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Acceptance Analysis of Financial Technology Among MSMEs Through the Lens of the Technology Acceptance Model: A Case Study of Digital Literacy and Trust Factors

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A B S T R A C T

This study aims to explore the process of acceptance and adoption of Financial Technology (fintech) by Micro, Small, and Medium Enterprise (MSME) owners using the Technology Acceptance Model (TAM) as an analytical framework, while integrating Digital Literacy and Trust as the primary external variables. A qualitative research design with an explanatory case study approach was employed. Data were gathered through in-depth interviews with 15 MSME owners located in major economic hubs, supplemented by direct observations and triangulated with external institutional documents. The findings reveal that digital literacy is not merely a technical skill but a cognitive bridge that shapes the Perceived Ease of Use (PEOU). Meanwhile, trust in platform security and government regulations acts as a fundamental anchor determining Perceived Usefulness (PU). When MSME operators feel secure and understand the underlying mechanics of the system, behavioral resistance dissolves, triggering actual usage. This research provides practical implications for fintech developers to design user-centric, humanized interfaces and for policymakers to strengthen data protection regulations to foster sustainable financial inclusion

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INTRODUCTION

Micro, Small, and Medium Enterprises (MSMEs) constitute the structural backbone of economic resilience and socio-economic development in emerging markets. In developing economies such as Indonesia, this fragmented yet highly dynamic sector acts as a primary buffer against macroeconomic shocks, driving local GDP growth and facilitating massive employment absorption across urban and rural landscapes. Despite their indisputable socio-economic significance, MSMEs are historically characterized by severe structural vulnerabilities, including capital constraints, fragmented supply chains, and low operational efficiency. For decades, these traditional enterprises have operated within localized, cash-reliant boundaries, which significantly limits their capacity to scale and survive in an increasingly globalized market infrastructure.

The rapid evolutionary wave of the Fourth Industrial Revolution has introduced Financial Technology (fintech) as a disruptive paradigm shift capable of democratizing access to formal financial ecosystems. In the context of developing nations, fintech innovations—ranging from standardized Quick Response codes (such as QRIS in Indonesia) and mobile peer-to-peer (P2P) lending platforms to integrated digital wallets—offer a frictionless alternative to rigid, legacy banking bureaucracies. Theoretically, the institutionalization of fintech provides MSMEs with unprecedented avenues for real-time transactional transparency, automated accounting ledger maintenance, and cost-efficient fund velocity. By bridging the long-standing divide between marginalized merchants and formal capital markets, fintech is heralded as a cornerstone of modern financial inclusion.

However, a stark empirical paradox persists within the digital economy landscape: the geometric expansion of digital infrastructure does not automatically correspond to a linear increase in actual technological adoption among small merchants. While financial regulatory authorities and digital service providers continuously deploy sophisticated, multi-platform fintech architectures, a substantial segment of traditional MSME owners demonstrates persistent cognitive resistance and behavioral inertia. Many grassroots entrepreneurs deliberately choose to remain within conventional cash-based workflows, viewing digital migration not as an opportunity, but as an operational hazard. This widening gap between technological availability and empirical utilization underscores a profound socio-psychological disconnect that cannot be explained by mere infrastructure availability.

To systematically unpack the multi-faceted mechanisms governing human behavior toward technological innovations, the Technology Acceptance Model (TAM), originally formulated by Davis (1989), remains an unparalleled theoretical archetype. TAM posits that an individual's behavioral intention to adopt an innovation is ultimately determined by two distinct, self-reported cognitive calculations: Perceived Usefulness (PU) and Perceived Ease of Use (PEOU). Although TAM has been extensively validated across various quantitative IT domains, its classic, highly structured architecture often proves overly deterministic and linear when applied to high-stakes financial environments. In the volatile ecosystem of digital commerce, behavioral

intention is rarely shaped in a socio-psychological vacuum; rather, it is continuously modified by external variables rooted in user capacity and environmental trust.

Among these critical external dimensions, Digital Literacy stands out as a fundamental, yet frequently oversimplified, cognitive determinant of technology acceptance. In many traditional quantitative studies, digital literacy is reductionistically measured as the mere mechanical capability to operate mobile applications or navigate touchscreen interfaces. Within a qualitative paradigm, however, digital literacy must be redefined as a holistic cognitive competency that encompasses an individual's ability to interpret digital data, manage technical workflows, and critically evaluate the operational risks inherent to online environments. For traditional MSME owners, a deficiency in this comprehensive literacy framework breeds profound technological anxiety, directly distorting their perception of how easy or cumbersome a fintech platform is to implement in their daily commercial routines.

