



FROM TECHNOLOGY ACCEPTANCE TO BUSINESS PERFORMANCE: A POST-ADOPTION MODEL OF DIGITAL PAYMENT USAGE AMONG SMES IN INDONESIA

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Abstract

The growth of digital payments is driving the transformation of transaction systems among micro, small, and medium-sized enterprises (MSMEs) in the digital age. The objective of this study is to analyze the role of digital payments in improving financial performance. This study employs a quantitative method analyzed using Structural Equation Modeling-Partial Least Squares (SEM-PLS). Data were collected via an online questionnaire. This study involved 350 respondents comprising MSMEs using digital payments across Indonesia. The results indicate that digital payments have a positive impact on the financial performance of MSMEs. This is attributed to the ease, utility, financial benefits, and satisfaction derived from using digital payments. This study is expected to contribute to expanding the application of TAM, ISSM, and ECT in the context of technology acceptance, particularly regarding digital payments that influence the financial performance of SMEs. Practically, the results of this study are also expected to serve as a basis for consideration and provide insights to enhance technology acceptance among SMEs.

Keywords: Digital Payments, MSME Financial Performance, TAM, ISSM, ECT



INTRODUCTION

Micro, Small, and Medium Enterprises (MSMEs) occupy a strategic position in the Indonesian economy. They contribute approximately 61% of the national gross domestic product and absorb nearly 97% of the national workforce (DJPb Kemenkeu RI, 2024; Kepala Staf Kepresidenan RI, 2026). Their number increased from approximately 64 million business units in 2020 to 65.5 million in 2025 (DJPb Kemenkeu RI, 2024; Majoo, 2025). Despite their substantial domestic contribution, MSMEs account for only around 15.7% of Indonesia's national exports (Kemenko Bidang Perekonomian RI, 2025). This contrast suggests that the scale of the MSME sector has not been fully translated into stronger international competitiveness. Digital transformation, particularly in transaction processing and financial management, is consequently important for improving operational capabilities and supporting the competitiveness of Indonesian MSMEs.

Digital payments refer to financial transactions conducted through digital technologies, including mobile banking and electronic wallets. For MSMEs, these technologies can simplify transactions, shorten processing times, improve financial transparency, and support more efficient business operations (Thathsarani & Jianguo, 2022; Musyaffi, 2024). The Technology Acceptance Model explains initial technology acceptance primarily through perceived usefulness and perceived ease of use. In the context of MSMEs, perceived usefulness reflects the extent to which business owners believe that digital payments improve transaction and business performance, whereas perceived ease of use concerns the effort required to learn and operate the technology. Existing evidence consistently emphasizes these acceptance-related factors. Fauziah et al. (2025) reported a significant relationship between perceived usefulness and digital payment adoption, while Gunawan et al. (2023) found that perceived usefulness and perceived ease of use influenced the intention to use digital payment technologies. Collectively, these studies show that MSME adoption decisions depend not only on the availability of digital infrastructure but also on users' evaluations of its practical utility and usability.

Although this literature provides an important explanation of initial adoption, it predominantly examines the relationships between perceived usefulness, perceived ease of use, and behavioral or adoption intention. Such an emphasis offers only a partial account of digital payment use because MSME owners' evaluations may change after they gain direct experience with the system. Initial acceptance variables do not adequately explain whether actual performance confirms users' prior expectations, whether users become satisfied, or whether they intend to continue using digital payments. They also provide limited insight into how system quality, perceived security, and perceived financial benefits shape post-adoption evaluations. More importantly, the



existing adoption-oriented approach does not sufficiently establish how sustained digital payment use produces measurable outcomes for MSME performance. The research problem thus extends beyond whether MSMEs are willing to adopt digital payments to whether the systems deliver reliable, secure, and economically valuable experiences that encourage continued use and improve business performance.

A broader theoretical framework is required to address these limitations. The Technology Acceptance Model explains initial acceptance through perceived usefulness and perceived ease of use, whereas Expectation Confirmation Theory explains post-adoption behavior through confirmation, user satisfaction, and continuance intention (Bhattacharjee, 2001). The Information Systems Success Model complements these perspectives by explaining how system characteristics, particularly system quality, contribute to successful information-system use and its resulting benefits (DeLone & McLean, 2003). Nevertheless, the simultaneous relationships among initial technology acceptance, post-adoption confirmation, system quality, perceived security, perceived financial benefits, user satisfaction, continuance intention, and MSME performance have not been comprehensively investigated in the context of Indonesian MSMEs. This gap is substantive rather than merely theoretical: models focused on initial adoption cannot determine whether technical quality and transaction security generate satisfaction, whether perceived financial value sustains usage, or whether continued digital payment use ultimately supports MSME performance.

The proposed extension integrates the acceptance mechanisms of the Technology Acceptance Model, the post-adoption mechanisms of Expectation Confirmation Theory, and the system-success perspective of the Information Systems Success Model. It also seeks to move beyond a predominantly technology-oriented explanation by incorporating a value-oriented assessment of the economic benefits and business outcomes generated by digital payment use. Retesting the model with respondents drawn from a broader and more representative research area is expected to determine whether the relationships identified previously remain consistent across different MSME populations and geographical settings, thereby strengthening external validity. Accordingly, this study aims to develop and empirically test an integrated model explaining how technology-acceptance factors, post-adoption evaluations, system-related factors, and perceived economic value influence continued digital payment use and MSME performance in Indonesia.

**Research Hypothesis****Perceived Ease of Use****H1: perceived ease of use affects perceived usefulness**

From the TAM perspective, perceived ease of use (PEOU) is defined as an individual's level of confidence that a technology can be used easily without requiring much effort (Davis, 1989). In the context of this study, PEOU reflects the extent to which SME operators feel that digital payments are easy to understand, learn, and operate in support of their daily business transactions. TAM explains that user-friendly technology enhances users' perception of the technology's benefits. When digital payment systems can be operated simply and do not require complex processes, SME operators will find it easier to utilize digital payment features to support the operational effectiveness and efficiency of their businesses. Ease of use can also reduce technical barriers and learning time, making the benefits of digital payments more readily apparent to users. Previous research indicates that PEOU influences perceived usefulness (PU) in the use of digital technology (Musyaffi, 2024; Musyaffi et al., 2022).

H2: Perceived ease of use affects satisfaction

In addition to influencing perceived usefulness (PU), the ease of use of technology can also increase user satisfaction. According to the ECT perspective outlined by (Bhattacharjee, 2001), satisfaction arises when the experience of using technology meets or exceeds user expectations. An easy-to-use digital payment system allows MSME operators to conduct transactions more conveniently, quickly, and with minimal errors, thereby creating a positive user experience. The less effort required to use the technology, the higher the level of comfort and satisfaction felt by users. Previous research has shown that PEOU influences satisfaction in the use of digital technology (Ashfaq et al., 2020; Musyaffi, 2024; Musyaffi et al., 2022).

H3: Perceived ease of use affects intention to use

Furthermore, (Davis, 1989) argues that the TAM can also explain that PEOU is a key factor influencing the intention to use (ITU) a technology. The ease of use of a technology tends to increase users' desire to adopt and continue using that technology in their daily activities. In the context of MSMEs, the ease of use of digital payments can encourage business owners to be more confident in utilizing digital payment technology on an ongoing basis. Conversely, systems perceived as complex can reduce users' interest in using such technology. Previous research indicates that PEOU influences ITU for digital payments (Ashfaq et al., 2020; Musyaffi, 2024; Musyaffi et al., 2022; Rahman et al., 2026).

