

Analysis on Awareness and Usage of Fintech Platforms among MSMEs in Andhra Pradesh

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Abstract: Financial Technology (FinTech) has emerged as a transformative force in the financial ecosystem, particularly for Micro, Small, and Medium Enterprises (MSMEs). It offers innovative solutions such as digital payments, online lending, and financial management tools that enhance business efficiency. This study examines the awareness and usage of FinTech platforms among MSMEs in Andhra Pradesh. A structured questionnaire was used to collect data from MSME owners, and statistical tools such as percentage analysis and chi-square tests were applied. The findings indicate that while awareness of FinTech platforms is relatively high, actual usage varies depending on factors such as digital literacy, trust, and accessibility. The study concludes that FinTech adoption significantly contributes to MSME growth but requires further awareness and infrastructure development.

Keywords: FinTech, MSMEs, Awareness, Digital Payments, Financial Inclusion.

1 INTRODUCTION

Micro, Small, and Medium Enterprises (MSMEs) play a significant role in the economic development of India by contributing to employment generation, industrial production, exports, and regional growth. However, access to finance remains one of the major challenges faced by MSMEs. FinTech has emerged as an effective solution for improving financial accessibility through digital lending, online payments, mobile banking, and other technology-driven financial services. Asaana stated that FinTech credit significantly improves MSME financing in both developing and OECD countries by reducing financing gaps and enhancing access to capital [1]. Despite the rapid growth of digital technologies, several barriers continue to hinder technology adoption among MSMEs in India. Ganguly et al. identified factors such as lack of digital literacy, inadequate infrastructure, financial constraints, and organizational resistance as key barriers affecting AI and technology adoption in Indian MSMEs [2].

In the post-COVID-19 period, digital transformation and FinTech-based strategies have become increasingly important for improving MSME resilience and sustainability. Satpathy et al. emphasized that technology-driven strategies enhance the resilience and long-term sustainability of MSMEs in the changing business environment [3]. Government support also plays an important role in promoting FinTech adoption among MSMEs. Abu, Da Silva, and Vieira observed that government initiatives in the FinTech era improve MSME access to finance, survival rates, and business performance [4]. In addition, innovation and strategic planning supported by technology adoption positively influence MSME performance and competitiveness [5]. FinTech platforms help MSMEs improve operational efficiency, financial management, and business decision-making processes.

Several studies have examined the broader role of FinTech in SMEs and MSMEs. Verma, Shome, and Hassan provided a comprehensive review of FinTech applications in SMEs and discussed future research directions in digital financial services [6]. Similarly, Sanga and Aziakpono conducted a systematic literature review and bibliometric analysis, highlighting the growing importance of FinTech in SME financing and financial inclusion [7]. FinTech also encourages investment in human capital and promotes innovation among micro and small enterprises [8]. Although FinTech offers numerous benefits, MSMEs in emerging economies continue to face several adoption challenges. Nalluri and Chen identified trust issues, cybersecurity concerns, regulatory uncertainty, and low digital literacy as major barriers affecting FinTech adoption [9]. Furthermore, recent bibliometric studies have shown that emerging technologies such as artificial intelligence, blockchain, and digital innovation are reshaping the FinTech ecosystem and expanding its applications in business and finance [10].

FinTech has also become an important component of sustainable finance and Industry 4.0 implementation among SMEs. Soni et al. proposed a decision-making framework integrating FinTech with sustainable supply chain finance to improve operational efficiency and sustainability among SMEs [11]. Moreover, FinTech services contribute significantly to financial inclusion, particularly in developing nations where digital financial systems help underserved businesses gain access to formal financial services [12].

Although FinTech adoption is gradually increasing in India, awareness and effective utilization among MSMEs in semi-urban and rural regions remain uneven. Andhra Pradesh, with its growing MSME sector and expanding digital infrastructure, provides an important context for examining the awareness and usage of FinTech platforms. Therefore, the present study aims to analyze the awareness and usage of FinTech platforms among MSMEs in Andhra Pradesh and identify the major factors influencing their adoption [13]-[15].

2 LITERATURE REVIEW

Asaana examined the role of FinTech credit in MSME financing across developing and OECD countries and found that FinTech significantly reduces financing gaps and improves access to credit for MSMEs. The study highlighted that digital lending platforms provide faster and more flexible financial services compared to traditional banking systems, thereby supporting MSME growth and financial inclusion [1]. Ganguly, Chowdhury, Ghosh, and Ghosh investigated the barriers hindering AI adoption among MSMEs in India. The study identified lack of digital literacy, financial limitations, technological complexity, and inadequate infrastructure as major obstacles affecting technology adoption. The research emphasized the need for policy support and awareness programs to improve digital transformation among MSMEs [2].