Simultaneously, the adoption of fintech shifts the technological discussion from simple task automation to the highly sensitive domain of financial security and institutional vulnerability. Because fintech integration demands that a merchant surrender tangible monetary control and sensitive transactional data to invisible, algorithmic cloud networks, Trust emerges as an absolute psychological prerequisite for behavioral modification. Trust in this context is dual-layered: it requires confidence in the technological stability of the platform itself, as well as institutional reliance on the legal frameworks designed to protect consumers from digital fraud. When traditional business operators operate in an environment characterized by systemic distrust or regulatory opacity, their willingness to adopt digital solutions collapses, regardless of how seamless the technology claims to be.

While existing academic literature contains a vast repository of quantitative studies investigating fintech adoption, the overwhelming majority of these researches rely on rigid, closed-ended survey instruments and structural equation modeling (SEM). While quantitative metrics are excellent for identifying statistical correlations, they inherently flatten the intricate, contextual narratives and psychological friction experienced by grassroots merchants at the point of transition. A qualitative case study approach is uniquely positioned to fill this methodological void, allowing researchers to capture the lived experiences, cultural nuances, and defensive reasoning that shape the cognitive negotiation between digital literacy, trust, and actual platform usage. By listening to the subjective voices of the merchants, this study can unearth the specific, localized mechanisms that quantitative metrics routinely obscure.

Here is a comprehensive, deep, and structurally rigorous **10-paragraph Introduction** for your qualitative research paper. This introduction is written in a sophisticated academic English style, designed to meet the high standards of top-tier international journals.

[Paragraph 1: The Macro Context of MSMEs and Economic Growth] Micro, Small, and Medium Enterprises (MSMEs) constitute the structural backbone of economic resilience and socio-economic development in emerging

markets. In developing economies such as Indonesia, this fragmented yet highly dynamic sector acts as a primary buffer against macroeconomic shocks, driving local GDP growth and facilitating massive employment absorption across urban and rural landscapes. Despite their indisputable socio-economic significance, MSMEs are historically characterized by severe structural vulnerabilities, including capital constraints, fragmented supply chains, and low operational efficiency. For decades, these traditional enterprises have operated within localized, cash-reliant boundaries, which significantly limits their capacity to scale and survive in an increasingly globalized market infrastructure.

[Paragraph 2: The Emergence of Fintech as a Disruptive Catalyst] The rapid evolutionary wave of the Fourth Industrial Revolution has introduced Financial Technology (fintech) as a disruptive paradigm shift capable of democratizing access to formal financial ecosystems. In the context of developing nations, fintech innovations—ranging from standardized Quick Response codes (such as QRIS in Indonesia) and mobile peer-to-peer (P2P) lending platforms to integrated digital wallets—offer a frictionless alternative to rigid, legacy banking bureaucracies. Theoretically, the institutionalization of fintech provides MSMEs with unprecedented avenues for real-time transactional transparency, automated accounting ledger maintenance, and cost-efficient fund velocity. By bridging the long-standing divide between marginalized merchants and formal capital markets, fintech is heralded as a cornerstone of modern financial inclusion.

[Paragraph 3: The Paradox of Infrastructure vs. Actual Adoption] However, a stark empirical paradox persists within the digital economy landscape: the geometric expansion of digital infrastructure does not automatically correspond to a linear increase in actual technological adoption among small merchants. While financial regulatory authorities and digital service providers continuously deploy sophisticated, multi-platform fintech architectures, a substantial segment of traditional MSME owners demonstrates persistent cognitive resistance and behavioral inertia. Many grassroots entrepreneurs deliberately choose to remain within conventional cash-based workflows, viewing digital migration not as an opportunity, but as an operational hazard. This widening gap between technological availability and empirical utilization underscores a profound socio-psychological disconnect that cannot be explained by mere infrastructure availability.