Perceived Usefulness**H4: Perceived usefulness affects intention to use**



PU reflects the extent to which MSME operators believe that the use of digital payments can improve the effectiveness and efficiency of business activities. From an ECT perspective, users will be satisfied when the technology they use is able to provide benefits in line with their expectations (Bhattacharjee, 2001). The greater the perceived benefits of using digital payments, the higher the level of user satisfaction with the technology. Previous research indicates that PU influences satisfaction with the use of digital technology (Ashfaq et al., 2020; Franque et al., 2021; Musyaffi, 2024; Radisa et al., 2024; Rahman et al., 2026).

H5: Perceived usefulness affects satisfaction

In addition to influencing satisfaction, PU is also a key factor driving ITU for digital payment technology. From a TAM perspective, (Davis, 1989) explains that users tend to adopt technologies they believe can provide benefits for their work activities and business operations. When digital payment is perceived as a means to make transactions more effective and efficient, MSMEs' intention to adopt this technology will increase. Previous research indicates that PU influences ITU for digital payment (Musyaffi, 2024; Radisa et al., 2024; Rahman et al., 2026).

Security**H6: Security affects satisfaction**

Security is one of the key aspects of digital payment usage because it relates to data protection and the security of users' transactions. From an ISSM perspective, (DeLone & McLean, 1992; Delone & McLean, 2003) it is emphasized that a high-quality system can increase technology adoption. When SME operators feel that digital payments can safeguard the security of their transactions and financial information, their intention to continue using this technology will increase. Previous research has shown that security influences the adoption of digital technology (Hanif & Lallie, 2021; Jhonson et al., 2023; Musyaffi, 2024; Musyaffi et al., 2022; Radisa et al., 2024; Rahman et al., 2026).

Digital Payment Quality**H7: Digital payment quality affects perceived usefulness**

Digital payment quality reflects the quality of digital payment systems in supporting business transactions, such as speed, stability, accuracy, and ease of access to the system. From an ISSM perspective, (DeLone & McLean, 1992; Delone & McLean, 2003) it is explained that a high-quality system can enhance users' perception of the benefits of technology. When digital payments can support transactions effectively and efficiently, MSME actors will more fully experience the benefits of using such technology. Previous research indicates that digital payment quality influences the adoption of digital technology (Musyaffi, 2024; Musyaffi et al., 2022).

H8: Digital payment quality affects intention to use



In addition to influencing PU, the quality of digital payment systems can also enhance ITU technology. A system that is fast, stable, and user-friendly will create a more convenient user experience, thereby encouraging MSMEs to continue using digital payments in their daily business activities. Previous research has shown that system quality influences ITU digital technology (Musyaffi, 2024; Musyaffi et al., 2022).

H9: Digital payment quality affects satisfaction

ISSM also explains that the quality of information systems is a key factor influencing user satisfaction (DeLone & McLean, 1992; DeLone & McLean, 2003). Digital payment systems capable of providing fast, accurate, and stable services will enhance the positive user experience for MSME operators. The better the quality of the digital payment system used, the higher the level of user satisfaction with that technology. Previous research has shown that digital payment quality influences satisfaction in the use of digital technology (Bossman & Agyei, 2022; Musyaffi, 2024; Musyaffi et al., 2022).

Financial Advantage**H10: Financial advantage affects intention to use**

Financial advantage refers to the economic benefits that MSMEs derive from using digital payments, such as savings on transaction costs, operational efficiency, and the availability of payment promotions and incentives. From a TAM perspective, users tend to adopt technologies perceived as capable of providing benefits for their business activities (Davis, 1989). The greater the financial benefits perceived from using digital payments, the higher the intention of MSME operators to use such technology in their daily business operations. Previous research indicates that financial advantage influences the intention to adopt digital payments (IUDP) (Chang, 2020; Christiansen et al., 2022; Musyaffi, 2024).

Satisfaction**H11: Satisfaction affects intention to use**

Satisfaction refers to users' satisfaction after using digital payment technology in business activities. In the context of MSMEs, satisfaction reflects the extent to which the experience of using digital payments meets business owners' expectations in supporting more effective, efficient, and practical transactions. From an ECT perspective (Bhattacharjee, 2001) user satisfaction is a key factor influencing the continued use of technology. Users who are satisfied with digital payments tend to want to continue using the technology in their daily business activities. When digital payments provide a user experience that meets user expectations, the intention to use the technology increases. Previous research shows that satisfaction influences the adoption of digital payment technology (Bossman & Agyei, 2022; Liébana-Cabanillas et al., 2020; Musyaffi, 2024).

H12: Satisfaction affects SMEs' Performance



In addition to influencing ITU, user satisfaction with digital payments can also support improved performance among MSMEs. From an ISSM perspective, user satisfaction is one of the indicators of information system success that can generate benefits for an organization (DeLone & McLean, 1992; Delone & McLean, 2003) SME operators who are satisfied with the use of digital payments tend to utilize the technology more optimally to support business operations, thereby improving transaction effectiveness and business performance. Previous research indicates that satisfaction influences SME performance (Musyaffi, 2024; Musyaffi et al., 2022; Niu et al., 2021).

Intention to Use

H13: Intention to use affects SMEs' Performance

Intention to use (ITU) reflects the desire of MSME operators to continue using digital payments in their daily business activities. From a TAM perspective (Davis, 1989) ITU is a key factor determining the acceptance and use of technology. The higher the intention of MSME operators to use digital payments, the greater the likelihood that this technology will be utilized more effectively to support business operations. Furthermore, from the ISSM perspective, the effective use of information systems can provide benefits to organizations, including improved efficiency and business performance. The use of digital payments enables SMEs to conduct transactions more quickly, conveniently, and efficiently, thereby supporting business productivity and enhancing SME performance. Previous research indicates that the use of digital technology influences SME performance (Khayer et al., 2020; Musyaffi, 2024; Teo et al., 2015).

LITERATURE REVIEW

This study draws on the Technology Acceptance Model (TAM), the Expectation-Confirmation Model (ECM), and the DeLone and McLean Information Systems Success Model to explain how MSMEs accept, evaluate, continue using, and obtain benefits from digital payment systems. Each framework serves a distinct conceptual function. TAM explains the initial acceptance of technology, ECM addresses users' evaluations after direct experience with a system, and the Information Systems Success Model explains how system quality and system use generate benefits for users and organizations. Their integration therefore provides a broader explanation of digital payment use than any single framework could offer.

These theories are not assumed to contribute all their original constructs to the research model. Rather, they provide the conceptual foundations for understanding the selected variables and their relationships. In this context, it is necessary to distinguish initial adoption from actual use, post-adoption evaluation, continuance intention, system



success, and financial performance. Although these concepts are related, they represent different stages and outcomes of technology use.

Technology Acceptance Model

The Technology Acceptance Model was developed by Davis (1989) to explain why individuals accept or reject information technology. The model identifies perceived usefulness and perceived ease of use as its two central beliefs. Perceived usefulness refers to the extent to which an individual believes that using a particular system will improve task performance. Perceived ease of use represents the extent to which the system is perceived as requiring minimal physical or mental effort. In the original framework, perceived ease of use can also influence perceived usefulness because a system that is easier to operate is more likely to be regarded as useful.

