and investment strategies depend on understanding these dynamics.

**Study Significance** This work is valuable for academic and practical research in behavioural finance, investor psychology, and market analysis. The study helps explain market behaviour by analysing behavioural biases and their effects on investor sentiment and stock market anomalies. This study is significant in these ways: 1. Better Understanding of Investor Behavior: The study examines how introspective biases like overconfidence, loss aversion, and herd behavior impact investor sentiment and market anomalies. This research goes beyond rational models to understand investor behavior by concentrating on the introspective process—how investors reflect on and become aware of their cognitive biases. It shows how these biases affect decision-making and investor sentiment during market swings. 2. Better Investor Decision-Making: The study highlights the importance of introspection in reducing behavioral biases, providing insights for investors to better manage emotions and biases. Understanding these psychological variables may help investors make better selections. In volatile markets, where emotions drive decision-making and market inefficiencies, this is crucial. Understanding biases can help investors avoid panic selling and speculative bubbles, stabilizing portfolios and improving financial outcomes. This study can inform policymakers, regulators, and financial institutions on how investor sentiment, influenced by introspective biases, contributes to stock market anomalies like bubbles, crashes, and corrections. Investor emotion and behavior patterns can help forecast market movements and reduce herd behavior or excessive exuberance, which distorts markets. 4. Progressing Behavioural Finance Research: This study bridges the gap in literature by combining introspective biases with stock market oddities. The cumulative influence of individual biases on investor mood and market dynamics is examined. This integrative approach may stimulate further research on psychological variables and financial markets, deepening investor psychology. 5. Practical Applications for Financial Advisors and Institutions: This research can help advisors and investment firms create better portfolio management techniques. Advisors can help investors make more logical decisions by understanding how introspective biases affect sentiment. Institutions can also use study findings to create tools to help investors identify and manage biases, enhancing market efficiency.


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**Study Objectives**: Identify the impact of behavioral bias on investment decisions. - Examine the relationship between behavioral bias and investor risk tolerance. Examine the correlation between stock market anomalies and investor risk tolerance. The goal is to examine how media affects investor sentiment through behavioral bias and stock market oddities.

**Research Methodology** Methods of Data Collection: Primary Data: A systematic questionnaire will ask investors about their emotions, decision-making, and market trends. Secondary Data: Historical stock market data, sentiment indices (VIX, Fear & Greed Index), media reports, financial news stories, and social media posts, behavioral finance and market anomaly academic papers. Sampling Method: Convenience or stratified random sampling Sample: 100 responders

**Data Analysis Tools:**

**Quantitative Analysis**: Statistics such as mean and standard deviation. • To test relationships, use correlation and regression analysis. Tables, graphs Percentage, average, and independent sample t tests. One-way ANOVA, Chi-square, etc. Variables Indep:endent Variable: Overconfidence, herding, loss aversion, anchoring, representativeness, disposition effect (likert scale). The January effect, momentum effect, value effect, day-of-the-week impact, post-earnings announcement drift, and long-term reversal are stock market anomalies. Age, gender, occupation, investment experience, investor type, trading frequency The dependent variable: Investor sentiment: Likert scales measure optimism/pessimism, anxiety, risk perception, and market confidence.

**Findings:** Investors' decisions are generally affected by emotions and habits, rather than reasoning. Common biases include overconfidence, herding, anchoring, and fear of loss. Biases can cause poor financial decisions, such as overtrading or overlooking crucial facts. any investors with strong behavioural biases view risk differently. Overconfident individuals may take unnecessary risks. Those who dread losses may take no risks. Emotions can impact investor risk tolerance. Investors may exploit oddities in the stock market. Although these patterns may seem hazardous, only investors who can tolerate risk often act on them. Investors that shun risk often do not invest in such scenarios. Media substantially impacts investor sentiment and behavior. News can cause investors to follow the crowd or panic due to fear or excitement.

**Conclusion:** This study reveals that stock market oddities and behavioural biases strongly influence investor sentiment. Investors typically base their decisions on emotions and psychological tendencies rather than logic and evidence. Overconfidence, herding, and loss anxiety influence investors' risk perception and



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investment decisions. Surprising price movements or trends in the stock market effect investor behaviour, especially risk-takers. Media also affects market biases and behaviors by distributing emotional information. Understanding these effects helps you make smarter investing decisions and prevent market blunders.

## References:

Kumar, A., Motahari, M., & Taffler, R. J. (2023). Skewness sentiment and market anomalies. Management Science.

Kalai Lakshmi, T. R., Mohanapriya, G., Subitha, T. S., Fernando, S., & Kumar, T. L. (2024). The impact of cognitive biases and emotional factors on investor behavior and stock market anomalies. European Economic Letters, 14(3), 2593–2602.

Zhang, X., Bissoondoyal-Bheenick, E., & Zhong, A. (2023). Investor sentiment and stock market anomalies in Australia. International Review of Economics & Finance, 86, 284–303.

Royit, A., Jose, B., & Varghese, J. (2023). Beware of extreme investor sentiments! Indian evidence on the performance of neuro-specific options volatility trading strategies on the facets of COVID-19. Vision: The Journal of Business Perspective.

Goodell, J. W., Kumar, S., Rao, P., & Verma, S. (2023). Emotions and stock market anomalies: A systematic review. Journal of Behavioral and Experimental Finance, 37, 100722.

Andleeb, R., & Hassan, A. (2023). Impact of investor sentiment on contemporaneous and future equity returns in emerging markets.

Arya, D. S., & Singh, D. S. (2025). The role of behavioral finance in understanding market anomalies. South Eastern European Journal of Public Health, 26(S1), 1799–1812.

Peng, Y. (2024). Internet sentiment exacerbates intraday overtrading: Evidence from the A-share market.

Fallahgoul, H. (2020). Inside the mind of investors during the COVID-19 pandemic: Evidence from the StockTwits data.



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# Self-determination theory and its impact on employee's performance in select HDFC and Axis Banks

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**Abstract:** This conceptual paper explores the application of Self-Determination Theory (SDT) and its influence on employee performance within the banking sector, focusing specifically on HDFC and Axis Banks. Rooted in the psychological framework proposed by Deci and Ryan, SDT emphasises the roles of autonomy, competence, and relatedness in fostering intrinsic motivation. The paper synthesises secondary data and scholarly literature to examine how motivational climates shaped by organisational policies affect employee engagement, satisfaction, and productivity. It also highlights current gaps in research and proposes future directions for empirical validation within Indian private banking institutions. The findings suggest that cultivating environments that support psychological needs enhances employee performance and organisational effectiveness.

**Keywords:** Self-Determination Theory, Employee Performance, Intrinsic Motivation, Private Sector Banks, Organisational Psychology

**Introduction:** In the dynamic Indian banking business, employee performance drives organizational success and competitive advantage. Edward L. Deci and Richard M. Ryan's Self-Determination Theory (SDT) provides a deep understanding of human motivation and its effects on performance. According to SDT, fulfilling basic psychological needs, including autonomy, competence, and relatedness, boosts intrinsic motivation and productivity. In contrast to



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extrinsic motivators like money and promotions, intrinsic motivation fosters engagement, creativity, and job happiness. HDFC Bank and Axis Bank have prioritised staff development and motivation in their HR administration. Both banks are known for innovation, digitalisation, and customer-centric services, therefore, their success depends on the frontline and managerial staff motivation and performance. The extent to which these institutions integrate SDT into their organisational culture is unknown. This paper examines how SDT's core components affect employee performance in HDFC and Axis Banks and proposes a framework for these banks to systematically apply SDT principles to improve motivation, satisfaction, and performance. The research uses secondary data from scholarly literature, industry reports, and organisational behaviour and HRM studies. SDT is applied to the Indian banking sector in this paper to connect theory and practice.

**Literature Review:** Motivation and employee performance have been studied in psychology, organisational behaviour, and human resource management. Self-Determination Theory (SDT), developed by Deci and Ryan (1985), distinguishes between intrinsic and extrinsic motivation and holds that optimal performance is achieved when people are intrinsically motivated by autonomy, competence, and relatedness. 2.1 Self-Determination Theory Foundations Deci and Ryan (2000) claim that fundamental psychological needs-supporting environments boost self-motivation and mental health. Many studies show that autonomous motivation improves job happiness, performance, and mental health. Employee engagement and commitment increase when they feel their work is meaningful and self-directed. SDT in Organisations Gagné and Deci (2005) applied SDT to workplaces and stressed that supportive leadership and need-satisfying job design help employees internalize work values. Baard, Deci, and Ryan (2004) discovered that autonomy and competence improve job performance and organizational commitment. Olafsen et al. (2015) found that SDT therapies boost motivation and prevent burnout. 2.3 Employee Performance and SDT A 2014 meta-analysis by Cerasoli et al. found that intrinsic motivation improves quality-based task performance more than extrinsic incentives. Banking relies on precision, customer satisfaction, and compliance over speed and volume, thus this result is crucial. In high-stress


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service workplaces like banks, fulfilling employees' psychological demands reduces weariness and turnover. 2.4 Indian Banking SDT Indian SDT research is growing. Sharma & Jain (2020) and Rathi & Lee (2017) explored how intrinsic motivation affects Indian service sector performance, particularly banking. Most research are general and organizationally unspecific. HDFC and Axis are among the leading Indian private banks with less SDT research. This paper addresses this gap. 2.5 HR Practice Role Supporting autonomy (decentralized decision-making), competence (training), and relatedness (team-building) in HR is vital. Deci et al. (2017) found that democratic decision-making, mentorship, and personal growth boost intrinsic motivation and productivity.

**Research Gap** Despite the growing importance of employee motivation in the banking sector, especially in competitive and customer-driven environments like HDFC Bank and Axis Bank, Self-Determination Theory (SDT) as a framework for understanding and improving employee performance is underexplored in India. Many research have explored general motivational theories and their effects on production, but few have used SDT to study intrinsic motivation in private sector banks. Research on HRM methods is frequently quantitative or generalized, rather than examining the psychological dynamics behind motivation and performance. SDT is supported in Western and educational environments, however its application to Indian bank operational dynamics and HR strategies is restricted. HDFC and Axis, two private sector banks with different corporate cultures and HR systems, are not compared. This comparison element helps find best practices and tailor interventions to organizational contexts. This paper aims to address gaps in employee motivation and performance by applying SDT to HDFC and Axis Banks, examining HR practices aligned with SDT principles, and proposing a model to improve employee engagement through need-supportive work environments. Self-Determination Theory (SDT) and employee performance in two large Indian private sector banks—HDFC Bank and Axis Bank—are theoretically examined in this study.

**Study objectives**: 1. The goal is to analyze the major components of Self-Determination Theory (autonomy, competence, and relatedness) and their



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impact on workplace motivation. 2. Evaluate the impact of SDT-aligned motivational strategies on employee performance in private banking. 3. Analyze HR and motivating tactics in HDFC and Axis Banks using SDT. 4. Develop a theoretical model incorporating SDT ideas into banking employee engagement frameworks.Identify opportunities for empirical investigation in Indian private banks using SDT as a basic theory.

**Methodology:** This paper uses secondary data analysis to analyze academic literature, journal articles, theoretical papers, HR case studies, and industry reports on motivation, organizational behavior, and the Indian banking sector. Since the study is non-empirical, it synthesizes previous research to produce theoretical insights and models without collecting participant data.

**Research Design:** Type: Conceptual and qualitative. • Approach: Descriptive and analytical, using Self-Determination Theory. • Data Source: Peer-reviewed journals, HR publications, SDT research, and organizational behavior literature. Analysis Unit: HDFC Bank and Axis Bank, two prominent Indian private sector banks, were chosen for their size, HR reputation, and contrasting yet competitive corporate cultures. **Methodology justification:** Conceptual research creates theoretical frameworks in domains where empirical study is scarce. This method is useful for applying psychological theories like SDT to real-world organizations without theory-based research.

**Conceptual diagram explanation**

**Workplace Self-Determination Theory Core Principles**

Self-Determination Theory (SDT) states that intrinsic motivation is most effective and lasting. Deci & Ryan (1985; 2000) say intrinsic motivation requires satisfying three psychological needs: The perception of volition and freedom in decision-making is called autonomy.

• Competence is mastery and efficiency in job.

• Relatedness: Feeling connected and associated with coworkers. Employee performance, creativity, job happiness, and organizational commitment are higher when HDFC and Axis Banks embrace work cultures, leadership styles, and HR procedures that meet these needs.



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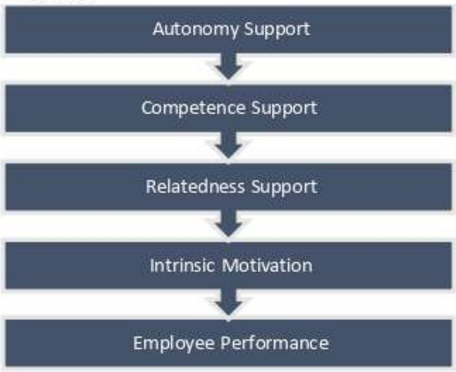
Application in HDFC and Axis Banks

| SDT Component | Manifestation in Banks | Impact on Employees |
|---|---|---|
| Autonomy | Flexibility in job roles, employee empowerment, participative decision-making | Increased ownership and innovation |
| Competence | Training programs, performance feedback, upskilling opportunities | Enhanced confidence and productivity |
| Relatedness | Team-building, supportive supervisors, inclusive culture | Stronger interpersonal bonds and morale |

Both banks emphasize employee growth and performance through structured training and digitised HR practices, yet **HDFC leans more toward performance metrics**, while **Axis emphasizes holistic engagement**. Integrating SDT can align these practices toward sustainable motivation.

Conceptual Model: Here is the theoretical model integrating SDT into the banking context: Conceptual Framework: SDT and Employee Performance in Banks




*Moderated by Organizational HR Practices, Culture, and Leadership Style*

This model suggests that when the **psychological needs** of employees are met through thoughtful HR and leadership interventions, it enhances **intrinsic**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**motivation**, which directly contributes to **better job performance**, particularly in high-pressure and target-driven banking environments.

**Conclusion:** This conceptual study studied how Self-Determination Theory (SDT) might improve employee performance in HDFC Bank and Axis Bank, two prominent Indian private sector banks. Based on the psychological demands of autonomy, competence, and relatedness, SDT provides a solid theoretical foundation for understanding and improving intrinsic motivation, which is widely acknowledged as a crucial driver of sustainable success in modern businesses. Both banks have progressive HR procedures and performance systems, but integrating SDT principles more explicitly could boost employee engagement, job satisfaction, and retention. In high-stress, performance-driven industries like banking, where routine and compliance rule, need-supportive settings can boost intrinsic motivation and benefit both people and the company. This conceptual study uses secondary data to establish a theoretical foundation and propose a framework for future empirical investigation. The proposed approach can help managers, HR professionals, and policymakers establish workplace policies that go beyond extrinsic rewards and meet employees' fundamental motivating requirements.

**Research Prospects:** This research provides a conceptual framework for SDT in Indian banking, although numerous areas need more study: To validate the model, future studies could utilize organized surveys or experiments to explore the claimed links. 2. Comparative Analysis: Expanding the study to include public or private banks (e.g., ICICI, Kotak Mahindra) to compare motivating climates. 3. Longitudinal Studies: Tracking the impact of SDT treatments on employee performance and satisfaction. 4. Examining the impact of transformational or participative leadership on SDT variables. As banking becomes more digital, it is important to examine how virtual or hybrid work environments affect psychological need satisfaction.


