
FINANCIAL TECHNOLOGY ADOPTION AND OPERATIONAL EFFECTIVENESS OF SARI-SARI STORES IN THE PHILIPPINES: A REVIEW

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ABSTRACT:

Sari-sari stores are a vital component of the Philippine grassroots economy, serving as the most accessible source of daily necessities for many communities. In recent years, the rapid expansion of financial technology (fintech), particularly digital payment platforms and e-wallet systems, has reshaped retail transactions and business operations among micro, small, and medium enterprises (MSMEs). This study examines the role of financial technology adoption in enhancing the operational effectiveness of sari-sari stores, with particular attention to transaction efficiency, cash flow management, customer responsiveness, and financial inclusion. Using a thematic literature analysis of studies published between 2022 and 2025, the research synthesizes empirical findings from national and regional contexts, including evidence from the Cordillera Administrative Region (CAR). The analysis reveals that fintech adoption contributes positively to faster transaction processing, improved financial awareness, enhanced customer convenience, and expanded access to formal financial services. However, the findings also highlight persistent barriers that limit the full realization of these benefits, such as unstable internet connectivity, limited digital literacy, cost sensitivity, and perceived transaction and cybersecurity risks. These constraints result in uneven adoption outcomes across urban and rural settings. The study concludes that while financial technology offers significant potential to strengthen the operational effectiveness and resilience of sari-sari stores, its impact is highly dependent on enabling infrastructure, affordable fintech solutions, and targeted capacity-building interventions. The findings provide valuable insights for policymakers, financial institutions, and development agencies

seeking to promote inclusive digital transformation and sustainable growth among grassroots micro-enterprises in the Philippines.

KEYWORDS: financial awareness, enterprises, payment platform, online payment, stores

INTRODUCTION

Sari-sari stores, commonly referred to as neighborhood sundry or convenience stores, are an integral and ubiquitous feature of the Philippine retail landscape. The term *sari-sari*, derived from the Tagalog word meaning “variety” or “sundry,” reflects the wide assortment of basic consumer goods these micro-retail establishments offer, including food items, toiletries, cigarettes, and prepaid mobile credits. Typically family-owned and operated within or adjacent to the owner’s residence, sari-sari stores are embedded in local communities and serve as the most accessible source of daily necessities for many Filipino households, particularly in low-income and rural areas (DTI, 2023; BSP, 2024).

As grassroots enterprises, sari-sari stores play a significant role in the Philippine microeconomy. Recent estimates suggest that more than one million sari-sari stores operate nationwide, collectively accounting for a substantial portion of domestic retail transactions and consumer food distribution (Packworks, 2024). These stores fall under the classification of micro, small, and medium enterprises (MSMEs) as defined by Republic Act No. 6977, as amended, which recognizes their contribution to employment generation, local economic circulation, and inclusive growth (DTI, 2023). Their importance is further underscored by the fact that MSMEs continue to dominate the Philippine business sector, representing over 99 percent of registered enterprises (PSA, 2022).

The operational model of sari-sari stores is characterized by distinctive practices that cater to the financial realities of their customers. One such practice is *tingi*, or small-quantity selling, which allows consumers to purchase goods in affordable units rather than full packages. This system enables daily consumption despite limited purchasing power and reduces the need for transportation to distant markets or supermarkets (BSP, 2024). Additionally, sari-sari stores frequently extend informal credit to trusted repeat customers (*suki*), reinforcing social relationships and community trust while functioning as an informal financial safety net (Asian Development Bank [ADB], 2023).

Despite their accessibility and social embeddedness, sari-sari stores face persistent operational challenges, including thin profit margins, limited access to formal financing, and low levels of managerial and technological capacity. These constraints affect business sustainability and make many stores vulnerable to economic disruptions (Packworks & World Bank, 2023). The COVID-19 pandemic exposed these vulnerabilities while simultaneously accelerating digital transformation across the retail sector. Movement restrictions, health protocols, and heightened concerns over physical cash handling prompted many micro-retailers to explore alternative transaction methods, particularly cashless and digital payment systems (BSP, 2024).