In the early TAM formulation, perceived usefulness and perceived ease of use shape users' attitudes toward a system. These attitudes contribute to behavioral intention, which subsequently influences actual system use. Perceived usefulness may also have a direct relationship with behavioral intention because users can intend to use a system when they believe it will improve their performance, even when their general attitude toward the system is not entirely favorable. TAM therefore distinguishes users' evaluations of technological functionality from their intention and actual behavior (Davis, 1989).

TAM is particularly relevant for explaining the initial acceptance of digital payments by MSME owners and managers. MSMEs are more likely to adopt a digital payment system when they perceive that it is easy to learn, simple to operate, and compatible with their daily transaction processes. Perceived ease of use may reduce the effort required to process customer payments, verify transactions, and access payment records. At the same time, perceived usefulness can arise when digital payments are expected to accelerate transactions, facilitate recordkeeping, improve operational efficiency, and provide customers with more convenient payment options.

Security, system quality, service quality, satisfaction, and net benefits are not original TAM constructs. These factors may be incorporated as external variables or explained through complementary theoretical frameworks. Maintaining this conceptual distinction is important because TAM primarily addresses beliefs and behavioral processes associated with technology acceptance rather than the overall quality, satisfaction, and organizational outcomes of an information system.

Expectation-Confirmation Model

Expectation Confirmation Theory was initially introduced by Oliver (1980) to explain consumer satisfaction. The theory proposes that consumers form expectations before purchasing or using a product or service and subsequently compare those



expectations with the performance they perceive after consumption. Satisfaction is influenced by the outcome of this comparison.

Confirmation occurs when perceived performance is consistent with prior expectations. Positive disconfirmation occurs when performance exceeds expectations, whereas negative disconfirmation occurs when performance falls below expectations. Confirmation and positive disconfirmation are generally associated with higher satisfaction, while negative disconfirmation tends to reduce satisfaction. The theory therefore focuses on how users evaluate the difference between what they initially expected and what they actually experienced (Oliver, 1980).

Bhattacharjee (2001) adapted this logic to the information systems context through the Expectation-Confirmation Model of Information Systems Continuance. ECM does not primarily explain whether a person initially adopts a system. Instead, it explains whether users intend to continue using a system after gaining direct experience with it. In ECM, confirmation influences both perceived usefulness and satisfaction. Users are more likely to perceive a system as useful and to feel satisfied when its actual performance confirms or exceeds their original expectations. Satisfaction and perceived usefulness subsequently influence continuance intention.

The distinction between TAM and ECM is therefore temporal and conceptual. TAM is more appropriate for explaining initial acceptance through perceived usefulness and perceived ease of use, whereas ECM focuses on post-adoption evaluation and continuance intention. A user may initially adopt a digital payment system because it appears useful and easy to use, but continued use depends on whether the system performs as expected and produces a satisfactory experience.

In the MSME context, confirmation may occur when a digital payment system provides the speed, reliability, convenience, and transaction information expected by business owners. When transactions are processed accurately, payment records are readily accessible, and the system supports routine business activities, perceived performance is more likely to confirm initial expectations. This confirmation can strengthen perceived usefulness and user satisfaction, thereby encouraging continuance use. Conversely, recurring failures, delayed settlements, complicated procedures, or poor customer support may create negative disconfirmation and weaken the intention to continue using the system.

The relevance of system quality and satisfaction to continued system use is also supported by Yanti and Nugroho (2018). Their study found that information quality and system quality were associated with user satisfaction, while user satisfaction contributed to continuance intention. Although their research examined an academic information system rather than digital payments, its findings support the broader argument that



users' evaluations of system performance and quality can shape satisfaction and continued use.

DeLone and McLean Information Systems Success Model

DeLone and McLean (1992) developed the Information Systems Success Model to address the multidimensional nature of information system success. The original model contained six interrelated dimensions: system quality, information quality, use, user satisfaction, individual impact, and organizational impact. System quality represents the technical performance of an information system, while information quality concerns the usefulness and accuracy of the information produced. Use and user satisfaction reflect users' interaction with and evaluation of the system. Individual impact and organizational impact represent the effects of the system on users and organizational performance.

DeLone and McLean (2003) subsequently updated the model in response to theoretical developments and empirical findings. The updated framework added service quality as a separate quality dimension and combined individual and organizational impacts into the broader construct of net benefits. It also clarified the relationships among intention to use, actual use, user satisfaction, and net benefits. In the updated model, system quality, information quality, and service quality can influence intention to use or actual use and user satisfaction. Use and satisfaction can generate net benefits, while the benefits experienced by users may, in turn, strengthen subsequent satisfaction and intentions to use the system.

The updated model is more appropriate for explaining the success of digital payment systems because successful implementation depends on more than initial acceptance. System quality may be reflected in reliability, accessibility, response speed, ease of navigation, and transaction security. Information quality may be indicated by the accuracy, completeness, timeliness, and clarity of transaction records. Service quality concerns the responsiveness, competence, and reliability of support provided by digital payment service providers.

When these quality dimensions meet MSMEs' operational needs, they may encourage more frequent system use and greater user satisfaction. Use and satisfaction may then produce net benefits, including faster transactions, lower administrative or cash-handling costs, more accurate payment records, better cash-flow monitoring, and improved financial control. Depending on how effectively the system is integrated into business activities, these benefits may also contribute to customer convenience, sales opportunities, profitability, and broader MSME performance.



The term net benefits should not be treated as identical to financial performance. Net benefits comprise the overall positive and negative consequences of system use at the individual, organizational, or societal level. Financial performance is a more specific organizational outcome that may constitute one component of net benefits. The distinction allows the Information Systems Success Model to explain the mechanism through which digital payment quality and use may contribute to financial outcomes without assuming that all system benefits are financial.

Integration of TAM, ECM, and the IS Success Model

TAM, ECM, and the DeLone and McLean Information Systems Success Model provide complementary explanations of different stages in the digital payment use process. TAM explains how perceived usefulness and perceived ease of use shape the initial acceptance of a digital payment system. ECM explains how users evaluate the system after adoption through confirmation, perceived usefulness, satisfaction, and continuance intention. The Information Systems Success Model explains how the quality, use, and satisfaction associated with the system may generate benefits for MSMEs

The integration begins with the initial beliefs of MSME owners or managers. A digital payment system that appears easy to operate and useful for business transactions is more likely to be accepted. After adoption, users obtain direct experience with its reliability, speed, transaction information, support services, and suitability for business operations. These experiences allow them to compare actual performance with their initial expectations. High system, information, and service quality can help confirm those expectations, while poor quality may lead to negative disconfirmation.

Confirmation can strengthen perceived usefulness because MSME users obtain evidence that the digital payment system provides the expected operational advantages. Confirmation and positive quality evaluations can also increase satisfaction. Perceived usefulness, perceived ease of use, and satisfaction may subsequently encourage actual use or continuance intention, although these constructs should not be treated as conceptually identical. Actual use concerns observable system utilization, whereas continuance intention refers to a user's willingness or plan to maintain future use.

