



The Influence of Digital Payment Adoption on Microenterprise Profitability in Yogyakarta

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Abstract

This study analyzes the effect of digital payment adoption on the profitability of microenterprises in Yogyakarta. Microenterprises are vital to the local economy yet often encounter financial constraints that limit growth. The rise of digital payment platforms such as QRIS, GoPay, OVO, and Dana presents opportunities to enhance operational efficiency and market competitiveness. Using a quantitative explanatory research design, data were collected from 100 microenterprise owners selected through purposive sampling. Structured questionnaires and interviews were employed to obtain relevant information. Data were analyzed using descriptive statistics, validity and reliability testing, and multiple linear regression to examine the research hypothesis. Digital payment adoption was evaluated based on frequency, ease, security, and convenience, while profitability was measured through sales growth, profit margin, cost efficiency, and transaction volume. The results reveal that digital payment adoption significantly improves profitability, explaining 51.1% of its variance. The remaining 48.9% may be influenced by other unexamined factors. These findings highlight that digital payment systems play a crucial role in enhancing financial performance. Strengthening digital literacy and payment infrastructure is recommended to optimize financial technology adoption among microenterprises in Yogyakarta.

INTRODUCTION

Micro, small, and medium enterprises (MSMEs) represent the backbone of developing economies, providing substantial contributions to employment, innovation, and inclusive growth (Sinha et al., 2024; Saputra & Darmawan, 2023). Within this sector, microenterprises form the largest group, functioning as engines of livelihood generation and local market vitality. In Indonesia, they account for more than 60% of total employment and nearly half of the national GDP, highlighting their integral role in sustaining economic stability and social welfare. The province of Yogyakarta provides a particularly compelling case, where microenterprises are interwoven with the city's cultural and tourism-based economy. These enterprises largely concentrated in food, retail, and services serve as economic buffers, absorbing shocks from market fluctuations and providing grassroots resilience (Sari &

Kusumawati, 2022; Chongbang & Bhandari, 2024; Nordhagen et al., 2021; Xu et al., 2024). Yet, despite their macroeconomic relevance, microenterprises continue to struggle with limited financial management, poor access to capital, and low operational efficiency (Gora & Dahiya, 2022; Mhlongo & Daya, 2023). Addressing these barriers is pivotal for strengthening local economic sustainability and poverty alleviation.

The rapid evolution of financial technology (fintech) has become a transformative force in this regard, reshaping how small businesses conduct transactions and manage finances (Agboola et al., 2023; Kamuangu, 2024; Ashta & Biot-Paquerot, 2018; Alam et al., 2025). Among fintech innovations, digital payment systems such as QRIS, GoPay, OVO, and Dana have gained prominence as tools that can potentially enhance microenterprise efficiency and competitiveness. These platforms simplify transactions, reduce cash handling, improve security, and create digital records that can serve as the basis for credit access and financial tracking (Lee & Pan, 2023). Following the COVID-19 pandemic, contactless payments have evolved from convenience to necessity, aligning with consumer preferences for safer and faster transactions (Kirmani et al., 2023). The adoption of these technologies thus represents more than a financial shift; it symbolizes a broader digital transformation within the informal and semi-formal economy. For microenterprises in Yogyakarta, embracing digital payments could serve as a steppingstone toward greater integration into formal financial systems and participation in the digital economy (Desiyanti, 2025; Jameaba, 2020; Fizzanty & Maulana, 2024).

Nevertheless, the extent to which digital payment adoption translates into tangible business benefits remains underexplored. While numerous studies confirm fintech's potential to improve financial inclusion and business resilience (Wirdiyanti et al., 2023; Kurniasari et al., 2023; Hun et al., 2024), empirical findings on profitability outcomes are mixed. Some microenterprises experience increased sales and customer retention due to improved convenience and trust, while others face marginal gains due to transaction fees, system maintenance costs, or inadequate consumer uptake. Furthermore, disparities in digital literacy and infrastructure access create uneven advantages across regions and sectors (Widadi & Puspitasari, 2024). These conditions underscore a paradox: digital payment systems hold immense promise for enhancing profitability, yet their benefits are not uniformly realized across microenterprises. Understanding the nature of this variability is critical for policymakers and entrepreneurs seeking to leverage financial technology effectively (Feyen et al., 2023; Armanios et al., 2017; Bradač Hojnik & Huđek, 2023).

