



Impact of FinTech Solutions on Small-Scale Entrepreneurship: Evidence from Kondotty Municipality, Kerala

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Abstract – Financial technology (FinTech) has transformed the financial ecosystem by improving access to digital financial services, enhancing operational efficiency, and promoting financial inclusion among small-scale entrepreneurs. This study examines the impact of FinTech solutions on small-scale entrepreneurship in Kondotty Municipality, Kerala. The objectives were to assess the adoption of FinTech tools, examine their influence on financial business operations, and evaluate their impact on entrepreneurial efficiency and growth. A descriptive research design was adopted using both primary and secondary data. Primary data were collected through a structured questionnaire administered to 60 small-scale entrepreneurs selected through purposive sampling. Statistical techniques including percentage analysis, one-way ANOVA, correlation analysis and regression analysis were used. The findings indicate that digital payment platforms, online banking, and accounting software significantly improve business efficiency, transaction speed, and financial management. However, the ANOVA results reveal no significant relationship between age and FinTech adoption ($F = 0.458$, $p = .712$). The study concludes that FinTech solutions positively influence operational efficiency and customer satisfaction among small-scale entrepreneurs. The findings have implications for policymakers, financial institutions, and entrepreneurship development agencies in promoting digital financial inclusion and technology-driven business growth.

Keywords – FinTech, small-scale entrepreneurship, digital payments, financial inclusion, operational efficiency

I. INTRODUCTION

Financial technology (FinTech) has emerged as a transformative force in the global financial sector by integrating technological innovation with financial services. Digital payment systems, online banking, accounting software, crowdfunding platforms, and mobile financial applications have fundamentally changed the way businesses conduct financial transactions and manage operations. For small-scale entrepreneurs, FinTech offers opportunities to improve financial management, reduce transaction costs, access credit, and enhance customer engagement.

In India, the rapid expansion of digital financial infrastructure has accelerated the adoption of FinTech solutions among micro and small enterprises. Digital payment platforms such as Google Pay, PhonePe, and online banking services have enabled entrepreneurs to conduct faster and more secure transactions. FinTech also contributes to financial inclusion by providing access to financial services for businesses that may have limited access to traditional banking institutions. Despite these developments, variations in technological awareness, digital literacy, and infrastructure continue to influence the extent of FinTech adoption among small-scale entrepreneurs.

This study investigates the impact of FinTech solutions on small-scale entrepreneurship in Kondotty Municipality, Kerala, with particular emphasis on operational efficiency, financial management, and business performance.

II. REVIEW OF LITERATURE

Recent studies have highlighted the significant role of FinTech in improving access to finance and business efficiency among small enterprises. Sharma et al. (2023) identified digital payment systems and financial services as major drivers of small business development. Beaumont et al. (2021) reported that FinTech platforms expand credit access for small businesses by reducing collateral constraints. Lestari et al. (2020) found that FinTech enhances business transactions and supports the survival and growth of micro and small enterprises.

Agarwal et al. (2020) demonstrated that mobile payment technology stimulates business creation and economic activity. Hapsari and Puspitasari (2024) emphasized the relationship between FinTech and financial inclusion among MSMEs. Harsono and Suprapti (2024) concluded that FinTech improves efficiency, accessibility, and innovation in financial services. These studies collectively suggest that FinTech adoption contributes positively to entrepreneurial development, although challenges related to financial literacy, cybersecurity, and digital infrastructure remain important barriers.

Giulio Cornelli, et al (2024): focused on “The Impact of Fintech Lending on Credit Access for U.S. Small Businesses”, they use proprietary loan-level data from two fintech SBL platforms (Funding Circle and Lending Club) to explore the characteristics of the loan Originated in pre-pandemic (2016-2019). They use secondary information for acquiring data. Their research findings include these fintech SBL platforms lent relatively more in zip codes with higher unemployment rates and higher business



bankruptcy filings. Moreover, fintech platforms' internal credit scores were able to predict future

Ajeng Andriani Hapsari, et al (2024): assess "The Influence of Financial Technology on the Advancement of Financial Inclusion in Micro, Small, and Medium Enterprises (MSMEs) in West Java". The aim of composing this article is to investigate how a whole lot of impact on fintech (risk and investment management, market provisioning, and cashless society) has on financial inclusion (financial knowledge, financial behavior and financial attitudes) in MSMEs in West Java. The research completed is a kind of quantitative study.

Scope of the Study

The study examined the impact of financial technology (fintech) on small-scale entrepreneurs in Kondotty municipality. It focused on fintech's role in accessibility, financial inclusion, operational efficiency, and business growth across sectors such as retail, manufacturing, agriculture, and services. Data were collected over six months from entrepreneurs using fintech services, including mobile banking, digital payments, online lending, crowdfunding, and financial management tools, through a structured questionnaire. The findings were limited to Kondotty and to currently adopted fintech solutions, but aimed to provide insights for entrepreneurs, financial institutions, and policymakers.

