

Impact of Fintech and Digital Financial Services on Financial Inclusion among Small Business Owners

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ABSTRACT

The current study titled, "Impact of Fintech and Digital Financial Services on Financial Inclusion among Small Business Owners," analyses the impact of fintech services in ensuring financial inclusion among small business owners in Bangalore. Many entrepreneurs are still limited to the usage of digital payment services only, whereas there is still reluctance in adopting sophisticated financial services such as digital loan, insurance, and investments. This research paper also analyses the role of security, hidden costs, fear of internet fraud, and digital financial literacy in adopting fintech services. The study adopted descriptive research methodology using non-probability purposive sampling technique. Primary data was collected using a structured questionnaire from 157 small business owners belonging to various sectors in Bangalore. Statistical tools like percentage analysis, descriptive statistics, Cronbach's Alpha, Pearson Correlation, multiple regression, and one-way ANOVA were used for the analysis of the data. Cronbach's Alpha for the reliability analysis was 0.881. The results suggest that there is a high degree of fintech usage among the respondents. Close to 94% of small business owners employ digital payment platforms, and PhonePe was the favourite choice. Respondents generally agreed that fintech solutions were easy to use, time-saving, helped in better financial management, increased accessibility to banking services, and improved overall performance of businesses. The respondents also felt that digital financial services played an important role in the process of financial inclusion by making transactions less dependent on cash transactions and increasing accessibility of formal financial services. However, there was lower usage of advanced fintech solutions such as digital loans and investments.

In its findings, the paper demonstrates that fintech and digital financial services are vital to achieving financial inclusion of small business owners, as they make the use of banking services more accessible, facilitate the process of operation, and ensure growth of businesses. The recommendations for the policy makers and financial organizations include the promotion of digital financial literacy programs,

implementation of security measures in the realm of cybersecurity, and development of user-friendly financial solutions through promotion of advanced fintech products.

Keywords: Fintech, Digital Financial Services, Financial Inclusion, Small Business Owners, Digital Payments, Financial Literacy, Online Fraud

INTRODUCTION

The explosive advancement in fintech has changed mode of delivery and accessibility of financial services throughout the world. Due to widespread usage of smartphones, internet, and UPI, mobile banking, digital wallets and other digital modes of payments financial transactions have made more efficient, easy and accessible. Fintech has facilitated more people to gain access to financial services.

“Financial inclusion requires that all people and businesses, regardless of their geography or financial standing, should have equal access to high-quality financial services” (Sagir Danladi U. M., 2023). Small business owners form major source of economic growth and creation of jobs. Small business owners are now increasingly utilising digital payment platforms like Google Pay, PhonePe, Paytm, BHIM and mobile banking for receiving payments as well as for making payments. It helps businesses decreasing their cash dependency, fast transactions, keeping digital records and make banking easy. But use of digital financial services by small business owners still restrict to payments only and not extend to advanced financial services like digital credit, insurance, savings and investments.

“The adoption of digital innovations such as mobile banking, Aadhaar-enabled payment systems, Unified Payments Interface (UPI), and cloud – based platforms has enhanced speed, transparency and outreach in service delivery. (Vinay Kumar Y S, 2025)

Despite increase in digital financial services availability, number of problems still exist that hinder their adoption and application effectively. Poor digital financial literacy, lack of awareness, fear of online frauds, security problems, hidden fees and issues concerning personal data privacy lower the willingness of small business owners to use sophisticated fintech services.

In this research, we will focus on their digital financial literacy and confidence, the digital financial services that they use, the importance of security in fintech adoption, and the impact of fintech on financial inclusion considering different demographic variables. It is expected that the findings from this research will be useful in designing strategies that improve the digital financial inclusion of small businesses.

REVIEW OF LITERATURE

(Yusef Ali Yusef Yakubi, 2022) The paper investigates “The Impact of Digital Technology and Business Regulations on Financial Inclusion and Socio-Economic Development in Low Income Countries” analyses the impact of these determinants on the developmental outcome in poor countries. To fill the research gap concerning the lack of studies exploring the combined effect of the two factors, Yusef Ali Yusef Yakubi, Basuki Basuki, Rudi Purwono, and Indrianawati Usman (2022) determined, based on quantitative research, that digital technology and business regulation positively affect financial inclusion. Nonetheless, only financial services can lead to socio-economic development.

(Windu Matoka, 2026) "Fintech, Financial Inclusion, and Entrepreneurship Outcomes for Women, Youth, and MSMEs: Pathways, Evidence, and Policy Priorities" focuses on the role of financial technologies in affecting the business outcomes of entrepreneurs, rather than just their ability to access finance through technology. Filling this research gap, Windu Matoka, Austin Mwange, Kampamba Clarence Chibesa, Bwalya Katuta, Lwando Kalaba, and Kabwalwa Chilyata (2026) show that fintech has helped enhance resilience and risk sharing for small-scale enterprises, particularly female and youth-owned MSMEs.