Financial technology (fintech), particularly digital payment platforms and e-wallet systems, has emerged as a key enabler of business continuity and operational adaptation among small enterprises. In the Philippines, the national push toward digital payments gained momentum during and after the pandemic, with electronic retail payments surpassing 40 percent of total transaction volume by 2023 and continuing to rise through 2025 (BSP, 2024). Mobile wallets such as GCash and Maya have become dominant platforms, facilitating peer-to-peer transfers, merchant payments, and bill settlements even at the micro-retail level (Fintech News Philippines, 2025).

Recent empirical evidence indicates increasing fintech adoption among sari-sari store owners. Data from digital commerce platforms show a steady rise in the number of sari-sari stores utilizing e-wallets, QR-based payments, and digital inventory systems, with adoption rates growing significantly between 2022 and 2024 (Packworks, 2024). However, studies also reveal that while awareness of digital payment systems is relatively high, actual usage varies due to concerns related to internet connectivity, transaction fees, digital literacy, and perceived security risks (Reyes & Santos, 2023; Villanueva et al., 2024).

Within the broader fintech ecosystem, e-commerce and digital payment systems represent a practical entry point for micro-enterprises due to their relatively low implementation requirements. E-commerce involves the use of electronic technologies to conduct commercial transactions and process payments, offering improved transaction speed, reduced cash handling risks, and enhanced customer convenience (Laudon & Traver, 2022). For sari-sari stores, integrating digital payments may enhance operational effectiveness by streamlining transactions, expanding customer reach, improving cash flow management, and strengthening financial inclusion (ADB, 2023; BSP, 2024).

Given the growing digitalization of the Philippine retail payments ecosystem and the central role of sari-sari stores in community-level commerce, there is a clear need to examine how financial technology adoption influences the operational effectiveness of these micro-enterprises. While recent studies have explored digital payment readiness and adoption at a descriptive level, empirical research remains limited on the operational outcomes of fintech integration among sari-sari stores. Addressing this gap is essential to inform evidence-based policy interventions, capacity-building programs, and fintech solutions tailored to the needs of grassroots MSMEs in a rapidly digitizing economy.

REVIEW OF RELATED LITERATURE

Micro, small, and medium enterprises (MSMEs) play a critical role in economic development, particularly in emerging economies where they account for a large share of employment and domestic trade. Recent global reports emphasize that MSMEs enhance economic resilience, promote inclusive growth, and support poverty reduction by providing livelihood opportunities at the community level (World Bank, 2022). However, MSMEs often face structural constraints such as limited capital, weak managerial capacity, and restricted access to technology, which affect their productivity and long-term sustainability.

In developing countries, micro-retail enterprises such as neighborhood convenience stores remain dominant in local distribution systems. Studies indicate that these enterprises thrive due to proximity, convenience, and social embeddedness, rather than economies of scale (International Labour Organization [ILO], 2023). Their operations are frequently informal, family-based, and adaptive to local consumption patterns, allowing them to survive despite competition from large retail chains. This structural flexibility mirrors the operating characteristics of sari-sari stores in the Philippines.

In the Philippine context, sari-sari stores represent the most prevalent form of micro-retail enterprise. According to the Department of Trade and Industry (DTI, 2023), sari-sari stores constitute a substantial proportion of registered micro-enterprises and serve as primary access points for essential consumer goods, especially in rural and low-income urban areas. Their contribution extends beyond commerce, as they reinforce community relationships and provide informal credit mechanisms that support household consumption smoothing.

Retail practices unique to sari-sari stores, such as *tingi* or small-quantity selling, have been widely documented as a response to income volatility among consumers. Research shows that *tingi* purchasing enables low-income households to manage daily cash constraints while maintaining access to essential goods (Asian Development Bank [ADB], 2023). Although

unit pricing is often higher, consumers prioritize affordability, accessibility, and immediacy over bulk savings, reinforcing the continued relevance of sari-sari stores.

Despite their advantages, sari-sari stores face persistent operational challenges. Studies conducted after the COVID-19 pandemic highlight issues such as declining profit margins, rising supplier costs, limited financial records, and low levels of formal business planning (Packworks & World Bank, 2023). These challenges hinder operational efficiency and reduce the ability of store owners to scale or modernize their businesses. As a result, many sari-sari stores remain vulnerable to economic shocks and competitive pressures.

Financial technology (fintech) has been identified as a potential solution to many of the constraints faced by micro-enterprises. Fintech refers to the application of digital technologies to deliver financial services more efficiently, including payments, savings, lending, and record-keeping (BSP, 2024). Recent literature emphasizes that fintech adoption can enhance financial inclusion by lowering transaction costs and expanding access to formal financial systems for underserved populations.