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**References**

Baard, P. P., Deci, E. L., & Ryan, R. M. (2004). Intrinsic need satisfaction: A motivational basis of performance and well-being in two work settings. *Journal of Applied Social Psychology*, 34(10), 2045–2068. https://doi.org/10.1111/j.1559-1816.2004.tb02690

Cerasoli, C. P., Nicklin, J. M., & Ford, M. T. (2014). Intrinsic motivation and extrinsic incentives jointly predict performance: A 40-year meta-analysis. *Psychological Bulletin*, 140(4), 980–1008. https://doi.org/10.1037/a0035661

Deci, E. L., & Ryan, R. M. (1985). *Intrinsic motivation and self-determination in human behavior*. Springer. https://doi.org/10.1007/978-1-4899-227

Deci, E. L., Olafsen, A. H., & Ryan, R. M. (2017). Self-determination theory in work organizations: The state of a science. *Annual Review of Organizational Psychology and Organizational Behavior*, 4, 19–43. https://doi.org/10.1146/annurev-orgpsych-032516-113108

Gagné, M., & Deci, E. L. (2005). Self-determination theory and work motivation. *Journal of Organizational Behavior*, 26(4), 331–362. https://doi.org/10.1002/job.322

Olafsen, A. H., Deci, E. L., & Halvari, H. (2015). Basic psychological needs and work motivation: A longitudinal test of directionality. *Motivation and Emotion*, 39(4), 880–896. https://doi.org/10.1007/s11031-015-9503-0

Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, 55(1), 68–78. https://doi.org/10.1037/0003-066X.55.1.68

Ryan, R. M., & Deci, E. L. (2017). *Self-determination theory: Basic psychological needs in motivation, development, and wellness*. Guilford Press. https://doi.org/10.1521/978.14625/28806

Sharma, A., & Jain, S. (2020). Role of intrinsic motivation in improving employee performance: An Indian banking perspective. *Journal of Management Research*, 20(1), 45–56. https://doi.org/10.5958/2321-5763.2020.00006.2

Rathi, N., & Lee, K. (2017). Understanding motivation and work engagement in the Indian banking sector. *Global Business Review*, 18(2), 302–317. https://doi.org/10.1177/0972150916666888

Manganelli, L., Thibault-Landry, A., Forest, J., & Carpentier, J. (2018). Self-determination theory can help you generate performance and well-being in the workplace. *Organizational Dynamics*, 47(4), 296–301. https://doi.org/10.1016/j.orgdyn.2018.01.004



ISBN: **978-93-5786-070-3**
March 2025

Kuvaas, B., Buch, R., Gagné, M., Dysvik, A., & Forest, J. (2016). Do you get what you pay for? Sales incentives and implications for motivation and changes in turnover intention and work effort. *Motivation and Emotion*, 40(5), 667–680. https://doi.org/10.1007/s11031-016-9574-6

Vansteenkiste, M., & Ryan, R. M. (2013). On psychological growth and vulnerability: Basic psychological need satisfaction and need frustration as a unifying principle. *Journal of Psychotherapy Integration*, 23(3), 263–280. https://doi.org/10.1037/a0032359

Liu, D., Chen, X. P., & Yao, X. (2011). From autonomy to creativity: A multilevel investigation of the mediating role of harmonious passion. *Journal of Applied Psychology*, 96(2), 294–309. https://doi.org/10.1037/a0021294

Deci, E. L., Koestner, R., & Ryan, R. M. (1999). A meta-analytic review of experiments examining the effects of extrinsic rewards on intrinsic motivation. *Psychological Bulletin*, 125(6), 627–668. https://doi.org/10.1037/0033-2909.125.6.627

Van den Broeck, A., Vansteenkiste, M., De Witte, H., Soenens, B., & Lens, W. (2010). Capturing autonomy, competence, and relatedness at work: Construction and initial validation of the Work-related Basic Need Satisfaction scale. *Journal of Occupational and Organizational Psychology*, 83(4), 981–1002. https://doi.org/10.1348/096317909X481382

Ghosh, R., & Ghosh, M. (2022). Motivation strategies and employee engagement in Indian banking sector. *Journal of Management Research and Analysis*, 9(1), 15–21. https://doi.org/10.18231/j.jmra.2022.003

Singh, P., & Dixit, R. (2019). Work motivation and employee performance: The mediating role of job satisfaction. *Indian Journal of Industrial Relations*, 54(4), 707–722. https://doi.org/10.1016/j.indm.2019.07.003



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# Attitudes of College Students Towards Startups In Wayanad Districts

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**Introduction:** Startups, which drive innovation, economic growth, and job creation, have grown worldwide, including in India. College students are increasingly considering entrepreneurship as a career option. Students are more exposed to startup ecosystems than ever because to digital platforms, easy information access, and supporting government regulations. College students' views on startups are the focus of this study. It assesses their entrepreneurial interest, drive, and willingness. The study also examines how financial independence, enthusiasm, government backing, and other socio-economic factors inspire students to establish their own businesses. The study also assesses students' knowledge of government startup programs like Startup India. Financial constraints, lack of expertise, mentorship gaps, and societal pressures hinder many student entrepreneurs, despite the burgeoning entrepreneurial culture. Thus, this study seeks to illuminate college students' startup mindsets and the biggest challenges they face when starting and running their enterprises. This research can help educational institutions, policymakers, and support organizations improve student entrepreneurship programs.

**Study significance**: Startups promote innovation, employment, and self-reliance, boosting economic growth. College students are future entrepreneurs and workers, so understanding their startup attitudes is vital. This Wayanad-based study examines students' entrepreneurship perceptions, goals, and problems. The research can help educational institutions, politicians, and companies establish entrepreneurial skills programs by identifying important


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characteristics impacting their willingness to participate in startups. It emphasizes the need for talent development, financial support, and mentorship to turn entrepreneurial ideas into reality. Wayanad's tourism, agricultural, and eco-business potential can boost economic growth and employment creation by promoting student startups. The findings can also help colleges construct entrepreneurship-focused curricula and incubation centers and government organizations develop legislation to address financial constraints, risk perception, and awareness gaps. Students with an entrepreneurial attitude can help Wayanad build a sustainable and progressive economy.

**Problem statement:** Startups spur innovation and jobs, boosting the economy. With their energy and inventiveness, college students may help startups. Their entrepreneurship views are molded by personal ambition, financial constraints, societal expectations, and lack of opportunity awareness. Some students are encouraged by successful entrepreneurs, but others dread failure, financial risk, and lack of business skills. Lack of knowledge about government support schemes hampers entrepreneurship. Specific actions are needed to overcome these obstacles. Entrepreneurship training, mentorship, and knowledge should be offered in schools to boost student confidence. On-campus incubation centers and financial aid can help students with early company issues. Colleges can foster entrepreneurial aspirations and startup culture in adolescents by providing an encouraging and resource-rich atmosphere.

**The study aims** to examine college students' views on startups. The study aims to uncover variables encouraging college students to create companies and to study their awareness of government incentives for entrepreneurs. The goal is to examine obstacles faced by students in starting and running their own businesses.

**Methodology for research**: Empirical research using primary and secondary data examines the relationship between education and government scheme awareness. A structured questionnaire is given to 60 purposively sampled respondents for the descriptive study design. This sampling strategy selects study participants with appropriate criteria. Government plans and education are contextualized using secondary sources from websites, books, and journals. The study analyzes respondents' educational backgrounds and government


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scheme awareness. Data analysis uses mean score and chi-square test. The mean score measures average government scheme awareness across education groups, while the chi-square test determines if education levels affect awareness. The study uses primary and secondary data and statistical methodologies to examine how education affects government scheme awareness, which has policy and pedagogical implications.

**Literature review**: In 2025, Masud et al. studied students' awareness and attitudes of startup activities in West Bengal HEIs using the NEP 2020 framework. The study discovered poor campus startup knowledge using data from students across academic levels and statistical methods like Chi-Square and PCA. It emphasizes the necessity for institutional support and specialized strategies to promote higher education entrepreneurship. In 2024, Aparna V. Nair of St. Teresa's College (Autonomous) in Ernakulam examined the entrepreneurial inclinations of postgraduate commerce students in the district. Limited work prospects are driving interest in entrepreneurship, and the study examines elements that influence this career decision. It also investigates how educational institutions foster entrepreneurial abilities, providing ideas for enhancing entrepreneurship education and policy. 3. Gupta et al. (2024) examined Jammu and Kashmir higher technical education students' views on entrepreneurship as a career. Entrepreneurship is expanding in popularity and vital to the region's socioeconomic development, according to the study. It stresses the necessity for government, education, industry, and professional collaboration. To create a robust regional entrepreneurial environment, the researchers suggest awareness campaigns, customized programs, mentorship, and continuous support.
4. Eresia-Eke et al. (2023) examined how attitudes and self-efficacy impact South African university students' business goals. Both characteristics strongly affected start-up propensity, with entrepreneurship education effectiveness enhancing the link with attitude but not self-efficacy. The study recommends targeting student attitudes, abilities, and perceptions to promote entrepreneurship. 5. Roomesh Kumar Jena (2020) To address youth unemployment and skill shortages, this study explores how business management students' perceptions about entrepreneurship education affect



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their entrepreneurial intents in India. The study of 509 students indicated a strong positive association between students' attitudes and entrepreneurial goals, controlling for gender and family background. Zarefard & Cho (2018) studied how managerial competences affect Iranian university students' drive to launch creative firms. Their study indicated that entrepreneurial self-efficacy and students' entrepreneurship mindsets mediated this association. While self-efficacy alone didn't lead to start-ups, positive attitudes helped transfer competencies and self-belief into entrepreneurial intents. 7. Shinnar, Pruett & Toney (2009) examined entrepreneurial views among 317 students and 87 instructors at a 4-year institution. They observed significant disparities in views, particularly on entrepreneurship as a career. Non-business students were interested, suggesting entrepreneurship education may be expanded. Students showed no gender disparities in interest, unlike previous studies. Startup literature emphasizes their importance in innovation and economic growth. Many studies have examined entrepreneurial hurdles, funding sources, and growth tactics, but long-term sustainability and regional variations in startup ecosystems remain unexplored. This analysis emphasizes the need for future research to fill these gaps and improve startup support systems.

**Analysis of data**: The large gap between education and government scheme awareness. Education and government scheme awareness were examined using the chi-square test. H0 suggested no significant difference between the two variables, but H1 suggested a substantial difference. The test's p-value was 0.95327, exceeding 0.05. Thus, the null hypothesis is accepted, showing that education level does not significantly affect government scheme awareness among research respondents. Opinion on Influencing Factors in Commerce Startups.Student replies show that love for entrepreneurship, financial incentive, flexible working environment, and high growth influence their decision to pursue commerce companies. Passion for entrepreneurship scored 4.13, the highest, showing its greatest influence. This shows that students are driven by their passion for launching a business. Possible financial incentive has a mean score of 3.71, indicating that predicted revenue or profit is important. Students also valued long-term scalability and success, scoring 3.7 for high growth potential. Flexible working environments had the lowest mean


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score of 3.2, indicating they are less influential. Flexibility is valued, but it is not a major motivator, as seen by the higher proportion of neutral comments. The data shows that passion and growth prospects motivate students more than work environment. These findings can assist educators and policymakers understand young entrepreneurs' motivations and encourage them.

**Findings: 1.** College students are interested in startups for financial independence, indicating a shift towards self-reliance and entrepreneurship. 2. Mentorship and guidance motivate 50% of students to establish businesses. 3. Most want to start their own businesses, demonstrating entrepreneurial spirit. The prospect for substantial growth also influences their positive view of startups. 4. A gap in awareness exists for 75% of students regarding government startup schemes. Students recommend additional government subsidies, incentives, and liberalized loans to boost entrepreneurs. 5. Students encounter challenges like fear of failure and low confidence when establishing a business. They face significant competition and risk after starting. These obstacles impede entry and growth. Help is needed to overcome them.

**Conclusion:** Attitudes of college students towards startups in the wayanad district shows that youth are increasingly interested in entrepreneurship as a vocation. With little work possibilities in the area, many students see startups as a practical and empowering alternative. Modern education, social media, and entrepreneurial success stories have shaped this approach. The survey also notes that students suffer capital shortages, lack of information about government support schemes, fear of failure, and minimal mentorship. Startup enthusiasm is visible, but educational institutions, local governments, and policymakers must provide organized support to cultivate this entrepreneurial spirit. Wayanad can tap into its students' innovative potential and alleviate regional concerns like unemployment and underdevelopment through sustainable business projects by bridging these gaps and boosting startup culture.


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**Reference:**

Masud, M., Paul, B., Dana, L. P., & Luperi, M. M. (2025). Students' Perceptions on Startups in Higher Education Institutions: Insights From West Bengal, India. In Sustainable Business Ecosystems and Social Perspectives (pp. 143-164). IGI Global Scientific Publishing.

NAIR, A. V. (2024). Entrepreneurship as a career choice: An analysis of entrepreneurial intention of post graduate commerce students with special reference to Ernakulam district (Doctoral dissertation, St Teresa's College (Autonomous), Ernakulam).

Gupta, A., Nanda, A., Sawhney, S., & Kaur, N. (2024). Attitude and Perceptions of Students Towards Entrepreneurship in Jammu and Kashmir. Journal of Engineering Education Transformations, 37(Special Issue 2).

Eresia-Eke, C. E., Shaun, D. V., Jean-Claude, P., & Ijagbulu, O. D. (2023). Psychological propellers of propensity for business start-ups among university students

Jena, R. K. (2020). Measuring the impact of business management Student's attitude towards entrepreneurship education on entrepreneurial intention: A case study. Computers in Human Behavior, 107, 106275.

Zarefard, M., & Cho, S. E. (2018). ENTREPRENEURS'MANAGERIAL COMPETENCIES AND INNOVATIVE START-UP INTENTIONS IN UNIVERSITY STUDENTS: FOCUS ON MEDIATING FACTORS. International Journal of Entrepreneurship, 22(2), 1-22.

Shinnar, R., Pruett, M., & Toney, B. (2009). Entrepreneurship education: Attitudes across campus. Journal of education for business, 84(3), 151-159.

- https://shodhganga.inflibnet.ac.in/handle/10603/432856
- https://sciencescholar.us/journal/index.php/ijhs/article/download/8744/5838
- https://www.startupindia.gov.in
- https://www.researchgate.net/publication/374337437



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# The Impact of Leadership on Organizational Citizenship Behaviour (OCB) and Its Role in Achieving Sustainability Goals: A Secondary Data Analysis

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**Abstract:** This paper investigates the impact of leadership on Organizational Citizenship Behaviour (OCB) and its role in achieving sustainability goals within organizations. Using secondary data from academic studies, organizational reports, and case studies, the paper explores how leadership styles, particularly transformational and servant leadership, influence OCB and contribute to organizational sustainability. The analysis identifies key theoretical frameworks, such as Social Exchange Theory (SET), Transformational Leadership, and Servant Leadership, along with empirical evidence from existing research and corporate sustainability reports. The findings suggest that leadership plays a critical role in fostering OCB, which in turn supports sustainability efforts in organizations. This study offers insights for organizations seeking to enhance sustainability through leadership practices that encourage employee voluntary behaviors aligned with sustainability objectives.

**Key words:** Organisational Citizenship Behaviour, Transformational Leadership, Servant Leadership, Sustainable Development

**Introduction:** Sustainability has become a central theme in contemporary business practices. As organizations strive to meet their sustainability goals,



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they require active participation from employees, whose Organizational Citizenship Behaviour (OCB) is crucial to driving these efforts. OCB refers to voluntary, discretionary behaviours that employees engage in beyond their job requirements, and these behaviours can significantly impact organizational effectiveness and sustainability outcomes (Organ, 1988).

Leadership, especially transformational and servant leadership, has been shown to influence OCB. Transformational leadership motivates employees to transcend their self-interests for the good of the organization, while servant leadership focuses on serving others and empowering employees (Bass, 1990; Greenleaf, 1977). Both leadership styles encourage behaviours that contribute to sustainability, including ethical decision-making, environmental responsibility, and corporate social responsibility (CSR) involvement.

This paper seeks to analyse the role of leadership in influencing OCB and achieving sustainability goals through a secondary data analysis approach. By synthesizing data from existing literature, case studies, and corporate reports, the study aims to provide empirical insights into how leadership styles can foster OCB that supports sustainability efforts.

**Research Questions**: 1. How do leadership styles (transformational and servant leadership) influence Organizational Citizenship Behaviour (OCB)? 2. What role does OCB play in achieving sustainability goals within organizations? 3. How can organizations leverage leadership practices to foster OCB that aligns with sustainability objectives?