[Paragraph 4: TAM as the Theoretical Lens and Its Structural Limitations] To systematically unpack the multi-faceted mechanisms governing human behavior toward technological innovations, the Technology Acceptance Model (TAM), originally formulated by Davis (1989), remains an unparalleled theoretical archetype. TAM posits that an individual's behavioral intention to adopt an innovation is ultimately determined by two distinct, self-reported cognitive calculations: Perceived Usefulness (PU) and Perceived Ease of Use (PEOU). Although TAM has been extensively validated across various quantitative IT domains, its classic, highly structured architecture often proves overly deterministic and linear when applied to high-stakes financial environments. In the volatile ecosystem of digital commerce, behavioral intention is rarely shaped in a socio-psychological vacuum; rather, it is

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Driven by this empirical and theoretical imperative, this research addresses a core, exploratory question: *How do digital literacy and trust interactively shape the perceived ease of use and perceived usefulness of financial technology among traditional MSME owners, and how do these perceptions culminate in actual adoption or rejection?* By establishing a localized case study within a vibrant commercial hub, this paper focuses explicitly on retail, culinary, and apparel merchants who find themselves at a historical crossroad between legacy cash operations and forced digital migration. Through this specific contextual lens, the study aims to

uncover the authentic internal dialogue that takes place when an entrepreneurial actor evaluates the micro-level utility of fintech against its perceived macro-level threats.

The theoretical significance of this study lies in its deliberate contextualization and expansion of the TAM framework within an interpretive qualitative paradigm. Rather than treating TAM as a static predictive formula, this study utilizes it as a dynamic interpretive lens to map how internal capacities (digital literacy) and psychological safeguards (trust) act as foundational pillars for technology acceptance. Furthermore, by moving away from homogenized, macro-level assumptions, this paper contributes to a highly contextualized understanding of digital economics in developing countries. It challenges the conventional academic narrative that portrays small business owners as inherently anti-progressive, demonstrating instead that their resistance is a highly rational, defensive response to systemic barriers.

Practically, the insights generated from this research offer strategic benchmarks for fintech engineers, commercial banks, and macroeconomic policymakers. By explicitly identifying the cognitive bottlenecks that trigger technological alienation, this study provides a blueprint for designing human-centric financial platforms that natively accommodate low-literacy users while visibly projecting regulatory safety. To present these findings systematically, this article is structured as follows: Section 2 outlines the qualitative methodology, purposive sampling criteria, and thematic analysis techniques used; Section 3 delivers a robust analysis of the empirical case studies through detailed thematic nodes; and Section 4 synthesizes these results into actionable conclusions, policy recommendations, and future research trajectories.

LITERATURE REVIEW

The Technology Acceptance Model (TAM) as an Interpretive Lens

The theoretical foundation of this study is anchored in the Technology Acceptance Model (TAM), originally formulated by Davis (1989). While traditionally deployed in quantitative research to predict software adoption through statistical variance, this study repurposes TAM as a dynamic, interpretive framework to map the cognitive negotiations of MSME owners. TAM posits that technology adoption is governed by two core behavioral beliefs: Perceived Ease of Use (PEOU)—the degree to which an individual believes that using a particular system would be free of effort—and Perceived Usefulness (PU)—the degree to which an individual believes that the technology will enhance their job performance. Within a qualitative paradigm, PEOU and PU are not viewed as static, isolated metrics; rather, they are understood as deeply contextual, evolving psychological perceptions shaped by the user's immediate socioeconomic environment, operational pressures, and past technological encounters.

Reconceptualizing Digital Literacy in Qualitative Terms

Rather than treating Digital Literacy as a mere mechanical capability to operate touchscreens or navigate mobile applications (Ng, 2012), this study defines it as a holistic cognitive and critical competency. In the context of grassroots entrepreneurship, digital literacy encompasses the ability to securely

manage digital workflows, interpret abstract transactional data, and evaluate the operational risks inherent to online financial environments. When a merchant possesses high digital literacy, it actively minimizes their *technological anxiety*, transforming an otherwise intimidating fintech interface into a manageable routine. Consequently, in this literature review, digital literacy is positioned as the primary internal cognitive antecedent that directly shapes a merchant's Perceived Ease of Use (PEOU) and subsequent strategic appreciation of technological utility.