Digital payment systems, particularly mobile e-wallets, have gained prominence in emerging economies. Empirical studies demonstrate that e-wallet adoption improves transaction speed, reduces cash-handling risks, and increases transparency in business operations (Laudon & Traver, 2022). In the Philippine setting, mobile payment platforms such as GCash and Maya have become widely accepted, even among micro-retailers, due to their ease of use and low entry barriers (Fintech News Philippines, 2025).

The Bangko Sentral ng Pilipinas (BSP, 2024) reports a sustained increase in electronic retail payments, reflecting a national shift toward cashless transactions. This transformation was accelerated by the COVID-19 pandemic, which encouraged both consumers and merchants to adopt contactless payment methods. Studies note that micro-businesses that integrated digital payments during this period demonstrated greater operational continuity compared to those that relied solely on cash transactions (ADB, 2023).

Specific studies focusing on sari-sari stores reveal moderate to high awareness of digital payment platforms among store owners, but varying levels of actual adoption. Reyes and Santos (2023) found that while most sari-sari store owners recognize the benefits of e-wallets, adoption is influenced by perceived usefulness, ease of use, and customer demand. Barriers such as unreliable internet connectivity, transaction fees, and limited digital literacy continue to affect full integration.

Operational effectiveness, defined as the ability of a business to efficiently utilize resources to achieve desired outcomes, has been linked to technology adoption in small enterprises.

Recent research indicates that digital payment systems contribute positively to sales efficiency, cash flow management, and customer satisfaction among micro-retailers (Villanueva et al., 2024). These improvements are particularly significant for businesses with high transaction volumes and low average purchase values, such as sari-sari stores.

E-commerce, as a subset of fintech, further enhances business operations by integrating digital payments with inventory management and customer engagement tools. Studies show that even limited forms of e-commerce—such as QR-based payments and digital ordering—can improve record accuracy and reduce operational inefficiencies in micro-enterprises (OECD, 2023). For sari-sari stores, such tools offer a practical pathway toward gradual digital transformation without requiring complex infrastructure.

A 2023–2024 cross-sectional survey of micro-retailers in urban and semi-rural Philippine communities found that sari-sari stores using e-wallets and QR-based payment systems reported higher transaction efficiency, improved cash flow monitoring, and increased customer frequency compared with cash-only stores (Reyes & Santos, 2023; Villanueva et al., 2024). Respondents noted that cashless payments reduced transaction time, minimized errors in giving change, and enhanced customer convenience, particularly during peak hours. The survey also revealed that 68–75% of store owners perceived an increase in daily sales volume after adopting digital payments, while 60% reported better record-keeping and financial awareness. However, results further showed that operational gains were moderated by factors such as internet reliability, digital literacy, and perceived transaction costs, indicating that while fintech adoption enhances operational effectiveness, its impact depends on supporting infrastructure and user capability (BSP, 2024; Packworks, 2024).

Survey research conducted in Benguet and Baguio City between 2022 and 2024 revealed that a growing proportion of sari-sari store owners have adopted mobile e-wallets such as GCash and Maya, primarily driven by customer demand, pandemic-induced health concerns, and the convenience of cashless transactions (DTI–CAR, 2023; Villanueva & Lopez, 2024). Findings indicated that store owners who integrated digital payments reported improved transaction efficiency, reduced cash-handling risks, and more consistent daily sales, particularly in urban barangays and areas near schools and transport hubs. However, surveys also identified persistent barriers in rural municipalities of CAR, including unstable internet connectivity, limited digital skills, and apprehension toward transaction fees, which constrained full fintech utilization (BSP–North Luzon, 2024). Overall, CAR-based evidence suggests that while fintech adoption among sari-sari stores is increasing and contributes positively to operational

effectiveness, regional disparities in infrastructure and digital readiness continue to influence the depth and sustainability of technology use in micro-retail operations.

Despite growing literature on fintech adoption among MSMEs, empirical studies specifically examining its impact on the operational effectiveness of sari-sari stores remain limited. Most existing research focuses on adoption readiness or consumer usage rather than operational outcomes. This gap underscores the need for studies that assess how financial technology platforms influence efficiency, sustainability, and resilience in sari-sari store operations, thereby contributing to evidence-based policymaking and targeted MSME support programs in the Philippines.

