



ISSN : 3048-5320 (Online)

CSIBER International Journal - CIJ

Vol - 3, Issue No - 1, January 2025

**MULTIDISCIPLINARY
JOURNAL**



MAKE IN INDIA



Published by : CSIBER Press, Central Library
Building, CSIBER Campus, University
Road, Kolhapur-416004, Maharashtra, India.

Find the Journal Online at
<https://www.siberindia.edu.in/journals>
E-mail : cij@siberindia.edu.in

FOUNDER PATRON

Late Dr. A. D. Shinde

Chhatrapati Shahu Institute of Business Education and Research Trust was established in 1976 to provide professional education to the youth of rural western Maharashtra and North Karnataka. It was founded by a well-known educationist, the then Dean of Shivaji University, Kolhapur and a renowned Chartered Accountant, Late Dr. A.D. Shinde Sir.

PATRON

Dr. R. A. Shinde

Managing Trustee, CSIBER Trust, Kolhapur, India

C. A. H. R. Shinde

Trustee, CSIBER Trust, Kolhapur, India

CHIEF EDITOR

Dr. Bindu Nandkumar Menon

bindumenon@siberindia.edu.in

Associate Professor, CSIBER, Kolhapur, India

EDITORIAL BOARD MEMBERS

Dr. S. P. Rath

drsprath@siberindia.edu.in

Director, CSIBER, Kolhapur, India

Prof. T. Mangaleswaran

mangales@vau.ac.lk

Professor, Rajarata University of Sri Lanka, Sri Lanka

Dr. Dinesh Kumar Hurreeram

directorgeneral@utm.ac.mu

Director General, University of Technology, Mauritius

Dr. Varsha Rayanade

vnrayanade@siberindia.edu.in

Assistant Professor, CSIBER, Kolhapur, India

Er. D. S. Mali

malids@siberindia.edu.in

Dean School of Environmental Science & Management
CSIBER, Kolhapur, India

CSIBER International Journal – CIJ

A Quarterly Double-Blind Peer Reviewed (Referred/Juried) Open Access International e-Journal – Included in the
International Serial Directories

<https://www.siberindia.edu.in/journals/>

Dr. Samir Gopalan

samirgopalan.mgmt@silveroakuni.ac.in
Dean of Colleges,
Silver Oak University, Ahmedabad, Gujarat, India

Prof. Dr. Hemant B. Chitto

hchitto@utm.ac.mu
University of Technology, Mauritius

Dr. Mohamoud Yusuf Muse

president@uoh.edu.so
President, University of Hargeisa, Somaliland, Africa

Dr. Terefe Zeleke

terefe.zeleke@ecsu.edu.et
Deputy C. E. O.,
Ethiopian Management Institute, Addis Ababa, Ethiopia, Africa

SUPERINTENDENT

Dr. Mrudula K. Patkar

Assistant Professor, School of Computer Science & Applications
CSIBER, Kolhapur, India

Contents

| Sr. No. | Title of Paper | Page No. |
|---------|---|----------|
| 1. | THE ROLE OF THE NATIONAL PENSION SYSTEM (NPS) IN ENHANCING RETIREMENT PLANNING AMONG GOVERNMENT EMPLOYEES WITH SPECIAL REFERENCE TO NPS SWAVLAMBAN Mr. Manoj Patel Research Scholar, Silver Oak University, Ahmedabad Dr. Samir Gopalan Director and Dean, Silver Oak University, Ahmedabad | 01-08 |
| 2. | REMOTE WORK AND ITS IMPACT ON EMPLOYEE ENGAGEMENT AND PRODUCTIVITY: A SYSTEMATIC REVIEW Md Alijan Arif Department of Commerce and Business Studies, Jamia Millia Islami, New Delhi, India Prof. N.U.K Sherwani: Professor, Department of Commerce and Business Studies, Jamia Millia Islami, New Delhi, India | 09-20 |
| 3. | THE INFLUENCE OF FINANCIAL SOCIALIZATION ON FINANCIAL PLANNING PROPENSITY: A QUALITATIVE EXPLORATION OF MILLENNIAL EXPERIENCES Fabeena Fasal Research Scholar, Bharata Mata College (Autonomous) Thrikkakara, Kerala, India. Dr. Rafeeka Mol C.A Assistant Professor, MES College, Marampally, Kerala, India | 21-30 |
| 4. | TIME MANAGEMENT AND ORGANIZATIONAL DEVELOPMENT: SPECIAL REFERENCE TO BANKING ORGANIZATIONS IN JAFFNA DISTRICT Thaneeswaran, S Manager, National Saving Bank, Sri Lanka. Velnamby, T Senior Professor, Faculty of Management Studies and Commerce, University of Jaffna, Sri Lanka | 31-35 |
| 5. | BRIDGING THE DISABILITY INCLUSION GAP OF ENTREPRENEURS WITH DISABILITIES THROUGH SOCIAL MEDIA MARKETING: EMPIRICAL EVIDENCE FROM KERALA Shameema A P Research Scholar Research and PG Department of Commerce MES Keveeyam College, Valanchery Malappuram, Kerala, India Dr. P.C. Santhosh Babu Assistant Professor and Head, Research and PG Department of Commerce MES Keveeyam College, Valanchery Malappuram, Kerala, India | 36-43 |