Effective and consistent digital payment use can produce net benefits. These benefits may include greater transaction efficiency, reduced cash-handling requirements, improved transaction accuracy, better financial records, easier monitoring of inflows and outflows, and more convenient payment access for customers. When these operational benefits translate into cost efficiency, sales growth, stronger cash flow, or improved profitability, they may contribute to the financial performance of MSMEs.



This theoretical integration therefore covers initial beliefs, initial acceptance, post-adoption evaluation, continued use, system success, and organizational benefits. The three frameworks are not merely placed alongside one another. They form a sequential and complementary explanation in which acceptance beliefs influence adoption, post-use experience influences satisfaction and continuance, and effective system use generates benefits that may support MSME financial performance. Nevertheless, the relevance of these theories does not mean that every construct in the original frameworks must be included in the empirical model. Each theory may serve as the conceptual basis for the particular constructs selected in the study.

Digital Payment Use among MSMEs

Digital payment use refers to the utilization of electronic systems to receive, transfer, or settle payments in business transactions. In the MSME context, these systems may include mobile banking, internet banking, electronic wallets, QR-based payments, payment gateways, electronic money, and other forms of electronic payment that allow transactions to be completed without the direct exchange of physical cash. Digital payment adoption refers to the initial decision to accept or implement such systems, whereas digital payment use refers to their actual utilization in business activities. Continuance use concerns their sustained utilization after users have evaluated their experience.

The factors associated with digital payment adoption and use should be classified according to their conceptual origins. Perceived usefulness and perceived ease of use represent acceptance beliefs within TAM. Confirmation, satisfaction, and continuance intention belong to the post-adoption logic of ECM. System quality, information quality, service quality, use, user satisfaction, and net benefits are central to the DeLone and McLean Information Systems Success Model. Separating these factors prevents the theoretical model from presenting adoption determinants, system characteristics, user evaluations, and outcomes as though they were equivalent concepts.

Security may also influence digital payment use, but it is not an original TAM construct. Depending on the research model, security can be positioned as an external factor influencing perceived usefulness, ease of use, trust, or intention. It may also be considered an aspect of perceived system quality when it relates to transaction protection, authentication, system integrity, and data security. Its conceptual position should be stated explicitly rather than attributed directly to TAM.

For MSMEs, the practical value of digital payments depends on how they are used in business operations. Occasional registration for a payment application does not necessarily indicate meaningful use. Digital payment use becomes operationally relevant when MSMEs regularly receive customer payments, settle supplier obligations, verify



incoming transactions, access transaction histories, reconcile records, or integrate digital payment information into financial management processes.

Musyaffi et al. (2024) provide empirical support for combining acceptance, quality, satisfaction, and performance perspectives in research on Indonesian MSMEs. Their study found significant relationships among perceived ease of use, perceived usefulness, digital payment quality, satisfaction, and intention to use. Satisfaction and intention to use were also positively related to MSME performance. These findings suggest that digital payment outcomes cannot be explained only by the availability of the technology. Quality evaluations, perceived benefits, satisfaction, and the willingness to use the technology consistently are also important components of the adoption and performance process.

Financial Performance of MSMEs

Financial performance refers to the extent to which an MSME achieves favorable financial results and maintains the financial capacity required to continue its operations. It is more specific than general business performance, which may include innovation, customer satisfaction, employee development, market position, adaptability, and business resilience. Although resilience and adaptability can support long-term financial outcomes, they should not automatically be treated as direct indicators of financial performance.

The financial performance of MSMEs may be reflected in sales growth, profit growth, profitability, cash-flow conditions, cost efficiency, income stability, and the ability to meet financial obligations. Depending on data availability and the research design, financial performance can be measured objectively through accounting or transaction records. However, many MSMEs do not maintain complete and standardized financial statements. Consequently, researchers may use subjective measures based on owners' or managers' evaluations of whether sales, profits, cash flow, or overall financial conditions have improved relative to previous periods or competing businesses.

The use of subjective financial performance measures should be explained transparently. Perceptual assessments do not represent exact accounting figures, but they may provide meaningful information when objective financial data are unavailable, incomplete, or considered confidential. The validity of such measures depends on whether the indicators clearly refer to financial outcomes and whether respondents have sufficient knowledge of the enterprise's financial condition.

Technology can contribute to MSME performance when it is aligned with operational needs and supported by users' capabilities. Monica et al. (2024) associate the use of technology with MSME financial performance, although the complete bibliographic details of this source must be verified before publication. In theoretical



terms, technology should not be treated as an automatic determinant of improved performance. Its contribution depends on the quality of implementation, frequency of use, user competence, business characteristics, and the extent to which the technology improves relevant business processes.

Digital payments may support financial performance through several mechanisms. Faster transaction processing can reduce waiting time and improve operational efficiency. Electronic transaction records may increase recording accuracy and facilitate the monitoring of revenues and cash inflows. Reduced dependence on cash may lower cash-handling risks and certain administrative costs. Digital payment options may also increase customer convenience and enable MSMEs to serve consumers who prefer cashless transactions. These mechanisms may contribute to sales, cash-flow management, cost efficiency, and profitability, but the magnitude of the benefits can vary among businesses.

Digital Payment Use and MSME Financial Performance

The relationship between digital payment use and MSME financial performance can be explained as a sequence that begins with technological acceptance and ends with organizational outcomes. MSME owners must first perceive digital payments as useful and sufficiently easy to use. The system must then provide reliable performance, accurate information, and adequate service support. After gaining experience, users assess whether the system has fulfilled their initial expectations. Confirmation and favorable quality evaluations can strengthen perceived usefulness and satisfaction, which may encourage actual and continued use.

Consistent digital payment use can improve transaction processes by reducing the time needed to receive and verify payments. Electronic records may support more accurate sales documentation, reconciliation, and cash-flow monitoring. Digital payments may also expand payment accessibility for customers, reduce barriers at the point of sale, and support transactions through online channels. When these operational improvements reduce costs, increase transaction volume, accelerate the circulation of funds, or support sales growth, they may contribute to better financial performance.

Musyaffi et al. (2024) found that digital payment quality was associated with perceived usefulness and intention to use, while perceived usefulness and perceived ease of use were related to satisfaction and intention. Satisfaction and intention to use were subsequently associated with MSME performance. The findings support a theoretical pathway in which system quality and acceptance beliefs contribute to user evaluation and use, which may then generate performance-related benefits. The study therefore provides more informative evidence than a simple statement that digital payments have a positive effect on performance.



Nevertheless, the use of digital payments does not necessarily produce financial improvement in every MSME. A system may be adopted but used only infrequently, disconnected from financial management, or unsuitable for the enterprise's transaction patterns. Low service quality, system interruptions, delayed fund settlements, transaction charges, or weak customer acceptance may reduce its benefits. MSMEs with limited digital skills may also be unable to use transaction data effectively for recordkeeping and financial decision-making.

The financial effects of digital payment use may therefore vary according to digital capability, business size, transaction volume, sector characteristics, customer preferences, infrastructure quality, and the cost structure of payment services. These conditions suggest that the relationship between digital payment use and financial performance should be expressed cautiously. Digital payment use may improve or contribute to financial performance when the system is accepted, reliable, regularly used, compatible with business needs, and capable of generating operational and financial benefits.