METHODOLOGY

This literature review employed a systematic and integrative approach to examine recent studies related to sari-sari stores, financial technology adoption, and operational effectiveness, with particular emphasis on Philippine and Cordillera Administrative Region (CAR) contexts. Peer-reviewed journal articles, government and central bank reports, and institutional research publications published between 2022 and 2025 were identified through academic databases and official repositories, including Google Scholar, Scopus-indexed journals, and national agencies such as the Bangko Sentral ng Pilipinas and the Department of Trade and Industry. Relevant literature was selected based on predefined inclusion criteria, namely relevance to MSMEs, micro-retail operations, digital payments, e-commerce, and fintech adoption. Thematic analysis was then applied to synthesize findings across studies, allowing recurring patterns, empirical results, and research gaps to be identified and organized to support the conceptual framing of the present study.

RESULTS AND DISCUSSION

The thematic analysis of literature published between 2022 and 2025 yielded several recurring and interrelated themes that explain how financial technology adoption influences the operational effectiveness of sari-sari stores. These themes reflect both enabling factors and persistent constraints shaping fintech integration at the micro-retail level, particularly within the Philippine and CAR contexts.

Theme 1: Financial Technology as an Enabler of Transaction Efficiency

Across the reviewed studies, financial technology—particularly mobile e-wallets and QR-based payment systems—consistently emerged as a significant enabler of transaction efficiency in micro-retail operations. Recent empirical literature indicates that cashless

payment platforms streamline the payment process by reducing the time required to complete transactions, eliminating the need to count cash or provide change, and lowering the likelihood of human error during peak business hours (BSP, 2024; Laudon & Traver, 2022). These efficiencies are especially critical for sari-sari stores, which typically handle a high frequency of low-value transactions throughout the day and operate with limited manpower, often managed by a single store owner or family member.

Studies conducted in the Philippine context further suggest that the adoption of e-wallets enhances service speed and queue management, leading to improved customer flow and reduced congestion at store counters (Reyes & Santos, 2023; Villanueva et al., 2024). Customers using digital payments experience faster checkout times, which is particularly advantageous during high-demand periods such as early mornings, evenings, and paydays. As a result, sari-sari stores offering cashless options are more capable of accommodating higher transaction volumes without compromising service quality. Beyond operational speed, financial technology also reduces the cognitive and physical burden placed on store owners. Digital payment systems automate transaction recording and confirmation, allowing owners to focus more on inventory management and customer interaction rather than manual cash handling (Asian Development Bank [ADB], 2023). This reduction in operational strain is particularly beneficial for small-scale entrepreneurs who may lack formal accounting skills or technological training. Moreover, automated transaction logs provide immediate verification, reducing disputes and enhancing trust between store owners and customers (BSP, 2024). Overall, the literature demonstrates that financial technology significantly enhances transaction efficiency in sari-sari store operations by optimizing payment processes, minimizing errors, and improving service delivery. These improvements contribute not only to higher customer satisfaction but also to smoother daily business operations, reinforcing the role of fintech as a practical and impactful tool for improving the operational effectiveness of grassroots micro-enterprises (Packworks, 2024; OECD, 2023)..

Theme 2: Improved Cash Flow Visibility and Financial Awareness

The reviewed literature consistently highlights improved cash flow visibility as a major benefit of financial technology adoption among sari-sari store owners. Digital payment platforms automatically generate transaction histories and digital receipts, which function as informal yet reliable financial records for micro-retailers who typically operate without formal bookkeeping systems. These transaction logs allow store owners to review daily,

weekly, and monthly sales patterns with greater accuracy compared to manual cash-based monitoring, which is often fragmented and prone to error (BSP, 2024; Packworks & World Bank, 2023). As a result, store owners gain clearer insights into their revenue streams and transaction volumes.

Enhanced visibility into cash inflows supports more informed short-term operational decisions. Studies report that sari-sari store owners who regularly review their digital transaction records demonstrate improved inventory management, as they are better able to identify fast-moving products and anticipate restocking needs (Villanueva et al., 2024; Asian Development Bank [ADB], 2023). Improved sales tracking also facilitates basic budgeting practices, such as setting aside funds for supplier purchases and managing daily operating expenses. This shift toward data-informed decision-making represents a significant improvement over traditional practices that rely primarily on memory or informal notes.