| Sr. No. | Title of Paper | Page No. |
|---------|---|----------|
| 6. | LIFESTYLE CHANGES OF HEALTH DRIVEN WOMEN ENTREPRENEURS IN KERALA Ottina Treasa Mendez, Research Scholar, Bharata Mata College Thrikkakara, Kerala, India Dr. Rafeekamol C.A Assistant Professor, Department of Commerce, MES College, Marampally, Aluva, Kerala, India. | 44-49 |
| 7. | STUDY OF DIFFERENT SOFT COMPUTING TECHNIQUES USED FOR HANDWRITTEN SIGNATURE RECOGNITION Sunil Tanaji Salunkhe, Research Scholar, Nanded, India. Dr. Satonkar Suhas Surykantrao Research Guide, Assistant Professor & Head of Computer Science Department, Swami Ramanand Teerth Marathwada University Nanded, Maharashtra, India. | 50-59 |
| 8. | EVALUATING THE FACTORS INFLUENCING CITIZENS' SATISFACTION TOWARDS E-GOVERNANCE SERVICES Shilpa D. Korde, Assistant Professor, Rosary College of Commerce and Arts Navelim Salcete Goa, India. S. V. Sukhtankar Associate Professor, Government College of Arts, Science and Commerce, Khandola, Marcela, Goa, India. | 60-66 |
| 9. | A BIBLIOMETRIC ANALYSIS ON INTERNATIONAL STUDENT MOBILITY IN HIGHER EDUCATION Lekshmi.S Research Scholar, Department of Economics, Sanatana Dharma College, University of Kerala, India. | 67-74 |
| 10. | SOCIO-ECONOMIC STATUS OF PLANT NURSERY OWNERS: A STUDY AT KHAMARGACHHI IN HOOGHLY DISTRICT OF WEST BENGAL Kartick Biswas Assistant Professor, P.G. Department of Commerce Hooghly Mohsin College Chinsurah, Hooghly West Bengal 712101, India Dr. Ashoke Mondal Assistant Professor, Department of Management and Marketing West Bengal State University, Barasat, North 24 Parganas, West Bengal. 700126, India | 75-83 |

| Sr. No. | Title of Paper | Page No. |
|---------|---|----------|
| 11. | THE ROLE OF FINTECH IN ENHANCING MSMES GROWTH AND ECONOMIC EXPANSION IN INDIA Dr. Jasveen Kaur Faculty and Former Chairperson/Head, University Business School (UBS), Guru Nanak Dev University, Punjab, India Sarita Research Fellow, University Business School (UBS), Guru Nanak Dev University, Punjab, India | 84-91 |
| 12. | EXPLORING CONSUMER TRENDS IN PLUS-SIZE APPAREL IN MEERUT CITY: AN ANALYSIS OF SOCIAL MEDIA ADVERTISING IMPACT. Harshi Garg Research scholar, School of Commerce and Management, IIMT University, Meerut (U.P), India. Priyank Sharma Associate professor, school of commerce and management, IIMT University, Meerut (U.P), India. | 92-99 |
| 13. | WORKING CONDITION OF EMPLOYEES IN HIGHER EDUCATION DEPARTMENT OF JAMMU AND KASHMIR Aabid Yousuf, Research Scholar, Gulzapora, Awantipora, Pulwama, Jammu and Kashmir, India. Dr. Aasim Mir Assistant Professor, Gulzapora, Awantipora, Pulwama, Jammu and Kashmir, India. Dr. Gaurav Seghal Assistant Professor, Gulzapora, Awantipora, Pulwama, Jammu and Kashmir, India. | 100-107 |
| 14. | IMPLEMENTATION AND ANALYSIS OF ATTENDANCE MANAGEMENT SYSTEM USING FACIAL BIOMETRICS Mohammed Shameer M C Department of Computer Science, Farook College, Kozhikode, Kerala, India Mubeena V Department of Vocational Studies, Farook College, Kozhikode, Kerala, India Habis Hassan Department of Vocational Studies, Farook College, Kozhikode, Kerala, India | 108-115 |

| Sr. No. | Title of Paper | Page No. |
|---------|---|----------|
| 15. | THE INFLUENCE OF ACTIVE VS. INACTIVE LIFESTYLES ON HEALTH OUTCOMES IN CONTEMPORARY SOCIETY: A COMPARATIVE ANALYSIS Vishal Vinayakrao Patil, Assistant Professor, Department of Business Administration and Research, Shri Sant Gajanan Maharaj College of Engineering, Shegaon, Maharashtra, India Dr. Satya Mohan Mishra Assistant Professor, Department of Business Administration and Research, Shri Sant Gajanan Maharaj College of Engineering, Shegaon, Maharashtra, India | 116-123 |
| 16. | EFFECTIVENESS OF MOMENT MARKETING: A STUDY OF PRODUCT & SERVICE BASED ADVERTISEMENTS Pooja Verma Research Scholar, Shri Vaishnav Vidyapeeth Vishwavidyalaya Indore, India. Dr. Pragya Jaroliya Professor, Shri Vaishnav Vidyapeeth Vishwavidyalaya Indore, India. Dr. Deepak Jaroliya Professor, Prestige Institute of Management & Research (PIMR) Indore, India. | 124-135 |