Research Gap

Existing research has primarily focused on MSMEs, digital financial services, and financial inclusion in broader regional and national contexts. Limited empirical evidence is available regarding the impact of FinTech adoption among small-scale entrepreneurs in Kondotty Municipality, Kerala. This study addresses this gap by examining how FinTech solutions influence financial operations and entrepreneurial efficiency in a localized context.

Objectives of the Study

- To assess the adoption of FinTech solutions among small-scale entrepreneurs.
- To examine the influence of FinTech on financial business operations.
- To evaluate the impact of FinTech solutions on entrepreneurial efficiency and business performance.

Hypotheses

- H01: There is no significant relationship between age and FinTech adoption.
- H02: There is no significant relationship between FinTech adoption and financial business operations.
- H03: There is no significant difference between FinTech adoption and the impact on small-scale entrepreneurship.

III. RESEARCH METHODOLOGY

The study adopted a descriptive research design. Both primary and secondary data were used. Primary data were collected through a structured questionnaire from 60 small-scale entrepreneurs operating in Kondotty Municipality. Purposive sampling was employed for respondent selection. Secondary data were collected from academic journals, books, reports, and online sources.

Data analysis was performed using percentage analysis, one-way ANOVA, regression analysis, and correlation analysis with SPSS.

IV. RESULTS AND DISCUSSION

Demographic Profile

The majority of respondents were between 25 and 50 years of age (40%), followed by entrepreneurs above 50 years (25%). Male respondents constituted 63% of the sample, while 37% were female. Most respondents possessed a bachelor's degree (43%) and had been operating their businesses for more than two years (47%).

Use of Technology in Business

Approximately 50% of respondents reported using technology daily in their business operations, indicating substantial digital integration among the sampled entrepreneurs.

Impact of FinTech Tools

Digital payment applications received the highest level of agreement among respondents regarding transaction speed and convenience. Accounting software was also widely recognized for improving financial reporting and record management. Online banking was perceived as an important tool for reducing transaction time and improving operational efficiency.

Hypothesis Testing

A one-way ANOVA was conducted to examine the relationship between age and FinTech adoption.

Source	F	p
Between groups	0.458	.712

Since $p > .05$, the null hypothesis was accepted. The results indicate no statistically significant relationship between age and FinTech adoption among the respondents. Overall, the findings suggest that FinTech adoption positively influences business efficiency, financial management, and customer satisfaction, irrespective of age.

To examine the Correlation between fintech adoptions and financial operation by through correlation method.



The Correlation confirms the variable “avg” is perfectly correlated with itself, with a Pearson correlation coefficient of 1.000 and a p-value of 0.000, indicating a significant correlation between fintech adoptions and financial operation. Here reject the H0. Therefore, accept H1, so there is a significant relationship between fintech adoptions and financial operation.

The study tested H3 using simple linear regression to examine the relationship between fintech adoption and small-scale entrepreneurship. The results showed a beta coefficient of 0.148, indicating a weak positive relationship. The R² value of 0.098 means fintech adoption explains 9.8% of the variation in entrepreneurship outcomes. The model produced F = 1.182 and p = 0.282. Since p > 0.05, the relationship is not statistically significant. Therefore, H3 is not supported, and fintech adoption does not significantly affect small-scale entrepreneurship in the sample.

V. DISCUSSION

The findings support the broader literature on FinTech and entrepreneurship. The widespread use of digital payment platforms reflects the growing acceptance of cashless transactions among small businesses. FinTech tools contribute to faster transaction processing, improved financial record management, and better operational control.

The absence of a significant relationship between age and FinTech adoption suggests that digital financial technologies are increasingly being adopted across different age groups. This indicates that perceived usefulness and business necessity may be more influential than demographic characteristics in determining FinTech adoption.

The study also highlights the importance of digital financial infrastructure in strengthening entrepreneurial performance. Improved financial management, reduced transaction costs, and enhanced customer convenience collectively contribute to higher operational efficiency and competitiveness.

VI. CONCLUSION

FinTech solutions have become an important enabler of small-scale entrepreneurship by improving financial accessibility, operational efficiency, and business management practices. The study demonstrates that digital payment systems, online banking, and accounting software positively affect business performance among entrepreneurs in Kondotty Municipality. Although age does not significantly influence FinTech adoption, technology adoption substantially enhances efficiency and customer satisfaction.

Promoting digital financial literacy, improving cybersecurity awareness, and expanding access to digital financial infrastructure can further strengthen the benefits of FinTech for small-scale entrepreneurs.

Practical Implications

The findings provide useful insights for:

- policymakers promoting digital financial inclusion,
- banks and FinTech companies developing MSME-focused financial products,
- entrepreneurship development institutions designing digital capability programs.

Limitations and Future Research

The study is limited to 60 entrepreneurs in Kondotty Municipality and therefore has limited generalizability. Future research may employ larger samples, comparative regional studies, and longitudinal designs to examine the long-term impact of FinTech adoption on entrepreneurial growth and sustainability.

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