

The Impact of Digital Payment Adoption and Working Capital on MSMEs Profitability: Evidence from Kepadangan Village, Tulangan District, Sidoarjo Regency, Indonesia

Adinda Bahar Abrianti, Novita Aurelya Rahmadhani, Lili Itaurrahmah, Dian Fahriani, M. Mustaqim

University of Nahdlatul Ulama Sidoarjo, Indonesia

**Corresponding author. Email : 32423029.student@unusida.ac.id*

ABSTRACT

This study investigates the impact of digital payment adoption and capital on the profitability of Micro, Small, and Medium Enterprises (MSMEs) in Kepadangan Village, Tulangan, Sidoarjo. Utilizing a quantitative approach, data was gathered from 30 randomly selected MSMEs via accidental sampling and analyzed using multiple linear regression in SPSS 29. Crucially, the results reveal that digital payment adoption has a negative and non-significant influence on MSME profitability. This unexpected trend is driven by high transaction fees and low digital literacy among local business owners. Conversely, capital exerts a strong positive and significant influence on profitability, as adequate funding directly enables MSMEs to scale production capacity, improve product quality, and expand marketing efforts. These findings suggest that while capital remains a vital driver for local economic growth, a critical gap exists in digital financial infrastructure and education that must be addressed to prevent digital tools from becoming a financial burden to small enterprises.

Keywords: *Digital Payment, Capital, Profitability, MSMEs*

1. INTRODUCTION

Micro, Small, and Medium Enterprises (MSMEs) play a strategic role in supporting economic growth, employment generation, and poverty reduction in developing countries. In Indonesia, MSMEs constitute the backbone of the national economy, contributing significantly to Gross Domestic Product (GDP) and labor absorption. According to the Ministry of Cooperatives and SMEs, the MSME sector contributed approximately 61% of Indonesia's GDP and absorbed nearly 97% of the national workforce in 2023. These figures demonstrate that MSMEs are not only important economic actors but also a crucial pillar for maintaining economic resilience, particularly during periods of uncertainty and crisis (Fathurrahman & Fitri, 2024).

The resilience of MSMEs was clearly demonstrated during the COVID-19 pandemic when many large-scale enterprises experienced operational and financial difficulties. Despite these challenges, numerous MSMEs continued their business activities and adapted to changing market conditions. East Java is among the provinces with the highest concentration of MSMEs in Indonesia, and Sidoarjo Regency is recognized as one of the regions with substantial MSME growth. The increasing number of MSMEs in Sidoarjo reflects the sector's potential to stimulate local economic development; however, it also highlights the necessity of improving business competitiveness and sustainability through innovation and effective resource management.

In recent years, digital transformation has significantly altered the business landscape, including payment systems. The rapid advancement of financial technology has encouraged the adoption of digital payment methods such as mobile banking, electronic wallets, and QR code-based payment systems. Digital payment systems provide convenience, speed, efficiency, and security in financial transactions, enabling businesses to better serve customers while reducing dependence on cash-based transactions (Hendriyawan & Mayangsari, 2022). The growing acceptance of digital payment platforms has reshaped consumer behavior, with customers increasingly preferring cashless transactions due to their practicality and accessibility.

Indonesia has experienced remarkable growth in digital payment transactions. The expansion of e-commerce activities and the increasing penetration of financial technology services have accelerated the adoption of digital

payment instruments among consumers and business owners. For MSMEs, digital payment utilization may generate various advantages, including faster transaction processing, improved customer satisfaction, broader market reach, and more efficient financial recordkeeping. These benefits can ultimately contribute to improved business performance and profitability (Yuniar, 2023). Consequently, digital payment adoption has become an essential component of business modernization and competitiveness in the digital economy era.

Besides technological adaptation, access to adequate capital remains one of the most important determinants of MSME performance. Working capital serves as the primary source of financing for day-to-day operational activities, including purchasing raw materials, paying labor costs, maintaining inventory, and supporting business expansion. Insufficient working capital often limits production capacity and business growth, whereas adequate capital enables enterprises to operate efficiently and respond effectively to market opportunities. Therefore, effective capital management is widely recognized as a critical factor influencing business sustainability and financial performance.

Profitability represents one of the most important indicators of business success because it reflects a firm's ability to generate earnings from its operational activities. A profitable business is more likely to sustain its operations, expand its market presence, and withstand external economic shocks. For MSMEs, profitability is particularly important because it determines the long-term viability of the enterprise and its capacity to contribute to local economic development. In this study, profitability is viewed as the outcome of both technological adoption and financial resource availability, represented by digital payment utilization and working capital, respectively.

