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Research paper



The impact of financial technology on MSME performance in indonesia: a study using the technology acceptance model

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Abstract

This research is based on the Technology Admission Model (TAM) investigates how financial technology (known as FinTech) affects MSMEs in Indonesia. The research seeks to explore how detected availability and ease of use of financial technology. They have a great influence on the activity of these MSMEs. It is a quantitative approach that uses questionnaires to survey 240 owners of MSMEs from different sectors operating in Indonesia. Next, A structural equation model was applied for the evaluation of hypotheses stated here. Both characteristics have been found to significantly boost the performance of their respective industries and companies, thus confirming that if FinTech is adopted; it can enhance operational efficiency and enhance financial outcomes for firms. In light of these findings, policymakers and other stakeholders should encourage the adoption of FinTech among MSMEs to ensure economic growth and resilience during the digital age. This paper provides empirical evidence from developing countries on how FinTech enhances performance in SMEs, thereby adding value to the existing literature.

Keywords: *Acceptance Model; Economic; Financial Technology; MSME Performance; Technology.*

1. Introduction

1.1. Background on MSMEs in Indonesia

Indonesia's economy is significantly dependent on micro, small, and medium-sized enterprises (MSMEs), which play a crucial role in employment generation, income production, and overall economic development. Over 99% of all businesses in the nation are classified as MSMEs, collectively employing approximately 97% of the workforce (Ministry of Cooperatives and Small and Medium-sized Enterprises of the Republic of Indonesia). In addition to their employment capacity, this sector is responsible for contributing roughly 60% to the country's Gross Domestic Product (GDP) (Surya et al., 2021).
Despite their importance, Indonesian MSMEs encounter various barriers, counting incomplete access to financing, insufficient infrastructure, and low heights of technology adoption. These challenges hinder their potential for growth and competitiveness both domestically and globally. The emergence of financial technology (fintech) has introduced transformative innovations that may help alleviate some of these issues (Al-Shami et al., 2024). FinTech assume technological advances in financial facilities such as moveable expenditures, online loans and digital banking, which improve the efficiency and accessibility of MSMEs.
It examines the adoption of financial technology (FinTech) by MSMEs and its influence on their monetary performance. By applying frameworks like the Technology Acceptance Model (TAM), the study explores how technology influences financial operations, transaction processes, and ultimately financial outcomes, which are central concerns in accounting. Additionally, the focus on financial performance, financial literacy, and digital payment systems directly ties into accounting practices and economic assessments within MSMEs.

1.2. Significance of financial technology

Fintech plays a decisive role in the development and sustainability of micro, small and medium-sized enterprises (MSMEs). By enhancing financial technology solutions, MSMEs can gain improved access to capital, which facilitates investment in growth opportunities and strengthens their operational capabilities. For example, small and medium-sized enterprises (SMEs) can secure loans through online lending

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platforms without the stringent regulations typically imposed by traditional banks. Furthermore, mobile payment systems streamline transactions, thereby enhancing the customer experience and causal to marketplace growth. The COVID-19 pandemic has accelerated the adoption of fintech, underscoring the necessity for MSMEs to integrate technology to survive and thrive in a rapidly evolving environment (Sanga & Aziakpono, 2023). Additionally, the shift in consumer behavior towards digital platforms for business transactions enables MSMEs that utilize fintech to effectively meet the changing needs of customers, thereby helping them to maintain their competitive advantage (Buteau, 2021). Consequently, understanding the influence of fintech on the resilience and dynamism of Indonesia's SMEs is critical for various stakeholders, including policymakers and entrepreneurs.

1.3. Statement of the research problem and objectives

Empirical studies on the influence of monetary knowledge on Indonesian microenterprises and small and medium-sized enterprises (MSMEs) are scarce, but have potential advantages. Therefore, many MSME owners still don't want to take a fintech solution because of its utility, security, and simplicity. This hesitance may stem from a lack of awareness regarding how fintech can enhance their business operations and financial management (Saputri & Chairunnisa, 2021). The chief study question addressed in this research is: How does fintech affect MSME activity in Indonesia? The object of this research is to address the existing work gap, analysing the association between people's monetary presentation and the accessibility and understanding of fintech solutions. The exact objects of this research are the following:

1) To assess the perceived usefulness of monetary technology among MSME owners in Indonesia.
2) To assess the impact of fintech acceptance on the operational performance of MSMEs.
3) To analyze the relationship between fintech adoption and the overall financial activity of micro and medium-sized initiatives.