The Role of Fintech in Enhancing MSMEs Growth and Economic Expansion in India

Dr.Jasveen Kaur

Faculty

University Business School (UBS)
Guru Nanak Dev University,
Amritsar-143005 (Punjab, India)

Sarita

Research Scholar

University Business School (UBS),
Guru Nanak Dev University,
Amritsar-143005 (Punjab, India)

Abstract

In the current era of Industrial Revolution 5.0, the Fintech industry finance through technology has become increasingly important to the expansion of the Indian economy. In this regard, the financial technology sector, or Fintech, has emerged as a crucial element of India's economy, particularly impacting the development of MSMEs. MSMEs are the foundation of the Indian economy, making substantial contributions to GDP, exports, and job creation. MSMEs and economic growth are closely related, which emphasizes the need for a supportive financial infrastructure. Fintech promises to provide this infrastructure by resolving the ongoing issues MSMEs face with financing, payments, insurance, and access to microfinance. In order to assess the present state of Fintech and MSMEs in India, this study will look into their growth, influence, and reciprocal significance to the country's economy. Through a thorough review of secondary data from published research, working papers, and credible organizational reports, this study highlights the Fintech sector's significant contributions to resolving the financial and operational bottlenecks that frequently impede the expansion of MSME. Furthermore, Fintech applications have increased MSMEs' capacity to grow, optimize processes, and connect with new clientele, especially via digital channels that promote seamless transactions and effective money management. The study also examines the Fintech industry's overall development trajectory in India, concentrating on key players, legal frameworks, and technological developments that influence how this sector supports MSMEs. Fintech is an essential tool for MSMEs to increase market share, improve revenue generation, and boost operational efficiency in this digital ecosystem. In conclusion, the relationship between Fintech and MSMEs reveals a revolutionary avenue for the development of the Indian economy, offering a framework wherein technologically advanced financial solutions directly tackle the particular difficulties faced by MSMEs. In addition to strengthening MSME flexibility in a cut-throat market, this collaboration has opened the door for inclusive growth and development in the Indian economy as a whole. To better understand the sector's changing role in Industrial Revolution 5.0, future research can expand to longitudinal studies to evaluate the long-term effects of Fintech on MSME performance.

Keywords: Financial technology (FinTech), Micro, small & medium enterprises (MSMEs), Digital economy, Finance, Digital.

Introduction

In the twenty-first century, technology plays a crucial role in enabling people to lead simple, easy lives. Every day, technology is interfering more and more with every part of life. Thus, the demand for technology-based products is raised by this technological interference. Technology affects both the producer and the consumer, or the supply and demand sides, to boost productivity based on higher quality (Brynjolfsson & Saunders, 2009). Fintech can be defined as a company that uses new technology in conjunction with traditional financial methods to provide financial products, such as application-based finance instrument trading and the UPI (Unified Payment Interface) payment system. The term is derived from the words "finance" and "technology." Fintech's economic penetration has grown dramatically over the past 15 years, particularly since its demonization in 2016 (Mohan, 2020). Fintech is the term for this integration of technology and finance (Srikrishnan, 2017). It is marked by the combination of digital technologies, artificial intelligence (AI), robotics, and the Internet of Things (IoT) with traditional industries. The Fourth Industrial Revolution, also known as Industry 4.0 or, more recently, Industry 5.0, is what the world economy is currently going through (Chander & Pal, 2022). It is defined by the combination of digital technologies, artificial intelligence (AI), robotics, and the Internet of Things (IoT) with traditional industries, which is changing how businesses function and engage with markets and customers. Micro, Small, and Medium-Sized Enterprises (MSMEs) are the backbone of the Indian economy (Özdemir & Hekim, 2018). MSMEs rely heavily on finance, without it, their success is unthinkable, and in this day and age, they have integrated finance with technology. These businesses are the backbone of the Indian economy, making a substantial contribution to GDP expansion, job creation, and export revenue. Because they empower a variety of societal groups, such as women entrepreneurs and rural communities, MSMEs are essential for fostering innovation, entrepreneurship, and economic inclusivity (De, 2018). The convergence of MSMEs and Fintech has revolutionary potential. Fintech solutions provide MSMEs with more market opportunities, better risk

CSIBER International Journal – CIJ

A Quarterly Double-Blind Peer Reviewed (Referred/Juried) Open Access International e-Journal – Included in the International Serial Directories