**Literature Review**

**Organizational Citizenship Behaviour (OCB):** Organizational Citizenship Behaviour (OCB) is defined as voluntary, discretionary behaviours that are not part of an employee's formal job requirements but contribute to the overall functioning and effectiveness of the organization (Organ, 1988). The key dimensions of OCB include altruism, conscientiousness, civic virtue, courtesy, and sportsmanship (Podsakoff et al., 2000). These behaviours create a positive


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organizational climate, improve teamwork, and help organizations adapt to changing environments.

In the context of sustainability, OCB is particularly relevant. Employees who engage in OCB may participate in green initiatives, advocate for ethical practices, and promote corporate sustainability projects (Witt, 2004). These actions, though not mandated, are essential in achieving long-term sustainability goals such as resource conservation, community development, and environmental responsibility.

**Leadership and OCB:** Leadership is critical in shaping the behaviour of employees, and research has shown that transformational leadership and servant leadership both have a positive impact on OCB.

- Transformational Leadership: Transformational leaders inspire and motivate employees by creating a compelling vision of the future, fostering a culture of trust, and providing individualized support. Bass (1990) suggests that transformational leaders encourage followers to go beyond their self-interests and engage in behaviours that contribute to the greater good of the organization. In the case of sustainability, transformational leaders can motivate employees to adopt behaviours that align with environmental and social sustainability goals (Podsakoff et al., 1990).
- Servant Leadership: Servant leadership, introduced by Greenleaf (1977), focuses on serving others, empowering employees, and promoting ethical behaviour. Servant leaders prioritize the well-being of their followers, which fosters an environment of trust, cooperation, and support for organizational goals. According to Liden et al. (2008), servant leadership is strongly linked to OCB, as employees led by servant leaders are more likely to engage in behaviours that contribute to organizational sustainability, such as engaging in CSR activities and promoting a positive work environment relationships.


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**OCB and Sustainability Goals:** OCB plays a vital role in promoting sustainability within organizations. Studies have shown that employees who engage in OCB contribute to various aspects of sustainability, including corporate social responsibility (CSR), green initiatives, and social equity programs (Eisenberger et al., 2001). Witt (2004) found that employees involved in OCB, such as voluntarily reducing energy consumption or advocating for ethical supply chain practices, directly support sustainability efforts, helping organizations achieve both environmental and social sustainability goals.

**Theoretical Framework**

**Social Exchange Theory (SET):** Social Exchange Theory (Blau, 1964) posits that relationships within organizations are based on a system of mutual exchange. Leaders who offer support, recognition, and trust create a work environment in which employees feel motivated to reciprocate by engaging in OCB. This exchange process can extend to sustainability goals, where employees contribute voluntarily to sustainability efforts in return for a positive organizational culture.

**Transformational Leadership Theory:** Transformational leadership, as described by Bass (1990), emphasizes the role of leaders in motivating employees to align their personal goals with the organization's greater good. This leadership style fosters trust, increases job satisfaction, and encourages behaviours that contribute to organizational sustainability. Transformational leaders create an environment where employees feel inspired to engage in OCB, including behaviours that support sustainability objectives.

**Servant Leadership Theory:** Servant leadership focuses on empowering employees and prioritizing their needs. Servant leaders encourage employees to engage in discretionary behaviours that benefit the organization and society. This approach is particularly effective in promoting OCB related to sustainability, as employees feel supported and motivated to engage in pro-


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social behaviours that contribute to the organization's long-term sustainability goals (Greenleaf, 1977).

**Methodology**

**Data Sources:** This study uses secondary data from the following sources:

1. Academic Studies: Data and findings from published articles on leadership, OCB, and sustainability retrieved from databases like Scopus, JSTOR, and Google Scholar.
2. Corporate Reports: Sustainability and CSR reports from organizations such as Patagonia, Interface, and Ben & Jerry's, which provide data on employee involvement in sustainability initiatives and leadership practices.
3. Case Studies: Data from case studies on companies recognized for their leadership practices and commitment to sustainability, such as Unilever and Tesla.

**Data Analysis:** Descriptive Statistics: Summary statistics of key findings from secondary data, such as the frequency of OCB-related behaviours in sustainability-focused organizations.

- Comparative Analysis: Analysing and comparing case studies of organizations with transformational and servant leadership practices to identify common sustainability practices driven by OCB.
- Correlation Analysis: Using existing data to analyse the relationship between leadership style, OCB, and sustainability outcomes. If data allows, correlation analysis will be employed to explore how leadership and OCB impact sustainability metrics.

**Results**

**Impact of Transformational Leadership on OCB:** Secondary data from various studies indicate a strong relationship between transformational leadership and OCB. For example, Podsakoff et al. (1990) demonstrated that transformational leaders inspire employees to engage in proactive behaviours,



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such as contributing to sustainability efforts and participating in CSR initiatives. Companies led by transformational leaders report higher levels of employee engagement in voluntary sustainability-related behaviours, including energy conservation and ethical sourcing.

**Impact of Servant Leadership on OCB:** Servant leadership has also been shown to positively influence OCB. Data from case studies on companies like Ben & Jerry's and Patagonia reveal that servant leadership fosters a supportive work environment where employees feel empowered to participate in sustainability initiatives. In these organizations, employees voluntarily engage in green initiatives and community development programs, contributing to long-term sustainability goals.

**OCB and Sustainability Outcomes:** Data from sustainability reports and case studies reveal that OCB directly contributes to achieving sustainability goals. Employees who engage in OCB are more likely to participate in sustainability programs such as waste reduction, ethical sourcing, and community involvement. For instance, Unilever's CSR report highlights how employee-driven initiatives in sustainable sourcing and environmental stewardship contribute to the company's long-term sustainability objectives.

**Discussion**

**Leadership and Employee Engagement:** The findings suggest that transformational leadership and servant leadership significantly influence OCB. Both leadership styles create an environment where employees are motivated to go beyond their formal roles, contributing to sustainability goals through actions such as participation in green initiatives and CSR activities.

**OCB and Sustainability Goals:** OCB plays a crucial role in achieving sustainability outcomes. Employees who engage in OCB are more likely to adopt behaviours that support both environmental sustainability (e.g., reducing waste, energy consumption) and social sustainability (e.g., community


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outreach, CSR activities). The secondary data supports the notion that OCB fosters a culture of sustainability within organizations.

**Implications for Practice:** To attain sustainability goals, organizations should encourage OCB through leadership. Transformational leadership inspires people to match their beliefs with organizational sustainability goals, whereas servant leadership fosters trust and empowerment to encourage voluntary sustainability engagement.

**Conclusion:** Leadership is crucial to promoting Organizational Citizenship Behaviour (OCB), which is necessary for organizational sustainability. Transformational and servant leadership approaches promote sustainable OCB. These leadership styles can assist organizations achieve long-term sustainability by encouraging OCB.

## References

1. Bass, B. M. (1990). *From transactional to transformational leadership: Learning to share the vision*. Organizational Dynamics, 18(3), 19-31. https://doi.org/10.1016/0090-2616(90)90061-S
2. Greenleaf, R. K. (1977). *Servant leadership: A journey into the nature of legitimate power and greatness*. Paulist Press.
3. Liden, R. C., et al. (2008). *Servant leadership: Development of a multidimensional measure and multi-level assessment*. The Leadership Quarterly, 19(2), 161-177. https://doi.org/10.1016/j.leaqua.2008.01.002
4. Organ, D. W. (1988). *Organizational citizenship behavior: The good soldier syndrome*. Lexington Books.
5. Podsakoff, P. M., et al. (1990). *Transformational leader behaviors and their effects on followers' trust in leader, satisfaction, and organizational citizenship behaviors*. The Leadership Quarterly, 1(2), 107-142. https://doi.org/10.1016/1048-9843(90)90009-7
6. Witt, L. A. (2004). *The interactive effects of organizational citizenship behavior and environmental sustainability on organizational performance*. Journal of Applied Psychology, 89(2), 333-341. https://doi.org/10.1037/0021-9010.89.2.333



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## E-Commerce Trends in India: Opportunities and Challenges

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**Abstract:** Indian e-commerce is growing rapidly and brings several opportunities and problems. The latest Indian e-commerce trends, possibilities, and difficulties are discussed here: E-commerce involves online service sales and data and money transfers. Often called online or electronic commerce. India's e-commerce business is booming. Future company ventures should consider e-commerce. E-commerce estimates show a significant increase in firms in our nation. Mobile phone internet users have helped Indian e-commerce grow rapidly. India's e-commerce market is growing rapidly due to internet use and improved electronics. Darkness rules online transactions because most individuals are oblivious of fraud and corruption. This is the biggest issue facing Indian e-commerce. Even financial transactions can be conducted swiftly and efficiently with e-commerce worldwide. Future generations will feel more comfortable shopping online. E-commerce is the study's focus. This study used secondary data from online databases of books, academic papers, and e-commerce articles. This paper describes India's e-commerce landscape and its opportunities and challenges.

**Keywords:** E-commerce, internet, challenges, opportunities.

**Introduction**: E-commerce involves online service sales and data and financial transfers. Often called online or electronic commerce. The best ways to do business online are the most common e-commerce questions, but how to spell e-commerce is also important. It's usually a matter of preference, not right or wrong. From startups to multinationals, selling online at scale may benefit



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everyone. E-commerce definition, concept Electronic commerce between firms and clients without formal contracts E-commerce is often connected with online shopping, although it can also refer to any electronic transaction. E-commerce involves online purchases of soft or hard goods and services, according to Kalakota and Whintons (1997). They defined e-commerce four ways: 1. E-commerce involves sending information, goods, or money via electronic channels, computer networks, or other means. 2. E-commerce automates company transactions and operate with technology. 3. A tool that helps enterprises, consumers, and management reduce service costs while boosting quality and speed. 4. Online shopping and selling. E-commerce connects customers to manufacturers, stakeholders, marketers, government, and service providers,

**Literature review**: This brief literature review is based on a few global e-commerce research. P. Kotler (1999). Due to its World Wide Web (www) communication technology, the Internet has given rise to E-Commerce. Kalakota, Robinson (2000). Many people use E-Commerce interchangeably with IBM's EBusiness‖ term. E-Commerce is part of E-Business. Singh & Kaur (2002). Since the introduction of computers and the Internet, Electronic Commerce (also known as Internet Commerce) has been a popular trend.

According to Trivedi (2004), the biggest challenge to e-commerce in India has been mentality because Indians view buying as a social outing to be celebrated. E-commerce in India has great promise, but many other obstacles stand in the way. Sumanjeet, B. (2005) found that Indian enterprises are rapidly adopting e-commerce as a commercial technology, just like other countries. It has grown rapidly in India in recent years.

According to Kaur, E. H. and D. (2015). We call that e-commerce. E-commerce in India is developing rapidly because it offers customers a smooth,


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dependable, and convenient shopping experience online. Rahman, M. et al. (2017) found that Indians are most inclined to buy and sell items and services online, or that Indian society is modernized and comfortable with e-commerce. Experts and organizations understand E-Commerce differently due to its recent adoption. D. P. Mittal defines Internet Commerce as the exchange of commodities or services for value online. Satya Prasad defines Electronic Commerce as the use of computer networks to support commercial activities, including creation, sale, and distribution of commodities, services, and intangible property. According to Diwan and Sharma, "E-Commerce" encompasses all commercial transactions between companies and individuals that rely on electronic processing and transmission of data, such as text, voice, and visual images

**Methodology for research** This study used secondary data from book, research paper, and online article databases to analyze e-commerce. The study aims to gain knowledge of e-commerce principles, its current state in India, its obstacles, and its potential.

**Indian E-Commerce Status**: The Internet permeates every aspect of our daily life due to its widespread impact on social interactions. Due to work and lack of time, going to the bank to withdraw money or buy basics is tough. In 2010, online sales exceeded $200 billion, demonstrating their growing importance in society. The fastest-growing and most intriguing business model in India is e-commerce. Indian e-commerce is expected to grow from $48.5 billion in 2018 to $200 billion in 2026. This growth is due to smart phone and internet use. Due to digital transformation, India's internet user population is expected to grow from 560.01 million in September 2018 to 829 million in 2021. India's e-commerce-driven internet economy is expected to quadruple from US$125 billion in April 2017 to US$250 billion by 2020. India's e-commerce sales are projected to grow by 51% annually, from US$ 39 billion in 2017 to US$ 120 billion in 2020.


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• Growth in Smartphone and Internet Penetration: E-commerce is expanding due to increased internet penetration, particularly in rural regions, and high smartphone adoption rates. Mobile devices account for 75–80% of Indian e-commerce transactions. • Significant growth in online shopping and selling is coming from Tier II, Tier III cities, and even smaller communities. E-commerce is becoming more accessible to underdeveloped places. Using social media channels for e-commerce and cooperating with influencers has become a popular approach to reach consumers and boost sales. Consumers, brands, and influencers are converging on Myntra.
• Omnichannel Models: Traditional merchants use online and offline channels to improve customer experience and stay competitive.
• Quick Commerce (Q-commerce): There is an increasing demand for deliveries under 30 minutes, particularly in grocery categories. Q-commerce players in India are growing. • Trend-First Commerce: Budget-friendly fashion collections are gaining popularity, with a major online presence.
• Hyper-Value Commerce: Affordable goods shopping platforms are gaining popularity, particularly among lower-middle-income consumers in smaller cities.
• Collaborative Commerce: Encouraging direct interaction and involvement between customers, brands, and influencers. • Voice and Visual Search: Voice assistants and visual search are altering consumer interaction with e-commerce platforms. • UPI is the primary payment option for online transactions, followed by credit cards and digital wallets. Money on delivery is still common but fading. • Government initiatives like Digital India and Make in India have facilitated e-commerce growth by enhancing digital infrastructure and boosting local manufacturing.
• Prioritize Regional Languages: E-commerce companies are considering multilingual support for Indian users who prefer material in their native language.


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**Opportunities in Indian E-Commerce:** Despite tremendous development, e-commerce remains a small percentage of the retail business in India, indicating significant opportunity for future expansion. The second-largest internet shopping market is India.• Rising middle class and per capita income boost consumption and spending power, helping the e-commerce sector. • India's vast and young population is tech-savvy and open to online purchasing, making it a favorable demographic. • Government support for digitalization, financial inclusion, and local manufacturing drives e-commerce growth. Automatically, B2B e-commerce and single-brand retail trading can receive 100% FDI. Increased participation of Micro, Small, and Medium Enterprises (MSMEs) online has led to a wider seller base and product diversification. • E-commerce Export Potential: India intends to boost e-commerce exports, offering enterprises worldwide market access. • The Indian e-commerce market is a hotbed for innovative business models such as Q-commerce, social commerce, and hyperlocal delivery. • India's retail and e-commerce sector presents substantial investment prospects due to development potential and favorable policies. • Expanding into online food and fashion: High-frequency purchase categories like groceries and the fast-growing fashion e-commerce segment offer prospects.