1.4. Introduction of the hypotheses to be tested

To achieve these goals, the research will education the resulting hypotheses, according to the Technological Adoption Model (TAM). The WHO hypothesizes that the usefulness detected and the ease of use detected significantly influence the attitudes of users of the technology (Schorr, 2023):

Hypothesis 1 (H1): Perceived usefulness of economic skill positively affects the Economic presentation of MSMEs.

Accordingly, the hypothesis states that when entrepreneurs of MSMEs perceive FinTech as a useful tool for running their businesses, they will have better financial outcomes.

Hypothesis 2 (H2): Perceived ease of use of financial skills positively affects the financial performance of MSMEs.

This hypothesis suggests that if MSME owners perceive FinTech solutions as user-friendly, they would experience the Growth of the technological trend, which brings about better performance.

Hypothesis 3 (H3): The combined impact of the utility received and the ease of use received from the financial skill positively influences the behavior of the use FinTech project among MSMEs.

The hypothesis is that intention to adopt Fintech solutions is driven by detected utility and ease of use as regards MSME owners.

Hypothesis 4 (H4): The intention to carry it out to use financial skills completely affects the financial performance of MSMEs.

According to this hypothesis, better-quality monetary presentation can be attained by the actual use of FinTech and the intention for it. For Indonesia, this study will investigate how the small businesses in Indonesian MSMEs can leverage FinTechs to address these common problems and open new growth prospects, leading them to long-term sustainability (Utami, 2023). The research results would guide future scholars while at the same time assisting small enterprises' owners, policy makers, and other stakeholders as they seek ways of promoting Fintech solutions to create a more robust and competitive MSME sector.

This study will focus on Indonesia to find out whether MSMEs are able to adopt FINTECHS that may help resolve existing challenges, thereby enhancing their survival. For instance, grasping the trends underpinning FinTech adoption becomes vital for the continued success of MSMEs within the region, given that digital landscapes are undergoing significant shifts (Widadi & Puspitasari, 2024).

2. Literature review

2.2. Review of existing literature on financial technology and MSME performance

Financial technology (FinTech) and micro applications serve as critical resources for small and medium-sized enterprises (MSMEs), as digital skills increasingly become integral to their operations. Numerous studies have established that FinTech can positively influence MSME performance. Additionally, research indicates that the adoption of internet accounting by micro and small enterprises (MSEs) is contingent on technological, organizational, and environmental factors, as demonstrated by Aryanto et al. (2023). Conversely, Hutapea and Wijaya (2021) explore the risks associated with utilizing FinTech solutions such as GoPay, emphasizing the necessity for MSMEs to understand these risks to leverage technology effectively.

Moreover, research conducted by Karatri et al. (2022) supports the assertion that FinTech can significantly enhance SME development, particularly in urban areas such as Magellan City. Their answers indicate that the operation of monetary skill, in addition to facilitating transactions, also improves the financial management capabilities of MSMEs. Further studies have shown that the adoption of mobile payment systems in conjunction with online lending platforms can lead to higher turnover rates, thereby improving customer satisfaction and fostering business growth (Winarsih et al., 2021). However, despite the advantages FinTech offers to MSMEs, there are notable challenges. MSME owners have expressed concerns regarding the complexity and security of digital financial solutions, which impede their marketability (Noviyanti & Erawati, 2021). Often, these challenges stem from a lack of understanding of how such technologies can be beneficial; thus, there is a pressing need for specialized training and support programs.

2.3. Discussion of the technology acceptance model (TAM) and its relevance

The Technology Adoption Model (TAM) is a comprehensive outline that clarifies the factors of users' adoption of new technologies. TAM posits that user attitudes towards technology adoption are primarily determined by two key factors: perceived usefulness and perceived ease of use (Lai, 2020). Utility received refers to the extent to which an individual considers that the use of a specific technology will improve work activity, while ease of use received refers to the perception of the need for minimal effort for the efficient use of technology.