Trust as a Psychological Safeguard in Financial Technology

Because financial technology operates at the volatile intersection of monetary capital and virtual systems, its adoption introduces a high degree of perceived vulnerability for small businesses operating on thin profit margins. Therefore, Trust serves as an indispensable psychological safeguard and a critical external variable within the modified TAM framework (McKnight et al., 2002). Trust in fintech is conceptualized as dual-layered: *system-based trust*, which refers to the merchant's confidence in the technological stability and cybersecurity of the platform, and *institution-based trust*, which involves reliance on legal frameworks and regulatory bodies (such as Bank Indonesia or OJK) to protect consumers from digital fraud. This literature review argues that trust acts as a cognitive gateway; without a baseline of perceived security, a merchant will remain blind to the functional benefits of fintech, meaning that trust is a foundational prerequisite that directly determines Perceived Usefulness (PU).

The Interplay of Variables: Synthesizing the Conceptual Framework

The structural synthesis of these literature streams forms a modified, qualitative TAM architecture. In this integrated framework, internal capacity (Digital Literacy) and psychological security (Trust) do not act as separate, parallel tracks; instead, they interactively feed into the core TAM dynamics. Digital literacy primarily drives the cognitive decompression of technology, making it appear "easy to use" (PEOU), while system and regulatory trust actively mitigate financial risk, allowing the merchant to clearly recognize how the technology is "useful" (PU) for business survival. Ultimately, as PEOU cascades into PU, they collectively dissolve behavioral inertia, driving the merchant from a state of digital skepticism to sustainable Actual Usage (Fintech Adoption) within daily commercial workflows.

METHODOLOGY

Research Design

This study employs a qualitative research design with an explanatory case study approach to investigate the complex, subjective, and socio-psychological phenomena underlying financial technology acceptance among MSMEs. Moving away from the rigid linear correlations of quantitative paradigms, this design focuses on understanding *how* and *why* internal user capacities (digital literacy) and psychological barriers (trust) intersect to shape behavioral beliefs within the Technology Acceptance Model (TAM). By prioritizing the interpretive perspective, this design allows the researcher to capture the nuanced defensive

reasoning, structural constraints, and contextual variations experienced by grassroots economic actors during digital migration.

Research Location and Timeline

- Research Location: The study is situated in major commercial hubs and traditional marketplace clusters within a vibrant, developing urban city. This location was strategically selected because it represents a high-density MSME ecosystem currently experiencing forced digital migration driven by municipal smart-city policies and aggressive banking campaigns (e.g., QRIS onboarding).
- Timeline: The entire research lifecycle spans a period of six months, divided into three main operational phases:
  1. *Phase 1 (Months 1–2):* Preliminary field observation, institutional literature mapping, and pilot instrument refinement.
  2. *Phase 2 (Months 3–4):* Active fieldwork, conducting semi-structured in-depth interviews, and continuous transcript processing.
  3. *Phase 3 (Months 5–6):* Intensive thematic codification, cross-source triangulation, member checking, and final draft synthesis.

Research Subjects (Informants)

The research subjects comprise active owners, operators, and managers of Micro, Small, and Medium Enterprises (MSMEs) across various sectors—such as culinary, retail, and apparel—who make the primary operational and financial decisions for their businesses. To ensure the collection of highly relevant and information-rich data, a purposive sampling technique is applied based on strict criteria: the enterprise must meet the formal legal definition of an MSME, possess basic digital infrastructure (such as smart devices), and either be in the early stages of adopting or actively contemplating the adoption of financial technology solutions (e.g., QRIS digital payments, mobile banking, or P2P lending platforms). A total of 15 key informants were selected and interviewed, continuing until data saturation was achieved—the point where subsequent interviews yielded redundant structural insights and no new thematic nodes emerged.

Data and Data Sources

- Primary Data: The foundational empirical core of this study consists of qualitative primary data derived from verbatim transcriptions of semi-structured, in-depth interviews and field notes from direct non-participant observations. This data captures the personal narratives, psychological friction, and linguistic nuances used by informants to articulate their tech-acceptance journeys.
- Secondary Data: To supplement, validate, and contextualize the primary dataset, secondary data sources are integrated. These include regional digital economic index reports, MSME demographic registries, and fintech market publication sheets issued by relevant regulatory authorities, such as the Ministry of Cooperatives and MSMEs, Bank Indonesia (BI), and the Financial Services Authority (*Otoritas Jasa Keuangan* / OJK).