**Challenges in Indian E-Commerce**: • Logistics and Infrastructure: Poor infrastructure, particularly in rural areas, can cause delays and higher costs in transportation and last-mile delivery.• Payment and Security Issues: Online transaction trust, cybersecurity, and fraud concerns persist despite the rise of digital payments. Many prefer cash on delivery. • Low Internet Penetration and access: Despite improvements, rural areas still lack high-speed access compared to other countries. • Digital Illiteracy and Consumer Awareness: Rural populations often lack digital literacy and awareness of online buying benefits and security precautions. • Managing Product Returns: High fashion


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returns present logistical and financial issues for e-commerce enterprises. • Competition and Price Sensitivity: The Indian e-commerce market is highly competitive, with price sensitivity impacting customer purchase decisions, challenging profit margins. • Changes in product quality, delivery delays, and customer service can affect customer trust and satisfaction. Important to build and sustain consumer trust. • Regulatory Challenges: Managing varied state and national rules, tax systems (e.g. GST), and compliance requirements can be difficult. Additionally, data and consumer protection must be addressed. • Supply Chain Management: Smaller businesses may struggle with managing inventories, refunds, and supplier coordination. • Inconsistent postal addresses, particularly in rural regions, might hinder delivery logistics. • Consumers may encounter false advertising, phony reviews, and unjust pricing policies. • Ensuring data privacy and cybersecurity is crucial due to the large volume of customer data collected. **Final thoughts and advice**: E-commerce in India is domestic and international, B2B and B2C, marketplace and inventory-based. Technology has enabled digital payments, hyper-local logistics, analytics-driven consumer engagement, and digital advertising, which have accelerated India's e-commerce market. In India, e-commerce is changing how people buy and sell. The future of shopping is online. Electronic commerce has shortened the gap between manufacturers and consumers. There's weakness E-commerce is tough for Indians due to a weak cyber security law. If cyberspace is established and these critical factors have the necessary public advantages, e-commerce in India will thrive in the future. The government regulates e-commerce to protect privacy, intellectual property, and consumer rights while promoting local and international trade. More individuals are using e-commerce in urban and rural areas at affordable prices, and the percentage is expanding daily. E-commerce has grown worldwide thanks to IT. It's easier to enter new markets and evaluate one's firm and products. It cuts administrative costs and enhances firm


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management.

Internet use in India is rising rapidly. Thus, e-commerce has hurt India. E-commerce benefits from clarity. E-commerce mostly benefits all sectors. Therefore, e-commerce has revolutionized the economy.

**References:**

1. Diwan, Parag and Sharma, Sunil (2000). Electronic Commerce: A Manager's Guide to E-Business, New Delhi: Vanity Books International, pp. 31-32.
2. Islam, M. A., Sarker, M. N. I., Rahman, M., Sultana, A. and Prodhan, A. S. (2017).―Determinants of Profitability of Commercial Banks in Bangladesh,‖ Int. J. Bank. Financ. Law, vol. 1, no. 1, pp. 1–11.
3. Kalakota, Ravi and Marica, Robinson (2000), E-Business: Roadmap for Success, California Addison Wesley Longman Inc.
4. Kaur, E. H. & Kaur, D. (2015). ―E-Commerce in India – Challenges and Prospects Abstract‖ Int. J. Eng. Tech., vol. 1, no. 2, pp. 36–40.
5. Kotler, P. (1999), Marketing Management, Prentice Hall of India, New Delhi.
6. Kumar N., Anusara, J., Hossin, A, Sarkar. K., Chanthamith. B., Shah. S. & Russel. I. H., (2018). Challenges and Opportunities of E-Commerce in India: Pathway for Sustainable E-Commerce. International journal of Engineering, Business and Management (IJEBM). ISSN: 2456-7817. [Vol-2, Issue-2, Mar-Apr, 2018]. Pp.13-21.
7. Mittal, D.P. (2000). Taxmann‗s Law of Information Technology (Cyber Law), New Delhi: Taxmann‗s Allied Services Pvt. Ltd, P. 7.
8. Pradad, S. (2001). Law Relating to Information Technology. Hyderabad: Asia Law House, p. 341.
9. Rahman, M., Saha, N. K., Sarker, M. N. I., Sultana, A. and Prodhan, A. S. (2017). ―Problems and Prospects of Electronic Banking in Bangladesh: A Case Study on Dutch-Bangla Bank Limited,‖ Am. J. Oper. Manag. Inf. Syst., vol. 2, no. 1, pp. 42–53, 2017.
10. Ribadu, M. B. and Rahman, W. N. Wan Ab. (2017). ―An integrated approach towards Sharia compliance Ecommerce trust,‖ Appl. Comput. Informatics, 2017.
11. Sarbapriya, R. (2011). Emerging Trend of E-Commerce in India: Some Crucial Issues, Prospects and Challenges. Computer Engineering and Intelligent Systems. ISSN 2222-1719 (Paper) ISSN:2222- 2863 (Online)Vol 2, No.5, 2011, www.iiste.org
12. Sarker, M. N. I. and Rashid, M. H. (2015). ―An Impact of Banking Activities of Private Commercial Islamic Bank to Economic Development in Bangladesh: A Case



ISBN: **978-93-5786-070-3**
March 2025

Study on First Security Islami Bank Limited (FSIBL),‖ J. Invest. Manag., vol. 4, no. 5, pp. 264–272.
13. Sarode, R. M. (2015). Future of E-Commerce in India Challenges & Opportunities. International Journal of Applied Research 2015; 1(12): 646-650.
14. Singh, Gurjeet and Kaur, Harlovleen (2002), ― Emergence of Electronic Commerce in
India:Contemporary Issues, Trennds and Challenges‖, Panjab University Law Review, Vol. 44, No.l, pp 118-131.
15. Sumanjeet, (2005), ―Emergence of E-Commerce in India‖, Science Tech Entrepreneur, Vol. 12, No. 8, pp.40-46.
16. Trivedi, I. V. (2004), "E-Commerce: Concepts and Applications", Presidential Address Appeared in Indian Journal of Commerce, Vol. 57, No. 3, pp 1-5.
17. Yadav, K and Sharma, D. (2014). SWOT Analysis of E-Commerce. Advance in Electronic and Electric Engineering. ISSN 2231-1297, Volume 4, Number 6 (2014), pp. 663-668.

**WEBSITES:**
1. https://acowebs.com/impact-ecommerce-society/
2. https://auxesisinfotech.com/E-commerce-Industry-Challenges
3. https://www.mohitecommerce.com/impact-of-ecommerce
4. https://www.privacyshield.gov/article?id=India-e-Commerce
5.https://www.the-future-of-commerce.com/2020/01/19/what-is-e-commerce-definition-examples/


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## Understanding Digital Readiness in MSMEs: A Study on Internet Entrepreneurial Self-Efficacy, Strategic Agility, and AI Usage

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**Abstract:** The study is conducted to understand the MSME's digital readiness by analysing internet entrepreneurial self-efficacy, strategic agility and AI usage among MSME of Thiruvathapuram district in Kerala . This is descriptive in nature and collected 100 responses from population of successfully operating the enterprise. Descriptive statistics were showed higher mean score for IESE, Strategic Agility, and AI usage, and inferential statistics were applied for the second and third objective and found there is no statistically difference in internet entrepreneurial self-efficacy based on AI usage and have no statistical difference in Strategic agility based on educational qualification. The result of the higher mean score is indicator of highest internet entrepreneurial self-efficacy and strategic agility. These results suggest that entrepreneurial capabilities such as self-efficacy and agility may be shaped more by experiential learning and individual digital readiness than by formal education or current levels of AI adoption. The study gives attention to policymakers and support organizations in conduct capacity building program for improving digital skill of entrepreneurs.

**Keyword:** Strategic Agility, AI usage, Internet Entrepreneurial self-efficacy, AI usage and MSME entrepreneurs


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**Introduction:** AI and digital transformation have transformed the global business environment, creating many chances to improve efficiency, decision-making, and competitiveness. MSME entrepreneurs may simply use machine learning and virtual assistants. However, most entrepreneurs are unaware of digital technology's benefits. However, business owners' entrepreneurial skills and digital competence often determine AI adoption. Internet Entrepreneurial Self-Efficacy (IESE) is a key competency. IESE is an entrepreneur's confidence in their online entrepreneurial skills, such as using digital platforms and managing e-commerce. More capable entrepreneurs can adapt quickly to technology advances. Strategic Agility—the ability to notice, respond, and adapt fast to external changes—is crucial for corporate resilience and competitiveness, especially in dynamic digital disruption situations. AI integration has relied on internet self-efficacy and strategic agility. MSME Employment, innovation, and regional expansion are crucial to economic development, especially in emerging economies, by MSMEs. However, poor technology infrastructure, digital skills, and financial resources typically hinder small firms. Policymakers should boost digital skills to gain a competitive edge in a changing economy. Technology acceptance models and organisational performance frameworks have dominated research, ignoring individual-level psychological factors. Few research have explored moderate entrepreneurs' digital self-efficacy and strategic agility. Demographic factors like education also affect MSMEs' strategic agility, but this is underdeveloped. The researcher seeks to investigate MSME entrepreneurs to determine the association between AI usage, Internet Entrepreneurial Self-Efficacy, and Strategic Agility.

To study the research gap, three objectives were set: (1) to assess MSME entrepreneurs' IESE, strategic agility, and AI usage; (2) to determine if AI usage levels affect IESE; and (3) to determine if strategic agility varies by


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educational qualification. Additionally, the researcher hopes to provide a framework for overcoming digital transition obstacles.

**Theoretical Frameworks:** This study uses Social Cognitive Theory, UTAUT, and Dynamic Capabilities Theory. According to Bandura's Social Cognitive Theory, self-efficacy is a person's conviction in their capacity to execute tasks, which affects behaviour. Digital self-efficacy boosts tech adaptability. Entrepreneurs with greater IESE expect to use new technology like AI well, thus they adopt them. United Theory of Acceptance and Use of Technology (UTAUT) describes AI adoption via performance, effort, social impact, and conducive factors. This model shows how internet self-efficacy aids digital skill acquisition. Dynamic Capabilities Theory explains strategic agility. It means the firm's ability to adjust resources and cope with environmental changes. Sensing possibilities and using technology enable strategic agility. AI enabled work automation, operational efficiency, speedy decision-making, etc. Many studies have shown that agility speeds up decision-making and innovation. **Literature Review:**

**Literature Review: Strategy Agility** is essential for MSMEs to compete and thrive in changing business contexts. Aji et al. (2025) found that agility helps MSME leaders succeed internally. Widjaja et al. (2024) stated that agile MSME critical capabilities enable risk management and long-term performance. Setiawan et al. (2025) stressed that internal capabilities must enable digital transformation for greater performance. Jufri et al. (2025) found that digital entrepreneurial leadership boosts MSMEs' strategic agility and innovation. Kustyadi et al. (2021) showed that leadership agility and ambidexterity boost company performance and organisational adaptation. According to Ogunleye et al. (2021), the business must link strategic agility and competitiveness for outstanding operational flexibility and market response. Busyeri and Nurfitriani (2024) stressed the role of innovative capability and ambidexterity in the agility-performance relationship. Digital


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marketing tactics can improve organisational agility by enabling quick consumer responses, according to Kosasi et al. (2017). Handayani et al. (2024) found that digital and sustainable efforts increase organisational agility. Babber et al. (2025) found that lean, agile, and innovative techniques boost MSME sustainability. Entrepreneurial agility enhances creativity and resilience, according to Korry et al. (2025), whereas Halim et al. (2022) indicated that agile and foresighted entrepreneurs can survive crises. These studies show that MSMEs need strategic agility to adapt, innovate, and succeed in disruptive and uncertain marketplaces. Bounfour et al. (2023) found that strategic agility helps convert intangible capital (knowledge, culture, innovation) during the COVID-19 pandemic. Intangible capital supported digital change and reduced uncertainty, according to the analysis. 3.2 Internet Entrepreneurial Self-Efficacy refers to confidence in using digital tools and technologies for successful business management. It involves one's confidence in their ability to use digital platforms, conduct business online, and use ICT for marketing, customer engagement, and operational management. The online Self efficacy scale, established by Torkzadeh and van Dyke (2001), measures confidence in using digital tools to do technology-mediated tasks. Many studies have explored digital self-efficacy in MSME digitalisation. Setyaningrum and Muafi (2023) found that self-efficacy strongly influences digital tool adoption. Lack of confidence can limit full engagement with AI, e-commerce, digital marketing, and online banking systems. In contrast, Putriani et al. (2023) revealed that stronger self-efficacy can reduce digital technology stress and facilitate digital adoption. Budiantara et al. (2024) highlighted that MSMEs may encounter structural and contextual constraints such inadequate infrastructure, institutional support, or policy limitations that stop individual confidence from becoming digital transformation. Ganefri et al. (2024) found that contextual factors, not digital self-efficacy, link entrepreneurial mentality to intention.


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**Methods 4.1.1 Data and measurement** The study was cross-sectional. MSMEs drove economic growth. Identify the district with the most nits from the economic assessment Volume No.1 2023 for data collecting. Thiruvananthapuram scored highest (14,434 units) with Rs 840.89 crore invested and 29,878 jobs created. Ernakulam (14,128 units) placed second with Rs 1,172.46 crore and 33,765 jobs. With 236.58 crore invested, Wayanad (3,950 units) started the fewest, employing 8,234 people. Entrepreneur contact information was obtained from Thrissur District Industrial Centre. MSMEs need digital transformation to survive. DIC did not provide an updated and accurate list of MSME registrants, hence this study used non-probability purposive sampling. 1) Top management responders were chosen because they should be able to tolerate technological developments. 2) Respondents should know digital technology. Data was collected by questionnaire. The instrument was two-part. First, respondents were asked demographic questions. Second half included AI Usage, Internet Entrepreneurial Self-Efficacy, and Strategic Agility questions. Respondents submitted 131 questions. Due to inadequate data and missing information, 31 were unusable. Only 100 valid questionnaires were kept for descriptive analysis. Pilot study yielded 10 replies. This helped the researcher learn more about the questionnaire. This study analysed questionnaire data using descriptive statistics and ANOVA. **Measures4.2** Web Entrepreneurship Self-efficacy was assessed (Parasuraman & Colby, 2015). Digital Entrepreneurial self-efficacy is: 1. I can persuade people. 2. I know computer file management basics. 3. My business benefits from my basic computer hardware installation and manipulation. 4. Multimedia hardware can aid my business. 5. I can install and use online apps. 6. I can create an original Internet marketing plan. 7. I can make an original e-commerce site. 8. I devise e-shop pricing strategies. 9 I can analyse my e-shop costs. 10 I can suggest a profitable e-commerce approach. 11. The scale From Bounfour et al. (2023), Strategic Agility 1. My e-shop materials are easily


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accessible. 2. Our company reacts quickly to competition. Our company reacts quickly to market changes. 3. We immediately find ways to improve customer service.

**Results: Demographic characterisation of participants**

Participants' demographic characteristics A gender imbalance in MSME began when the demographic analysis revealed that 59% of respondents were men. About 35% of participants were Managing Directors and 65% were Chairpersons, providing strategic insights on digital processes. Educationally, 37% had Plus 2 certificates, 30% graduated, 26% post-graduated, 18% were post-graduates, and 15% had IT Diplomas, indicating insufficient IT competence.

**Descriptive Statistics: AI Usage**

**Table No.1: MSME entrepreneurs' extent of AI usage**

| | | F | Percentage | Valid Percent |
|---|---|---|---|---|
| | High | 55 | 55.0 | 55.0 |
| | Medium | 40 | 40.0 | 40.0 |
| | Low | 5 | 5.0 | 5.0 |
| | Total | 100 | 100.0 | 100.0 |

The table discloses that majority (55%) belong to High AI usage level, 40% falls under the category medium AI usage level and the remaining 5% belongs to Low level AI usage.

**Internet Entrepreneurial Self efficacy**

**Table No.2: MSME entrepreneurs' level of Internet Entrepreneurial Self efficacy**


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| Statements | N | Min. | Max. | Mean | Std. Deviation |
|---|---|---|---|---|---|
| I can make others with my thoughts | 100 | 1.00 | 5.00 | 4.0800 | .83702 |
| I have a basic ability in computer file management | 100 | 2.00 | 5.00 | 4.0300 | .70288 |
| I can install and manipulate basic types of computer hardware to help my business | 100 | 2.00 | 5.00 | 3.7700 | .77662 |
| I can use multi-media hardware to help my business | 100 | 1.00 | 5.00 | 4.1400 | .77876 |
| I have the ability to install and use website applications | 100 | 2.00 | 5.00 | 4.1300 | .78695 |
| I can formulate an innovative Internet marketing strategy | 100 | 1.00 | 5.00 | 3.7900 | .76930 |
| I can create a unique electronic commerce website | 100 | 1.00 | 5.00 | 4.1500 | .77035 |
| I know how to formulate a pricing strategy for my e-shop | 100 | 2.00 | 5.00 | 4.1400 | .65165 |
| I can analyze the cost structure of my e-shop | 100 | 1.00 | 5.00 | 4.0500 | .83333 |


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| | | | | | |
|---|---|---|---|---|---|
| I can propose a profitable business model for electronic commerce | 100 | 1.00 | 5.00 | 4.0900 | .84202 |
| I am flexible in shifting business approaches when needed | 100 | 1.00 | 5.00 | 3.8600 | .77876 |
| Self-efficacy | 100 | 3.36 | 4.64 | 4.0209 | .26945 |

The Descriptive statistics of Internet Entrepreneurial Self efficacy reveal an overall mean score 4.022(S. D= .2695). This shows a positive confidence in applying software's and to formulate innovative marketing strategies when need arises. Specifically items "I can create a unique electronic commerce website" (4.15)," I know how to formulate a pricing strategy for my e-shop" (4.14) and" I can use multi-media hardware to help my business" (4.14) were obtained highest mean score.