(Odeh, 2025) In conducting their research entitled “Impact of Financial Technology on Small and Medium Enterprises Financial Inclusion in Abuja, Nigeria,” a descriptive survey was done to determine the impact of fintech in the long run on financial inclusion of SMEs, highlighting the deficiencies in the previous literature on the long-run impact of fintech and lack of qualitative analysis in the past works. According to Odeh Job Adah et al. (2025), mobile banking has a highly significant positive impact on the account opening of SMEs and can explain 60.9 percent of the variance in account opening of SMEs.

(Mamadou Ndione, 2024) The paper by Mamadou Ndione, Arvind Ashta, and Bernard Bahama Bako Liba (2024), titled “Banks, microfinance institutions and fintech: how the ratio of male and female entrepreneurs moderates their capacity for financial inclusion,” uses a quantitative method to examine the moderation of gender-based entrepreneurship on financial inclusion. The authors report that e-money systems contribute greatly to financial inclusion when compared to banks and MFIs, but male entrepreneurship strengthens this effect while female entrepreneurship diminishes it. Hence, they argue that while fintech plays a vital role in financial access, it is necessary to formulate gender-sensitive financial policies due to such dynamic.

(Yadav, 2026) The author explores “Technological Challenges and Advantages of Small Finance Bank in India: A Descriptive Study on Digital Financial Inclusion” explores the role played by technology in fostering financial inclusion in Small Finance Banks. Yadav and Rastogi (2026), even though technological platforms such as UPI and e-KYC make financial services more convenient and efficient, there remain obstacles, including insufficient infrastructure, low digital literacy levels, and security concern

(Afjal, 2023) The paper entitled “Bridging the Financial Divide: A Bibliometric Analysis on the Role of Digital Financial Services within FinTech in Enhancing Financial Inclusion and Economic Development” conducted a bibliometric analysis that suggested that the significance of digital financial services for inclusive economic development should be noted. However, the number of studies related to vulnerable people is still relatively small. Mohd Afjal (2023) emphasized the necessity of having proper policies, international cooperation, and research on disadvantaged people and technological advancements.

(Ashoka M.L, 2024) In the article “Role of Fintech in Accelerating Financial Inclusion,” fintech has been analysed conceptually, indicating both strengths and limitations. According to Ashoka M. L. and Aswathy P. (2024), while fintech provides revolutionary services for promoting financial inclusion, it faces several constraints, including the digital gap, lack of financial knowledge, and regulatory threats. Therefore, for fintech to achieve its transformational impact, measures should be put in place to fill infrastructure gaps.

(Mothobi, 2024) Network coverage has been studied at the micro level via the paper “The Impact of Network Coverage on Adoption of Fintech and Financial Inclusion in Sub-Saharan Africa” using

geospatially referenced data to understand the impact of the network on the adoption of fintech. According to Mothobi & Kebotsamang (2024), network infrastructures, especially GSM and UMTS networks, are key in promoting fintech adoption and financial inclusion, which could increase financial inclusion by 6% if expanded in rural areas.

METHODOLOGY

The sample framework contains entrepreneurs of small businesses from different industries such as retail stores, grocery stores, medical stores, hardware stores, clothing stores, and other small business units from Bangalore. The respondents were selected through personal contacts, business connections and distributing questionnaires through google form and it is coded in Microsoft Excel.

The research employs Non-Probability Purposive Sampling methodology. The sampling method is ideal as the researcher has purposely chosen respondents with some understanding and practical use of fintech and digital financial service. Since the research is around how such services contribute to financial inclusion, the information gathered will be relevant. The sample for the present study consists of 100–150 small business owners.

The selected sample size is considered adequate for conducting statistical analysis such as Descriptive Statistics, regression, correlation, ANOVA in order to examine the impact of fintech and digital financial services on financial inclusion. The sampling unit for this study is individual small business owner who operates in Bangalore and has a knowledge of fintech and digital financial services.

Based on the objectives of the study, the following hypothesis are proposed:-

Objective 1: To analyse the impact of fintech and digital financial services on financial inclusion among small business owners.

H0: There is no significant relationship between fintech and digital financial services and financial inclusion among small business owners.

H1: There is a significant relationship between fintech and digital financial services and financial inclusion among small business owners.

Objective 2: To evaluate the effect of security risks, hidden charges and fear of online fraud on the adoption of fintech services among small business owners.

H0: Security risks, hidden charges, and fear of online fraud do not significantly affect the adoption of fintech services among small business owners.