Existing research has identified several mechanisms through which digital payments could influence profitability. The first mechanism involves cost and time efficiency: digital transactions reduce manual bookkeeping, cash management risks, and payment delays (Maniyar, 2025). The second relates to market expansion, as digital payments attract a broader customer base accustomed to cashless transactions, particularly among younger and more mobile demographics. The third mechanism concerns transparency and traceability, which improve financial accountability and facilitate access to formal credit systems (Lee & Pan, 2023; Prasetyo & Kurniawan, 2021). Yet, these mechanisms depend heavily on contextual factors such as enterprise size, owner competence, and consumer readiness. Studies in India and sub-Saharan Africa, for example, show that while fintech adoption enhances operational efficiency, its profitability impact diminishes when digital literacy or infrastructure support is weak (Kirmani et al., 2023; Agboola et al., 2023). Therefore, the profitability effect of digital payments is likely nonlinear and context-dependent, a pattern deserving deeper empirical validation in Indonesia's urban microenterprise landscape.

In the Indonesian context, the government's implementation of the *Quick Response Code Indonesian Standard* (QRIS) has dramatically expanded digital payment accessibility. Bank Indonesia reported exponential growth in QRIS users between 2020 and 2024, reflecting both merchant and consumer enthusiasm for cashless transactions. However, this digital leap has not been evenly distributed across regions or economic classes. Urban centers like Yogyakarta exhibit higher adoption rates, yet many microenterprise owners continue to rely partly on cash due to habits, trust issues, or technical limitations (Widadi & Puspitasari, 2024). Consequently, there exists a dual economy in which digital and cash-based systems coexist, creating a transitional phase with uncertain profitability outcomes. The challenge lies in determining whether digital payment adoption indeed yields measurable financial gains, or if it primarily serves as a symbolic marker of modernization without substantial impact on bottom-line performance.

Previous empirical work offers preliminary insights but leaves several questions unanswered. For instance, Kurniasari et al. (2023) found that digital technology adoption positively affected SME sustainability in traditional markets, yet the magnitude of financial gains varied widely among business types. Wirdiyanti et al. (2023) emphasized the role of e-commerce adoption in boosting performance but cautioned that technological integration must align with managerial capacity. In a similar vein, Sari (2022) highlighted that MSME empowerment through digital finance requires continuous support in infrastructure and literacy. Collectively, these studies establish the conceptual foundation linking technology adoption with business outcomes but stop short of isolating the specific effects of *digital payments* on *microenterprise profitability*. Most analyses either aggregate all fintech tools into a single construct or focus on medium-sized enterprises, overlooking the unique behavioral and structural characteristics of microenterprises.

This gap in the literature underscores the need for targeted investigation. Microenterprises differ markedly from larger SMEs in terms of resource availability, decision-making autonomy, and exposure to digital platforms. Their owners often rely on informal networks and experiential knowledge rather than formal financial analytics. As such, digital payment adoption may exert nuanced effects on profitability that aggregate-level studies fail to capture. Moreover, the Yogyakarta context marked by high tourism traffic and strong cultural entrepreneurship offers a distinctive environment where digital payment systems could both facilitate customer interaction and improve turnover stability. Yet, despite the strategic importance of this region, scholarly attention to its microenterprise sector remains limited. This lacuna calls for a localized, data-driven analysis that examines how digital payment practices translate into measurable profit outcomes under specific socio-economic conditions.

Theoretically, this study contributes to the ongoing discourse on the Technology Acceptance Model (TAM) by testing how perceived usefulness and ease of use of digital payment systems relate to financial performance in microenterprises. While TAM has been widely applied in technology adoption research, its financial implications in micro-scale enterprises remain insufficiently quantified. The integration of profitability as an outcome variable extends TAM beyond behavioral intention, bridging technology adoption theory with microeconomic performance models. Empirically, this research aligns with the resource-based view (RBV), positing that digital capabilities when effectively harnessed constitute valuable, rare, and inimitable resources that drive competitive advantage. By empirically linking fintech adoption with profitability metrics, the study advances understanding of how intangible technological assets translate into tangible economic outcomes.

Therefore, the present study seeks to examine the influence of digital payment adoption on the profitability of microenterprises in Yogyakarta. Building on prior

research (Agboola et al., 2023; Kurniasari et al., 2023; Wirdiyanti et al., 2023), it aims to determine the extent to which digital payment systems contribute to sales growth, profit margins, cost efficiency, and transaction volume. The novelty of this study lies in its focused assessment of *microenterprises* a segment often overshadowed by broader SME analyses and its integration of quantitative regression with qualitative insights from entrepreneurs. The research addresses three interrelated objectives: first, to measure the level of digital payment adoption among microenterprises; second, to quantify its direct impact on profitability; and third, to identify contextual factors that may moderate this relationship. In doing so, the study fills a crucial empirical and theoretical gap in the intersection of financial technology, microenterprise management, and local economic development.