Overall, the integrated theoretical reasoning positions digital payment use as a process rather than a single adoption decision. Perceived usefulness and perceived ease of use support initial acceptance; confirmation and satisfaction influence post-adoption evaluation and continuance intention; and system quality, information quality, service quality, use, and user satisfaction determine whether the system produces net benefits. Financial performance represents a specific organizational outcome that may improve when those benefits are translated into greater efficiency, stronger financial control, higher sales, more stable cash flow, or improved profitability.

RESEARCH METHOD

Research Design

This study employs a quantitative method with an explanatory research design to analyze the relationships between variables in the research model. Data were collected cross-sectionally through the distribution of questionnaires to MSME operators who use digital payment methods in Indonesia. Data analysis utilized Structural Equation Modeling-Partial Least Squares (SEM-PLS) because this study involves a complex structural model and includes several latent constructs.

Population and Sample

The target population comprised MSME owners or managers in Indonesia whose enterprises used at least one digital payment system for business transactions. Digital payment systems included QR-based payments, mobile wallets, mobile banking, internet banking, virtual accounts, and other electronically mediated payment channels relevant to the enterprise. MSME status was determined using [insert and cite the statutory or



operational definition of an MSME used in the study]. The respondent had to possess sufficient knowledge of the focal enterprise's operational and payment practices to evaluate the questionnaire statements.

Respondent eligibility required the participant to be at least 18 years old; to be an owner, manager, or person directly involved in the MSME's operational or financial decision-making; to represent an enterprise operating in Indonesia that met the study's MSME definition; to have used digital payments in business transactions; and to provide voluntary consent. Responses were to be excluded when the participant was not an MSME owner or manager, had never used digital payments for business purposes, failed a screening question, submitted an incomplete or duplicate response, or displayed an implausible or otherwise invalid response pattern. These criteria should be retained in the manuscript only after the authors confirm that they were applied during data collection and screening

The original research protocol reported a minimum target of 120 respondents based on an initial 10-times-rule calculation. This heuristic was retained as the study's preliminary recruitment benchmark, but it was not treated as a statistical-power assessment. The 10-times rule can yield imprecise minimum-sample estimates and should not be the sole basis for establishing sample adequacy in PLS-SEM (Hair et al., 2021; Kock & Hadaya, 2018).

A more rigorous assessment should report an a priori power analysis for the most complex endogenous construct, using G*Power or another defensible method, together with the statistical test, anticipated effect size, alpha level, desired power, maximum number of predictors, and resulting minimum sample size (Faul et al., 2009). Alternatively, the inverse square root or gamma-exponential method may be reported for PLS-SEM (Kock & Hadaya, 2018).

Table 1
Survey Statements

Variable	Statements	Source
Ease of use	1) Digital payments can be used anywhere and anytime. 2) The digital payment platform I use is easy and simple to use and has an intuitive interface. 3) The digital payment platform is easy to use in my business operations. 4) I find that the digital payment platform is easy to learn.	Musyafii, dkk., (2024)



Usefulness	1) The digital payment platform I use offers many advantages over traditional transactions. 2) By using digital payments, I can quickly view transaction details. 3) I prefer digital payments because they are effective and efficient. 4) By using digital payments, I can manage my business transactions more flexibly.	Musyafii, dkk., (2024)
Security	1) Digital payment platforms have robust security measures. 2) Digital payment platforms include features to verify user identities. 3) Digital payment platforms protect user data. 4) When using digital payments, users must enter a password.	Musyafii, dkk., (2024)
Quality	1) The interface of the digital payment platform makes users feel comfortable. 2) Navigation on the digital payment platform makes it easy to conduct transactions. 3) The digital payment platform offers features and services that suit my business needs. 4) Using the digital payment platform feels comfortable because it meets my needs.	Musyafii, dkk., (2024)
Satisfaction	1) I am satisfied with digital payments because the information displayed is accurate. 2) When using the digital payment platform, I am satisfied with the digital payment results, ensuring that business transactions run smoothly. 3) I am satisfied with digital payments because they provide comprehensive information. 4) Overall, I am satisfied with all the digital payment features in meeting my business needs.	Musyafii, dkk., (2024)
Financial Advantage	1) Digital payments can reduce staffing costs (e.g., cashiers).	Musyafii, dkk., (2024)



	2) Digital payments allow customers to make payments independently through digital payment platforms. 3) Digital payments enable customers to take advantage of structured payment options (monthly or annual) 4) Using digital payments gives me a competitive edge because I have invested in business infrastructure.	
Intention to use	1) I intend to use digital payments consistently because they are very helpful for my business. 2) I try to use digital payments when conducting business transactions. 3) I use digital payments fairly often in my business transactions. 4) I recommend digital payments to others.	Musyaffi, dkk., (2024)
SMEs Performance	1) My business decisions become more effective when I review digital transaction reports. 2) Digital payments in my business can increase customer loyalty. 3) Digital payments in my business can increase the number of customers who make purchases 4) Digital payments can enhance my business's reputation	Musyaffi dkk., (2024)

Data Analysis

To address the research questions, the author used Structural Equation Modeling–Partial Least Squares (SEM-PLS) as an analytical tool to evaluate the quantitative data collected from the questionnaire. This method aligns with the research objective of integrating several theoretical frameworks—namely, the Technology Acceptance Model (TAM), the E-Commerce Theory (ECT), and the IS Success Model—while incorporating additional variables such as financial benefits and security.

RESULTS AND DISCUSSION

Descriptive Statistics

The distribution of this research questionnaire yielded 350 respondents. After verification, all data were deemed complete and met the criteria for analysis. The annual



income of MSMEs was dominated by the micro cluster, comprising 216 respondents (61.7%). The composition of respondents by gender consisted of 134 male respondents (38.3%) and 216 female respondents (61.7%). The majority of respondents were aged over 25 and 25–30 years, with 100 respondents each (28.6%). The majority of respondents' business locations were in western Indonesia, with 209 respondents (59.5%). The food and beverage sector was the dominant business type, with 171 respondents (48.9%). The majority of respondents were business owners, with 188 respondents (53.7%). The most widely used e-wallet was used by 207 respondents (59.3%). The most widely used mobile banking app was MyBCA, used by 151 respondents (43.1%).