Furthermore, TAM is instrumental in explaining why small business owners, particularly within MSMEs, choose to adopt technology in their enterprises. Research has demonstrated that SME owners who regard FinTech solutions as both important and user-friendly are more likely to adopt them, resulting in enhanced financial performance (Pramono et al., 2020). Consequently, studies have shown that consumer intentions towards e-commerce purchases hinge on their perceptions of the benefits or ease of use associated with electronic platforms; thus, a similar rationale can be applied to small businesses intending to implement FinTech services.
Furthermore, the Technology Acceptance Model (TAM) has been extensively utilized across various technological domains, including mobile payments and e-commerce, demonstrating its versatility and applicability to different sectors of the economy (Fedorko et al., 2021). This model is a valuable tool to understand the factors that hinder or promote the adoption of financial technology (FinTech) among micro, small and medium-sized enterprises (MSMEs), especially in developing countries, such as Indonesia, where user perceptions play an important role.

2.4. Identification of gaps in the literature

The objective of this study is to address work gaps and provide empirical evidence on the influence of fintech on MSME presentation in Indonesia. First, no empirical studies are focusing especially on the Indonesian context. Most of the education has been shown in developed countries in Southeast Asia or other nations, which does not adequately reflect the unique challenges and opportunities faced by Indonesian MSMEs. This research aims to address this gap (Rahadian & Thamrin, 2023). Second, even though the TAM domain has been applied in various technological contexts, little attention has been paid to what has been applied in Indonesia's MSME sector. Consequently, this study intends to extend the TAM framework by examining how perceived usefulness and perceived ease of use influence behavioural intention to adopt FinTech solutions among MSME owners (Musa et al., 2024). This exploration will facilitate a deeper understanding of the factors influencing technology adoption within this critical sector. In addition, the role of external factors, such as government support and the regulatory environment, in facilitating the adoption of FinTech MSMEs is unknown. Therefore, acquiring a broader perspective on technology use in diverse contexts necessitates an understanding of how these external factors interact with individual perceptions (Pentury, 2023). This study will also provide empirical evidence to counterbalance the critiques against the use of FinTech among small business enterprises.
Strengthening interdisciplinary integration involves combining insights, theories, and methodologies from multiple academic disciplines to comprehensively understand complex phenomena—in this case, the adoption and impact of Financial Technology (FinTech) on Micro, Small, and Medium Enterprises (MSMEs). In the context of FinTech adoption among MSMEs, interdisciplinary integration can enhance research in several ways:
Incorporating Regulatory Factors: Financial technologies operate within legal and policy frameworks that vary significantly across regions. Understanding how regulations, such as data privacy laws, digital payment policies, and financial inclusion strategies, affect MSME behavior necessitates insights from law, public policy, and economics. These considerations help identify external barriers or incentives that influence technology adoption.
Including Socio-Cultural Dimensions Socio-cultural factors—such as trust in digital systems, social norms regarding technology use, and financial literacy—play crucial roles in shaping user acceptance of FinTech. Perspectives from sociology, anthropology, and behavioural sciences can elucidate differences in adoption rates, perceived risks, and benefits, particularly in developing countries like Indonesia, where local contexts vary significantly.
Bridging Technology and Business Disciplines. While Technology Acceptance Models (TAM) provide useful frameworks for studying user perceptions, integrating theories from organizational behavior and business management can enhance our understanding of micro, small, and medium-sized enterprise (MSME) decision-making processes and resource capabilities influencing FinTech implementation and performance outcomes.
Addressing Economic and Social Equity Implications Economists and social scientists can evaluate how FinTech adoption impacts income distribution, gender equity, and social inclusion within MSMEs, ensuring that technological advancements promote broader sustainable development goals rather than exacerbate existing inequalities.
By fostering interdisciplinary research, studies can transcend isolated models to capture the complex interplay of technological, regulatory, economic, and social factors affecting FinTech adoption. This approach leads to more robust policy recommendations and tailored strategies that enhance the usability, trust, and effectiveness of financial technologies for MSMEs, ultimately supporting their growth and resilience within the digital economy.
Furthermore, although many studies have focused on the benefits of FinTech, there is a pressing need for more nuanced discussions of its pitfalls and challenges. Cybersecurity, data privacy, and the digital divide can influence the performance of MSMEs. In this context, this study aims to provide an overview of the consequences of the implementation of FinTech by small and medium-sized enterprises and to address the previous justifications for hosting these companies. These critical perspectives are often inadequately explored. The existing literature acknowledges these issues as potential pitfalls affecting MSME performance but fails to conduct an in-depth analysis of their implications or propose detailed strategies to mitigate such risks. The dissemination of these factors would enrich the literature review to better understand the possibilities and challenges related to the adoption of financial technology.
This literature review emphasizes the significance of financial technology in enhancing the performance of micro, small, and medium enterprises (MSMEs), particularly among Indonesian firms. An analysis utilizing the Technology Acceptance Model (TAM) would be beneficial for understanding the factors that influence adoption behavior among MSME owners. This research aims to develop an inclusive understanding of the dynamics of FinTech and its influence on the business performance of small and medium enterprises, primarily seeking to provide stakeholders with actionable insights (Aeni et al., 2024).