Moreover, the use of digital payment systems contributes to increased financial awareness and literacy among micro-entrepreneurs. Exposure to transaction summaries, balance notifications, and digital dashboards introduces sari-sari store owners to fundamental financial management concepts, including cash flow tracking, income consistency, and expense control (OECD, 2023). Over time, this increased financial awareness enhances confidence in managing business finances and may encourage greater engagement with formal financial services such as digital savings, micro-loans, and insurance products. Consequently, fintech adoption not only improves operational effectiveness but also fosters financial capability development among sari-sari store owners, supporting their long-term business sustainability (ADB, 2023; BSP, 2024)..

Theme 3: Customer Convenience and Market Responsiveness

The reviewed literature emphasizes customer convenience as a critical driver of financial technology adoption among micro-retailers. Studies indicate that sari-sari stores offering cashless payment options are perceived by customers as more accessible and responsive to evolving consumer preferences, particularly in urban and semi-urban areas where digital payment usage is increasingly normalized (Laudon & Traver, 2022; OECD, 2023). Younger consumers and digitally engaged customers, in particular, demonstrate a stronger preference for stores that accept e-wallets and QR-based payments, as these platforms provide faster, contactless, and more flexible transaction experiences. The availability of digital payment options therefore enhances customer satisfaction and encourages repeat patronage.

Furthermore, the literature suggests that the acceptance of multiple payment modes reduces the likelihood of lost or deferred sales due to insufficient cash on the part of customers. Research on digital retail behavior shows that payment flexibility positively influences purchasing decisions, especially for low-value, high-frequency transactions typical of sari-sari stores (International Labour Organization [ILO], 2023; Asian Development Bank [ADB], 2023). By accommodating both cash and cashless transactions, sari-sari store owners are better positioned to respond to fluctuating customer demand and competitive pressures from larger convenience stores. In this regard, fintech adoption functions not only as an operational enhancement but also as a strategic tool that strengthens market responsiveness and supports customer retention and business growth among grassroots micro-enterprises.

Theme 4: Financial Inclusion and MSME Formalization Pathways

The literature consistently frames financial technology adoption as a critical pathway toward enhanced financial inclusion and gradual formalization among sari-sari store owners. Digital payment platforms serve as initial entry points into the formal financial ecosystem by enabling micro-entrepreneurs to establish transaction histories that can be used to assess creditworthiness and business performance (World Bank, 2022; Bangko Sentral ng Pilipinas [BSP], 2024). Through sustained use of e-wallets and digital payment systems, sari-sari store owners gain access to linked financial services such as digital savings accounts, micro-loans, insurance products, and merchant support programs, which were previously inaccessible through informal, cash-based operations (Asian Development Bank [ADB], 2023).

Empirical studies further suggest that fintech integration can gradually reduce reliance on informal credit arrangements, such as personal borrowing or utang from suppliers and customers, by providing alternative financing channels with clearer terms and greater transparency (OECD, 2023). However, the extent of financial inclusion benefits is uneven across geographic contexts. Urban-based sari-sari stores tend to experience greater inclusion outcomes due to better digital infrastructure, higher transaction volumes, and stronger customer demand for cashless payments, while rural stores face constraints related to connectivity, digital literacy, and platform accessibility (International Labour Organization [ILO], 2023; BSP–North Luzon, 2024). These disparities indicate that while fintech offers significant potential for MSME formalization, targeted interventions are necessary to ensure inclusive and equitable benefits across regions..

Theme 5: Infrastructure and Digital Literacy as Persistent Barriers

Despite the documented advantages of financial technology adoption, the literature consistently identifies infrastructure limitations and digital literacy gaps as persistent barriers to effective fintech utilization among sari-sari store owners. Unstable or limited internet connectivity remains a significant challenge, particularly in rural and geographically isolated areas such as parts of the Cordillera Administrative Region, where network coverage and signal reliability are inconsistent (BSP–North Luzon, 2024; Department of Information and Communications Technology [DICT], 2023). These connectivity issues hinder real-time transaction processing, discourage continuous use of digital payment platforms, and often compel store owners to revert to cash-based transactions during service interruptions.