Table 2
Respondent Characteristics

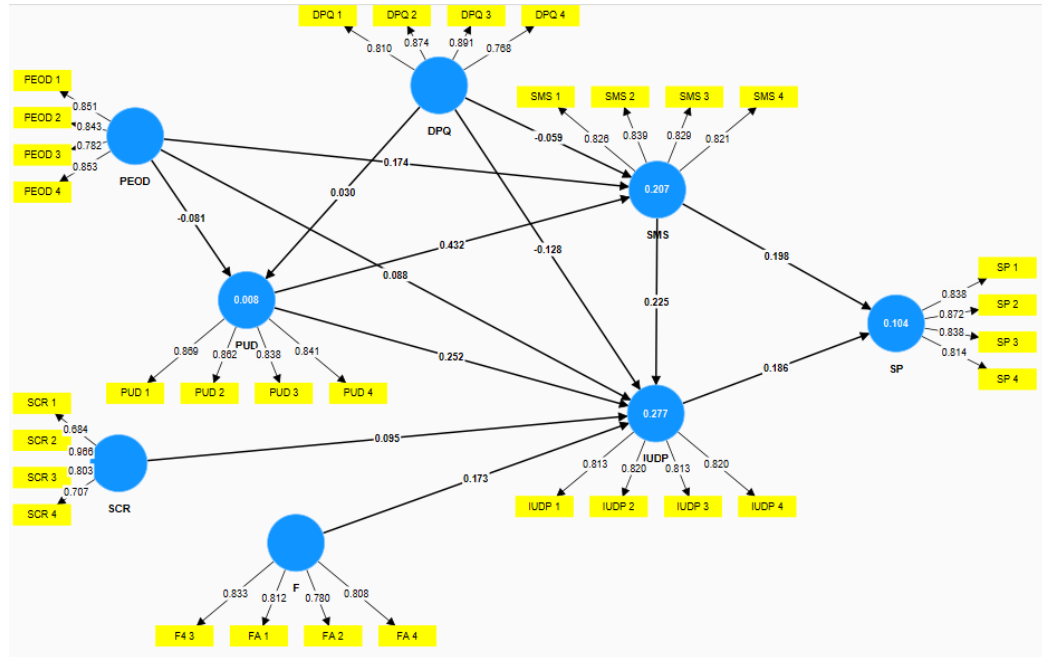
Respondent Characteristics		Quantity	%
Annual Revenue	Micro Businesses: Up to IDR 2 Billion	216	61,7%
	Small Businesses: IDR 2 Billion – IDR 15 Billion	110	31,4%
	Medium-Sized Businesses: IDR 15 Billion	24	6,9%
Gender	Male	134	38,3%
	Female	216	61,7%
Business Type	Food & Beverage	171	48,9%
	Fashion	70	20%
	Automotive	24	6,9%
	Internet & Technology	14	4%
	Cosmetics / Skincare	15	4,3%
	Logistics	26	7,4%
	Other	30	8,5%
Sales Method	Offline & Online	212	60%
	Offline Only	138	39,4%
Apps used for online selling	Shopee	137	60,9%
	Tiktokshop	53	23,6%
	Lazada	16	7,1%
	Tokopedia	29	12,9%
	Grabfood	62	27,6%
	Gojekfood	64	28,4%
	Other	5	1,5%
Respondent's Role in the Business	Owner	188	53,7%
	Employee	50	14,3%
	Owner and Employee	112	32%



Age	<25 Years	100	28,6%
	25 – 30 Years	100	28,6%
	31 – 40 Years	87	24,9%
	41 – 50 Years	53	15,1%
	>50 Years	10	2,9-%
E-Wallets Used	Shopeepay	199	57%
	Dana	207	59,3%
	Gopay	163	46,7%
	Ovo	87	24,9%
	Other	2	0,6%
Mobile Banking Apps Used	My BCA	151	43,1%
	BRImo	140	40,0%
	Livin by Mandiri	136	38,9%
	DIGI bjb	16	4,6%
	Seabank	97	27.7%
	Superbank	25	7.1%
	Blue By BCA	43	12.3%
	Jenius	15	4,3%
	Wondr By BNI	62	17,7%
	Other	7	2,1%
Region	WIB	209	59,5%
	WITA	113	32,5%
	WIT	29	8%



Quantitative Analysis Measurement Models



This study uses eight latent constructs *Digital Payment Quality (DPQ)*, *Financial Advantage (FA)*, *Intention to Use Digital Payment (IUDP)*, *Security (SCR)*, *SMEs Satisfaction (SMS)*, *Perceived Ease of Use (PEOD)*, *Perceived Usefulness (PUD)*, and *SMEs Performance (SP)*.

Table 3
Validity Test

Variable	Indicator	Outer Loading	AVE	Notes
<i>Digital Payment Quality</i>	DPQ 1	0.810	0.701	VALID
	DPQ 2	0.874		VALID
	DPQ 3	0.891		VALID
	DPQ 4	0.768		VALID
<i>Financial Advantage</i>	FA 1	0.833	0.654	VALID
	FA 2	0.812		VALID
	FA 3	0.780		VALID
	FA 4	0.808		VALID
<i>Intention To Use Digital Payment</i>	IUDP 1	0.813	0.667	VALID
	IUDP 2	0.820		VALID
	IUDP 3	0.813		VALID
	IUDP 4	0.820		VALID



<i>Perceived Ease Of Use</i>	PEOD 1	0.851	0.694	VALID
	PEOD 2	0.843		VALID
	PEOD 3	0.782		VALID
	PEOD 4	0.853		VALID
<i>Perceived Usefulness</i>	PUD 1	0.869	0.727	VALID
	PUD 2	0.862		VALID
	PUD 3	0.838		VALID
	PUD 4	0.841		VALID
<i>Security</i>	SCR 1	0.684	0.636	VALID
	SCR 2	0.966		VALID
	SCR 3	0.803		VALID
	SCR 4	0.707		VALID
<i>SMEs Satisfaction</i>	SMS 1	0.826	0.687	VALID
	SMS 2	0.839		VALID
	SMS 3	0.829		VALID
	SMS 4	0.821		VALID
<i>SMEs Performance</i>	SP 1	0.838	0.707	VALID
	SP 2	0.872		VALID
	SP 3	0.838		VALID
	SP 4	0.814		VALID

Convergent validity was tested by examining the outer loading and Average Variance Extracted (AVE) values. The test results showed that all indicators had outer loading values above the minimum threshold of 0.70, except for indicator SCR1, which had a value of 0.684. However, this value still fell within the tolerance range recommended in PLS-SEM (>0.60), so this indicator could be retained.

Furthermore, the AVE values for all constructs were above 0.50, indicating that each construct was able to explain more than 50% of the variance of its indicators. Thus, all constructs in this study were found to meet the criteria for convergent validity and are suitable for further analysis.

Table 4
Reliability Test

	Cronbach's alpha	Composite reliability (rho_a)
DPQ	0.863	0.922
F	0.824	0.828
IUDP	0.834	0.835
PEOD	0.855	0.880



PUD	0.875	0.878
SCR	0.862	1.935
SMS	0.848	0.850
SP	0.862	0.864

Reliability testing in this study was conducted to assess the level of internal consistency of the indicators in measuring each latent construct. Based on the test results, all research constructs had Cronbach's Alpha and Composite Reliability values above the minimum threshold of 0.70. These values indicate that the indicators for each construct demonstrate good consistency and are capable of measuring the constructs reliably. Furthermore, the relatively high Composite Reliability values indicate that the constructs possess greater reliability in explaining indicator variance compared to Cronbach's Alpha.

Structural Model

Table 5
R-square

	R-square	R-square adjusted
IUDP	0.277	0.264
PUD	0.008	0.002
SMS	0.207	0.200
SP	0.104	0.098

The R-squared value indicates the ability of independent variables to explain the dependent variable. The IUDP construct has an R^2 value of 0.277, indicating that 27.7% of the variation in digital payment usage intention can be explained by the variables DPQ, FA, PEOD, PUD, SCR, and SMS. The SMS construct has an R^2 value of 0.207, meaning that 20.7% of the variation in MSME satisfaction is explained by DPQ, PEOD, and PUD. Meanwhile, the SP construct has an R^2 value of 0.104, indicating that MSME performance is influenced by SMS and IUDP. Overall, the R^2 values indicate that the model has low to moderate explanatory power, which is still acceptable in social and behavioral research.