H1: Security risks, hidden charges, and fear of online fraud significantly affect the adoption of fintech services among small business owners.

Objective 3: To compare the level of financial inclusion among small business owners based on their demographic characteristics

H0: There is no significant difference in the level of financial inclusion among small business owners based on their demographic characteristics.

H1: There is a significant difference in the level of financial inclusion among small business owners based on their demographic characteristics.

RESULTS AND DISCUSSIONS

Data is collected from 157 small business owners to analyse the effect of fintech and digital financial services on financial inclusion. The reliability test showed 0.881 that shows that respondents are aware about digital payments apps and show good reliability. From the results of the research, fintech and digital financial services have played a vital part in ensuring financial inclusion of small businesses.

The respondents has possessed knowledge and confidence in digital financial services and the adoption of digital payments and financial services has increased the convenience of transactions as well as financial services.

From regression analysis relation between the independent variables and financial inclusion is moderate and positively related ($R=0.504$). Financial inclusion is 25.4% through independent variables ($R^2 = 0.254$). It is also statistically significant ($F=26.210$, $p<0.001$) show that there is significance in the independent variables having financial inclusion.

Based on Pearson correlation analysis there is a moderately positive correlation between two variables that is business performance of small business owners and their level of financial inclusion ($r=0.447$). From this analysis we can see that more performance of small businesses is improved due to use of fintech services, more the level of financial inclusion of such business owners increases. ANOVA say that there is a statistically significant difference between two variables where p value is less than 0.001.

CONCLUSION

To conclude, study has shown that fintech and digital financial services are important for process of ensuring financial inclusion among small business owners. Results obtained show that majority of respondents have positive opinion about fintech services and they increase financial inclusion, reduce complexity in financial management, save time and make business more effective. The analysis of statistical data shows compliance with research goals. Result of Pearson Correlation Analysis show positive and significant correlation between fintech and digital financial services and financial inclusion. Regression analysis shows that security threats, hidden fees and threat of fraud are important factors for fintech service adoption and One way ANOVA has shown significant differences in financial inclusion depending on respondent characteristics.

Overall, the study recognised the role of fintech in changing the digital financial landscape to enhance financial inclusion by removing various barriers. (Kunwar, 2025). In summary from this paper we see that fintech technology has become a critical tool for fostering financial inclusion among small business owners. Although there are still fear about security threats, online scams, hidden fees, efforts to improve cybersecurity, increase digital financial literacy and enhance transparency continue to promote use of fintech technology and foster financial inclusion. Training and improvements in digital and financial capability increase the active use of digital financial services and support stronger financial inclusion outcomes. (Mundi, 2026)

REFERENCES

1. Yakubi, Y. A. Y., Basuki, B., Purwono, R., & Usman, I. (2022). The impact of digital technology and business regulations on financial inclusion and socio-economic development in low-income countries. *SAGE Open*, 12(3). <https://doi.org/10.1177/21582440221116112>
2. Matoka, W., Mwange, A., Chibesa, K. C., Katuta, B., Kalaba, L., & Chilyata, K. (2026). Fintech, financial inclusion, and entrepreneurship outcomes for women, youth, and MSMEs: Pathways, evidence, and policy priorities. *Science Mundi*, 6(1), 287–294. <https://doi.org/10.51867/scimundi.6.1.26>
3. Adah, O. J., Joseph, D. D., & Ndaman, A. (2025). Impact of financial technology on small and medium enterprises financial inclusion in Abuja, Nigeria. *Abuja Journal of Business and Management*, 3(1), 74–87. <https://doi.org/10.7118/ajbam-01-2025-96>
4. Ndione, M., Ashta, A., & Liba, B. B. B. (2024). Banks, microfinance institutions and fintech: How the ratio of male and female entrepreneurs moderates their capacity for financial inclusion. *Cogent Economics & Finance*, 12(1), 2402031. <https://doi.org/10.1080/23322039.2024.2402031>
5. Yadav, S., & Rastogi, S. K. (2026). Technological challenges and advantages of small finance bank in India: A descriptive study on digital financial inclusion. *International Journal of Research & Technology*, 14(Special Issue 1), 650–658. <https://doi.org/10.64882/ijrt.v14.iS1.1074>
6. Afjal, M. (2023). Bridging the financial divide: A bibliometric analysis on the role of digital financial services within FinTech in enhancing financial inclusion and economic development. *Humanities and Social Sciences Communications*, 10(1), Article 645. <https://doi.org/10.1057/s41599-023-02086-y>
7. Risman, A., Ali, A. J., Soelton, M., & Siswanti, I. (2023). The behavioural finance of MSMEs in the advancement of financial inclusion and financial technology (FinTech). *Cogent Business & Management*, 10(3), Article 2282353. <https://doi.org/10.1080/23311975.2023.2282353>
8. Mothobi, O., & Kebotsamang, K. (2024). The impact of network coverage on adoption of FinTech and financial inclusion in Sub-Saharan Africa. *Telecommunications Policy*, 48(2), Article 102732. <https://doi.org/10.1016/j.telpol.2023.102732>
9. Khairani, R., Tantono, E. A., Anderson, R., Munthe, H., & Purba, P. Y. (2025). Unlocking the potential of financial inclusion, e-commerce, and FinTech to boost SME performance. *Jurnal Ilmiah Manajemen Kesatuan*, 13(5), 3565–3576. <https://doi.org/10.37641/jimkes.v13i5.3786>
10. Ansari, I., Azim, K. S., Bhujel, K., Panchal, S. S., & Ahirrao, Y. S. (2025). Fintech innovation and IT infrastructure: Business implications for financial inclusion and digital payment systems. *Journal of Infrastructure, Policy and Development*, 9(4), Article 10518. <https://doi.org/10.24294/jipd.v9i4.10518>
11. Agboola, O., Adelugba, I. A., & Eze, B. U. (2023). Effect of financial technology on the survival of micro-enterprises. *Journal of Small Business & Entrepreneurship*. Advance online publication. <https://doi.org/10.1080/08276331.2023.2281013>
12. Kamal, M., Rahmani, M. S., & Alam, M. R. (2025). Beyond traditional banking: How fintech is reshaping financial access in India. *International Journal of Scientific Research in Engineering and Management (IJSREM)*, 9(6). <https://doi.org/10.55041/IJSREM46775>