**Strategic Agility**

Table No. 3 MSME entrepreneurs' level of strategic agility

| **Statements** | **N** | **Min.** | **Max.** | **Mean** | **SD** |
|---|---|---|---|---|---|
| Our enterprise responds rapidly to moves by competitors | 100 | 2.00 | 5.00 | 4.1700 | .79207 |
| Our enterprise is quick to recognize changes in its market | 100 | 3.00 | 5.00 | 3.8500 | .68718 |
| We quickly identify new opportunities to better serve our customers | 100 | 2.00 | 5.00 | 4.1600 | .73471 |
| **Strategic Agility** | **100** | **3.00** | **5.00** | **4.0600** | **.41134** |


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The table reveal that the Overall mean of Strategic Agility is 4.06. exhibits that MSME entrepreneurs have critical capabilities that enables them to gain competitive advantages in the dynamic challenging business environment. The statement "Our enterprise responds rapidly to moves by competitors" has obtained highest score(4.17).

**5.3. ANOVA**

To determine whether there is any significant difference in internet entrepreneurial self-efficacy based on AI usage level and to know the any significant difference in strategic Agility based on educational level ANOVA is applied and two hypotheses

5.3.1AI usage difference among the MSME entrepreneurs regarding the dimension of Internet Entrepreneurial self-efficacy

H1: MSME entrepreneurs' internet Entrepreneurial self-efficacy significantly varies based on AI usage level

Table No.4 ANOVA for significant difference between Internet Entrepreneurial Self Efficacy with respect to the level of AI usage

| | Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|
| Between Groups | .164 | 2 | .082 | 1.136 | .325 |
| Within Groups | 7.023 | 97 | .072 | | |
| Total | 7.188 | 99 | | | |

To investigate whether any difference exist in Internet Entrepreneurial self-efficacy based on AI usage level, A one-way ANOVA was conducted. Levene's Test for homogeneity of variances was not significant ($p = .564$), confirming that the assumption of equal variances was met. The results disclosed that no statistically significant differences was found in IESE across the AI usage groups, $F(2, 97) = 1.191$, $p = .309$. Therefore, the findings indicate


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that the level of AI usage (Low, Medium, High) does not have a significant impact on the self-efficacy of MSME entrepreneurs.

5.3.2 Level of education difference among MSME entrepreneurs' regarding the dimension of Strategic agility

**H2: There is a statistically significant difference in Strategic Agility among MSME entrepreneurs with varying levels of educational qualification**

Table No.5.ANOVA for significant difference between strategic Agility with respect to the level of educational qualification.

| | Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|
| Between Groups | .303 | 3 | .101 | .590 | .623 |
| Within Groups | 16.448 | 96 | .171 | | |
| Total | 16.751 | 99 | | | |

A one-way ANOVA was used to determine if entrepreneurs with different educational degrees have varied Strategic Agility. Levene's Test assessed variance homogeneity before ANOVA. The assumption of equal variances was met because the test result was not significant (p =.147). Strategic agility does not differ by education F(3, 96) = 0.590, p =.623. Educational qualification appears not to affect Strategic Agility of MSME entrepreneurs in the sample.

**Discussion:** The high mean score of online entrepreneurial self-efficacy implies that they are confident using digital tools to manage businesses. This study found no substantial variation in Internet Entrepreneurial Self-Efficacy (IESE) across AI usage levels. According to past research, personal traits, prior experience, and digital confidence influence self-efficacy more than AI adoption (Balgiu et al., 2024; Zhang & Weng, 2022). Ahmad et al. (2024) recommended training to increase Internet self-efficacy. Next, strategic agility gets a high mean score, indicating a strong response to the dynamic corporate


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environment. But ANOVA demonstrates that educational qualification does not significantly improve MSME entrepreneurs' strategic agility. Strategic agility is driven by knowledge-sharing and organisational culture, not academic background, according to Bounfour et al. (2023). Strategic agility can only be achieved through market engagement and experimental learning, not formal schooling, according to Zhang and Weng (2022). These data imply that IESE and strategic agility are learnt behaviourally rather than intellectually. Training, mentoring, and practical experience may instill these qualities better than traditional education.

**Practical Implications:** Policymakers, MSME support organisations, and entrepreneurship educators can learn from this study. First, MSME entrepreneurs will participate in skill-building workshops to improve their technical skills and internet entrepreneurial self-efficacy. Entrepreneurial training institutions should organise Practical, hands-on training should boost entrepreneurs' digital confidence and competence. The fact that educational qualification does not greatly improve strategic agility shows that mentoring, experiential learning, and adaptive thinking are more important than formal schooling. To develop key capacity and agility in entrepreneurs, government agencies and incubators should prioritise mentorship, practical learning, and scenario-based strategy formulation.

**Conclusion**: The article evaluated MSME entrepreneurs' AI usage, Internet Entrepreneurial Self-Efficacy, and Strategic Agility. The study found that Thiruvananthapuram MSME entrepreneurs have higher Internet self-efficacy, strategic agility, and AI utilisation. AI usage and educational level do not affect Internet entrepreneurial self-efficacy or strategy. These findings imply that human qualities, digital literacy, and practical learning may shape entrepreneurial competencies more than technological usage or academic background. The report emphasises entrepreneurial attitude and digital preparedness as key MSME development tactics.


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**Future studies:** AI adoption's long-term effects on Internet entrepreneurial self-efficacy and strategic agility need longitudinal studies. Future studies will include technology stress and technological preparedness to improve our understanding and shed light on adaptive entrepreneurial conduct.

**Reference:**

Kustyadi, G., & WIJAYANTI, A. (2021). Ambidexterity and leadership agility in micro, small and medium enterprises (MSME)'s performance: An empirical study in Indonesia. *The Journal of Asian Finance, Economics and Business*, *8*(7), 303-311.

Aji, W. J., Wardana, L. W., & Kusdiyanti, H. (2025). Determinants of Business Success with Strategic Agility as a Mediating Variable (Study on msmes in Banjarbaru City). *Formosa Journal of Social Sciences*, *4*(1), 1-24.

Widjaja, I., Sudarmiatin, S., & Wardana, L. W. (2024). Agility Strategy and Risk Management as Support for Sustainable MSME Performance to Achieve MSME sdgs: A Literature Review. *International Journal Business, Management and Innovation Review*, *1*(4), 59-81.

Setiawan, B., Pamungkas, B., Mekaniwati, A., & Kusuma, P. M. (2025). The strategic role of digital transformation, dynamic and agile capabilities for the performance of micro, small, and medium enterprises (msmes). *The Bottom Line*.

Jufri, A., & Hadiwibowo, I. (2025). The Impact of Strategic Agility on msmes Innovation Driven by Digital Entrepreneurial Leadership. In *E3S Web of Conferences* (Vol. 622, p. 04001). EDP Sciences.

Ogunleye, P. O., Adeyemo, S. A., Adesola, M. A., & Yahaya, Y. (2021). Strategic agility and small and medium enterprises' performance: Evidence from Osun State, Nigeria. *South Asian Journal of Social Studies and Economics*, *11*(1), 26-36.

Busyeri, A. T., Rofaida, R., Hadijah, H. S., & Kurniawan, A. (2024). The Role Of Innovation Capability In Mediating The Effect Of Strategic Agility On Business Performance Of Smes In The Food And Beverage Sector In Cimahi. *Dinasti International Journal of Education Management & Social Science*, *5*(6).

Nurfitriani, S., Rifan, D. F., & Sanjaya, V. F. (2024). The influence of strategic agility on competitive advantage with organizational ambidexterity as mediation at msme's in bandar lampung. *Assets: jurnal ekonomi, manajemen dan akuntansi*, *14*(1), 141-159.



ISBN: **978-93-5786-070-3**
March 2025

Kosasi, S., & Yuliani, I. D. A. E. (2017, November). Improving organizational agility of micro, small, and medium enterprises through digital marketing strategy. In *2017 2nd International conferences on Information Technology, Information Systems and Electrical Engineering (ICITISEE)* (pp. 68-72). IEEE.

Handayani, J., & Masrokhah, S. (2024). Digital transformation, sustainability, and msme performance: the role of organizational agility. *Ultima Management: Jurnal Ilmu Manajemen*, *16*(2), 298-318.

Babber, G., & Mittal, A. (2025). Achieving sustainability through the integration of lean, agile, and innovative systems: Implications for Indian micro small medium enterprises (msmes). *Journal of Science and Technology Policy Management*, *16*(2), 365-400.

Korry, p., & dyah, p. (2025). The agility of SME entrepreneurs and its impact on innovation and entrepreneurial resilience. *Economic studies*, *34*(3).

HALIM, H. A., ZAINAL, S. R. M., & Ahmad, N. H. (2022). Strategic Foresight and Agility: Upholding Sustainable Competitiveness Among smes During COVID-19 Pandemic. *International Journal of Economics & Management*, *16.*

Tisyani, A. S., & Sushandoyo, D. (2023). E-Commerce Platforms as Business Agility Reinforcement To Compete In The Market: Cases Of Indonesian MSME. *Journal Integration of Management Studies*, *1*(1), 83-92.

Suprapti, S., & Suparmi, S. (2022). Improving marketing performance through business agility and market orientation in micro, small, and medium enterprises in Semarang City. *Arthatama*, *6*(1), 26-43.

Palanisamy, S., Chelliah, S., & Muthuveloo, R. (2022, May). The influence of strategic agility on organizational performance during pandemic: a perspective of smes in manufacturing sector. In *Tenth international conference on entrepreneurship and business management 2021 (ICEBM 2021)* (pp. 30-35). Atlantis Press.

Mayndarto, E. C., Murwanigsari, E., & Mayangsari, S. (2025). Enhancing MSME Reputation: The Interplay of Digital Technology, Talent Management, and Business Agility. *Journal of System and Management Sciences*, *15*(2), 91-109.

Ocharo, M. O. (2021). Strategic Agility and Firm Competitiveness amongst smes in Starehe Sub-County in Nairobi City County, Kenya. *Unpublished MBA project, Kenyatta University*.

Ahmad, Z., Ali, S., & Rahman, N. (2024). *Digital transformation of family-owned small businesses: A nexus of internet entrepreneurial self-efficacy, artificial intelligence usage and strategic agility*. Kybernetes. Https://doi.org/10.1108/K-10-2023-0921



ISBN: **978-93-5786-070-3**
March 2025

Balgiu, B. A., Bejinaru, R., & Candel, O. S. (2024). Validation of the Internet Entrepreneurial Self-Efficacy Scale. *Plos ONE, 19*(10), e0312929. Https://doi.org/10.1371/journal.pone.0312929

Yilmaz, Y., & Bayraktar, C. A. (2023). Exploring the role of digital literacy and technology readiness in shaping SME performance during digital transformation. *Journal of Small Business and Enterprise Development*, 30(2), 321–339. Https://doi.org/10.1108/JSBED-03-2022-0110

Zhang, Y., & Weng, Q. (2022). The impact of entrepreneurial self-efficacy on digital entrepreneurship: The mediating role of perceived behavioral control. *Technological Forecasting and Social Change, 178*, 121577. Https://doi.org/10.1016/j.techfore.2022.121577

Bounfour, A., Housel, T., Silkey, T., & Nonnis, A. (2023). Digital transformation and strategic agility during the COVID-19 crisis: The role of the intangible capital conversion. *Digital Transformation and Society, 2*(3), 257–275. Https://doi.org/10.1108/DTS-09-2022-0048

Kustyadi, G., & Wijayanti, A. (2021). Ambidexterity and leadership agility in micro, small and medium enterprises (MSME)'s performance: An empirical study in Indonesia. *The Journal of Asian Finance, Economics and Business, 8*(7), 303–311. Https://doi.org/10.13106/jafeb.2021.vol8.no7.303

Zhang, Y., & Weng, Q. (2022). The impact of entrepreneurial self-efficacy on digital entrepreneurship: The mediating role of perceived behavioral control. *Technological Forecasting and Social Change, 178*, 121577. Https://doi.org/10.1016/j.techfore.2022.121577



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## Reflections of behavioural biases in investment decisions among individual investors

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**Abstract:** This study investigates the reflections of behavioral biases in investment decisions among individual investors, focusing on the state of Kerala. The primary objectives are to identify key cognitive biases—such as recency, overconfidence, loss aversion, anchoring, confirmation bias, and hindsight bias—and analyze their influence on investment decisions. The study also examines how these biases affect market trends and the risk-bearing capacity of individual investors. Using purposive sampling, both primary and secondary data were collected and analysed through the simple percentage method. The findings indicate that these behavioural biases significantly shape individual investment behaviours and contribute to shifting market dynamics. The study concludes that behavioural biases are deeply embedded in investment decision-making, often leading to irrational financial choices and reflecting broader market trends influenced by investor psychology.

**Keywords:** Behavioural bias, Individual investors, risk bearing capacity

**Introduction:** In fast-moving financial markets where fortunes and careers can be earned or lost, integrating emotion, cognition, and bodily response may be crucial to understanding how and why decisions are made. Behavioural finance is the study of finance based on credible assumptions about how people behave, often confirmed by psychological experiments. It combines psychology and economics to understand how psychological biases influence



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the financial decisions of individuals and institutions and how these decisions can affect market outcomes. It challenges the traditional finance theory that assumes investors are rational and make logical. Behavioural finance biases are systematic thinking or emotional errors that influence financial decisions, typically deviating from rational economic principles. These biases are mental shortcuts or emotional idiosyncrasies that might fool us with money and investing. They explain why we don't always make logical choices, even with information.

This study examines how behavioural bias affects individual investor investment decisions.

**Study significance**: Understanding behavioural biases and how they affect individual investor investment decisions would promote financial stability, efficiency, and equity. The study aims to demonstrate investor behavioural biases and their importance in investment decisions. This study seeks to uncover and prioritise investor decision-making behavioural biases.

**Problem statement**: Overconfidence, herd behaviour, loss aversion, and anchoring influence individual investors' investing decisions, which depart from rational financial theories. Behavioural finance is becoming more important, yet little is known about how these biases affect investing decisions. This gap makes it difficult to devise ways to improve individual investor rational decision-making.

**Objectives of the study:1.** The goal is to discover cognitive biases that influence investment decisions. 2. Analyse cognitive biases' impact on investment decision-making. 3. Market trend effects of behavioural biases. 4. Capacity of individual investors to take risks.

**Methodology for research**: The data came from 50 investors. Use of purposeful sampling. The study will use a descriptive research approach to collect and analyse numerical data on individual investors' behavioural bias in investment decisions. Primary and secondary data were employed in this investigation. Investors provide primary data via structured questionnaires. Secondary data came from journals, books, and internet.



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**Interpretation of the findings:** The study found that behavioural biases strongly influence individual investors' investment decisions, which affect market patterns. The main findings are;

**Recency bias**: Recent news events overly affect investment decisions, leading to short-term market overreactions. Over 40% of respondents believe in recent market trends and buy popular products.

**Overconfidence:** Over 55% of investors rely on intuition and gut feelings to make judgements. Many investors were overconfident in their market predictions. This caused excessive trade volumes and market instability. 48% of investors prioritise minimising loss above maximising returns. A larger emotional reaction to losses prevented investors from selling failing assets, causing market inefficiencies and delayed corrections.