Ultimately, this investigation contributes to both scholarly and policy discourse. For academia, it refines the understanding of how fintech adoption mechanisms operate within microenterprise ecosystems. For practitioners and policymakers, it offers evidence-based guidance on designing interventions that enhance digital literacy, optimize payment infrastructure, and improve microenterprise sustainability. The study's scope encompasses microenterprises in Yogyakarta that have adopted at least one digital payment platform, and its findings are expected to have broader applicability to similar urban economies across Indonesia and Southeast Asia. By illuminating the profitability dynamics of digital payment adoption, this research aspires to inform strategies that empower microentrepreneurs to thrive in an increasingly digitalized and competitive marketplace.

METHODS

This study employs a quantitative explanatory research design to examine the impact of digital payment adoption on the profitability of microenterprises in Yogyakarta. The research design is deemed appropriate as it not only seeks to quantify the level of digital payment adoption among microenterprises but also tests the causal relationship between digital payment use and financial performance. The explanatory design allows for a more comprehensive understanding of how digital payment systems contribute to profitability by examining the magnitude of their effect, the underlying mechanisms, and the moderating factors that may influence this relationship.

Research Design

The quantitative explanatory research design is used to assess the relationship between digital payment adoption and microenterprise profitability. This design is particularly suitable as it facilitates the testing of hypothesized relationships and causal effects. According to Hair et al. (2019), explanatory research designs allow researchers to explore how specific variables influence outcomes, making it ideal for understanding complex business environments where multiple factors contribute to performance. The research combines both primary and secondary data collection methods to ensure robust and comprehensive results, incorporating both numerical and qualitative insights to triangulate findings.

Population and Sample

The target population for this study consists of microenterprises in Yogyakarta, specifically businesses that meet the criteria outlined by Indonesia's Ministry of Cooperatives and SMEs. These criteria define microenterprises as businesses with assets under IDR 50 million and annual revenues below IDR 300 million. The city of Yogyakarta was chosen due to its dynamic and diverse microenterprise sector, particularly in the food, retail, and services industries, which are closely aligned with the city's tourism-driven economy. The study aims to include a representative sample

of microenterprise owners who have adopted at least one digital payment platform such as QRIS, GoPay, OVO, or Dana.

To select a sample, purposive sampling was employed to target microenterprises that actively use digital payment systems. Purposive sampling allows the researcher to focus on participants who meet specific criteria, ensuring that the sample is both relevant and representative of the population under study (Etikan et al., 2016). The sample size was determined using Slovin's formula, which is commonly used to calculate sample sizes in survey-based research. This approach ensures that the sample is large enough to provide statistically valid conclusions while also being manageable in terms of time and resources. The adequacy of the sample size is further supported by Hair et al.'s (2019) rule of thumb, which suggests a minimum of five to ten respondents per indicator in a survey. Therefore, the sample size is expected to provide sufficient power to detect meaningful relationships between the variables under investigation.

Data Collection

Data for this study were collected from both primary and secondary sources. Primary data were obtained through the distribution of structured questionnaires to microenterprise owners or managers. The questionnaire was designed to gather information on two primary variables: the adoption of digital payment systems and microenterprise profitability. The questionnaire items were derived from established scales used in previous studies on digital payment adoption (Kurniasari et al., 2023; Agboola et al., 2023). Additionally, in-depth interviews were conducted with selected respondents to gain qualitative insights into their experiences with digital payment systems, including the perceived benefits, challenges, and barriers to adoption.

Secondary data were gathered from reports and publications issued by Bank Indonesia, fintech service providers, and other relevant institutions. These sources provided complementary data on the broader context of digital payment adoption in Indonesia, including statistics on QRIS adoption rates, trends in fintech usage, and the regulatory environment surrounding digital payments. The combination of primary and secondary data ensures a well-rounded approach to understanding the impact of digital payments on microenterprise profitability.