<https://www.siberindia.edu.in/journals/>

management tools, expedited payment systems, and inexpensive financing Agrawal & Zagade). This collaboration is promoting financial inclusion and economic empowerment by changing the way small businesses function and expand in the current digital era. It is challenging to raise money in India without offering adequate security, particularly for loans to MSME's. Due to the small business's scale, an unfair assumption of credit risk is made. This is where the significance of fin-tech funding models is revealed. It mitigates the drawback of scale being small by assisting in the real-time transparency of business information (Greene & Bala, 2018). By lending money themselves, acting as financial product aggregators, or putting MSME in contact with banks and other financial institutions, fin-tech companies support MSME. The widespread use of smartphones and the rapid advancement of technology have allowed fin-tech companies to provide MSME access to credit that they rightfully deserve. They provide small businesses with creative and adaptable credit products that help them close the funding gap (DAN & Dewi, 2023). The study attempts to provide a broad overview of fin-tech and its significance today. This study focuses on examining the role of fin-tech companies in funding MSME in India and demonstrates that in order to provide MSME the benefits of formal lending, fin-techs and banks must collaborate to provide creative and customized digital offerings. The MSME sector contributes significantly to GDP, exports, and employment, all of which are important for the development of the country. The largest barrier to MSME growth and job creation in developing nations like India is limited access to credit. The lending industry must expand by 80% in order to generate the necessary jobs. The existing financial infrastructure is very expensive and only functions well in cities. It is based on physical branches and relationship managers (Mukherjee, 2018). Fin tech is presenting a promising remedy to get around this. Fin-tech is concentrated on providing quick and easy banking services to the MSME sector anywhere at any time. Lenders can more accurately verify the identity of the business owner with the use of fingerprint and iris scanning (Gupta & Tham, 2018). This is particularly important in nations where millions of people may share the same surname and where there are no addresses or identification registers. Lenders can determine an individual's creditworthiness faster by using psychological testing or mobile phone data analysis. Lending itself is evolving as a result of fin-tech (Van Loo, 2018). Loan arrangements are no longer required to be made at a bank branch thanks to crowdsourcing and mobile banking. Additionally, bit coin enables the settlement of international payments in a matter of minutes. It is much simpler for lenders to stay on top of things, say by automatically advising the business or sending texts, if business owners can handle their accounts and finances with basic apps.

Significance of Fintech in empowering MSMEs

Micro, Small, and Medium-Sized Enterprises (MSMEs) benefit greatly from fintech in a number of ways.

➤ **Finance Access:** Getting financing is one of the main issues facing MSMEs. Small businesses are frequently turned down for loans by traditional lenders because of alleged risks and a lack of collateral. Alternative financing options like invoice financing, crowdfunding, and peer-to-peer lending are provided by fintech platforms. These platforms make it simpler for MSMEs to obtain funding swiftly and at reasonable rates by utilizing technology to evaluate creditworthiness based on alternative data points.

✓ **Cost-Effectiveness:** Fintech solutions help MSMEs operate more economically by streamlining financial procedures. For small businesses, digital payment systems, automated accounting software, and online lending platforms mean less paperwork and middlemen, which means savings in terms of both time and money.

✓ **Financial Inclusion:** By assisting marginalized MSMEs that conventional financial institutions frequently ignore, fintech advances financial inclusion. MSMEs in remote locations or with restricted access to banks can now engage in the formal financial system, enhancing their financial resilience and growth prospects, thanks to mobile banking, digital wallets, and microinsurance products.

✓ **Data-Driven Insights:** Fintech companies use machine learning algorithms and big data analytics to give MSMEs actionable insights into market trends, customer behavior, and financial health. This data-driven strategy aids small businesses in decision-making, operational optimization, and the discovery of fresh avenues for expansion.

✓ **Risk management:** Fintech solutions provide MSMEs with cutting-edge instruments for risk management, including fraud detection systems, credit scoring models, and insurance plans customized to meet their requirements. By reducing risks related to lending, payments, and cybersecurity, these solutions improve small businesses' general stability and sustainability.

✓ **Market Expansion:** Fintech helps MSMEs to reach a wider range of consumers outside of specific geographic areas. Small businesses can grow and compete in global markets thanks to e-commerce platforms, digital marketing tools, and online payment gateways that enable cross-border trade and access to customers worldwide. In general, Fintech enables MSMEs to grow, innovate, and be resilient in the face of changing business conditions

by giving them access to markets, inexpensive financing, effective financial management tools, and risk mitigation techniques.