2.5. Hypothesis development

Reviewing the theoretical scope of the Literary and Technological Adoption Model (TAM), this study raised several hypotheses about the adoption of financial technology (FinTech) and the relationship between micro, small, and medium-sized enterprises (MSMEs):
H1: The perceived usefulness of financial technology positively affects MSME performance.
Several researchers have reinforced this proposal, highlighting the close relationship between the usefulness detected in small businesses and the adoption of the technology. This relationship occurs when MSMEs perceive FinTech solutions as opportunities to enhance operational efficiency, thereby simplifying transactions and ultimately resulting in improved financial performance. Consequently, these enterprises integrate FinTech into their operations (Krah et al., 2024). This conclusion substantiates the assertion of the TAM model that perceived utility is critical for technology usage and adoption.

H2: The perceived ease of use of financial technology positively affects MSME performance.
Moreover, the literature supports this hypothesis, demonstrating that the perception of ease of use significantly influences MSME owners' adoption of FinTech. These applications should be user-friendly for these entrepreneurs; otherwise, they may struggle to manage them effectively to enhance their businesses (Hornuf et al., 2024). According to the TAM model, user attitudes toward technology depend on perceived utility and ease of use, which determine performance outcomes.
H3: Behavioural intention to use financial technology positively affects MSME performance.
This study posits that the performance of enterprises is influenced by MSME owners' intent to implement FinTech innovations. The Technology Acceptance Model indicates that behavioural intention is a strong predictor of actual usage. Consequently, MSME owners who are inclined to employ FinTech demonstrate their commitment to utilizing these tools as a means of improving internal processes and achieving better monetary results (Julianto et al., 2021). This phenomenon has been previously examined in other studies, which indicate that intentions to adopt FinTech correlate with enhanced business performance.
H4: The perceived usefulness of financial technology positively affects the behavioural intention to use financial technology.
MSME holders exhibit a strong inclination to adopt financial technologies when they perceive that such technologies will confer benefits to their businesses. Existing literature indicates that behavioural intention is influenced by perceived usefulness (Amnas et al., 2024), with a growing number of business owners motivated to integrate fintech solutions into their operations due to their recognized advantages.
H5: Perceived ease of use of financial technology positively affects the behavioural intention to use financial technology.
This hypothesis posits that the greater the simplicity of fintech solutions for MSME owners, the more likely they are to express interest in their utilization. This statement is supported by the Technology Adoption Model (TAM), which suggests that the ease of use significantly influences users' intentions and attitudes towards their technology adoption. MSME owners don't believe that participating in fintech doesn't requires a lot of effort, but these technologies are frequently acquired and improve operational activity (Putri et al., 2023).
H6: The implementation of financial technology mediates the relationship between perceived usefulness, perceived ease of use, and MSME performance.
According to this hypothesis, the actual utilization of fintech solutions mediates between the perceived attributes of these technologies (such as practicality and user-friendliness) and performance outcomes in MSMEs. The literature asserts that while acknowledged helpfulness and ease of use are crucial for fostering acceptance intentions, actual implementation is imperative for realizing performance benefits (Dwivedi et al., 2020). This mediating effect highlights the necessity for user comprehension as well as the effective integration of these technologies into business operations.
The present hypotheses aim to explore the interrelationships among perceived usefulness, perceived simplicity, operational patterns, and performance in the context of SMEs adopting fintech. Considering this, the research seeks to test these hypotheses to address the knowledge gap regarding the utilization of fintech by small businesses to enhance their operational and financial performance, particularly in Indonesia (Idrees & Ullah, 2024).