The primary data collection instrument was pre-tested with a small group of respondents to ensure its clarity and reliability. The pre-test allowed for adjustments to be made to the questionnaire to improve its comprehensiveness and ease of understanding. The final version of the questionnaire was distributed to 100 microenterprise owners, and responses were collected within a two-month period. In addition to the survey, a series of in-depth interviews were conducted to provide richer, more contextual insights into the quantitative findings. The interviews were semi-structured, allowing respondents to freely discuss their experiences while still addressing key questions related to digital payment adoption.

Variables and Measurement

This study focuses on two primary variables: digital payment adoption and microenterprise profitability. Digital payment adoption is the independent variable, while profitability is the dependent variable. Both variables were measured using a five-point Likert scale, where respondents were asked to rate their agreement with various statements related to their business's use of digital payment systems and their perceived profitability.

Digital payment adoption was assessed through several indicators, including the frequency of use, the variety of platforms adopted, perceived ease of use, security, transaction cost efficiency, and convenience. These indicators were adapted from previous research on technology adoption in small businesses (Lee & Pan, 2023;

Kurniasari et al., 2023). Respondents were asked to rate statements such as "I use digital payments frequently," "Digital payments are secure and convenient," and "The use of digital payments has reduced my administrative costs." The cumulative score for digital payment adoption was derived from these individual items, providing a composite measure of the level of digital payment integration in each business.

Profitability, the dependent variable, was measured through four key indicators: sales growth, profit margins, cost efficiency, and transaction volume. These indicators were chosen because they directly reflect the financial health of the business and are commonly used in profitability studies (Sari, 2022; Agboola et al., 2023). Respondents were asked to rate statements such as "My business has experienced growth in sales since adopting digital payments," "Digital payments have improved my profit margins," and "The use of digital payments has helped reduce my operational costs." In addition, respondents were asked to provide financial records where possible to corroborate their self-reported data.

To account for potential confounding factors, control variables such as business age, type of industry, and location were included in the analysis. These variables were selected because they could influence both digital payment adoption and profitability. For example, newer businesses may be more inclined to adopt digital payment systems, while businesses in the retail or food sectors may experience greater benefits from digital transactions due to higher transaction volumes (Widadi & Puspitasari, 2024).

Data Analysis

Data analysis for this study was conducted in multiple stages. First, descriptive statistics were used to summarize the demographic characteristics of the respondents and the general patterns of digital payment adoption. Descriptive statistics were also used to examine the distribution of responses to each questionnaire item, providing an overview of the overall perceptions of digital payment systems among microenterprise owners.

Second, inferential analysis was conducted to test the research hypothesis regarding the influence of digital payment adoption on microenterprise profitability. Multiple linear regression analysis was used as the main technique to assess the relationship between the independent and dependent variables. Regression analysis is appropriate for this study because it allows for the identification of causal relationships while controlling for potential confounding variables (Hair et al., 2019). Assumptions of normality, multicollinearity, heteroscedasticity, and autocorrelation were tested to ensure the validity of the regression model.

In cases where latent constructs were involved, Partial Least Squares Structural Equation Modeling (PLS-SEM) was used to provide a more robust assessment of the causal relationships between digital payment adoption and profitability. PLS-SEM is particularly useful in this study because it allows for the analysis of complex models involving multiple constructs and indicators (Hair et al., 2016). The results from the regression analysis were supplemented by qualitative data obtained from the in-depth interviews. The interview transcripts were analyzed thematically, identifying key themes related to the benefits and challenges of digital payment adoption as perceived by microenterprise owners.

To ensure the validity and reliability of the measurement instruments, both construct validity and reliability tests were conducted. Construct validity was assessed using Pearson's correlation to determine whether each questionnaire item accurately measured the intended construct (Hair et al., 2019). Reliability was tested using Cronbach's Alpha, with a threshold of 0.70 deemed acceptable for confirming internal consistency (Nunnally & Bernstein, 1994). These tests were performed on

the survey data to ensure that the scales used for digital payment adoption and profitability were both valid and reliable.

RESULTS AND DISCUSSION

The results of this study provide valuable insights into the relationship between digital payment adoption and the profitability of microenterprises in Yogyakarta. A total of 100 microenterprise owners participated in the survey, representing a diverse range of business types, characteristics, and levels of digital payment adoption. The analysis of the collected data reveals significant findings that contribute to both academic and practical understanding of how digital payment systems affect business performance. This section presents the results of the descriptive analysis, regression analysis, and qualitative insights obtained from the in-depth interviews, offering a comprehensive overview of the data and its implications.