Although previous studies have examined the relationship between digital payment adoption, capital availability, and business performance, empirical findings remain inconclusive. Several studies reported that digital payment systems positively influence financial performance and profitability through increased transaction efficiency and customer convenience. Other studies, however, found that technological adoption alone does not necessarily improve profitability without adequate managerial capabilities and financial support. Similarly, research investigating the impact of working capital on profitability has produced mixed results across different business sectors and regional contexts. These inconsistencies indicate the existence of a research gap that requires further investigation, particularly within the context of rural and community-based MSMEs.

Furthermore, empirical evidence focusing on culinary MSMEs in Kepadangan Village, Tulangan District, Sidoarjo Regency remains limited. Considering the rapid growth of digital payment usage and the continuing importance of capital availability for business operations, examining how these factors influence MSME profitability in this specific context is highly relevant. Such investigation is expected to provide a deeper understanding of the determinants of MSME financial performance and offer practical implications for business owners, policymakers, and local government institutions in designing strategies to strengthen MSME competitiveness.

Therefore, this study aims to analyze the effect of digital payment adoption and working capital on the profitability of culinary MSMEs in Kepadangan Village, Tulangan District, Sidoarjo Regency. The findings are expected to contribute to the growing literature on digital financial inclusion and MSME development while providing empirical evidence regarding the role of technological and financial resources in enhancing business profitability.

2. RESEARCH METHODS

This study uses a quantitative approach with a causal research design to examine the effect of digital payment and capital on profitability. The independent variables in this study are digital payment and capital, while profitability serves as the dependent variable. Digital payment refers to electronic payment methods such as mobile banking and e-wallets (Handayani et al., 2022; Daud et al., 2022). Capital is the financial resource used to support business operations and growth (Sale, 2021), while profitability reflects a business's ability to generate profit (Riyanto, 2021). Data were collected through a questionnaire distributed to MSME owners and analyzed using statistical methods.

The measurement scale used in this study is a five-point Likert scale, ranging from 1 (strongly disagree) to 5 (strongly agree). The questionnaire items were developed based on previous studies related to digital payment, capital, and profitability (Handayani et al., 2022; Sale, 2021; Riyanto, 2021). The collected data were then processed and analyzed to determine the effect of digital payment and capital on profitability.

3. RESULTS AND DISCUSSION

3.1. Results

3.1.1. Respondent Profile

This study involved 30 MSME owners operating in the culinary sector in Kepadangan Village, Tulangan District, Sidoarjo Regency. Respondents were classified based on gender and age characteristics.

Table 1. Respondent Characteristics Based on Gender

Gender	Frequency	Percentage (%)
Male	14	46,7
Female	16	53,3
Total	30	100

The results indicate that female respondents dominated the sample, accounting for 53.3% of the total respondents, while male respondents represented 46.7%. This finding suggests that women play a significant role in managing and developing culinary MSMEs in Kepadangan Village.

3.1.2. Descriptive Statistics Analysis

Descriptive statistics were used to provide an overview of the research variables, namely Digital Payment (X1), Capital (X2), and Profitability (Y).

Table 2. Descriptive Statistics

Variable	Mean	Standard Deviasion	N
Digital Payment	3.6667	0.66089	30
Capital	7.8333	1.74679	30
Profitability	0.3880	0.08980	30

The average score of digital payment adoption was 3.6667, indicating that most MSMEs have implemented digital payment systems in their business transactions. The capital variable recorded an average value of 7.8333, suggesting that respondents generally possess sufficient business capital. Meanwhile, profitability had a mean value of 0.3880, indicating a moderate level of profit generation among the surveyed MSMEs.

3.1.3. Partial Effects (t-test)

Table 3. Partial Effects (t-test)

Hypothesis	Relationship	Std. Estimate (β)	t-value	p-value	Decision
H1	Digital Payment → Profitability	-0.018	-1.921	0.065	Rejected
H2	Capital → Profitability	0.048	13.437	0.000	Accepted

Table 3. presents the results of the partial effect analysis using the t-test. The findings show that Digital Payment has a negative but insignificant effect on Profitability ($\beta = -0.018$; $t = -1.921$; $p = 0.065$), indicating that the adoption of digital payment systems does not significantly contribute to improving the profitability of MSMEs. Therefore, H1 is rejected. In contrast, Capital has a positive and significant effect on Profitability ($\beta = 0.048$; $t = 13.437$; $p < 0.001$), suggesting that greater capital availability enables MSMEs to enhance their operational performance and generate higher profits. Thus, H2 is accepted. These results indicate that capital is a more influential factor in determining MSME profitability than digital payment adoption.

3.1.4. Simultaneous Effect (F-test)

Table 4. Simultaneous Effect (F-test)

Model	F-value	p-value	Decision
Digital Payment & Capital → Profitability	90.447	0.000	Accepted

Table 4. reports the results of the simultaneous effect analysis using the F-test. The model produces an F-value of 90.447 with a significance level of $p < 0.001$, indicating that Digital Payment and Capital jointly have a significant effect on Profitability. Therefore, H3 is accepted. This finding suggests that the combined contribution of financial resources and technological adoption plays an important role in explaining variations in MSME profitability. Furthermore, the significant F-test result confirms that the regression model is appropriate for predicting profitability among culinary MSMEs in Kepadangan Village, Tulangan District, Sidoarjo Regency.