Table 6
Hypothesis Testing

Hypothesis	Path	β (O)	T-Stat	P-Value	Decision
H1	PEOU $\rightarrow$ PU	-0.081	1.450	0.147	Rejected
H2	PEOU $\rightarrow$ Satisfaction	0.174	3.808	0.000	Accepted
H3	PEOU $\rightarrow$ IUDP	0.088	1.775	0.076	Rejected



H4	PU → Satisfaction	0.432	9.911	0.000	Accepted
H5	PU → IUDP	0.252	5.591	0.000	Accepted
H6	Security → IUDP	0.095	1.245	0.213	Rejected
H7	DPQ → PU	0.030	0.506	0.613	Rejected
H8	DPQ → IUDP	-0.128	2.944	0.003	Rejected (significantly negative/opposite direction)
H9	DPQ → Satisfaction	-0.059	1.144	0.253	Rejected
H10	FA → IUDP	0.173	3.627	0.000	Accepted
H11	Satisfaction → IUDP	0.225	4.125	0.000	Accepted
H12	Satisfaction → SMEs Performance	0.198	3.522	0.000	Accepted
H13	IUDP → SMEs Performance	0.186	3.428	0.001	Accepted

Hypothesis testing was conducted using the bootstrapping method with 5,000 subsamples. The testing criteria were based on T-statistics > 1.96 and P-values < 0.05.

The test results indicate that **PUD has a positive and significant effect on SMS and IUDP**, confirming that perceived usefulness is a key factor in enhancing satisfaction and the intention to use digital payments. Additionally, SMS has a significant effect on IUDP and SP, suggesting that SME satisfaction plays a crucial role in driving sustained usage and improving SME performance.

FA was also found to have a positive and significant effect on IUDP, while DPQ had a significant negative effect on IUDP, indicating that the quality of digital payments can influence usage intention in complex ways. Meanwhile, the pathways DPQ → PUD, DPQ → SMS, PEOD → IUDP, PEOD → PUD, and SCR → IUDP did not show significant effects.

Summary of the Main Topics

This study develops an integrated model combining the Technology Acceptance Model (TAM) (Davis, 1989), Expectation Confirmation Theory-ECT (Bhattacharjee, 2001), and Information System Success Model-ISSM (DeLone & McLean, 1992; DeLone & McLean, 2003) to explain digital payment usage behavior among SMEs. Unlike some previous studies that discussed the relationships between variables separately, this study views the use of digital payments as a phased process that begins with the technology acceptance stage, proceeds to the evaluation of usage experience, and culminates in system success regarding business performance. This approach enables this study to



explain not only the factors driving SMEs to use digital payments but also how usage experience and system quality influence the sustainability of usage and their impact on SME performance.

Acceptance Stage

The acceptance stage explains how MSME actors form their initial acceptance of digital payments through their perceptions of ease of use, technological benefits, system quality, security, and the financial benefits derived from the use of digital payment technology. In this stage, the study evaluates hypotheses H1, H3, H5, H6, H7, H8, and H10 related to the formation of the intention to use digital payments in daily business activities.

The results of the study indicate that PU influences IUDP, thus supporting H5 in this study. These findings are consistent with the Technology Acceptance Model (TAM), which identifies PU as a key determinant of technology acceptance (Davis, 1989). Previous studies have also shown that PU has a significant influence on IUDP (Ashfaq et al., 2020; Musyaffi et al., 2022; Rahman et al., 2026). Additionally, financial advantage was also found to influence IUDP, indicating that H10 is supported in this study. These results indicate that economic benefits are a key consideration for MSME operators in using digital payments. This finding is understandable given that the majority of respondents were micro (61.7%) and small (31.4%) SMEs operating in the food and beverage sector (48.9%) and conducting hybrid offline-online sales (60%). These conditions cause SME operators to be more oriented toward practical benefits and economic gains that can be directly felt in their daily business operations. This finding reinforces previous research indicating that economic benefits, cost efficiency, and increased business value can drive the adoption of digital technology among SMEs (Khayer et al., 2020; Teo et al., 2015; Thathsarani & Jianguo, 2022). MSME operators tend to accept digital payment technologies when they improve transaction efficiency, support business operations, and provide financial benefits to their businesses.

This study found that security does not influence the intention to use digital payments (IUDP), so H6 is not supported. This finding suggests that security has not yet become a primary consideration for MSME operators in determining their intention to use digital payments, as it is likely perceived as a standard feature generally offered by various digital payment services today. This finding also reinforces the results of a recent systematic review indicating that perceived utility (PU), utilitarian value, and convenience are more consistent factors influencing IUDP compared to security aspects or technical system quality in the context of modern digital payments (Ramayanti et al., 2024). Additionally, the majority of study respondents are already accustomed to using marketplaces, e-wallets, and mobile banking in their daily business activities, so



perceptions regarding technology security are no longer a dominant factor in shaping intention to use. These findings differ from previous research, which stated that system security can enhance trust and drive the intention to use digital technology (Al-Okaily et al., 2022; Singh & Sinha, 2020). This study also shows that DPQ has no effect on PU, so H7 is not supported, while DPQ has a significant negative effect on IUDP, so H8 is also not supported in this study. These findings indicate that improvements in system quality are not always accompanied by an increase in usage intention and digital payment adoption among MSMEs. In the context of this study, the majority of respondents were micro and small MSMEs that use digital payments to support transaction activities practically and efficiently; thus, MSME actors tend to be more oriented toward direct benefits rather than the technical quality of complex systems. More features, system updates, or the complexity of digital payment services may actually increase the adaptation burden on users, thereby potentially reducing the tendency for sustainable technology use. This finding differs from previous research, which asserts that system quality plays a crucial role in shaping user perceptions and the success of digital technology adoption (DeLone & McLean, 1992; Delone & McLean, 2003) (Tam & Oliviera, 2016).

However, PEOU does not influence PU or IUDP; therefore, H1 and H3 are not supported in this study. This finding differs from the classic TAM model, which positions ease of use as the primary factor in technology adoption (Davis, 1989). These results indicate that, in the context of digital payments for SMEs, ease of use is no longer perceived as a competitive advantage but rather as a minimum standard that digital payment systems must meet. Additionally, the majority of respondents have already become accustomed to using marketplaces, e-wallets, and mobile banking in their daily business activities, so user ease is no longer perceived as the primary differentiating factor in the use of digital payment technology. This situation indicates a shift in user behavior compared to the original context of TAM development, where SME operators tend to be more focused on tangible benefits and financial gains rather than the ease of using the technology itself. Similar findings have also been observed in several recent studies, which show that for digital technologies that are already familiar to users, perceived usefulness and the tangible benefits experienced by users tend to be more dominant than PEOU in influencing the intention to use the technology (Oliviera et al., 2016; Verkijika, 2018).

Evaluation Stage

In this stage, the study emphasizes the role of satisfaction in shaping the continued use of digital payments. The results indicate that H2 and H4 are supported, showing that PEOU and PU influence satisfaction. These findings indicate that although PEOU is not



able to directly increase IUDP in H3, ease of use still plays a crucial role in creating a positive user experience. A digital payment system that is easy to understand and operate allows MSME actors to conduct transactions more practically, quickly, and with minimal errors, thereby increasing comfort in using the technology. These findings align with the Technology Acceptance Model (TAM), which states that ease of use can enhance users' positive perceptions of the system being used (Davis, 1989).