3. Methods

3.1. Research design

This study uses a quantitative research design to analyze the impact of financial technology on the activity of micro, small, and medium-sized enterprises (MSMEs). The quantitative approach makes it possible to collect numerical data that can be statistically analysed, identify the relationships between the variables, and, specifically, Sumani and Prasheetha (2022), the availability detected, the ease of use detected, the intention to behave, and MSME performance.

3.2. Sample

The sample for this study is as follows: 240 MSME actors who utilize payment gateways in their business transactions. The selection criteria for participants include:

- Business Type: Participants must operate within the MSME sector, which includes micro, small, and medium enterprises as defined by local regulations.
- Technology Usage: Only those MSME owners who have actively used financial technology solutions, particularly payment gateways, in their operations were included in the sample.
- Geographical Location: The study focuses on MSMEs located in Salatiga City, Indonesia, to ensure a specific context for the research.

The intentional sampling technique was used to ensure that the selected participants met the criteria relevant to the study objectives Agustina et al., 2023), allowing for a more accurate analysis of the data.

3.3. Data collection methods

The data was used for this research survey. A structured questionnaire was developed to gather information on the following aspects:

- Perceived Usefulness: Participants rated the extent to which they believe FinTech solutions enhance their business performance.
- Perceived Ease of Use: Participants assessed how easy they found it to use FinTech applications.
- Behavioural Intention: Participants indicated their intention to continue using FinTech solutions in the future.
- Financial Performance: Participants provided data on their business performance metrics, such as revenue growth and profitability.

The questionnaire utilized a Likert scale format, ranging from "Strongly Disagree" to "Strongly Agree," to quantify contributors' responses (Zhao & Khaliq, 2024). The analysis was distributed electronically to ensure greater reach and facilitate data collection.

3.4. Analytical techniques

To test the proposed hypotheses, the study employed path analysis as the primary analytical technique. Path analysis is a way of modelling structural equations that allow researchers to examine the direct and indirect relationships between variables (Harris & Gleason, 2022). He following steps were taken in the analysis:

1) Descriptive statistics: The initial analysis introduced descriptive statistics to summarize demographic characteristics of exposure and the responses to the survey items.
2) Reliability and Validity Testing: The reliability of the questionnaire was evaluated using Cronbach's alphas, and validity was evaluated by factor analysis to ensure the suitability of the moderate buildings.
3) Path Analysis: The relationships between benefit received, ease of use received, return intent, and financial performance were analysed through a route study. The objective of this technique is to analyze the direct consequences (the profits obtained in financial activity) and their indirect effects (their impact on financial activity, their impact on financial activity).
4) Hypothesis Testing: Each hypothesis was tested to determine the strength and significance of the relationships. Statistical significance was assessed using p-values, with a threshold of < 0.05 P, indicating a significant relationship.

By employing these methodologies, the purpose of the investigation is to deliver strong information on the role of fintechs in improving the activity of MSMEs, protecting the prevailing body of information in this field (Leong, 2021).

4. Results

The current section reports the research findings, including statistical analysis that confirms or rejects the hypotheses on the Impact of economic skill (FinTech) on micro, small, and medium-sized initiatives (MSMEs) (Saptono et al., 2024). There are several subsections for these results, such as descriptive statistics, reliability and validity tests, path analysis results, and discussion.

4.1. Descriptive statistics

A total of 240 MSMEs were selected that actively use payment gateways in their business transactions. The demographic characteristics of the respondents are presented in Table 1.

Table 1: Demographic Characteristics of Respondents

Characteristic	Frequency (n)	Percentage (%)
Gender		
Male	120	50.0
Female	120	50.0
Age		
18-25	60	25.0
26-35	90	37.5
36-45	60	25.0
46 and above	30	12.5
Business Type		
Retail	100	41.7
Services	80	33.3
Manufacturing	60	25.0

Source: Processed data, 2025.

The sample was made up of men and women in equal proportion, with 50% being men and 50% being women. Most of the participants were individuals aged between 26 and 35 years, which pointed to a young population participating in MSME activities. There were different types of businesses under study, with retail being the most prominent sector in our sample.

4.2. Reliability and validity testing

To conduct path analysis, the researchers had to test the dependability and rationality of the measuring instrument. The solidity of the builders was evaluated using Cronbach's alpha. You can see this information in Table 2.