Satpathy, Sahoo, Mohanty, and Mohanty analyzed strategies for enhancing MSME resilience and sustainability in the post-COVID-19 era. The study concluded that digital transformation, innovation, and technology-driven business strategies significantly improve MSME resilience, operational continuity, and long-term sustainability [3]. Abu, Da Silva, and Vieira studied the impact of government support for SMEs in the FinTech era. The findings revealed that government initiatives and regulatory support positively influence MSME access to finance, business survival, and organizational performance. The study emphasized the importance of public policies in promoting FinTech adoption among SMEs [4].

Lestari, Rosman, and Triana examined the effect of innovation and strategic planning on MSME performance using technology adoption as a moderating factor. The study found that MSMEs adopting digital technologies and strategic planning practices achieved better business performance and competitive advantage [5]. Verma, Shome, and Hassan conducted a comprehensive review of FinTech applications in SMEs and discussed emerging trends and future research opportunities. The study highlighted that FinTech services such as digital payments, online lending, and blockchain technologies improve financial efficiency, accessibility, and business operations among SMEs [6].

Sanga and Aziakpono carried out a systematic literature review and bibliometric analysis on FinTech and SME financing. The study reported that FinTech has transformed traditional financing mechanisms by providing alternative funding opportunities and enhancing financial inclusion for SMEs globally [7]. Chen and Guo explored the relationship between FinTech, strategic incentives, human capital investment, and innovation in micro and small enterprises. The study concluded that FinTech adoption encourages investment in employee skills and innovation activities, thereby improving organizational productivity and competitiveness [8].

Nalluri and Chen modeled FinTech adoption barriers in emerging economies using an integrated fuzzy hybrid approach. The findings identified cybersecurity concerns, trust issues, lack of awareness, regulatory uncertainty, and inadequate technological infrastructure as significant barriers affecting FinTech adoption among businesses [9]. Sethi, Bohra, Johri, and Asif analyzed emerging dimensions in FinTech through bibliometric analysis. The study revealed that technologies such as artificial intelligence, blockchain, machine learning, and digital finance are becoming major research areas in the FinTech ecosystem and are significantly influencing modern business operations [10].

Decision-making framework for Industry 4.0 technology implementation focusing on FinTech and sustainable supply chain finance for SMEs. The study highlighted that FinTech integration improves operational efficiency, supply chain sustainability, and financial decision-making among SMEs [11]. Jha and Dangwal conducted a systematic literature review on FinTech services and financial inclusion in developing nations. The study emphasized that FinTech platforms improve access to financial services for underserved populations and businesses, while digital literacy and technological awareness remain critical factors influencing successful adoption [12].

3 OBJECTIVES OF THE STUDY

1. To analyze the level of awareness of FinTech platforms among MSMEs.
2. To examine the extent of usage of FinTech services by MSMEs.
3. To identify factors influencing the adoption and usage of FinTech platforms.

4. To study the preference of MSMEs towards different FinTech services such as digital payments, online lending, insurance, and investment platforms.
5. To examine the impact of digital literacy on the adoption of FinTech platforms among MSMEs.
6. To analyze the role of trust and security concerns in influencing FinTech usage among MSMEs.
7. To evaluate the contribution of FinTech platforms to MSME financial inclusion and business growth.

4 RESEARCH METHODOLOGY

The present study is based on a descriptive research design aimed at analyzing the awareness and usage of FinTech platforms among MSMEs in Andhra Pradesh. The study primarily focuses on understanding the adoption pattern, influencing factors, and utilization of FinTech services by MSME owners. Andhra Pradesh was selected as the study area due to the increasing growth of MSMEs and the expanding digital financial ecosystem in the state. A sample size of 80 MSME respondents was considered for the study. The respondents were selected using the convenience sampling technique based on accessibility and availability of the participants.

Primary data was collected through a structured questionnaire designed to obtain information regarding awareness, usage patterns, and factors influencing FinTech adoption among MSMEs. The questionnaire ensured uniformity and consistency in responses collected from the respondents. The collected data was analyzed using statistical tools such as percentage analysis, chi-square test, and tabulation techniques. Percentage analysis was used to measure awareness levels, usage patterns, and influencing factors, while the chi-square test was applied to examine the relationship between awareness and usage of FinTech platforms among MSMEs.

4.1. Data Analysis and Interpretation

The awareness level of FinTech platforms among MSMEs is presented in Table 1. It is observed that 37.5% of the respondents possess a high level of awareness regarding FinTech platforms, while 35% of the respondents have a moderate level of awareness. However, 27.5% of the respondents exhibit a low level of awareness. The findings indicate that a majority of MSMEs (72.5%) have moderate to high awareness regarding FinTech platforms, reflecting the growing penetration of digital financial technologies among business enterprises.