In addition, digital payment in H4 showed the strongest influence on satisfaction compared to other relationships in the research model. These results indicate that MSMEs' satisfaction with digital payments is primarily shaped by the tangible benefits they experience while using the technology. MSME actors will feel more satisfied when digital payments effectively support business processes, accelerate transactions, increase payment flexibility, and facilitate interactions with consumers. Thus, H4, supported by this study, reinforces Bhattacharjee's (2001) research, which asserts that PU is a primary determinant of satisfaction in the context of the continued use of information systems.

However, digital payment quality (DPQ) does not affect satisfaction; therefore, H9 is not supported in this study. These findings suggest that the technical quality of digital payment systems is not necessarily the primary factor shaping user satisfaction, which tends to be more influenced by tangible benefits and user experience than by the quality of the system itself. These results indicate that as long as digital payments can effectively support basic transaction needs, aspects such as feature complexity, system updates, or the technical quality of the service likely do not directly influence user satisfaction evaluations. The findings of this study align with those of Fachri et al. (2021) who demonstrated that DPQ does not significantly affect satisfaction in the use of digital payments. Furthermore, Pushparaj et al. (2025) also explain that system quality does not show a significant influence on customer experience in the use of mobile payment apps, meaning that the technical quality of the system is not always a dominant factor in shaping user experience and satisfaction. Thus, in the context of digital payment usage among SMEs, PU and practical usage experience tend to be more dominant in shaping user satisfaction than the technical quality of the system itself.

These findings are also consistent with the ECT developed by Richard L. Oliver and later adapted by (Bhattacharjee, 2001) in the context of information systems. This theory explains that satisfaction arises when the experience of using technology meets or exceeds user expectations. Previous research has also shown that satisfaction is closely related to the experience of using digital technology and the continued use of digital payment systems (Ashfaq et al., 2020; Hanif & Lallie, 2021; Liébana-Cabanillas et al., 2020). In this context, the benefits perceived by MSMEs while using digital payments are a key factor in shaping user satisfaction. Thus, user satisfaction is influenced by practical experiences



as well as the operational benefits derived from using digital payments in daily business activities.

This study also found that H11 was supported, indicating that satisfaction influences IUDP. These results reinforce previous research stating that users who are satisfied with a technology tend to have a higher intention to continue using that technology on an ongoing basis (Ashfaq et al., 2020; Bhattacharjee, 2001; Musyaffi et al., 2022). These results indicate that SMEs satisfied with their use of digital payments tend to have a stronger desire to continue using the technology in their daily business activities. User satisfaction can reinforce the belief that digital payments can provide sustainable benefits for their businesses. In the context of a mature digital payment ecosystem, satisfaction is primarily driven by perceived utility rather than system quality or ease of use, indicating a shift from technical evaluation to value-based evaluation.

System Success Stage

The system success stage explains how the quality of digital payment systems and the user experience with the technology influence the success of digital payment adoption and its impact on SME performance. From the ISSM perspective developed by DeLone dan McLean (1992; 2003), the success of an information system can be assessed based on system quality, user satisfaction, technology adoption, and the resulting impact on both individuals and organizations. In the context of this study, the success of digital payment implementation is measured through the influence of digital payment quality (DPQ), security, intention to use digital payment (IUDP), and satisfaction on SME performance. In this section, the success of system implementation is examined based on H6, H7, H8, H9, H12, and H13.

The research results show that IUDP influences SME performance, thereby supporting H13. This finding indicates that the intention to use digital payments reflects an acceptance of technology that can support transaction efficiency, operational flexibility, and the business activities of MSMEs. Business owners who tend to continue using digital payments are more likely to be able to utilize this technology to support their business operations more effectively and efficiently. Additionally, satisfaction also has a positive effect on SME performance (H12). This finding suggests that the success of digital payment implementation is influenced not only by technology usage but also by the positive experiences users have while using the digital payment system. From an ISSM perspective, user satisfaction is the most critical indicator reflecting the success of information system implementation and its contribution to organizational performance. SMEs that are satisfied with digital payments tend to be better able to optimally utilize this technology to support business activities and enhance the effectiveness of technology use in business operations. Previous research has also shown that the adoption of



information technology and positive user experiences can improve operational efficiency, business flexibility, and overall company performance (Ashfaq et al., 2020; Bhattacharjee, 2001; Teo et al., 2015)(Bhattacharjee, 2001; Garisson et al., 2015; Ooi et al., 2018; Ashfaq et al., 2020).

The research findings also indicate that H7, H8, and H9 are not supported, as digital payment quality does not influence PU, IUDP, or satisfaction. These results suggest that the technical quality of the system is not a primary factor considered by MSME operators when evaluating digital payment systems. In the context of MSMEs, users tend to prioritize the practical benefits and direct impact of technology on business operations over the technical quality of the system. Previous research explains that technology adoption among SMEs is driven more by the technology's ability to enhance operational efficiency, business flexibility, and economic benefits than by the system's technical capabilities themselves (Bhattacharjee, 2001; Khayer et al., 2020; Teo et al., 2015; Thathsarani & Jianguo, 2022). These findings indicate that the behavior of digital payment usage among SMEs is more dominated by a practical value orientation than by a technology quality orientation.

Furthermore, the research results do not support H6 because security does not influence IUDP. These findings suggest that security aspects are not always the dominant factor in the use of digital payment technology, especially when users prioritize operational smoothness, transaction convenience, and usability over technical aspects of system security. This suggests that security is likely perceived as a basic requirement for digital payment services, and thus no longer serves as the primary factor in shaping intention to use (Ashfaq et al., 2020; Hanif & Lallie, 2021; Liébana-Cabanillas et al., 2020). Furthermore, increasing familiarity and trust in digital payment services may also reduce users' sensitivity to technological security risks (Kim et al., 2010).

Overall, the system success stage indicates that the success of digital payment implementation among MSMEs is more influenced by tangible benefits, a satisfying user experience, and the business impact perceived by users than by technical system factors. These findings suggest that MSME operators tend to adopt and continue using digital payments based on the technology's ability to effectively and efficiently support their daily business activities. Previous research also explains that technology adoption among SMEs is generally driven by operational benefits, business efficiency, and the technology's ability to create practical value for the company (Khayer et al., 2020; Teo et al., 2015; Thathsarani & Jianguo, 2022). Furthermore, from the ECT and ISSM perspectives, the success of information system implementation is influenced by a satisfying user experience and the benefits users perceive while using the technology. Thus, the success of digital payments in SMEs is determined not only by the quality of



the technology but also by the extent to which the technology can create practical value and a user experience relevant to business needs.

CONCLUSION

This study demonstrates that the use of digital payments plays a crucial role in improving the financial performance of SMEs in the digital age. Perceived usefulness, satisfaction, and financial benefits have been shown to be the primary factors driving SMEs' intention to continue using digital payments, which ultimately has a positive impact on business performance, such as increased transaction efficiency, better financial management, and higher customer loyalty and customer numbers. Meanwhile, the factors of convenience and security do not show a significant direct influence on the intention to use, although they still contribute indirectly through user satisfaction. These findings confirm that digital payments not only function as a modern transaction tool but also as an effective financial strategy for MSMEs to improve competitiveness, stability, and business sustainability amid the development of the digital economy.

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