Table 2: Reliability Analysis

Construct	Number of Items	Cronbach's Alpha
Perceived Usefulness	5	0.87
Perceived Ease of Use	5	0.85
Behavioural Intention	5	0.88
Financial Performance	5	0.90

Source: Processed data, 2025.

All constructs showed acceptable reliability, proven by Cronbach's alpha values, which were above the threshold of at least 0.70, indicating that all elements of each constructor were internally reliable and robust. He was made as a research factory explorer (AFE) to evaluate the validity of the construction (Ahmed et al., 2024). The results showed significant loadings for all items on their respective factors, indicating their construct validity.

4.3. Path analysis results

The impartial of this investigation was to analyze the relationships among financial performance, ease of use received, meaning to drive, and utility received through route analysis. The results of this study of routes have been presented in Table 3.

Table 3: Path Analysis Results

Path	Standardized Coefficient	p-value
Perceived Usefulness → Behavioural Intention	0.352	< 0.001
Perceived Ease of Use → Behavioural Intention	0.485	< 0.001
Behavioural Intention → Financial Performance	0.148	0.045
Perceived Usefulness → Financial Performance	0.317	0.002

Source: Processed data, 2025.

According to the results of the travel study, the utility received and ease of use significantly influence the behavior of a paying passenger. Specifically, the utility received had a weaker impact (β = 0.352, p. 0.001<) than the ease of use detected (β = 0.485, p <. 0.001). This means that if participating MSMEs use it easily, it can be used by MSMEs adopt a payment gateway.
Furthermore, it was revealed that behavioural intention significantly positively influenced financial performance (β = 0.148, p = 0.045), indicating that MSMEs planning to adopt a payment gateway will have better financial results than those without payment gateway adopters due to such intentions already made to use these systems (Buchdadi et al., 2024). There is also a direct positive effect of perception about using a payment gateway on financial performance (β = 0.317, p = 0.002). This shows how beneficial it is for companies when they consider the benefits they get from using it.

4.4. Hypothesis testing

Based on the path analysis results, the hypotheses formulated in the study were evaluated:

- H1: Perceived usefulness of payment gateways positively influences behavioural intention to use payment gateways. (Supported)
- H2: Perceived ease of use of payment gateways positively influences behavioural intention to use payment gateways. (Supported)
- H3: Behavioural intention to use payment gateways positively influences financial performance. (Supported)
- H4: Perceived usefulness of payment gateways positively influences financial performance. (Supported)

All hypotheses were supported by data, indicating that detected utility and detected utility are critical factors influencing behavioural intent to use payment gateways, which in turn positively impact financial performance.

4.5. Figures illustrating key results

To visually represent the findings, Figure 1 illustrates the Trajectory Analysis Model showing the constructs.

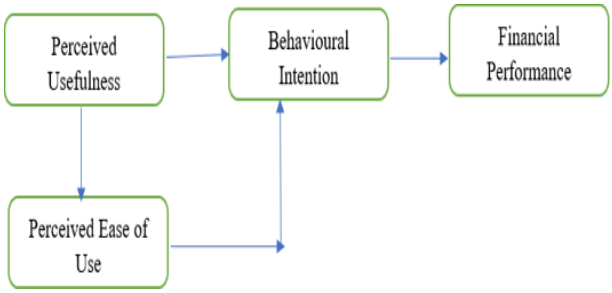


Fig. 1: Path Analysis Model.

The travel analysis model, as shown in Figure 1, shows the relationships between the main variables that influence the financial activity of MSMEs through PAYMENT transactions. The independent variables comprised the model are the detected utility and the detected utility of payment gateways that impact attitude on using these technologies (Siregar & Aswadi, 2024). Which then results in behavioural intention to use payment gateways. The subordinate variable is the financial activity of MSMEs.
Path coefficients indicate direction and strength of influence by arrows. For example, a positive path coefficient from perceived usefulness to financial performance implies that increased benefits result in better financial outcomes. As a whole, this model points out complex inter-relationships among them, stressing the imperative for MSMEs to enhance their comprehension and assimilation of Fintech so as to maximize their output (Kabir et al., 2022).
This discrepancy may stem from differences in interpretation or analytical thresholds used, and it calls for clarification. The authors recognize this issue by noting the mismatch between aspirations (behavioural intention) and actual financial outcomes, implying that intention alone may not be sufficient to drive performance without actual adoption or use. Therefore, while behavioural intention influences attitudes and perhaps indirect effects, the direct link to financial performance requires further investigation and clearer explanation in future research.