Descriptive Statistics

Table 1. Respondent Profile (n = 100)

Characteristics	Category	Frequency	Percentage (%)
Type of Business	Food & Beverage	45	45.0
	Retail/Shop	30	30.0
	Services	15	15.0
	Others	10	10.0
Business Age	< 3 years	40	40.0
	3–5 years	35	35.0
	> 5 years	25	25.0
Monthly Revenue (in IDR)	< 5 million	50	50.0
	5–10 million	35	35.0
	> 10 million	15	15.0

Source: Primary Data, 2025

The profile of respondents indicates that the majority of microenterprises engaged in this study operate in the food and beverage sector (45%), followed by retail businesses (30%) and services (15%). This reflects the dominance of culinary and retail activities in Yogyakarta's microenterprise landscape, consistent with the city's status as a tourist and student hub.

In terms of business age, most respondents reported operating for less than three years (40%), suggesting that digital payment systems are being rapidly adopted by newly established businesses. Enterprises operating between three to five years accounted for 35% of respondents, while only 25% had been in operation for more than five years. This finding suggests that younger businesses may be more flexible and adaptive to technological changes compared to older, more established enterprises. Monthly revenue distribution shows that half of the respondents earn less than IDR 5 million per month, while 35% earn between IDR 5–10 million, and 15% report more than IDR 10 million. This range reflects the typical financial scale of microenterprises, which tend to operate with relatively small turnover compared to small and medium enterprises.

Table 2. Descriptive Statistics of Main Variables

Variable	Mean	Std. Deviation	Minimum	Maximum
Digital Payment Adoption (X)	3.95	0.68	2.30	5.00

Profitability (Y)	3.80	0.72	2.10	5.00
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Source: Primary Data, 2025

The descriptive analysis shows that the mean score for digital payment adoption is 3.95 out of 5, which indicates that microenterprises in Yogyakarta generally perceive digital payment systems positively. Respondents agreed that these systems are easy to use, secure, and convenient. The relatively high mean also reflects that digital payments have been integrated into day-to-day business operations, such as customer transactions, supplier payments, and financial record-keeping.

The profitability variable has a mean of 3.80, suggesting that respondents consider their businesses to have achieved a good level of performance in terms of sales growth, profit margins, and efficiency after adopting digital payments. Although profitability levels vary across enterprises, the minimum score (2.10) suggests that some businesses still face challenges in converting technological adoption into financial success. The standard deviation values (0.68 for adoption and 0.72 for profitability) also indicate moderate variation among respondents, which may reflect differences in business size, sector, and market conditions.

Regression Analysis

The primary objective of this study was to test whether the adoption of digital payment systems significantly influences the profitability of microenterprises. To achieve this, multiple linear regression analysis was performed, with digital payment adoption as the independent variable and profitability as the dependent variable. The results of the regression analysis are summarized in Table 3.

Table 3. Regression Analysis Results

Model	Unstandardized Coefficient (B)	Std. Error	t-value	Sig.
(Constant)	1.215	0.312	3.89	0.000
Digital Payment Adoption (X)	0.652	0.081	8.05	0.000

$R = 0.715$, $R^2 = 0.511$, $F = 64.84$, $\text{Sig.} = 0.000$

Source: Primary Data, 2025

The regression analysis confirms that digital payment adoption has a positive and significant effect on microenterprise profitability. The regression coefficient of 0.652 indicates that for every one-unit increase in the level of digital payment adoption, profitability increases by 0.652 units, holding other factors constant. The significance value ($p < 0.001$) further confirms that the relationship is statistically significant.

The model's R^2 value of 0.511 means that approximately 51.1% of the variation in microenterprise profitability can be explained by digital payment adoption, while the remaining 48.9% is influenced by other variables not included in this model, such as marketing strategies, customer loyalty, and competitive intensity. The F-test result (64.84, sig. = 0.000) shows that the model as a whole is statistically valid.

The findings of this study provide strong evidence that adopting digital payment systems contributes positively to the profitability of microenterprises in Yogyakarta. This result is consistent with the Technology Acceptance Model (TAM), which suggests that perceived ease of use and perceived usefulness are key drivers of technology adoption. Microenterprise owners in Yogyakarta view digital payment platforms as tools that simplify financial transactions, reduce cash-handling risks, and enhance customer convenience, ultimately leading to improved financial performance.

Furthermore, the positive influence aligns with previous studies by Prasetyo & Kurniawan (2021) and Sari (2022), who found that digital financial technology adoption can increase sales, expand customer bases, and streamline business operations. In the context of Yogyakarta, where tourism and student populations create high demand for cashless transactions, digital payments are not merely a convenience but also a competitive necessity.