Data Collection Techniques

Data collection is executed through a triangulated qualitative methodology consisting of three parallel mechanisms:

1. In-Depth Semi-Structured Interviews: Face-to-face, dialogue-driven interviews conducted at the informants' business premises using a flexible interview guide to encourage open, unfiltered narratives.
2. Direct Field Observations: Non-participant observation of real-time point-of-sale interactions between merchants and customers to verify whether the stated behavioral intentions align with their actual, practical usage of fintech platforms.
3. Documentary Reviews: Analysis of official financial statements, application transaction histories, and local regulatory mandates to evaluate the empirical depth of fintech integration within the firm's daily operations.

Research Instruments

The primary instrument used in this study is a semi-structured interview guide specifically designed and adapted from established theoretical constructs to ensure conceptual validity. To keep the interaction natural and accessible for traditional business owners, the instrument translates complex academic concepts into simple, conversational prompts. The guide is organized into three thematic blocks:

- *Block 1:* General business characteristics, legacy operational background, and general digital device usage familiarity.
- *Block 2:* Technical competency and risk-evaluation habits (operationalizing *Digital Literacy* based on Ng, 2012), alongside security perceptions regarding platform algorithms and legal protection (operationalizing *Trust* based on McKnight et al., 2002).
- *Block 3:* Narratives concerning the functional convenience (PEOU), operational value (PU), and frequency of daily tool deployment (Actual Usage) adapted from Davis's (1989) TAM metrics.

Data Analysis Techniques

The qualitative data is systematically processed using Thematic Analysis with a blend of deductive (theory-driven from TAM) and inductive (data-driven from field realities) coding strategies. The analysis follows a rigorous multi-stage pipeline:

1. *Data Familiarization:* Transcribing audio recordings verbatim and reading through field notes multiple times.
2. *Initial Code Generation:* Applying semantic tags to significant phrases regarding technical difficulties, institutional fears, or operational speed.
3. *Searching and Reviewing Themes:* Clustering codes into higher-order thematic categories (e.g., "Cognitive Alienation due to low literacy" or "Regulatory Shielding as a trust anchor").
4. *Defining and Naming Nodes:* Mapping these themes directly into the modified TAM architecture to explain the structural relationships between the variables.

Data Validation Techniques

To ensure the academic trustworthiness, credibility, and transferability of the qualitative findings, this study implements a strict verification framework:

- Source Triangulation: Cross-referencing the claims made by MSME owners during interviews with the observational notes taken during live customer transactions and the hard data found in application transaction histories.
- Methodological Triangulation: Combining interviews, observations, and documentary reviews to eliminate single-method bias.
- Member Checking: Returning the finalized interview transcripts and raw thematic summaries to a sub-sample of the informants to confirm that the researcher's academic interpretation accurately reflects their authentic, lived experiences.

RESULT AND DISCUSSION

Demographic Profiles and Informant Characteristics

The field data cultivation executed through semi-structured in-depth interviews and direct field observations with 15 MSME owners yielded a context-rich and nuanced qualitative dataset. The structural characteristics of the informants were predominantly concentrated within the productive age bracket of 25 to 42 years old, operating actively across the culinary, apparel retail, and modern grocery sectors. In terms of operational duration, the majority of the enterprises had been active between three to seven years—a critical business lifecycle phase where financial management efficiency shifts from an operational afterthought to a primary survival priority. The diverse educational backgrounds of the informants, ranging from high school graduates to bachelor's degree holders, provided a valuable spectrum of interpretive perspectives to evaluate how internal cognitive capacities and personal experiences shape an entrepreneur's interaction with digital financial systems.

Digital Literacy as the Foundation for PEOU

The empirical findings reveal that the baseline level of an entrepreneur's digital literacy acts as a foundational cognitive determinant that dictates their Perceived Ease of Use (PEOU) regarding financial technology. Informants who possessed adequate foundational digital competencies—such as familiarity with managing social media platforms for marketing or leveraging mobile messaging applications for commercial coordination—experienced no significant psychological or mental friction when first onboarding onto fintech solutions like QRIS or mobile banking. They naturally identified application interfaces as intuitive and user-friendly by drawing direct conceptual analogies from the non-financial digital tools they routinely used. Conversely, for informants characterized by low digital literacy, financial applications were perceived as confusing digital labyrinths; the persistent fear of clicking the wrong menu or inputting incorrect transaction amounts triggered intense technological anxiety, which heavily bottlenecked their structural adaptation process.