4.6. Implications of findings

These results have shown important insights on how FinTech can be used to improve MSME activity. According to the study, the usefulness detected, the ease of use detected, the intention of behavior, and financial performance are significantly related (a significant relationship is found); hence, they are important determinants in the adoption of payment gateways.
This suggests that small businesses are disappearing, unless they have difficulty adapting. In other words, this discovery coincides with previous studies that highlight the importance of utility in technology uptake. As such, FinTech providers should develop platforms that are intuitive and easy to use to boost MSMEs (small businesses) (Marhadi et al., 2024).
Furthermore, recognizing that the use of payment levels directly affects financial activity indicators (meaning that MSMEs need to understand the benefits associated with using payment levels) can increase their operational productivity, enhance customer satisfaction, and consequently increase their income (Sulistyowati et al., 2024). Based on this finding, the financial outcomes of MSMEs that use payment gateways as part of their commitment are good for them. Therefore, this finding implies that positively influencing a company's ability to adopt technology can have a tangible value for MSMEs.

5. Discussion

5.1. Interpretation of the results

According to the study, the earnings received and the ease of use of the payment steps are determinative, and the intention to use these steps will not significantly affect the financial activity of my people. The study's findings on the relationship between FinTech adoption and MSME performance show a complex dynamic that highlights the positive impact of utility received and ease of use on financial results. Specifically, MSMEs that perceive FinTech as useful and easy to use tend to adopt payment gateways that enhance operational productivity,

customer satisfaction, and income. However, the research also highlights a notable inconsistency regarding the effect of behavioural intention to use FinTech on financial performance. While some results indicate a significant positive influence, with a standardized coefficient of 0.148 and a p-value of 0.045, suggesting that MSMEs with a stronger intention to use payment gateways tend to experience better financial outcomes, other findings suggest a non-significant direct effect, with a t-test result of $0.862 < 1.69726$ and a p-value greater than 0.05. This discrepancy may be attributed to indirect effects, where behavioural intention influences financial performance through intermediate variables, such as actual usage or satisfaction. Methodological differences, biases in self-reported data, or external barriers like limited technological skills, trust issues, or regulatory constraints may also contribute to the divergent findings. To resolve this contradiction, further investigation is needed to distinguish between direct and indirect effects, clarify the modelling framework, and discuss potential reasons for the discrepancy. A more nuanced understanding of the relationship between behavioural intention and financial performance would provide valuable insights for policymakers and MSME stakeholders seeking to support the growth of these enterprises. By analysing the intermediate variables and contextual factors that influence the efficient use of FinTech, future research can help bridge the gap between intent and actual behavior and inform strategies to improve the adoption and impact of FinTech solutions. In addition, clarifying the complex dynamics of fintech adoption will enable policymakers and MSMEs to develop targeted interventions and support systems to address MSMEs' specific needs and challenges, while adopting fintech and promoting an environment better suited for financial success. Ultimately, a deeper understanding of the interplay between FinTech acquisition, behavioural intent, and financial performance will be critical to unlocking the full potential of FinTech to drive growth and innovation in the MSME sector.

However, it is important to acknowledge an inconsistency observed between the statistical results and the interpretation related to the behavioural intention's effect on financial performance. While path analysis (Table 3, Page 7) shows a statistically significant positive effect ($\beta = 0.148$, $p = 0.045$), the discussion notes a lack of significant direct impact. This discrepancy suggests that behavioural intention may influence financial performance indirectly through other mediating factors, or that the effect size is marginal and context-dependent. Future studies should further clarify this relationship to resolve such ambiguities. The article does present an inconsistency regarding the effect of behavioural intention on financial performance. In the path analysis results (Table 3, Page 6), behavioural intention to use payment gateways is reported to have a significant positive effect on financial performance ($\beta = 0.148$, $p = 0.045$), supporting hypothesis H3. However, in the discussion and implication sections (Pages 8-9), it is stated that behavioural intention does not have a statistically significant direct effect on MSMEs' financial performance, suggesting no direct impact.