Role of Fintech on the Growth of Msmes

Micro, Small, and Medium-Sized Enterprises (MSMEs) and financial technology (fintech) have come together in India to form a transformative force that is propelling growth and promoting economic development. Fintech plays an important role in increasing access to finance and promoting the growth of MSMEs by providing flexible products and better ways to solve problems. This fintech creates a foundation that can help MSMEs grow by facilitating digital identity verification, cooperative customer due diligence, data sharing, and payment plans. Additionally, it improves customer satisfaction and lowers the cost and increases accessibility to financial services. It is simpler for MSMEs to record financial transactions using different apps like Khatabook and UPI-based apps when they use fintech. Certain Fintech applications automatically log financial transactions and provide sales data on a weekly or monthly basis to assist MSME participants in comprehending the performance of their business. Additionally, the customer found that working with fintech-enabled businesses went more smoothly since it simplifies payment gateways and allows customers to conduct transactions without having to physically meet with sellers. This makes transactions more convenient, transparent, and accessible, and empowers users while being simple to use. Furthermore, the FinTech industry provides unique and innovative techniques for assessing risks through the use of big data, machine learning, and the creation of credit ratings for customers with negligible to no credit history. which helps companies expand their services throughout all of India. Fintech is tackling these issues and helping MSMEs prosper in a more digital and competitive market with its creative solutions. Enhancing access to financing is one of fintech's most important contributions to MSMEs. MSMEs have historically had difficulty obtaining loans from traditional banks because of their strict credit requirements and dearth of significant collateral. Fintech companies provide creative lending solutions like invoice financing, crowdfunding, and peer-to-peer (P2P) lending by utilizing technology and alternative data sources. These platforms evaluate MSMEs' creditworthiness more quickly and accurately by using big data analytics and sophisticated algorithms. This makes it easier and faster for MSMEs to obtain desperately needed capital. For MSMEs to invest in growth opportunities, grow their businesses, and become more competitive, financial inclusion is essential. Fintech also helps MSMEs operate more efficiently by digitizing their financial procedures. The use of digital payment solutions, like Unified Payments Interface (UPI) and mobile wallets, has completely changed how MSMEs perform transactions. These digital platforms provide easy and safe payment options, cut transaction costs, and lessen reliance on cash. As a result, MSMEs that implement quick and easy payment methods can improve customer satisfaction and manage their cash flows more skill fully. Fintech companies also offer automated invoicing and accounting software that streamlines back-office operations, cutting down on human error and freeing up resources for important business initiatives. Another area where fintech is making great progress is risk management. MSMEs are vulnerable to a range of risks, such as shifts in the market and interruptions in operations, and frequently operate with narrow profit margins. Fintech solutions offer advanced risk management capabilities like customizable insurance plans and real-time fraud detection systems. Blockchain technology, for example, lowers the risk of fraud by guaranteeing the security and transparency of transactions. Fintech-enabled insurance platforms also provide customized policies that address the unique requirements of MSMEs, assisting them in reducing the risks related to their day-to-day operations. Fintech also helps MSMEs grow their customer base and penetrate new markets. MSMEs can reach a wider audience outside of their local markets by using digital platforms with e commerce capabilities. Fintech tools help MSMEs target particular customer segments, personalize their offerings, and interact with their audience more successfully. Examples of these tools are digital marketing and analytics-driven insights. In addition to increasing sales, this greater market penetration also improves customer loyalty and brand visibility. Financial empowerment and financial literacy are additional roles that fintech plays in the MSME sector. Fintech platforms frequently include tools and educational resources to assist MSMEs in understanding market trends, compliance requirements, and financial management. With this information, MSME owners are better equipped to plan strategically for long-term growth, optimize their operations, and make educated decisions. Furthermore, the integration of fintech in the MSME sector has been further stimulated by the government's supportive policies and regulatory framework. The Digital India campaign and the Pradhan Mantri Jan Dhan Yojana, for example, have created a solid foundation for a digital infrastructure that will support the growth of fintech services. MSMEs are more likely to adopt these technologies because regulatory bodies like the Reserve Bank of India (RBI) have established guidelines to guarantee the secure and effective operation of fintech platforms. To summarize, fintech is contributing significantly to the expansion and success of MSMEs in India through facilitating better access to capital, increasing operational effectiveness, offering strong risk management solutions, opening up new markets, and promoting financial literacy. Fintech is predicted to advance MSMEs' economic empowerment as it develops, propelling equitable growth and setting them up for long-term success in the digital era.

Literature Review

In India, fintech has become a relatively new industry in the last few years. Due to the nation's strong and successful government reforms that are driving the nation toward a digital economy, the Indian market has witnessed massive investments in FinTech across multiple industries. Growing smartphone and internet usage has also been beneficial, leading to a rise in FinTech and the usage of digital technology across the nation Erik Feyen & Saal, (2021). The new technology known as financial technology, or fin-tech, aims to compete with established financial practices in the provision of financial services. In India, a new financial services sector known as fin-tech has emerged. Businesses in this sector use technology to deliver financial services. These businesses are involved in a number of industries, including payments, insurance, and wealth management. This study is to comprehend the fin-tech industry's growth and the difficulties it faces Giglio, (2021). The conceptual framework and foundation needed to comprehend the swift and prosperous development of recently developed financial technologies are provided by this article. Fin-tech supports the growth of startups in India, the MSME sector, banks' digital transformation, and the cashless economy. This essay discusses the difficulties the fin-tech sector has faced in India. Due to their vital role in the economy, MSMEs will benefit from increased access to financial products through the use of financial technology, which will also increase their financial literacy Irman et al., (2023). Financial literacy has been shown to be closely correlated with a firm's performance because it is critical for determining the effectiveness of past actions and is used to affect the current situation. Fintech can help MSMEs raise funds for their operations more quickly and can also help with information sharing, customer experience, and other areas. Rahul Kumar et al., (2021). FinTech is a new business model that, as opposed to bank services, actually benefits MSMEs. FinTech offers financial transaction services without requiring an account, unlike other providers. Even though FinTech is not a financial institution like other banks, it is nevertheless subject to Bank Indonesia regulations. The public or consumers are to be protected by this. Companies using the model are required by Bank Indonesia to register their businesses with either the Financial Services Authority or Bank Indonesia Rahma, (2018). A nation or region's ability to create jobs is aided by MSMEs. Even though each MSME employs a relatively small number of people, the MSME sector as a whole employs a sizable number of people. MSMEs frequently have the ability to create distinctive, creative, or high caliber goods or services Marolt et al., (2016). MSMEs typically have greater flexibility and can react more swiftly to shifting market trends because of their smaller size Zahrah & Wijaya, (2019). Fin-Tech is growing faster than ever, but this also means that consumers need to learn more to deal with increasingly sophisticated products and technology Fu et al., (2019). Though research hasn't been able to conclusively show that one gender is more likely than the other to use technology, Generation Z has been found to be less willing to use it than Generation Y Murugan et al., (2021). Noorinasab et al., (2016), Entrepreneurs deal with issues like insufficient funding and how to raise capital for their startups. A lot of business owners are unable to obtain outside funding due to insufficient market credit and security. The loan application procedure takes a long time. Additional issues include a decline in profit due to competition, improperly maintained financial statements by MSMEs' owners, insufficient guarantees for loan funding, equity issues during capital raising, and reliance on money lenders for expensive loans. The financial services industry is undergoing a global transformation due to the phenomenon of innovation in the digital age. A brand-new phenomenon known as Financial Technology (FinTech) emerged as a result of all these developments. A few financial services start-ups have attempted to offer financial services to the general public. Innovations in the field (from current financial institutions) have surfaced as more information. FinTech has grown to be a larger industry than the Internet of Things (IoT), and with quantum computing, it will undergo exponential change in the future. New asset classes and technologies are still being developed, and they will alter the way businesses operate today. Even those who are not involved in this new industry and merely observe it are interested in IoT because it connects many technology-related businesses and industries (Schulte & Liu, 2018; Nakashima, 2018).