**Anchoring bias:** Over 60% of investors rely on prior stock market performance and information. Many investors held onto outmoded reference points like the original stock price, slowing market adjustments and sometimes resisting fresh market information.

**Confirmation bias:** 42% of investors seek information to support their investment decisions. Due to investor confidence, popular assets remained expensive for longer.

Investors may experience **hindsight bias**, with 52% planning to modify their portfolio following a loss or decrease in value. After market results were known, investors had hindsight bias and thought they were inevitable. Overconfidence in future decision-making and misjudgment threatens distorted future tactics.

**Market trends impact:** 46% of investors trust recent market trends to predict future performance. These behavioural biases caused asset mispricing, news overreaction, and speculative bubbles. Market panics were mostly caused by cognitive biases, not just economic fundamentals. Market patterns reflected economic indicators and investor sentiment cycles, exacerbated by biases in decision-making.

**Conclusion:** Behavioural biases strongly influence individual investor decisions. Many investors make decisions based on psychological factors like overconfidence, fear of losses (loss aversion), recency biases, anchoring,


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hindsight biases (like "knew it would happen"), and confirmation bias. Trading too much, insufficiently distributing risk, or misjudging asset values are common investment mistakes caused by these biases. These behaviours suggest that standard financial theories, which assume investors act logically, cannot fully explain how people invest. Understanding these biases can enhance investment strategy and financial outcomes.

**Reference:**

Rikberg, O. (2023). The Impact of Behavioural Biases on Individual Investors' Decision-Making: An Analysis of Cognitive and Emotional Biases in Investment Choices.

Finance & Accounting, 4(6), 807-815. Hemrajani, P., Rajni, & Dhiman, R. (2024). Retail investors financial risk tolerance and risk-taking behaviour: The role of psychological factors. FIIB Business Review, 13(1), 87-105.

Lei. S., & Mathers, A. M. (2024). Familiarity bias in direct stock investment by individual investors. Review of Behavioral Finance, 16(3), 551-579.

Venkatesa Palanichamy, N., Santhosh Kumar, M., & Kalpana, M. Effect of Behavioral Biases and Financial Literacy on Investors' Investment Decision-making in Kerala, India.

Banerji. J., Kundu, K., & Alam, P. A. (2023). The impact of behavioral biases on individuals financial choices under uncertainty: An empirical approach, Business Perspectives and Research, 11(3), 401-424.

Siratan, E. D., Tannia, T., Susilo, S. R., Dewi, A. C., & Dozen, W. (2024). The Influence of Behaviour Finance and Demographic Factors on Investment Decision Making Through Risk Tolerance as Mediation. Dinasti International Journal of Economics, Finance & Accounting, 4(6), 807-815.

Hemrajani, P., Rajni, & Dhiman, R. (2024). Retail investors financial risk tolerance and risk-taking behaviour: The role of psychological factors. FIIB Business Review, 13(1), 87-105.

Ahmad & Shah, 2020 M. Ahmad, S.Z.A. Shah Overconfidence heuristic-driven bias in investment decision-making and performance: Mediating effects of risk perception and moderating effects of financial literacy Journal of Economic and Administrative, 38 (1) (2020), pp. 60-90



ISBN: **978-93-5786-070-3**
March 2025

Antony and Joseph, 2017 A. Antony, A.I. Joseph Influence of behavioural factors affecting investment decision—An AHP analysis Metamorphosis, 16 (2) (2017), pp. 107-114

Arora and Kumari, 2015 M. Arora, S. Kumari Risk taking in financial decisions as a function of age, gender: Mediating role of loss aversion and regret International Journal of Applied Psychology, 5 (4) (2015), pp. 83-89

Daniel, Hirshleifer and Subrahmanyam, 1998 K. Daniel, D. Hirshleifer, A. Subrahmanyam Investor psychology and security market under-and overreactions. The Journal of Finance, 53 (6) (1998), pp. 1839-1885.

Bashir et al., 2024 U. Bashir, U.N. Kayani, S. Khan, A. Polat, M. Hussain, A.F. Aysan Investor sentiment and stock price crash risk: The mediating role of analyst herding Computers in Human Behavior Reports, 13 (2024), Article 100371

14:51

De Bondt, Mayoral and Vallelado, 2013 W. De Bondt, R.M. Mayoral, E. Vallelado Behavioral decision-making in finance: An overview and assessment of selected research Spanish Journal of Finance and Accounting/Revista Española de Financiación y Contabilidad, 42 (157) (2013), pp. 99-118

Jain, Walia, Kaur, & Singh, 2021 J. Jain, N. Walia, M. Kaur, S. Singh Behavioural biases affecting investors' decision-making process: A scale development approach Management Research, 45 (8) (2021), pp. 1079-1098

Mittal, 2019 S.K. Mittal Behavior biases and investment decision: Theoretical and research framework Qualitative Research in Financial, 14 (2) (2019), pp. 213-228



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## A study on social media marketing strategies for startups

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**Introduction:** Startups need social media marketing because it has changed how businesses connect with customers. Unlike traditional marketing tactics, social media marketing helps companies develop brand awareness, engage target customers, and grow business at cheap cost. With Facebook, Instagram, Twitter, LinkedIn, and TikTok, entrepreneurs may reach customers, generate leads, and build a digital presence. Due to its cheap and strong engagement potential, social media marketing can assist startups with little resources. Startups gain reputation and reach via content marketing, targeted advertising, and community building. Despite its benefits, social media marketing faces algorithm updates, content saturation, and audience retention. Successful startup campaigns need understanding these aspects. Social media indicators are crucial to marketing success evaluation. Startups may improve marketing success by tracking KPIs like engagement, click-through, and conversion rates. Startups can also use social media influencers' credibility and reach to boost brand trust and visibility using influencer marketing. This study examines the importance of social media in startup growth, effective marketing techniques, benefits and drawbacks, social media metrics, and influencer marketing. Startups can use the data to create and implement effective social media marketing plans to stay competitive in the digital age.

**Problem statement:** Due to limited resources and brand recognition, startups need excellent marketing to flourish. Social media is a cheap way to engage


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customers, develop brand exposure, and boost revenue. Startups often lack clear strategy to maximise their potential. Choosing the best social media marketing methods, quantifying success with meaningful metrics, and overcoming algorithm changes and competition are major issues. Many firms have yet to use influencer marketing. This study examines the significance of social media in company growth, effective marketing methods, benefits and drawbacks, and how companies can optimise their social media efforts for long-term success.

**Study significance**: This study examines how companies can utilise social media marketing to expand, raise brand awareness, and engage customers. Startups may maximise ROI by identifying essential methods for digital marketing. It shows the pros and cons of social media marketing, enabling educated decision-making. The study also investigates performance indicators on social media and how influencer marketing boosts brand reputation and reach. This report gives entrepreneurs and marketers real advice to help startups succeed in a competitive digital marketplace.

**Study goals:** Analyse the impact of social media on startup growth. To discover successful social media marketing strategies for businesses, study its benefits and limitations, examine the significance of social media analytics in measuring performance, and investigate how entrepreneurs might harness influencer marketing.

**Methodology for research**: This research methodology solves the research problem and its reasoning. This science studies systematic research. This includes geographical area, research design, data gathering method, and sampling methodology. The study employed primary and secondary data. A well-structured questionnaire collects data. The questionnaire begins with a socio-economic profile of respondents and then asks about the study's aims.

**Sampling Method** Samples were selected using snow balls. **Sample size:** 65 people Study area: Wayanad Data-collection tools Quantitative Analysis • Use


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descriptive statistics (mean, standard deviation) • Test associations with correlation and regression analysis • Create tables and graphs • Percentage, average, independent sample t-test. Chi-square test, one-way ANOVA.

**Findings:** A strong 56% of respondents say social media is crucial for startup success. Instagram was the most influential, with 53.3% of people citing it for startup growth. Social media has raised revenues for 31% of firms, proving its revenue-boosting power. Most respondents said social media boosts brand visibility, making it an important brand awareness tool. A significant 30% of respondents strongly think that content marketing is the best startup social media marketing technique. 37% of respondents use social media weekly, suggesting persistent engagement. Most responders use paid social media ads to develop their startups. 30% of respondents think their audience prefers promotional content. 38% of respondents cited increased client engagement as the main benefit of social media marketing. Startups can overcome social media marketing obstacles by hiring a dedicated social media manager. CTR increased is a key indicator for social media marketing effectiveness. 17% used social media analytics to analyse client feedback and improve messaging. Most responders use social media management tools to track metrics and evaluate performance. 40% track social media data with Instagram insights. 42% of respondents used social media influencers to market their startups. 31% of respondents said nano influencers are cheaper and more honest, especially for companies with limited funding. 38% of startups saw sales rise from influencer marketing. Working with influencers was most difficult for 27% of respondents due to expense management. Startup social media marketing strategies depend mainly on client engagement.

**Conclusion:** This study examined how social media helps startups succeed. Social media platforms are cost-effective, scalable, and highly engaging for companies to develop brand awareness, interact with target audiences, and


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acquire customers. Startup methods that focus on content consistency, platform selection based on target demographics, and interactive engagement were shown to be most effective. Social media marketing offers entrepreneurs real-time feedback, viral potential, and worldwide reach, but it also includes problems including managing negative comments, keeping up with platform algorithms, and resource limits. The report also stressed the relevance of social media analytics like engagement rates, reach, and conversions in marketing evaluation and strategy refinement. For firms seeking legitimacy and rapid growth, influencer marketing proved particularly advantageous. When matched with the brand's values, micro and macro influencer collaborations can boost traffic and sales. In conclusion, a well-structured, data-driven social media marketing plan supported by performance metrics and influencer alliances can help companies develop sustainably in today's competitive digital marketplace.

## References

Olivieri, M., & Testa, G. (2024). Social media platforms use in startups' international marketing strategies: a multiple case study. International Marketing Review, 41(5), 1074-1101.

Susiang, M. I. N. (2024). Creative Marketing Strategies to Drive Business Growth in Startup Incubators. The Eastasouth Management and Business, 3(01), 208-219

Park, S. Y., & Loo, B. T. (2024). The use of crowdfunding and social media platforms in strategic start-up communication: a big-data analysis. In Start-up and Entrepreneurial Communication (pp. 197-215). Routledge.

de Souza, A. O., Pereira, M. E. F., Satrapa, H. F. M., Luiz, D. M., Drumond, T. D. R., Soliani, R. D., ... & Pereira, F. S. (2024). Marketing strategies for a natural products startup: a case study in the Brazilian Amazon. Observatório De La Economía Latinoamericana, 22(6), e5495-e5495.

Sahu[1], S., Kshatriya, S., & Jha[1], S. N. (2024). Impact of Digital Marketing Strategies on the Performance of Startups.



ISBN: **978-93-5786-070-3**
March 2025

Hilong, L. (2023). Effectiveness of social media to attract customers for start-up business. International Journal of Management and Human Science (IJMHS), 7(1), 16-23.

Thulasipriya, B., & Rodrigues, L. J. (2023). Developing Marketing Strategies for Startup Entrepreneurs: A Literature Review. IUP Journal of Entrepreneurship Development, 20(3), 5-18.

Rudeloff, C., Pakura, S., Eggers, F., & Niemand, T. (2022). It takes two to tango: the interplay between decision logics, communication strategies and social media engagement in start-ups. Review of managerial science, 16(3), 681-712.

Gulati, S., & Grover, A. Social Media Strategies for Indian Startups.

Garg, S., Asif, S., Yadav, S., & Kaushik, T. (2022). The influence of online marketing on start-ups. International journal of health sciences, 6(S5), 5414-5427.

Mumi, A. (2022). Social media as a strategic capabil.

**Websites:**

http://scholar. Google .com

http://www.google.com

http://shodhaganga.inflibnet.ac.in

http://www.researchgate.net/publication



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# Invisible Inequality: Economic Marginalisation in Indian Higher Education

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**Abstract:** This research analyses the economic marginalisation of students outside of caste-based affirmative action measures in India's higher education system, a commonly disregarded aspect of inequality. Reservation laws have promoted social justice for historically marginalised communities, but they have not adequately addressed the needs of economically disadvantaged individuals outside these categories, especially in the general category. The study exposes discrepancies in quality education, competitive test outcomes, and institutional support using NEET 2024, national surveys, and academic literature. It claims that present policy frameworks fail to address caste and class, leaving a policy vacuum that disadvantages a large portion of the population. The study recommends a reform of inclusive policymaking that better incorporates economic vulnerability into affirmative action discourse.
**Keywords**: Economic marginalization, general category students, higher education inequality, caste and class intersection, EWS quota, educational policy, India, competitive exam disparities

**Introduction:** "Injustice anywhere is a threat to justice everywhere." —Martin Luther King Jr. India's higher education affirmative action initiatives have traditionally targeted caste-based imbalances to empower marginalised groups. Economic suffering is not limited to historically disadvantaged classes. Growing research reveals that economically disadvantaged students outside the reservation system suffer significant challenges, particularly to competitive higher education. This article examines these inequities, focussing on the 'invisible poor.' The study uses intersectionality and distributive justice to explain the system's fundamental inequalities. As the Indian education system


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evolves in a competitive global environment, meritocracy, justice, and equity become more complicated. Low-income students across all social categories are disadvantaged by rising education costs, urban-rural inequities, and systemic hurdles to competitive exam preparation, while those ineligible for caste-based reservations face equivalent or more suffering. This paper challenges the idea that general category students are privileged. It shows how economic vulnerability transcends caste and how institutional procedures, like the 2019 10% EWS quota, have failed to close the gap. The research labels these economically disadvantaged children the 'invisible poor' in Indian education discourse using intersectional theory and distributive justice. Different cut-off scores for entrance exams like NEET, JEE, and UPSC reflect systemic inequalities that put pressure on students outside the quota system. Affirmative action aims to equalise the playing field, but fresh research suggests economic and geographic discrimination, particularly in rural India. Kerala, known for its education, is especially affected by this dynamic. Lower family incomes in upper-caste rural regions and limited access to competitive coaching centres suggest a silent crisis masked by larger development metrics. This study highlights these facts using latest national datasets and rigorous policy analysis. It presents a balanced, research-based case for recalibrating educational equity frameworks to reflect India's changing inequality scenario.
**Study Objectives:** 1. Analyse the structural exclusion of economically marginalised students in dia's higher education system. 2. Assess competitive test cut-off scores and their impact on equal access to higher education. 3. Evaluate the efficacy of identity-based affirmative action frameworks, particularly the EWS quota, in reducing economic vulnerability.
**Research Method**: This study uses AISHE (2023), ASER (2023), and NEET, JEE, UPSC, and UGC NET cut-off records for secondary data analysis. The data were evaluated to determine economic exclusion trends in competitive tests and reservations.
**Economic inequality in identity-based policies:** Economic Status and Caste-Based Policy: Indian affirmative action has always relied on caste, although it often obscures economic deprivation. This research examines how economically marginalised students excluded from reservation programs


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experience multiple exclusions using intersectionality and distributive justice. These students often lack excellent education, exam preparation, and institutional mentorship, worsening their educational disadvantage. Empirical research shows that broad category populations are economically disadvantaged. The Periodic Labour Force Survey (PLFS, 2022) shows that many upper-caste households are low-income, contradicting the idea of universal privilege. The National Family Health Survey (NFHS-5, 2019–21) found 27.5% of rural upper-caste households in the lowest wealth quintile. The 2011-12 India Human Development Survey (IHDS) confirms that approximately 25% of households earn less than ₹5,000 per month.

**Educational and structural barriers**: General category kids from economically deprived backgrounds face significant structural educational challenges. The Annual Status of Education Report (ASER 2021) notes that these pupils attend underfunded schools, which hinders their preparation for high-stakes competitive tests. The All India Survey on Higher Education (AISHE 2020–21) found that general category student enrolment has dropped due to affordability. The urban-rural split is stark: 8.7% of rural 18–23-year-olds are in higher education, compared to 27% in urban regions. Despite Kerala's high literacy rate, general category students from rural districts like Wayanad, Idukki, and Kasaragod experience systemic disadvantages due to pricey private tuition and migration-related family upheavals, affecting their academic continuity.