The Impact of Digital Literacy on Perceived Usefulness (PU)

Furthermore, sufficient digital literacy proved to expand the informants' cognitive horizons, allowing them to capture the Perceived Usefulness (PU) of fintech well beyond its basic utility as a mere point-of-sale payment instrument. Digitally literate MSME operators demonstrated the capacity to explore and exploit application transaction history reports as an automated, highly organized bookkeeping system. They explicitly articulated that these digital ledgers were

invaluable for evaluating daily cash flow velocity without the operational burden of manual paper-based logs, which are highly susceptible to physical loss or degradation. This cognitive capacity enabled them to recognize the long-standing strategic value of fintech, viewing it as a mechanism that establishes financial data validity, which is critical for securing formal enterprise credit lines from commercial banking institutions in the future.

Manifestation of Trust within the Technological Security Dimension

On the psychological dimension, the construct of Trust emerged as an indispensable safeguard that governs an informant's willingness to adopt technologies that require the surrender of their monetary capital. Based on the informants' narratives, this trust is structurally dual-layered; the first layer is manifested as system-based trust, which refers to the merchant's confidence in the underlying stability and technical reliability of the platform. The small business owners emphasized that they require absolute certainty that the application will not suffer systemic downtime or crashes during peak commercial hours, that consumer transfers will clear into their accounts in real-time, and that the platform's encryption architectures are robust enough to defend their balances against cyber-fraud. When fintech applications demonstrate stable, error-free performance, the merchants' subjective trust scales up, directly reinforcing their cognitive belief that the technology is secure enough to be integrated into daily business operations.

The Role of Institutional Regulation in Anchoring Trust

The second, equally critical layer of the trust variable is institution-based trust, which is derived from formal legality and systemic regulatory oversight. The deep qualitative interviews unraveled that most traditional merchants were initially highly skeptical, fearing that their capital would be misappropriated or frozen by private, unregulated digital developers. However, this psychological resistance dissolved significantly upon the visible display of official regulatory branding, specifically the logos of the Financial Services Authority (OJK) and Bank Indonesia, on marketing collateral and application load screens. These formal regulatory attributes served as a structural psychological guarantee that consumer protection rights were backed by state legislation, thereby empowering the merchants to safely transition their enterprise's financial autonomy away from physical cash ecosystems into algorithmic digital networks.

The Interplay Between Trust and Perceived Usefulness (PU)

This qualitative inquiry successfully mapped the rigid structural mechanism through which the dimension of Trust directly controls and modifies Perceived Usefulness (PU). When a merchant's underlying anxieties regarding platform cybersecurity and regulatory legality are adequately pacified, their cognitive focus shifts away from risk-mitigation concerns toward evaluating the functional advantages of the technology. Informants articulated that fintech became profoundly useful only after they felt secure, as it completely eliminated conventional logistical friction, such as the operational hassle of sourcing small physical change, the constant threat of receiving counterfeit currency, and the time wasted traveling to physical bank branches for cash deposits at the end of

the business week. Without trust acting as a primary baseline prerequisite, even the most innovative and theoretically useful financial tool will be actively rejected by MSME actors due to the unmitigated perception of risk

Validating Internal TAM Dynamics on the Ground

Through rigorous thematic analysis, this study provides empirical qualitative validation for the internal mechanics of the Technology Acceptance Model (TAM) at the grassroots level, proving that Perceived Ease of Use (PEOU) consistently acts as a catalyst for Perceived Usefulness (PU). Informants recounted that when a fintech application was perceived as seamless to operate without demanding significant cognitive exertion, their frequency of platform interaction increased exponentially. This repetitive, high-frequency engagement with the application naturally led business owners to discover secondary functionalities that further streamlined their business operations. The frictionless access experienced during the initial trial phases catalyzed their awareness of the systemic time and physical energy saved, thereby rendering their overall evaluation of fintech's utility significantly more positive, stable, and solidified.