3.1.5. Hypothesis Testing Results

The proposed hypotheses were tested to determine the effects of digital payment and capital on MSME profitability. The significance of each relationship was assessed based on the estimated coefficients, t-values, and p-values. The results of hypothesis testing and the corresponding decisions are summarized in Table 7.

Table 5. Summary of Hypothesis Testing Results

Hypothesis	Relationship	Std. Estimates (β)	C.R. / t-value	p-value	Note
H1 (+)	Digital Payment → Profitability	-0.018	-1.921	0.065	Not Supported
H2 (+)	Capital → Profitability	0.048	13.437	0.000	Supported
H3 (+)	Digital Payment & Capital → Profitability	—	90.447 (F-value)	0.000	Supported

Note: Significant at p-value < 0.05 .

Table 5 presents the results of hypothesis testing. The findings indicate that the effect of digital payment on profitability is not statistically significant ($\beta = -0.018$, $p = 0.065$), thus H1 is not supported. This result suggests that the adoption of digital payment systems has not directly contributed to increased profitability among culinary MSMEs in Kepadangan Village.

Meanwhile, capital has a positive and significant effect on profitability ($\beta = 0.048$, $p < 0.001$), supporting H2. The result indicates that adequate capital enables MSMEs to improve operational capacity, increase production, and generate higher profits.

Furthermore, the simultaneous testing reveals that digital payment and capital jointly affect profitability ($F = 90.447$, $p < 0.001$). Therefore, H3 is supported. These findings suggest that profitability is influenced by both financial resources and technological adoption, although capital remains the dominant factor in explaining MSME profitability.

3.2. Discussions

The results indicate that Reliability does not significantly affect Customer Satisfaction ($\beta = 0.165$, $p = 0.152$). This finding suggests that customers may perceive reliability as a basic requirement rather than a factor that enhances satisfaction. Although reliable service is important, customers may place greater emphasis on other service attributes when evaluating their overall satisfaction. Similarly, Responsiveness was found to have no significant effect on Customer Satisfaction ($\beta = 0.164$, $p = 0.127$). This result implies that the speed of response provided by the service provider may not be the primary determinant of customer satisfaction. Customers may value service quality dimensions that directly improve their service experience. In contrast, Visibility has a positive and significant effect on Customer Satisfaction ($\beta = 0.203$, $p = 0.044$). This finding indicates that customers are more satisfied when service information, facilities, and communication channels are clearly visible and easily accessible. Greater visibility helps customers understand and utilize the service more effectively, leading to higher satisfaction levels.

Employee Commitment also demonstrates a significant positive effect on Customer Satisfaction ($\beta = 0.314$, $p = 0.003$). This result highlights the importance of employees' dedication and professionalism in delivering quality service. Customers tend to be more satisfied when employees show commitment, responsibility, and a willingness to assist them.

Furthermore, Access to Service significantly influences Customer Satisfaction ($\beta = 0.201$, $p = 0.038$). Easy access to services, information, and support enables customers to fulfill their needs efficiently, thereby enhancing their satisfaction. This finding emphasizes the importance of reducing barriers that may hinder customers from obtaining services.

Finally, Customer Satisfaction has a strong positive effect on Customer Loyalty ($\beta = 0.918$, $p < 0.001$). This result indicates that satisfied customers are more likely to remain loyal, continue using the service, and recommend it to others. Among all tested relationships, customer satisfaction appears to be the most important predictor of customer loyalty. Overall, the findings suggest that Visibility, Employee Commitment, and Access to Service are key factors influencing Customer Satisfaction, while Customer Satisfaction serves as the primary determinant of Customer Loyalty.

4. CONCLUSION

This study aimed to examine the effect of digital payment and capital on the profitability of MSMEs in Kepadangan Village, Tulangan District, Sidoarjo Regency. Based on the results of the analysis, it can be concluded that digital payment does not have a significant effect on MSME profitability. Although digital payment systems facilitate transactions and improve payment efficiency, their implementation alone is not sufficient to significantly increase business profitability.

Furthermore, capital has a positive and significant effect on MSME profitability. This finding indicates that adequate capital enables MSMEs to support business operations, expand production capacity, and improve overall business performance, which ultimately contributes to higher profitability.

In addition, digital payment and capital simultaneously have a significant effect on profitability. This result suggests that the combination of technological adoption and financial resources plays an important role in influencing MSME performance. Therefore, efforts to improve MSME profitability should focus not only on encouraging the use of digital payment systems but also on strengthening access to capital to support sustainable business growth.

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