**Digital Divide and Educational Technology Access**: Digital access is essential yet unevenly distributed. Online learning increased during the COVID-19 epidemic, but economically disadvantaged students, especially in rural areas, had restricted access to digital infrastructure. Only 15% of rural families had internet access, according to the NSSO (2020) report on digital education. Access was below the national average even in general category families, showing the socioeconomic disparity. Students from such backgrounds rarely have laptops or established online tutoring platforms like BYJU'S or Unacademy. They use shared mobile devices. The learning gap widens because affluent pupils have access to high-quality coaching. This access discrepancy lowers exam performance for economically disadvantaged


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kids regardless of intellectual ability. Mental and academic stress High academic expectations, financial constraints, and insufficient support networks put economically disadvantaged kids under tremendous psychological stress. NIMHANS discovered in 2023 that students from poor general category families report higher anxiety and despair, mostly due to academic competitiveness and perceived opportunity inequalities. Coaching cities like Kota, where hopefuls from low-income households feel great pressure to succeed without external support, demonstrate this dynamic. Over 25 Kota students committed suicide in 2023, many of them "invisible poor" pupils. These tragedies highlight the need to address mental health and material access.

**Income inequality by caste**: Recent research shows economic differences within and between castes. Reservation policies help historically marginalised communities, although they increasingly benefit economically better-off minorities. The Centre for Policy Research found in 2023 that the top 20% of restricted income earners receive over 60% of reservation-related benefits in various states. This internal stratification undermines affirmative action's redistributive purpose and leaves economically marginalised non-reserved people without support. Due to their caste identity, rural upper-caste populations like Kerala's Brahmins and Nairs, who have dwindling landholdings and insecure income, are excluded from economic relief programs. Kerala's agrarian shift and educational privatisation have hit these groups hard. Despite historical privilege, field studies demonstrate economically disadvantaged NSS and SN Trust college students drop out at higher rates. Policies that confuse caste with economic standing are limited by these trends. Rather than treating caste and class as separate disadvantages, a more sophisticated approach is needed.

**Caste-Based Economic Inequality: Data Table**

| Source | Key Findings | Implications |
|---|---|---|
| IHDS (2011–12) | 25% of general category households earn < ₹5,000/month | Challenges the idea of universal economic privilege in general category |



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| Source | Key Findings | Implications |
|---|---|---|
| PLFS (2022) | Upper-caste rural households rely on low-income agrarian jobs; urban SC/STs show mobility | Caste privilege does not ensure economic advantage, especially in rural India |
| NFHS-5 (2019–21) | 27.5% of upper-caste rural households in the lowest wealth quintile | Substantial economic hardship exists even among upper castes |
| Ashwini Deshpande (2020) | Inter-caste inequality decreasing, intra-caste inequality rising | Inequality is growing within caste groups, questioning benefit distribution |
| Centre for Policy Research (2023) | Top 20% in reserved categories consume over 60% of reservation benefits | Economic vulnerability overlooked in current reservation frameworks |

This table helps illustrate the intersection of caste and economic inequality, showing that economic hardship is prevalent across both reserved and general categories. It highlights how caste-based policies may overlook intra-caste economic disparities, contributing to uneven benefit distribution and increasing inequality.

**Competitive Exam Cut-Of Disparities: Data Table and Analysis**

| Exam | Year | Category | Cut-Off Marks / Percentile | Max Marks | Remarks |
|---|---|---|---|---|---|
| NEET | 2024 | General (UR) | 720 – 137 | 720 | Significantly higher than other categories |


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| | | | | | |
|---|---|---|---|---|---|
| | | SC/ST/ OBC | 136 – 107 | | Reflects relaxed threshold for reserved groups |
| | | PwD | 136 – 121 (UR-PwD) | | |
| JEE Main | 2024 | General (UR) | 93.2 percentile | 300 | High cut-off for unreserved candidates |
| | | OBC-NCL | 75.0 percentile | | |
| | | SC | 51.9 percentile | | |
| | | ST | 37.2 percentile | | |
| UPSC Prelims | 2023 | General (UR) | ~88 marks | 200 | Cut-off trend flat despite increased competition |
| | | OBC | ~86 marks | | Minor relaxation for OBC category |
| | | SC | ~74 marks | | Wider gap in historical context |
| | | ST | ~69 marks | | Consistent disparity over years |


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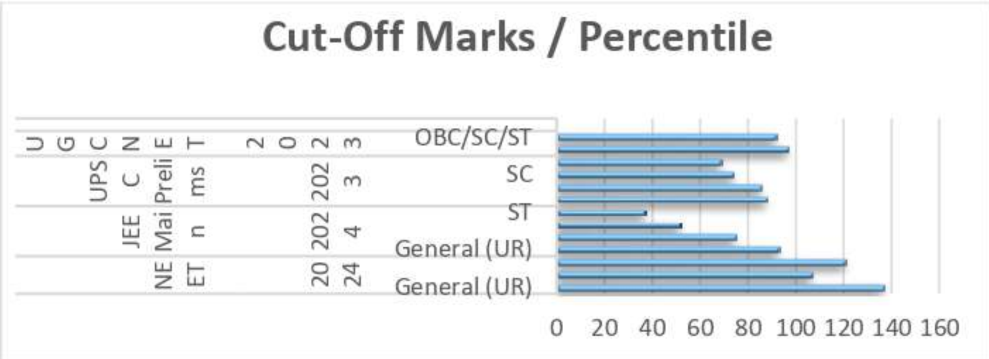
| | | | | | |
|---|---|---|---|---|---|
| UGC NET | 2023 | General (UR) | 97–99 percentile (avg. 180+) | 300 | High for Assistant Professor eligibility |
| | | OBC/SC/ST | 92–96 percentile (avg. 160–170) | | Threshold varies by subject, trend consistent |




Major competitive exams have persistent and considerable cut-off threshold differences across categories. Despite not receiving compensation, general category students, especially economically disadvantaged ones, must meet higher performance criteria. The strict structure ignores economic hardship beyond caste-based classifications, causing systemic exclusion.

**Key findings:** 1. Economic vulnerability across caste lines The results showed that many general category students, especially rural ones, struggle economically. The India Human Development Survey (IHDS, 2011-12) found that 25% of general category households earn less than ₹5,000 per month, challenging the perception of economic superiority among these students. Limited access to quality education and coaching for competitive exams like NEET, JEE, and UPSC exacerbates economic vulnerability. 2. Economically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Disadvantaged Students Under-represented in Higher Education According to the Annual Status of Education Report (ASER, 2021) and the All India Survey on Higher Education (AISHE, 2020-21), economically disadvantaged general category students had lower higher education enrolment rates. With 8.7% of rural general category youth aged 18–23 engaged in higher education, compared to 27% in urban regions, the rural-urban split is stark. Competition Exam Cut-Offs and Access Disparities The data shows that general category students have substantially higher cut-offs for competitive exams like NEET and JEE than reserved category students. These factors, along with inadequate preparation resources, put them at a disadvantage. Despite similar academic potential, latest NEET 2024 cut-off data shows a considerable disparity between the general category (50th percentile) and SC/ST/OBC categories (40th percentile). 4. Impact of Reservation Policies and EWS Quota The EWS quota has not adequately addressed the requirements of economically disadvantaged students in the general category. Central university records reveal numerous EWS seats vacant, implying awareness, implementation, and accessibility problems. A increasing amount of research suggests that caste-based reservation alone does not alleviate the economic hardship of rural, upper-caste students competing in the commercialised education sector.

**Suggestions**: 1. Incorporate Economic Criteria into Reservation Policies Economic indicators such household income, parental occupation, and regional disadvantage should be used to determine educational assistance system eligibility. This would ensure that all truly impoverished students receive aid, including those outside caste-based reservations yet facing equivalent or greater financial difficulty. 2. Improve and monitor EWS Quota System Current EWS quota implementation needs more clarity and openness. Authorities should increase verification to prevent misuse and target benefits to the most disadvantaged. Clearer criteria, stronger rural outreach, and periodic audits would connect policy goal with impact. 3. Increase Affordable Competitive Exam Preparation Support The government and institutions must fund scalable, cheap competitive test preparation programs, notably online and community-based ones. Subsidised or free coaching and digital platforms would aid economically disadvantaged pupils across all categories.


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4. Encourage Data-Driven, Inclusive Policy Dialogue Educational justice must go beyond caste. Disaggregated socioeconomic data should inform national scholarly and policy discourse. Policy solutions must acknowledge class, caste, and regional inequality to be inclusive and just. 5. Establish Support Systems Addressing Psychological and Structural obstacles For economically marginalised students, institutions should offer mentoring, mental health counselling, and peer networks. These treatments can minimise psychological stress, promote retention, and boost academic progress for policy- and perception-ignored students.

**Conclusion:** This study brings attention to economically disadvantaged kids barred from caste-based reservations. Affirmative action has corrected many historical injustices, but it must include economic marginalisation. Future education policy must balance caste and class characteristics and be data-driven to promote educational justice.

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**Reference:**

All India Survey on Higher Education (AISHE). (2023). Ministry of Education, Government of India.

Annual Status of Education Report (ASER). (2023). Pratham Foundation.

Deshpande, A. (2011). The Grammar of Caste: Economic Discrimination in Contemporary India. Oxford University Press.

Drèze, J., & Sen, A. (2013). An Uncertain Glory: India and its Contradictions. Princeton University Press.

Government of India. (2019). The Constitution (103rd Amendment) Act.

Jodhka, S. S., & Newman, K. S. (2007). In the Name of Globalisation: Meritocracy, Productivity and the Hidden Language of Caste. Economic and Political Weekly.

National Testing Agency (NTA). (2023). NEET and JEE Cut-off Reports.

Thorat, S., & Newman, K. (2010). Blocked by Caste: Economic Discrimination in Modern India. Oxford University Press.

Times of India. (2024). UGC NET Cut-Off Analysis.

Yadav, Y. (2022). Unequal Yet Equal: Reservation and Representation in India. Journal of Indian Education Policy.



ISBN: **978-93-5786-070-3**
March 2025

Basant, R., & Sen, G. (2020). *Who gets in? Access to higher education in India*. Economic and Political Weekly, 55(3), 34–42.
Ministry of Education. (2023). *National Education Policy 2020: Implementation Progress Report*. Government of India.
Singh, A. (2021). *The Unseen Poor: General Category and the Myth of Privilege*. Indian Journal of Social Justice, 12(2), 88–104.
National Sample Survey Office (NSSO). (2022). *Household Social Consumption on Education in India* (Report No. 588). Ministry of Statistics and Programme Implementation
Desai, S., & Vanneman, R. (2015). *India Human Development Survey-II (IHDS-II)*. National Council of Applied Economic Research.



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# An analysis of investor awareness and social media influence on stock market investment in Wayanad

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**Abstract:** This study examines investor knowledge and social media's impact on Wayanad stock market investment. Online platforms like YouTube, Telegram, Instagram, and Facebook are increasingly relied on by investors for real-time updates, stock advice, and market trends. The research uses a systematic questionnaire to examine investors' stock market awareness, social media's influence on their decisions, and psychological obstacles. It also examines investor awareness, returns, and online misinformation hazards. The findings can help politicians, educators, and investors promote financial literacy and ethical investing.

**Keywords:** Investor Awareness, Social Media, Stock Market, Investment Behaviour, Financial Literacy.

**Introduction:** Stock market wealth creation requires investor knowledge and decision-making. Rural Indian investors lack stock market knowledge, risks, and possibilities, while urban investors have more financial market exposure. This awareness gap dramatically affects engagement and investment. Social media is now a major investing tool. YouTube, Twitter, and Telegram provide market updates, professional advise, and investing recommendations. Misinformation, speculation, and psychological biases like overconfidence and herd mentality plague investors on unregulated social media. Investment rashness lowers returns. Investors must understand financial markets, investing methods, and risks to make informed decisions. Social media platforms provide investors with real-time stock and market data, trends, and opinions.



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These platforms give a lot of information, but their accuracy, reliability, and impact on investment decisions are unclear.This study explores Wayanad investor knowledge and social media influence on stock market investing. It will examine investors' stock market fundamental knowledge, social media's impact on investment methods, and psychological barriers. The study will also assess if awareness boosts investment results. It promotes rural financial knowledge and investment.

**Literature review:** Financial education is needed because Sasikumar & Sundaram (2024) observed that investor awareness increases satisfaction and decision-making while decreasing losses. Singh & Kumar (2024) found that social media and influencer credibility cause herding in Indian markets, especially under uncertainty, while financial literacy reduces it. Nurhidayah (2022) found that social media effects Indonesian millennial investors, mediating financial risk tolerance and downturn overreaction bias. Subramanian (2021) observed that compelling content on YouTube and Instagram influences young Indian investors. Tonne (2019) shown how media influences sentiment and market volatility, challenging market efficiency.

**Study significance:** Urban and rural investors in India have increased stock market involvement in recent years. Financial literacy and investor awareness are low in rural Wayanad. Many people are unaware of stock market prospects, risks, and how digital platforms effect investment decisions. Growing cellphone and internet use has made social media a powerful tool that influences financial behavior, often positively but occasionally through misinformation or exaggeration. Many investors lack direction, leading to impulsive decisions and financial stress, despite government and institutional efforts to increase financial literacy. Thus, investor knowledge and social media's impact on investment must be considered. It will also identify investor psychology.

**Problem statement**: Technology and smartphones have democratized the Indian stock market. Investor awareness and financial literacy are lacking in rural Wayanad. Many stock market investors don't understand its risks, rewards, or operation. Social media is influencing investment decisions, but it often spreads unsubstantiated or erroneous information that can lead to


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disastrous investments. Rural areas like Wayanad have had low financial literacy achievement. Investor awareness and investment returns and social media's psychological impact on investing are also inadequately explored. To address these gaps, this study examines awareness, social media influence, and investment decision-making.

**Study goals**: ● Evaluate stock market awareness. ● Examine social media's impact on investment. ●Examine the correlation between awareness and return. ● The goal is to examine the psychological problems investors confront from social media impact.

**Methodology for research:** The study employs descriptive research to describe investor awareness, social media's impact on investment decisions, and awareness and investment returns in Wayanad, Kerala. Researchers examined rural and semi-urban Wayanad individual investors, a less-studied group. With time and accessibility constraints, 60 respondents were convenience sampled. A structured questionnaire with closed-ended and Likert-scale items measured investment behaviour and impressions. Journals, newspapers, SEBI reports, government reports, and trustworthy websites offered secondary data. Chi-square tests, percentage, and mean score were used. Regional retail investor factors were fully understood with this technique.

**Data analysis:** There is a substantial correlation between respondents' educational qualifications and their stock market awareness. Educational qualification and stock market awareness were examined using the Chi-square test. The null hypothesis ($H_0$) suggests no significant difference between variables, while the alternative hypothesis ($H_1$) suggests a substantial difference. The test's p-value was 0.689, exceeding 0.05. Thus, the null hypothesis is accepted, showing that education degree does not significantly affect stock market awareness among research respondents. This implies that educational qualification does not affect stock market understanding in Wayanad district. ● Analysis of Retail Investor Investment Decision Factors Awareness of stock market dangers is the most relevant element for retail investors (mean score: 4.2), indicating their caution. Next (3.8), social media influence, notably on Telegram and YouTube, strongly influences investment


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decisions. Investment experience scored moderately (3.5), reflecting expanding but diversified market exposure. Return expectations scored lowest (3.3), suggesting risk awareness and information sources are more important. Retail investors prioritise knowledge and social media over external incentives.