However, the study also reveals that not all microenterprises benefit equally from adopting digital payments. Some respondents reported limited improvements in profitability, which may be explained by external factors such as low customer demand, insufficient digital literacy, or the nature of the business sector. For example, service-based enterprises with low transaction volumes may not experience the same financial impact as food and beverage businesses, which typically have higher transaction frequencies.

Moderating Factors and Control Variables

In addition to digital payment adoption, several control variables were included in the regression model to account for other factors that might influence profitability. These variables included business age, type of industry, and location. The results indicate that business age had a significant moderating effect on the relationship between digital payment adoption and profitability. Specifically, younger businesses appeared to benefit more from digital payment adoption than older businesses. This finding is consistent with the literature, which suggests that new businesses are more agile and receptive to technological changes than their older counterparts (Widadi & Puspitasari, 2024).

The type of industry also had a moderating effect, with businesses in the food and beverage sector showing stronger profitability gains from digital payment adoption compared to those in retail and services. This could be attributed to the higher volume of transactions in the food and beverage industry, where digital payments can significantly streamline operations and improve customer experience. Retail businesses also benefited from digital payments, but the effect was less pronounced, likely due to lower transaction frequencies compared to the food sector. The service industry, which often involves fewer and larger transactions, saw the smallest improvements in profitability from digital payment adoption, suggesting that digital payments may not be as impactful for businesses with lower transaction volumes (Mhlongo & Daya, 2023).

Ease of Use and Security

First, many respondents emphasized that ease of use and security were the most significant factors influencing their decision to adopt digital payment systems. Several business owners noted that digital payments reduced the risks associated with cash handling and improved transaction speed. As one interviewee put it,

“Digital payments are faster, safer, and much more convenient. My customers feel more secure, and I no longer have to worry about cash management.”

This finding supports previous literature, which suggests that the perceived ease of use and security of digital payments significantly drive adoption (Davis, 1989; Kurniasari et al., 2023).

Challenges Related to Transaction Fees and Customer Adoption

Second, transaction fees and customer adoption were identified as barriers to greater digital payment usage. While many respondents recognized the benefits of digital payments, some expressed concerns about the transaction fees charged by payment platforms, particularly for small transactions. Additionally, some businesses reported that their customers were hesitant to adopt digital payments, especially

older individuals or those with limited access to smartphones. One business owner mentioned,

“Some of my regular customers still prefer cash because they are not comfortable with digital payments, and I can’t force them to switch.”

This aligns with findings from Agboola et al. (2023), which highlight that transaction costs and customer reluctance can limit the full potential of digital payments in microenterprises.

Impact on Sales and Customer Base

Despite these challenges, many interviewees reported that digital payments had led to higher sales, particularly from younger customers who preferred cashless transactions. One respondent from the food sector shared,

“Since we started accepting digital payments, more young people come in, and they are spending more because it’s easier for them.”

This finding suggests that digital payment systems help microenterprises tap into a larger, tech-savvy customer base, ultimately leading to increased sales. The connection between digital payment adoption and sales growth is consistent with previous research by Lee & Pan (2023), which emphasized the role of digital payments in attracting tech-oriented consumers.

Improved Financial Management:

Several respondents also noted that digital payments had made it easier to keep track of sales and inventory, which in turn helped improve cost efficiency and profit margins. As one business owner in retail put it,

“Before digital payments, it was hard to keep track of every transaction, but now I can easily check everything online, which helps me manage my costs better.”

This finding aligns with studies suggesting that digital payments improve business efficiency by automating financial record-keeping and reducing administrative costs (Kirmani et al., 2023).

Interpretation of Qualitative Insights:

The qualitative insights complement the quantitative results by providing a deeper understanding of how digital payment adoption impacts profitability. While digital payments undeniably offer advantages in terms of speed, security, and customer attraction, challenges such as transaction fees and customer adoption remain significant barriers. Microenterprise owners in Yogyakarta who have successfully integrated digital payments have experienced higher sales, better cost management, and improved customer satisfaction. However, these benefits are not universal, as businesses with lower transaction volumes or customer bases that are not yet familiar with digital payments face challenges in realizing substantial gains.

The interviews also highlight the importance of digital literacy and consumer education in maximizing the impact of digital payments. Several respondents suggested that increased efforts to educate customers about the benefits of digital payments could help overcome the reluctance observed among older customers or those unfamiliar with technology. As one business owner stated,

“If more people understood how digital payments work, I think it would be easier to convince them to switch.”