13. Zaimović, A., Omanović, A., Arnaut-Berilo, A., & Torlak, M. S. (2025). The effect of business experience on fintech behavioural adoption among MSME managers: The mediating role of digital financial literacy and its components. *Cogent Business & Management*, 12(1), Article 2474582. <https://doi.org/10.1080/23311975.2025.2474582>
14. Gunawan, A., Jufrizen, J., & Pulungan, D. R. (2023). Improving MSME performance by using financial literacy, financial technology and financial inclusion. *Jurnal Manajemen Bisnis*, 14(3), 505–523. <https://doi.org/10.18196/mb.v14i3.19118>
15. Al-Shami, S. A., Razali, N. M., Rashid, N., Majid, A., & Arshad, A. S. (2024). Financial and digital financial literacy through social media use toward financial inclusion among batik small enterprises in Indonesia. *Heliyon*, 10(18), e38031. <https://doi.org/10.1016/j.heliyon.2024.e38031>
16. Sriyono, S., Purwanto, E., Hadi, S., & Wibowo, A. (2023). Evaluation of fintech’s impact on financial inclusion in Indonesia: A case research on the use of digital payment services. *Journal of Open Innovation: Technology, Market, and Complexity*, 9(4), 100181. <https://doi.org/10.1016/j.joitmc.2023.100181>
17. Sam-Abugu, C., Luo, X., & Wong, B. (2025). The combined role of FinTech innovation and financial literacy in sustainable financial inclusion in Nigeria. *Humanities and Social Sciences Communications*, 12(1), Article 356. <https://doi.org/10.1057/s41599-025-04626-z>
18. Ha, D., Nguyen, T. T. H., Tran, T. H., & Le, Q. H. (2025). Financial inclusion and FinTech: A state-of-the-art systematic literature review. *Journal of Risk and Financial Management*, 18(2), Article 78. <https://doi.org/10.3390/jrfm18020078>
19. Ashoka, M. L., & Aswathy, P. (2024). Role of FinTech in accelerating financial inclusion. *International Journal of Scientific Research in Engineering and Management (IJSREM)*, 8(10). <https://doi.org/10.55041/IJSREM38680>
20. Marini, M., Soelton, M., Arief, H., & Syah, T. Y. R. (2024). Measuring the financial performance of MSMEs from the perspective of financial literacy, financial inclusion and financial technology. *International Journal of Data and Network Science*, 8(2), 863–872. <https://doi.org/10.5267/j.ijdns.2023.12.015>
21. Usman, M. H., Hadi, N. U., Khan, M. A., & Alshammari, A. A. (2025). The effect of FinTech on MSMEs' performance: The mediating role of financial inclusion. *Journal of Open Innovation: Technology, Market, and Complexity*, 11(2), Article 100482. <https://doi.org/10.1016/j.joitmc.2025.100482>
22. Danladi, S., Modibbo, U. M., & Prasad, M. S. V. (2023). Achieving sustainable development goals through financial inclusion: Collaborative approaches to FinTech adoption in developing countries. *International Journal of Scientific Research in Engineering and Management (IJSREM)*, 7(12).
23. <https://doi.org/10.55041/IJSREM27717>