Research Objectives

This study's main goal is to investigate the connection between the expansion of MSMEs in India and the Fintech sector. The particular goals consist of;

- To investigate the Fintech industry's development trajectory, key players, regulatory framework, and technological developments in India.
- To analyse the effect of fintech on the following MSMEs growth metrics, costs, revenue, market share, customer acquisition, and operational efficiency.

To comprehend the development trajectory of India's Fintech industry, including its major players, regulatory framework, and technological advancements, a thorough review of the body of existing literature will be undertaken.

Research Methodology

A secondary data analysis will be carried out, depending on previously published literature, in order to achieve the research goals. To comprehend the development trajectory of India's Fintech sector, a thorough review of scholarly and industry-based literature will be conducted. Reputable sources including industry reports, scholarly journals, official publications, and credible financial news outlets will be the source of secondary data. There will be data collection on the adoption of fintech, MSMEs growth metrics, regulatory changes, and regional economic disparities. Technology developments that have affected MSME growth, such as blockchain, artificial intelligence, digital payment platforms, and mobile banking apps, will also be covered in the literature.

Discussion

Fintech

Assessing the current state of the Fintech sector in India entails looking at a number of factors, including its growth trajectory, major participants, regulatory environment, and technological innovations, especially with regard to helping Micro, Small, and Medium-Sized Enterprises (MSMEs). Over the past ten years, India's Fintech industry has grown and changed quickly. Driven first by digital payment solutions, the sector has grown to include wealth management, lending, insurance, and regulatory technology (RegTech), among other financial services. The trajectory of the Fintech industry in India is indicative of a movement towards digital transformation and universal financial inclusion in various domains, including MSMEs. A wide range of entities, including government programs, established financial institutions, startups, and tech firms, comprise India's Fintech ecosystem. Digital payment providers like Paytm, PhonePe, and Google Pay, lending platforms like Lendingkart and Capital Float, insurance aggregators like Policybazaar, and regulatory technology companies providing compliance solutions for MSMEs are some of the major players in the Fintech space. The legal and regulatory environment that oversees the Fintech sector in India has developed to support innovation while guaranteeing consumer safety and legal compliance. Fintech activities are heavily regulated by the Reserve Bank of India (RBI), which has policies and guidelines pertaining to payment systems, digital lending, cybersecurity, data privacy, and anti-money laundering (AML) measures. For MSMEs to confidently adopt Fintech solutions, regulatory clarity and a supportive legal environment are critical. The current state of India's Fintech industry is distinguished by a wide range of creative solutions targeted at addressing the unique needs and difficulties faced by small businesses in the context of assisting MSMEs. Enabling digital wallets, online invoicing, and cashless transactions for MSMEs to enhance customer convenience and liquidity management. Digital lending platforms: These provide MSMEs with quick and easy access to credit solutions through the use of alternative data sources and real-time creditworthiness assessments. Ensuring compliance with legal requirements by offering MSMEs automated compliance solutions for tax computations, regulatory reporting, and GST filings. Using digital platforms, MSMEs can easily manage their finances, obtain working capital loans, and complete banking transactions. All things considered, the current state of the Fintech industry in India offers a thriving ecosystem of cutting-edge services and solutions designed to empower MSMEs, boost their competitiveness, and promote inclusivity and economic growth.