The findings of this study provide valuable insights for both academic researchers and practitioners. From an academic perspective, this study adds to the growing body of literature on digital payment adoption and its impact on business

performance. The results confirm that digital payments are a key driver of profitability for microenterprises, supporting the Technology Acceptance Model (TAM), which posits that perceived usefulness and ease of use are key determinants of technology adoption (Davis, 1989). By demonstrating the positive impact of digital payments on profitability, this study extends TAM's application to the microenterprise context.

From a practical standpoint, the findings suggest that microenterprise owners should actively embrace digital payment systems to improve their financial performance. Given the positive effects on profitability, policymakers and financial institutions should prioritize initiatives that promote digital literacy and expand access to affordable digital payment platforms. In particular, providing training and support for microenterprises in underserved areas could help overcome barriers to adoption and maximize the benefits of digital payments.

Furthermore, the study highlights the importance of understanding the varying impacts of digital payments across different business sectors. While digital payments have a positive effect on profitability across industries, their impact is most pronounced in high-transaction sectors such as food and beverage. Policymakers and fintech providers should consider tailoring their solutions to meet the specific needs of different industries to ensure that all microenterprises can benefit from digital payments.

The Impact of Digital Payment Adoption on Microenterprise Profitability: Insights from Yogyakarta

This study investigates the relationship between digital payment adoption and the profitability of microenterprises in Yogyakarta. The results highlight a significant positive effect of digital payment systems on the profitability of microenterprises, especially in terms of sales growth, cost efficiency, and transaction volume. The findings align with the Technology Acceptance Model (TAM), which suggests that perceived usefulness and ease of use are key drivers of technology adoption (Davis, 1989). By integrating these digital payment systems into their daily operations, microenterprise owners benefit from enhanced transaction speed, security, and operational efficiency, ultimately leading to improved profitability.

The regression analysis confirms that digital payment adoption is a significant predictor of profitability, with a clear indication that as businesses adopt more digital payment platforms, their financial performance improves. This outcome mirrors findings from previous studies, such as those by Kurniasari et al. (2023) and Agboola et al. (2023), which emphasize the positive impact of financial technology adoption on small businesses. In the context of Yogyakarta, where tourism and service industries dominate, the adoption of digital payments helps microenterprises expand their customer base, particularly among tech-savvy, younger consumers who favor cashless transactions (Lee & Pan, 2023). The ability to streamline transactions and reduce the reliance on cash handling leads to greater operational efficiency and enhances customer satisfaction, which in turn improves profitability.

However, the findings also reveal that the relationship between digital payment adoption and profitability is not uniform across all business types. Younger businesses and those in high-transaction industries, such as food and beverage, experienced more significant profitability gains. These sectors benefit from higher transaction volumes, which digital payment platforms can handle more efficiently. In contrast, businesses in the retail and services sectors, which tend to have fewer but larger transactions, saw smaller improvements in profitability. This suggests that digital payments are more effective in businesses where transaction frequency is high, a finding that aligns with Mhlongo & Daya (2023), who noted that businesses with frequent customer interactions gain the most from digital payment systems.

In addition to the overall positive effect of digital payments, the study uncovered several barriers to adoption that limit their impact on profitability. One of the primary concerns highlighted by microenterprise owners was the issue of transaction fees. Despite the perceived benefits, many respondents noted that the costs associated with using digital payment platforms could erode the financial advantages, especially for small transactions. As one business owner stated, “The fees for small transactions are a big burden for my business,” indicating that the cost structure of digital payment systems needs to be more favorable to microenterprises, particularly in low-margin sectors. Transaction fees have been identified as a significant barrier to the adoption of digital payments, particularly in developing economies, where microenterprises already face financial constraints (Agboola et al., 2023). Addressing this issue could help businesses fully leverage the benefits of digital payments.

Customer reluctance, especially those who were older or have less access to the smartphone or the internet were also found to be another major barrier in the interview. The younger more technologically advanced customers were more receptive to the digital form of payment thus, older customers were more content to stick with the old conventional methods of using cash thus limiting the adoption of digital payment systems. This hesitation is one of the typical problems of most emerging markets where the level of digital literacy is low and older generations might be not that comfortable with new technologies (Kirmani et al., 2023). Particularly in the case of Yogyakarta, where tourism and student populations are the two key drivers of the local economy, companies that do not embrace the concept of digital payments are likely to lose a sizeable portion of the consumer population that is increasingly sensitive to the concept of cashless transactions. To overcome these barriers, it is important to educate the business owners and customers on the advantages of using digital payments.