In addition to infrastructure constraints, varying levels of digital literacy among sari-sari store owners significantly affect fintech adoption and usage outcomes. Studies indicate that limited familiarity with smartphones, applications, and digital security features reduces confidence in using e-wallets and other fintech tools, particularly among older store owners and those with minimal formal education (Asian Development Bank [ADB], 2023; International Labour Organization [ILO], 2023). Concerns over transaction errors, account security, and technical troubleshooting further discourage sustained use. These barriers moderate the positive impact of fintech on operational effectiveness and contribute to uneven adoption patterns across regions, underscoring the need for targeted digital skills training and infrastructure development to support inclusive fintech integration among grassroots MSMEs.

Theme 6: Cost Sensitivity and Perceived Transaction Risks

The literature identifies cost sensitivity as a major factor influencing the extent of fintech adoption among sari-sari store owners. Transaction fees associated with digital payments, including merchant service charges and withdrawal costs, are often perceived as burdensome for micro-enterprises operating on very thin profit margins (OECD, 2023; Asian Development Bank [ADB], 2023). Even minimal fees can significantly affect net income for sari-sari stores that rely on high-volume, low-value transactions, leading some store owners to limit digital payment acceptance or apply informal surcharges to customers. As a result, cost considerations continue to shape adoption decisions and usage intensity.

In addition to direct costs, perceived transaction risks further discourage full fintech integration. Studies report that fears of erroneous transfers, delayed fund settlements, and cybersecurity threats—such as account hacking or unauthorized transactions—undermine trust in digital payment systems among micro-retailers (BSP, 2024; International Labour

Organization [ILO], 2023). These concerns are often exacerbated by limited digital literacy and lack of access to reliable customer support. Consequently, the literature emphasizes the need for cost-sensitive fintech solutions, transparent fee structures, and targeted financial education programs to enhance trust, reduce perceived risks, and promote sustained digital payment usage among sari-sari store owners.

Theme 7: Contextual Differences Between Urban and Rural Sari-Sari Stores

The analysis indicates notable differences in fintech adoption outcomes between urban and rural sari-sari stores. Urban stores demonstrate higher adoption rates and greater operational gains due to better infrastructure, higher customer demand for cashless payments, and greater exposure to digital tools. In contrast, rural stores show more cautious adoption patterns, often using fintech only as a supplementary payment option. These contextual differences emphasize the importance of location-specific strategies in promoting digital transformation among micro-retailers.

Overall, the thematic analysis demonstrates that financial technology adoption positively influences the operational effectiveness of sari-sari stores by improving transaction efficiency, financial management, and customer responsiveness. However, the extent of these benefits is shaped by contextual factors such as infrastructure availability, digital literacy, cost sensitivity, and geographic location. The findings suggest that fintech adoption is not a uniform process but a graduated transition that requires enabling conditions and targeted support to maximize its impact on grassroots micro-enterprises.

CONCLUSIONS AND RECOMMENDATIONS

CONCLUSION

This thematic analysis demonstrates that financial technology adoption plays a significant role in enhancing the operational effectiveness of sari-sari stores by improving transaction efficiency, cash flow visibility, customer convenience, and access to formal financial systems. The findings indicate that digital payment platforms support smoother daily operations and foster greater financial awareness among store owners, contributing to improved decision-making and business resilience. However, the benefits of fintech adoption are not uniformly experienced, as persistent challenges related to infrastructure limitations, digital literacy gaps, cost sensitivity, and perceived transaction risks continue to moderate its impact, particularly in rural and geographically isolated areas such as the Cordillera Administrative Region. Overall, the results suggest that while fintech presents substantial

opportunities for strengthening grassroots micro-enterprises, its effectiveness depends on the availability of enabling conditions and targeted support mechanisms.

RECOMMENDATIONS

Based on the findings, it is recommended that policymakers and government agencies strengthen digital infrastructure and internet connectivity in rural and underserved areas to ensure consistent access to fintech platforms. Financial institutions and fintech providers should develop cost-sensitive, user-friendly payment solutions tailored to the needs of micro-retailers, accompanied by transparent fee structures and robust customer support. Additionally, capacity-building initiatives focusing on digital and financial literacy should be implemented to enhance store owners' confidence and competence in using digital tools. For future research, empirical studies employing quantitative and mixed-method approaches are recommended to measure the direct impact of fintech adoption on sales performance, profitability, and long-term sustainability of sari-sari stores, particularly within regional contexts such as the Cordillera Administrative Region.

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