MEMEs

Analysing how Fintech interventions affect different performance metrics of Micro, Small, and Medium Enterprises (MSMEs), such as revenue growth, cost reductions, market penetration, customer acquisition, and operational effectiveness, is necessary to assess the impact of Fintech on MSME growth. By providing access to new markets, facilitating online sales channels, optimizing pricing strategies, and boosting customer engagement, fintech interventions can significantly contribute to the revenue growth of MSMEs. Fintech platforms, for instance, that provide e-commerce capabilities, digital marketing tools, and analytics-driven insights, can assist MSMEs in growing their clientele, revenue streams, and sales. By automating repetitive tasks, cutting paperwork, optimizing efficiency, and streamlining processes, fintech solutions frequently result in cost savings for MSMEs. Digital payment solutions, for example, lower transaction costs, do away with the need for manual cash handling, and enhance cash flow management. Similar to this, MSMEs can cut costs by saving time and money with automated invoicing systems and cloud-based accounting software. MSMEs can expand their customer base and enter new markets with the help of fintech interventions. Digital marketing campaigns, focused promotions, tailored products, and online channels that link MSMEs with prospective clients around the world are used to accomplish this. Fintech also makes cross border transactions easier, which enables MSMEs to trade internationally and reach a wider market. Fintech platforms help MSMEs acquire new customers by providing easy-to-use financial services, tailored product recommendations, frictionless payment processes, and loyalty initiatives. For instance, AI-driven algorithms are used by digital lending platforms to evaluate credit risk and provide customized loan products to MSMEs, drawing in new clients who might not otherwise have access to traditional banking services. By offering real-time data analytics, predictive insights, task automation, and

business process integration, fintech solutions improve the operational effectiveness of MSMEs. Better decision-making, more effective resource allocation, quicker reaction times, and increased efficiency all result from this. Supply chain finance platforms, for example, help MSMEs manage their working capital better, lower supply chain risks, and optimize inventory management.

Conclusion

Over the past ten years, the Fintech industry in India has experienced tremendous growth and change. Initially driven by digital payment solutions, the industry now offers a wide range of financial services, including wealth management, lending, insurance, and regulatory technology (RegTech). This development is indicative of a larger trend toward financial inclusion and digital transformation, especially for MSMEs (micro, small, and medium-sized enterprises). The Fintech ecosystem in India is made up of a wide variety of organizations, including government initiatives, well-known financial institutions, tech companies, and startups. Prominent firms like Paytm, PhonePe, Lendingkart, and Policybazaar provide cutting-edge solutions designed specifically to meet the requirements of MSMEs. The Reserve Bank of India (RBI) is in charge of overseeing the regulatory environment, which has developed to strike a balance between innovation, consumer protection, and legal compliance. This framework gives MSMEs the assurance they need to embrace Fintech solutions. The Fintech sector in India is currently characterized by an abundance of innovative solutions designed to tackle the particular challenges faced by micro, small, and medium enterprises. Online invoicing, cashless transactions, and digital wallets improve customer convenience and liquidity management. Digital lending platforms offer instant credit availability through real-time evaluations and alternative data sources. Legal compliance is guaranteed by automated compliance solutions, and working capital access and effective financial management are made possible by digital platforms. Analyzing how Fintech interventions affect MSME growth reveals notable gains in a number of performance indicators. Fintech makes it easier to grow your revenue by opening up new markets, streamlining your pricing tactics, and increasing customer interaction with e-commerce and digital marketing tools. Automation, streamlined procedures, and cheaper transaction costs all contribute to cost reductions that improve productivity and cash flow management. Fintech platforms facilitate cross-border transactions and enable targeted promotions and tailored products, thereby expanding market penetration. Personalized loan products and user-friendly financial services that use AI-driven algorithms to assess credit risk improve customer acquisition. Task automation, predictive insights, and real-time data analytics all increase operational effectiveness by facilitating better resource allocation and decision-making. In summary, India's Fintech market currently provides a thriving ecosystem of cutting-edge services and products aimed at empowering MSMEs, boosting their competitiveness, and promoting inclusive economic growth. Fintech interventions have the potential to significantly accelerate the growth and development of MSMEs in India, provided that regulations remain supportive and technological advancements continue to occur.

Implication and Future Research

Fintech's integration with the Indian MSME sector has significant ramifications that affect the economy on several fronts. The convergence of technology and finance poses a dual prospectus for Micro, Small, and Medium-Sized Enterprises (MSMEs), which play a pivotal role in propelling India's economic expansion. One of the biggest effects is the improvement of MSMEs' access to capital through improved financial inclusion. Due to perceived risks and a lack of collateral, MSMEs were historically underserved by traditional banking systems. However, today, they have access to a variety of financing options, including invoice financing, crowdfunding, and peer-to-peer lending. Fintech platforms use technology to evaluate creditworthiness based on non-traditional data points, which facilitates funding for small businesses. This amalgamation of By enabling MSMEs in remote locations or with restricted banking access to engage in the formal financial system, this democratization of finance promotes resilience and wider economic participation. Fintech solutions reduce the operational burdens that usually impede MSMEs by streamlining financial processes. Online lending platforms, automated accounting software, and digital payment systems reduce the need for paperwork and middlemen, saving a significant amount of time and money. By reallocating resources to core business operations, these efficiencies enable MSMEs to increase profitability and productivity. Additionally, cloud-based accounting and digital invoicing tools enhance cash flow management, which is critical to small businesses' viability. Market Expansion and Revenue Growth: By giving MSMEs the resources they need to reach out to new clients and break into international markets, fintech promotes market expansion. Digital marketing tools, online payment gateways, and e-commerce platforms allow MSMEs to trade internationally, which broadens their customer base beyond local markets. Gaining access to a larger market has the potential to greatly increase sales and propel company expansion. Fintech platforms' analytics-driven insights also assist MSMEs in improving customer engagement, streamlining pricing strategies, and customizing their goods to effectively meet market demands. The MSME sector's adoption of fintech promotes an innovative culture. Big data, machine learning, and artificial intelligence (AI) give MSMEs instant access to