Nevertheless, as problematic as it is, the qualitative interviews revealed that online payments have given most microenterprises an opportunity to increase their clientele, especially younger, more technologically-advanced consumers who value the luxuries of cashless payments. According to one participant in the food industry who was interviewed, there is an increase in the number of youngsters that come as a result of allowing digital payments and they are spending more due to the ease it has brought to their lives. This feeling conforms to the general digital payment adoption trend in the developed economies, where comfort and safety are the motivating factors that drive consumers to choose it (Lee & Pan, 2023). Cashless transactions are not only a convenience issue; they also offer business a competitive advantage in an ever-digitized economy. In industries where speed and convenience are vital like food and beverage, online payments can be used to enhance the customer experience, thus boosting sales and becoming more profitable.

Additionally, the use of digital payments has made financial management easier among the owners of most microenterprises. Respondents said that e-payment systems helped them to better monitor sales and inventory and as a result lessened the burden of administration of handling cash and manual accounting. As one of the business owners has mentioned, it was difficult before to track all the transactions but nowadays one can just go online and see everything which makes it easier to manage his or her costs. This is one of the main aspects that help to achieve higher profitability due to the improvement of financial management. The time wasted in the falsehood of administration is saved and the business owner concentrates more in others in his or her business including marketing, customer care and development of its product. This result aligns with the study by Kirmani et al. (2023), who believe that digital payment systems do not only enhance efficiency in the work of transactions but also offer valuable financial information that could be used to make business decisions.

The findings of this study indicate that digitization of payment has a strong positive impact on profitability, which differs depending on the nature of business. In the case of micro enterprises whose business depends on high transactions like food and beverage, digital payment can change the game itself and make operations easier, draw more customers, and boost financial results. But the advantages of digital payments might not be as high in the case of microenterprises in low-transactions sectors. Thus, the introduction of digital payment systems can be regarded as one of the strategic investments that are to be approached with a careful consideration of the needs and transactions of the business and its customers.

Also, the research notes the significance of digital literacy in the maximisation of digital payment systems. The owners of microenterprises and their customers should have a good understanding of how digital payment platforms should be used to enjoy their benefits to the fullest. Most customers, as the interviewees suggested, are still reluctant to go into digital payments because of lack of knowledge or even unfamiliarity with the technology. Against this backdrop, policymakers and the providers of fintechs ought to focus on efforts that encourage digital literacy among the small businesses and their customers. It may be possible to train the microenterprises and raise awareness of digital payments among the population as a part of the promotion of digital payment adoption and resistance to it. Policy wise, the results highlight the supportive infrastructure and the lowering of transaction costs of microenterprises to succeed in a cashless economy. Microenterprises in most of the developing economies also experience high transaction costs and poor access to digital payment solutions, which restrict their competitiveness with other bigger businesses (Sari & Kusumawati, 2022). It is therefore important that policymakers should be able to create the environment where digital payment adoption is facilitated through financial incentives, better infrastructure, and a lower cost of using digital payment systems. In this way, microenterprises will be able to optimize the advantages of fintech and promote the development of the local economy.

CONCLUSION

This study examined the impact of digital payment adoption on the profitability of microenterprises in Yogyakarta. The findings reveal a significant positive relationship between the use of digital payment systems and business profitability, particularly in terms of sales growth, cost efficiency, and transaction volume. Digital payment adoption was shown to be more impactful in high-transaction industries, such as food and beverage, where transaction frequency is higher. However, barriers such as transaction fees and customer reluctance, especially among older consumers, were identified as limitations to the full potential of digital payment systems.

The implications of these findings suggest that digital payment adoption can significantly enhance microenterprise profitability, providing a competitive edge by improving operational efficiency and expanding the customer base. Policymakers and fintech providers should focus on reducing transaction fees and improving access to digital payment platforms, particularly in underserved areas. Additionally, promoting digital literacy among both business owners and consumers is essential for increasing adoption and maximizing the benefits of these systems. This research contributes to the growing body of literature on financial technology adoption by specifically addressing the microenterprise context, which has often been overlooked in broader fintech studies. Future research could further explore the long-term effects of digital payment adoption on business sustainability, examine sector-specific differences in adoption outcomes, and expand the study to other regions with varying levels of digital infrastructure.

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