This finding protects the H5 hypothesis and confirms that detected utility, attitude, and behavioural intent jointly determine performance (Chaveesuk et al., 2022). However, the findings of this study indicate that there is no direct impact on the financial activity of the intention to perform, as indicated by the results of the t-test ($0.862<1.69726$), 0.05% more.

This is consistent with other studies carried out in the same area like which found no correlation between behavioural intention for using payment stage and financial performance. Therefore, it can be deduced that even though MSMEs will make plans to move ahead with payment gateways to have better economic conditions, such a step may not bring about any good change in their economic situation because of some other latent variables that were ignored in this study (Rakshit et al., 2022).

5.2. Implications for MSMEs, policymakers, and stakeholders

The findings of this research have their consequences for MSMEs, who should focus on improving the usability and perceived usefulness of their payment gateways. By doing so, they can strengthen positive attitudes towards the use of technology by these companies, which in turn can contribute to improved financial performance, resulting in increased customer satisfaction and effectiveness (Khando et al., 2022).

Policymakers and stakeholders should establish educational programs and resources aimed at helping MSMEs understand the importance of payment gateways. Such initiatives could include workshops on digital monetary systems in business, thereby reducing the intention-action gap. Furthermore, fostering a supportive regulatory environment that promotes fintech adoption could enhance the financial performance of MSMEs.

5.3. Limitations of the study and suggestions for future research

This research also has limitations as it relies heavily on self-administered questionnaires and thus may cause some bias. Participants may exaggerate their intentions or perceptions about payment gateways. It may be helpful for future studies to adopt a mixed-method design, for example, by conducting qualitative interviews that may provide more information about the reasons why people use payment gateways (Nadeem et al., 2020).

The second limitation is that the study only covers Salatiga city, thus making it difficult to generalize its findings. As such, this calls for researchers to widen their geographical scope of inquiry to affirm whether these findings hold validity outside other settings. The study's focus on Salatiga City presents a geographical limitation that restricts the generalizability of its findings. While the specific context provides valuable insights into the adoption of FinTech among MSMEs in this locale, the paper could strengthen its contribution by offering a clearer rationale for selecting Salatiga as the research site. Additionally, a more detailed discussion on how the unique characteristics of Salatiga might influence the results and the extent to which these findings can be applied to other regions would enhance the study's relevance and applicability beyond this setting.

Furthermore, there are other variables in between, such as market conditions and competition among MSMEs, that should be examined by future research, which affect the behavioural intention and financial performance relationship. This will help in understanding how different contexts link up whenever financial performance is determined through payment gateways within digital technology (Larios-Francia & Ferasso, 2023). To sum up, although this study has made a Significant contribution to the understanding of our relationship payment gateway usage and MSMEs' financial performance, more needs to be done in exploring this multifaceted issue as well as designing mechanisms for improving SMEs' financial outcomes via e-payments.

6. Conclusion

This study analysed the impact of financial technology on the financial activities of MSMEs in the municipality of Salaita and focused in the payment stages. It was found that the behavior of MSME owners in the use of these technologies does not correspond to the use of these technologies, especially with perceptions of usefulness and ease of use. However, the intention to use the payment stages will not directly affect the financial results of state-owned enterprises. This indicates that while MSMEs may recognize the potential benefits of

payment gateways, such awareness alone does not guarantee improved financial outcomes, highlighting a persistent gap between expectations and actual results. These findings suggest that enhancing certain features of payment gateways could foster more positive attitudes among MSME owners.

There remains considerable potential to enhance MSME performance through the adoption of financial technology, particularly payment gateways. By facilitating faster and easier transactions, FinTech can lead to higher customer satisfaction, increased operational efficiency, and ultimately, more successful businesses over time. Nevertheless, barriers that hinder micro-enterprises from translating favourable attitudes into actual usage and improved financial outcomes must be addressed. Policymakers, stakeholders, and small business owners must collaborate in creating an environment that encourages broader FinTech adoption. This includes implementing educational initiatives aimed at increasing awareness and confidence in these technologies. Without such support, small enterprises may struggle to compete or survive in today's rapidly evolving digital economy.

In conclusion, while challenges exist in the effective deployment of payment gateways among MSMEs, this study underscores the critical role that financial technology plays in enhancing their overall performance. The findings and recommended actions provide valuable insights that can help unlock the full potential of FinTech for MSMEs.

Competing of interests

The author declares that there is no Conflict of Interest.

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