information about consumer behaviour, market trends, and financial health. These technologies make it possible to make wiser decisions, allocate resources more effectively, and react to changes in the market more quickly. In addition, the incorporation of blockchain and IoT into supply chain finance improves efficiency and transparency while lowering supply chain risks and maximizing inventory control. Problems and Things to Think About: Despite these advantages, there are still issues with fintech integration in the MSME sector. To guarantee the long-term adoption of fintech solutions, concerns like cybersecurity, data privacy, and the digital divide must be addressed. It is imperative that regulatory frameworks adapt to strike a balance between innovation and consumer protection. This will allow MSMEs to confidently embrace new technologies without sacrificing security or compliance. In conclusion, fintech has far-reaching and revolutionary effects on MSMEs in India. Fintech enables MSMEs to prosper in a competitive environment by improving risk management, market access, operational efficiency, and financial inclusion. To fully realize fintech's potential in promoting sustainable growth and economic development in the MSME sector, however, issues with security, regulations, and digital literacy must be resolved.

References

- Agrawal, S., Gupta, G. and Zagade, A., 2020.** Fintech: a New Revolution in India. *Journal NX*, pp.47-57.
- Brynjolfsson, E. and Saunders, A., 2009.** *Wired for innovation: How information technology is reshaping the economy.* Mit Press.
- Chander, B., Pal, S., De, D. and Buyya, R., 2022.** Artificial intelligence-based internet of things for industry 5.0. Artificial intelligence-based internet of things systems, pp.3-45.
- De, N. and Mondal, T., 2018.** Micro, Small & Medium Enterprises (MSMEs) and Potential Women Entrepreneurs for Inclusive Growth in India. *International Journal of Research in Management*, 8(1), pp.95-107.
- DAN, S.S. and Dewi, E.F., 2023.** The Future of Digital Finance In Southeast Asia: A Legal Perspective. Prenada Media.
- Feyen, E., Frost, J., Gambacorta, L., Natarajan, H. and Saal, M., 2021.** Fintech and the digital transformation of financial services: implications for market structure and public policy. BIS papers.
- Fu, J. and Mishra, M., 2020.** The global impact of COVID-19 on FinTech adoption. Swiss Finance Institute Research Paper, (20-38).
- Giglio, F., 2022.** Fintech: A literature review. *International Business Research*, 15(1), pp.80-85.
- Gupta, P. and Tham, T.M., 2018.** Fintech: the new DNA of financial services. Walter de Gruyter GmbH & Co KG.
- Greene, E.F., Amico, J.M. and Bala, S., 2018.** Blockchain, marketplace lending and crowdfunding: emerging issues and opportunities in fin tech. In *Research Handbook on Shadow Banking* (pp. 253-296). Edward Elgar Publishing.
- Irman, M., Budiyo, B. and Suwito, S., 2023.** Increasing financial inclusion through financial literacy and financial technology On MSMEs. *International Journal Economics Development Research*, pp.126-141.
- Mohan, D., 2020.** The financial services guide to Fintech: Driving banking innovation through effective partnerships. Kogan Page Publishers.
- Morgan, P.J. and Trinh, L.Q., 2020.** Fintech and financial literacy in Viet Nam (No. 1154). ADBI Working Paper Series.
- Mukherjee, S., 2018.** Challenges to Indian micro small scale and medium enterprises in the era of globalization. *Journal of Global Entrepreneurship Research*, 8, pp.1-19.
- Özdemir, V. and Hekim, N., 2018.** Birth of industry 5.0: Making sense of big data with artificial intelligence, "the internet of things" and next-generation technology policy. *Omics: a journal of integrative biology*, 22(1), pp.65-76.
- Rahma, T.I.F., 2018.** Persepsi Masyarakat Kota Medan Terhadap Penggunaan Financial Technology. *At-tawassuth: jurnal ekonomi islam*, 3(1), pp.184-203.
- Srikrishnan, S., 2017.** Demonetization, the movement to an electronic payments system and the inch towards full financial inclusion in the Indian economy.

Schulte, P. and Liu, G., 2018. FinTech is merging with IoT and AI to challenge banks: how entrenched interests can prepare. *The Journal of alternative investments*, 20(3), p.41.

Van Loo, R., 2018. Making innovation more competitive: The case of fintech. *UCLA L. Rev.*, 65, p.232.

Zahrah, A. and Wijaya, P.A., 2019. Manfaat eksistensi usaha mikro kecil menengah (UMKM) terhadap unemployment rate. *Society*, 10(2), pp.110-10 \