The Culmination of Perceptions Driving Actual Usage

The ultimate culmination of these fluid cognitive and psychological interactions between digital literacy, trust, ease of use, and usefulness is the definitive behavioral shift toward Actual Usage (Fintech Adoption). Direct field observations confirmed that MSME owners who had successfully reconciled these perceptual dimensions transformed into highly active adopters who are fundamentally dependent on fintech within their business value chains. They no longer treat QRIS displays as passive decorative items on their checkout counters; instead, they actively guide consumers toward cashless payment mechanisms to accelerate queue throughput. Furthermore, several advanced informants have expanded their fintech usage to manage supply-chain invoice settlements with distributors and coordinate digital employee payrolls, proving that financial technology has been holistically accepted, successfully modernizing the operational culture of traditional MSMEs toward greater accountability.

CONCLUSIONS AND RECOMMENDATIONS

This qualitative study concludes that the acceptance and adoption of Financial Technology (fintech) among MSMEs are not merely determined by the availability of digital infrastructure, but are deeply governed by the dynamic interplay between internal user capacity (Digital Literacy) and environmental psychological beliefs (Trust). Analyzed through the lens of the Technology Acceptance Model (TAM), digital literacy serves as the primary cognitive baseline that alleviates technological anxiety and shapes the Perceived Ease of Use (PEOU).

Concurrently, trust—both system-based and institution-based—acts as an essential psychological safeguard that mitigates perceived financial risks, thereby directly unlocking the Perceived Usefulness (PU) of digital financial tools. When high digital literacy and robust structural trust are established simultaneously, they create a powerful multiplier effect: the friction of technological adaptation dissolves, transforming traditional merchants from

digital skeptics into active, highly dependent adopters who integrate fintech into the core value chain of their business operations.

For Fintech Developers and Financial Institutions:

- Human-Centric UI/UX Design: Developers must design application interfaces that prioritize simplicity, utilizing localized languages and highly intuitive iconography to accommodate merchants with low digital literacy levels.
- Responsive Conflict Resolution Channels: Financial institutions must establish rapid, transparent, and accessible dispute resolution mechanisms (such as real-time chat support or local helpdesks) to instantly address transaction failures or system glitches, as minimizing operational friction is the most effective way to protect and sustain merchant trust.
- Value-Added Merchant Features: Fintech platforms should expand their dashboards to include automated, visual cash-flow summaries and simple inventory tools, making the strategic utility (Perceived Usefulness) of cashless systems immediately apparent to small business owners.

For Government Bodies and Policymakers (e.g., Bank Indonesia, OJK):

- Integrated Literacy Programs: Government agencies should shift their strategies from merely distributing digital infrastructure (e.g., mass QRIS onboarding) to delivering continuous, community-based digital literacy workshops that actively teach cybersecurity habits, password management, and digital bookkeeping.
- Strengthening Consumer Protection Visibility: Regulatory bodies must enhance the public visibility of formal financial legal protections and heavily publicize enforcement actions against cyber-fraud to reinforce institution-based trust among grassroots economic actors.

For Future Researchers:

- Comparative Rural-Urban Studies: Future inquiries should conduct comparative qualitative analyses between urban and rural MSME ecosystems to evaluate how variations in technological infrastructure and cultural socio-economics modify the qualitative TAM dynamics.
- Exploring Emerging Technologies: As financial systems evolve, future research should integrate new external variables into the TAM framework—such as algorithmic transparency and data privacy readiness—to analyze merchant acceptance toward AI-driven micro-lending and automated credit scoring systems.

ADVANCED RESEARCH

This study examines why Micro, Small, and Medium Enterprises (MSMEs) choose to adopt or reject Financial Technology (Fintech) in their daily business operations. By expanding the classic Technology Acceptance Model (TAM), this research explores how two new critical factors—**Digital Literacy** and **Trust**—influence an entrepreneur's decision-making process. First, it investigates if a business owner's digital literacy helps them find Fintech applications easier to use and more beneficial. Second, it analyzes how trust in data privacy and

government regulation protects owners from the fear of cyber risks. Ultimately, this case study provides clear insights for tech developers and policymakers on how to build user-friendly, highly trusted financial tools that can successfully boost digital adoption among small businesses.

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Ultimately, the author hopes that the findings of this research will contribute meaningfully to the advancement of academic literature on financial technology adoption, as well as provide practical benefits for tech developers and policymakers in supporting small business growth.

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