**Findings:** There is little stock market understanding among respondents, with 35% unaware and 16.7% highly aware. However, 43.3% rely on social media for knowledge and 71.7% support financial literacy programs. The most frequent source of stock market knowledge is social media (43.3%), followed by self-learning (25%) and friends/family (23.3%). Social media significantly impacts investment behaviour, with 55% following stock market updates, 48.3% influenced by Telegram, and 45% saying it improves decision-making, but only 6.7% acting on recommendations. • 55% of respondents monitor stock market updates on social media, and 51.7% use social media suggestions for investment decisions. However, only 18.3% verify these advice, showing a harmful tendency of acting without appropriate validation. Most investors (71.6%) feel that awareness leads to better profits, with 35% expecting 6-10% returns and 51.7% citing social media recommendations above personal or professional advise. • 63.3% experience social media stress, 60% disclose rash decisions, 61.7% face losses, 68.3% gain confidence, and 36.7% temporarily quit investing as a coping mechanism.

**Conclusion:** Investor knowledge and social media influence effect stock market investment both positively and badly, yet awareness is essential for financial decision-making. The study An examination of investor understanding and social media influence on Wayanad stock market investment indicated that many inhabitants don't comprehend portfolio diversification, regulatory organizations, or risk management. Telegram, YouTube, and Instagram distribute market data, but investors don't verify it before acting, the poll found. Rural investors face several obstacles to improved investments. These include financial illiteracy, overreliance on social media without verification, psychological difficulties including impulsivity and overconfidence, and lack of professional training or advising help. Thus, the government and financial institutions must emphasize investor


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education, manage misleading social media content, and provide accurate, trustworthy information to help investors make good financial decisions.

## References:

Sasikumar, S., & Sundaram, N. (2024). Investors' Perception towards the Share Market Awareness, Challenges and Satisfaction–A Study from Indian Context. International Research Journal of Multidisciplinary Scope, 5(3), 70-78.

Singh, L. H., & Kumar, K. (2024). The herding behavior of investors in the Indian financial market: An insight into the influence of social media. In Handbook of Research on Innovative Approaches to Information Technology in Library and Information Science (pp. 82-102). IGI Global Scientific Publishing.

Nurhidayah, N. (2022). Social Media, Financial Risk Tolerance, and Indonesian Millennial Generation Investor Behavior. International Journal of Finance & Banking Studies, 11(4).

Subramanian, Y. R. (2021). Social-media influence on the investment decisions among the young adults in India. Advancement in Management and Technology (AMT), 2(1), 17-26.

Ton, Q. T. (2019). Investor Sentiment and Attention in Capital Markets-A (Social) Media Perspective.

**Websites:**

https://www.moneycontrol.com

https://www.investopedia.com

https://shodhganga.inflibnet.ac.in

https://zerodha.com/varsity



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**Conservation as worship-A study of religious practices of Mullukuruma Community in Wayanad**

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Wayanad Talook is a continuation of great Mysore plateau and lies above the crest of the western [i]ghats. The country is rugged and rich with scenic beauty, especially in the south west, where range after range of hills, some hills with the the peak of more than 7000 feets. The average high of the plateau is about 2000 ft above the sea level, but many of the peak's heights more than that Vellarimala (7,364 feet), Elambileri (6806 feet) and Balasore or Banasura(6762feet), where the legendary giant Banasura is said to have constructed his fort. There are different assumptions regarding the evolution place name " Wayanad". Madras manual administration says that the sanskrit name of Wayanad was mayakshethra. This sanskrit connotation became "mayanadu' and later changed to Wayanad[1]. Vayal nadu, vananadu, vazhinadu etc also related to wayanad; but it is more reasonable to think that Wayanad as its name evolved from "Mayakshethra"sometimes the Malayalam version of Mayakshethra, mayanad may developed as Wayanad[ii]Rao bahadur c Gopalan Nair says in his work that the term vananad or land of forest may be turned as Wayanadu.Wayanadu is a hilly terrain with several elevated hights from the sea level with fertile soil and abundance of natural resources Nilgiri hills are situating on eastern part and Mysore plateau is bordering north west.[iii]


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**Migrations through ages:** Wayanadu was the paradise of migrants from time immemorial. Large influx of Migrants had been here from pre historical period itself such as Kurichyas, Pathiyar, Adiyar, Chettis, Jains, Nairs and Muslims too. Purpose of this arrival was to make their life more fortunate and prosper it with the abundance of natural resource here. Fertile soil, plenty of water, thick forests, and natural resources etc offered here prompted the migrants to settle down in Wayanad.Period of many of such migrations are shrouded in mystery. Archaeological evidence obtained from Edakkal caves shows that Mullukuruma community had been here in 3 rd century BC itself. According to a legend exist among the Mullukuruma s earliest rulers of Wayanad were vedas or Mullukurumas who held sway here and they were treacherously defeated by the kings of Kottayam and Kurumbranad kings together following the Marriage of veda princess with Kumbala prince who arrived in Thirunelli temple as a pilgrim[iv]. There are certain evidences for the existence of Veda kingdom here as revealed from the place names such as Vedankotta, Pakkam kotta, Kotta ambalam, Veliyambam Kotta are the pilgrim centers of Mullukurumas even now.[v] Over throw of Veda kingdom resulted in the establishment of Fedalism here under the Kottayam kings, Kottayam kings divided entire Wayanad region in to ten Nadus under Nair nadu vazhis.During this period the traditional rights of tribes over land, forest, were lost[vi], they became tax payees and agricultural serfs in the new system. can be traced from 17 th century itself. The British power arrived here following Tipu after the fall of Mysore.The Wayanad, which in 1798 Lord Mornington. Governor General of India, pronounced to be a part of the dominions of Tipu was ceded by the partition treaty of Mysore after the fall of Seringa patanam in 1799.[vii] During the British period also many of the rights of tribes like hunting and collection of forest products were limited by Madras Forest act of 1882[viii]. A large influx of migration had been here in the second half of 20$^{th}$ century from Travancore.The migrants from Travancore came with illicit liquor , and


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encroached the land under the tribes kept without enough title deeds , thus during the second half of 20 th century many of them became coolies under the Migrant farmers

In Wayanad, there were large extend of paddy cultivation had been here, thus plenty of water was required for that, so water conservation was practiced by ethnic tribes like Kuyrichiyas and Kurumas here.Chetty community and Jains also expanded the cultivation of paddy here.' Kenis' and' Chiras' existing in different parts of Wayanad are best examples for this.There are many ponds , dams and chiras were constructed by Jains here such as in Cheeral, Kazhambu kunnu, Nenmeni , Ponkuzhi etc.[ix] There are several place names in Wayanad related with chiras such as padichira, Manichira etc and' Kenichira'. Denoting the wide spread water conservation here.Mullukuruma community confined to south eastern Wayand region are considering their 'Kenis' as one of their God.Keni is a Small pond like circular features made in the springs and its inner layaer will be made out of hard woods like Ayani or jack fruit or Palm. It will store pure water without spilling out even in rainy season,Mullukuruma community in Wayanad are more cautious to protect this natural reservoirs. This paper is an attempt to study the how religion of nature worship among Mullukuruma community entangles with conservation of nature.

**Archaeological evidences about Mullukurumas:** Edakkal caves is the antiquarian evidence existing in Wayanad. It was invented by Faucett in 1894. Edakkal cave is situating 4 miles south west of Sultan Bathery on the western slopes of Edakkal hill, is an interesting natural cave with 5 feet width or fissure in the rock. Engravings on the walls of the cave have awaken the curiosity of many archaeologists and anthropologists. The cave contains certain inscription and carvings, small human figures, and symbols. Carvings in Edakkal caves clearly represents both figures of animals and human beings the most interesting features of the cultures are the appearance of intermittent human figure with peculiar head dress.[x] Human figures began to appear in artistic


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representation in the period of agro pastoralism.[xi] Several female and male enthroned figurines raising their hands were depicted widely among the Edakkal engravingsOne human figure carrying bows in hand along with a hunting dog in the northern wall is actually a representative of a Mullukuruma who uses dogs for hunting as opined by Faucett. Hunting is a part of their religious rites which existed recent times in Wayanad.[xii] The symbols which frequently seen in the cave walks were 'Swasthika' in various forms and specimens of familiar circular "Sun symbols." Faucet suggests that carvings and engravings on the cave wall are artistic work of Mullu Kurumas of early days. Their fear to approach the cave and their adoration to it ensure this fact. Faucet assuming that possibly the artists of Edakkal cave may be ancestors of present Mullu kurumas of wayanad and they also call themselves as Vedas.[xiii] Prof. Buler famous archaeologist opines that the period Edakkal engravings except the script may be 3$^{rd}$ c Bc., the period of script may be of 3$^{rd}$ c AD.[xiv] Some magical squares are seen among the Carvings which is common in oriental sooth saying. Scholars such as EO Tilner opines that, the cave may be a veneration Centre.[xv] He assumes that some tiger cult may be existed there as it is testified by the inscription in Brahmi as "Palpulithananthakari"read by Dr Hultzch; as this writing means one who killed many tigers. Faucet himself done a description about Edakkal caves in 'Indian antiquary 'mentions the annual pilgrim done by the Chetty community to do offering to 'Mudiyampilli' Bhagavathi.[xvi] Still it also existing as a Centre of worship to Mullukurumas and chetties. There had been a hunting sports among the tribes of wayanad called "Narikkuth."

**Theoretical approach:** In the long sweep of human history, for distinct modes of resource use such as food gathering, nomadic pastoralism, settled cultivation and industry[xvii]. Ramachandra Guha had critically examined the fact that whenever the modes of resource use is changing from food gathering, nomadic pastoralism, settled cultivation, and industry, consecutive changes will occur


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in their technology, aspects of economy and aspects of social organization, and aspects of ideology, i.e., broad perception of man-nature relationship. All ethnic tribes including Mullu kurumas of Wayanad region also passed through all this stages. In the Gathering mode of resource use, they practiced shifting cultivation and hunting and had only limited resources," they considered nature as totally capricious, which is not subject to human control. They regard humans being as merely the part of a community of beings that includes other living creatures as well as elements of land scape such as streams and rocks."[xviii] . As they felt nature beyond human control, they venerated natural water reservoirs called "Keni". It is still rarely seen in the district in the places such as Pakkam, Mundaneduppu colony near Kolagappara, and a keni which is situating at Appad near Meenangadi. They are still attributing a divine feeling towards its water. They call it "Deivakeni" or God Keni. All these kenis situating within the Mullukuruma settlement premises. They are also venerating river in Kuruva island which is a tributary of river Kabani. There are 18 branches for Kabani River at Kuruva. The Mullukuruma community who are the majority at the Pakkam region considered that these 18 branches of the river were emerged in midst of Krishna- Banasura war to release Anirudha, the son of Krishna. He was hostage by Banasura. During the war, Lord Shiva felt thirsty and he knelt to drink water from river Kuruva. Then he shook his moustache, the water drops fell out of it and turned into 18 branches of the river. So, they still venerate the water of river Kuruva. Still, they kneel to drink water from it.[xix]


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Deiva Keni at Pakkam

In this Modern period, it self they are following the conservation of their traditional Kavus too, Kavu tradition exist across kerala as a center of nature worship of the ethnic tribes. In Wayanad region to the Mullukuruma community is conserving the Kavus as a center of veneration. it is rich with rare species of woods shrubs herbal medicines etc. Usually, Kavus in Wayanad are rich with hard woods like 'Ayani' (Artocarpus hisutus Lam),' Kunni' (Abrus precatorius LA), Jack fruit tree, and herbal plants like' incha' (Acacia Caesia), Van Kadaladi, (Achyranthes asperaL) etc.[xx] Each of the kavus had their own guardian deities there. A kavu is grown as an eco-system under cover of the nature worship. Almost all kavus in Wayanad were situating in agrarian or non-agrarian eco systems. Kavus in Wayanad can be seen in the side of village ways, beside paddy fields, amid coffee estates under the patronage of various communities. Majority of such kavus were owned by ethnic tribes like Mullukurumas. Some of them are went under acculturation in the in the industrial mode of resource use.Mani kavu, which was a veneration center of ethnic tribes such as Kundu vadiya , Paniya etc under the ownership of Ayanippura Mullukuruma family was now under Malabar Devaswam board, which is situating in 35 acres in Choothu para near


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Meenangadi. During the period of Kottayam rulers, it was under the 'Koothali Nairs. It consisted of a swayambhoo Sivalinga and a stream also falls on it. Forest around it is protected by considering that Siva situating there as thapasa siva or as a meditating hermit. [xxi]Now this Kavu is known as Manikavu Siva temple.There are five more allied sub Kavus for this temple , they are Madathum kandi, Gulikan Kavu, Kavum Moola kavu, Karimam kavu, Kuttychathan Kavu .All these Kavus are following nature worship, and protecting the forests around them.

**Madoor Bhagavathykkavu:** It is under the owner ship of Mullukuruma community, it is situating in 1.5 hecters of land with three sub kavus such as serpa kavu,GulikanKavu,and a' keni' and' Chira'. In the early days 'cock cutting' was a part of ritual here, but it is prohibited.Kenis are generally considered as gods by the community. With the provision of tube wells by the govt many of their kenis had been disappeared and spoiled.[xxii]Madoor Bhagavathykkavu is situating in the premises of Madoor Mullukuruma colony.

**Mundaneduppu Kavu:** In Mundanaduppu kavu, both Mullukuruma and Paniya community have their rights, they are practicing cock cutting in the month of Kumbham or in the month of February. Annual worship is only there. There is also a 'Daivakeni' near to it. Water of the keni is used for the purificatory ceremony of Kavu near to it.[xxiii]

**Urukkandi Sreekandan puli kavu:** It is another kavu under Urukkandi Mullukuruma family, they are worshipping Sreekandan puli in disguise of lord Siva. Thalachilwan, Poothadi Daivam of Mullukurumas are worshipped here.This consists of old mango and jack fruit trees in its premises. In addition to that the tribal people in Wayand such as Paniyas, Mullukurumas and Kurichiyas are venereating and protecting milky trees such as Chembakam, Pala, Kanjiram and arali as sacred. Since they are producing milk,it is considered as symbol of fertility and every ethnic tribes never cut such trees most probably their gods are seating under such milky trees.[xxiv] In addition to


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that they are highly careful to nurture the herbal plants such as Nandiar vattam, arootha , Thulasi , panikoorkka etc in their house premises both for curing the illness as well as to ward off evil too. Kuruma women are often hesitated to go near all these plants during their menstrual days, it shows that they are keeping

## Citation

[i] Madras Manuel of administration, vol iii, p 1025
[ii] Rao bahadur c Gopalan Nair, Wayanad janangalum paramparyavum (Mal), Modern books S.Bathery, 1911, p17.
[iii] Ibid p 17
[iv] Told by Karimban 92 years. At Bathery on 14/01/2023.
[v] OK Johni, Wayanadinte samskarika Bhoomika,Sulthan Bathery, 1988, p65
[vi]OK Johni, Wayanad rekhakal, Sulthan Bathery, 2010.p.82.
[vii] Logans Treatie s CXIII
[viii] Madras forest act 1892.
[ix] ibid, wayanadinte Samskarika Bhoomika, p.48.
[x] District Gazettes Calicut, Sreedharan menon P68.
[xi] ibid, Wayanad Rekhakal, p24.
[xii] From authors experience in the childhood.

[xiv] Opcit,Wayanadinte Samskarikabhoomoka,p.21.
[xv] Opcit, Wayanad Rekhakal, p29.
[xvi] India antiquary, W Faucet, volume xxx, 1901, P413
[xvii] Madhav Gadgil and Ramachandra Guha, The Use and Abuse of Nature This Fissured Land an ecological history of India, Oxford university press,1992, p14
[xviii] Ibid pp 15,18.
[xix] Pazhookaran Jose, Kappi mooppante Kadanubhavangal,2011, pp 100,101
[xx] Report prerpared byMS Swaminathan Research Foundation to Meenangadi Grama panchayath,2021 p,14
[xxi] Told by Ani ,48 yrs, Poojari of the temple on 17/06/23.
[xxii] Told by Ajayan Madoor, 45 yrs, Police constable, Meenangadi police station on 12/08/21.
[xxiii] Told by Dineshan Mundanaduppu, 52 yrs old, at his residence in Mundanadappu on 17/02/23
[xxiv] From the experience of author in the field work in Wayanad in course of research.


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