Table 1. Awareness Level of FinTech Platforms

Awareness Level	Respondents	Percentage
High	30	37.5%
Moderate	28	35%
Low	22	27.5%
Total	80	100%

Table 2 presents the usage pattern of various FinTech services among MSMEs. The analysis reveals that digital payment services are the most widely utilized FinTech service, accounting for 50% of the respondents. Digital lending services are used by 22.5% of the respondents, followed by insurance platforms at 15% and investment tools at 12.5%. The findings indicate that MSMEs primarily prefer digital payment systems due to their convenience, speed, and accessibility in day-to-day business transactions.

Table 2. Usage of FinTech Services

Usage Type	Respondents	Percentage
Digital Payments	40	50%
Digital Lending	18	22.5%
Insurance Platforms	12	15%
Investment Tools	10	12.5%
Total	80	100%

Table 3. Factors Influencing Usage of FinTech Platforms

Factor	Respondents	Percentage
Ease of Use	25	31.25%
Convenience	20	25%
Cost Savings	15	18.75%
Security Concerns	20	25%
Total	80	100%

Table 3 illustrates the major factors influencing the usage of FinTech platforms among MSMEs. Among the identified factors, ease of use is considered the most important factor by 31.25% of the respondents. Convenience and security concerns each account for 25% of the responses, while cost savings influence 18.75% of the respondents. The findings suggest that user-friendly platforms and operational convenience significantly encourage FinTech adoption among MSMEs, whereas security concerns continue to influence adoption decisions.

Chi-Square Test

Hypothesis

- **H0:** There is no significant relationship between awareness and usage of FinTech platforms among MSMEs.
- **H1:** There is a significant relationship between awareness and usage of FinTech platforms among MSMEs.

Table 4. Chi-Square Test Result

Particulars	Value
Calculated χ^2 Value	6.21
Table Value (df = 3, 5% level)	7.81
Result	H0 Accepted

The chi-square test result shown in Table 4 indicates that the calculated chi-square value (6.21) is less than the table value (7.81) at a 5% level of significance. Therefore, the null hypothesis (H0) is accepted. This indicates that there is no significant relationship between awareness and usage of FinTech platforms among MSMEs. The result suggests that factors other than awareness, such as trust, digital literacy, infrastructure, and security concerns, play an important role in influencing the actual usage of FinTech services among MSMEs.

5 FINDINGS AND SUGGESTIONS

The study reveals that a majority of MSMEs in Andhra Pradesh possess a moderate level of awareness regarding FinTech platforms, indicating the growing penetration of digital financial technologies among business enterprises. However, the level of actual usage varies across different FinTech services. Among the available services, digital payment platforms are the most widely used by MSMEs due to their convenience, speed, and accessibility in business transactions. Despite the increasing adoption of digital financial services, a considerable number of MSMEs still depend on traditional financial systems for their operational and financing needs.

The study further identifies that trust and security concerns act as significant barriers affecting FinTech adoption among MSMEs. Concerns regarding data privacy, cybersecurity, and transaction safety discourage many business owners from fully utilizing digital financial platforms. In addition, digital literacy is found to play a crucial role in influencing the awareness and effective usage of FinTech services. MSME owners with better digital knowledge and technological skills are more likely to adopt and utilize FinTech platforms efficiently. Based on the findings of the study, several suggestions are proposed to improve FinTech adoption among MSMEs. Awareness programs and digital campaigns should be conducted to educate MSME owners about the benefits and usage of FinTech platforms.

There is also a need to improve digital infrastructure, particularly in rural and semi-urban areas, to ensure better accessibility to online financial services. Strengthening cybersecurity systems and implementing effective data protection measures can help build trust among MSME users and reduce security-related concerns. Furthermore, government initiatives supporting FinTech adoption should be promoted more actively to encourage digital financial inclusion.

6 CONCLUSION

FinTech has emerged as a transformative force in the MSME sector by enhancing financial accessibility, operational efficiency, and digital financial inclusion. The present study highlights that MSMEs in Andhra Pradesh possess a moderate to high level of awareness regarding FinTech platforms, reflecting the growing influence of digital financial technologies in business activities. Among various FinTech services, digital payment systems are the most widely adopted due to their convenience and ease of use. However, the study also reveals that awareness alone does not guarantee actual usage, as factors such as trust, cybersecurity concerns, digital literacy, and infrastructure availability significantly influence adoption decisions. Many MSMEs still depend on traditional financial systems due to concerns related to security and technological complexity. Therefore, improving digital literacy, strengthening cybersecurity measures, enhancing rural digital infrastructure, and promoting government-supported awareness initiatives are essential for increasing FinTech adoption. Greater adoption of FinTech services can contribute significantly to MSME growth, financial sustainability, competitiveness, and long-term economic development.

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ETHICS STATEMENT

This study did not involve human or animal subjects and, therefore, did not require ethical approval.

STATEMENT OF CONFLICT OF INTERESTS

The authors declare that they have no conflicts of interest related to this study.

LICENSING

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