

E-Wallet Payment Adoption by the Retail Sector in Tabaco City

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ABSTRACT

This dissertation investigated the adoption of e-wallet payment systems among retailers in Tabaco City, Philippines, and developed a strategic framework to guide effective cashless payment adoption and long-term digital transformation. Grounded in a socio-technical adoption perspective, it identifies motivations for adoption, assesses effects on business performance, analyzes enabling and hindering factors, and formulates a strategic framework for effective cashless e-wallet adoption and long-term digital transformation initiatives. A qualitative, adopter-focused design was employed through structured interviews with retail adopters, analyzed and triangulated with secondary sector reports. Thematic analysis revealed motivations

centered on customer convenience, operational efficiency, and strategic competitiveness. Retailers reported faster transactions, improved reconciliation, and enhanced customer satisfaction, though benefits varied with internet reliability, POS integration, staff capability, and transaction costs. Success factors included infrastructure investment, interoperability, and staff training, while barriers involved connectivity instability, system errors, and low digital literacy. The study concluded that e-wallet adoption is a multidimensional process requiring coordinated action among retailers, technology providers, and policymakers. The proposed framework emphasizes customer-centric communication, technological reliability, managerial accountability, and inclusive infrastructure development—advancing regional retail competitiveness and contributing to national digital transformation.

Keywords: *E-Wallet adoption; digital payments; QRPh; Tabaco City; socio-technical framework*

INTRODUCTION

Across Southeast Asia, e-wallets have become more than just a payment option—they are now a defining feature of how commerce is done. In countries like Singapore, Malaysia, and Indonesia, mobile payment platforms are seamlessly woven into everyday life, supported by widespread smartphone use, stronger internet connectivity, evolving customer expectations, and clear regulatory support. This regional momentum sets the stage for the Philippines, reminding us that keeping pace with global digital trends is not just desirable but necessary if our own payment ecosystem is to mature alongside international best practices. In the Philippines, the past decade has been transformative. Digital payments have moved from being a novelty to becoming mainstream, reshaping the way Filipinos buy, sell, and manage money. Over the last five years, this shift has been especially pronounced: digital transactions now account for 57.4% of monthly retail payment volume (Remolona, 2024). This acceleration has been driven both by national strategies and by consumers themselves, who increasingly prefer the convenience of cashless transactions.

The Bangko Sentral ng Pilipinas (BSP), through its Digital Payments Transformation Roadmap, set ambitious goals—converting at least half of retail payments to digital and onboarding 70% of Filipino adults into the formal financial system by 2023 (BSP; USAID, 2021). By the end of that year, the country had surpassed expectations, with 393.6 million registered e-wallet accounts, a 52.8% year-on-year growth, signaling the Philippines’ successful transition toward a cash-lite economy. Merchant payments have been at the heart of this adoption curve, accounting for 64.9% of digital payment volume, with platforms like GCash, Maya, and Shopee Pay dominating QR-enabled retail transactions and representing 95.1% of all QR Ph P2M transactions in 2023 (BSP, 2024).

Yet, despite these national achievements, the story looks different at the local level. In mid-sized cities such as Tabaco City, adoption remains uneven, digital payments establishments enabled for mobile transactions increasing by 38% in 2023, Tabaco City Business Permit Office (2023). Albay is an ideal locale for this study due to its active commercial and financial activities, which has a growing user of digital tools especially E-Wallets. Below is the map of Tabaco City.



Figure 1. *Map of Tabaco City*

Many retailers still struggle with limited digital infrastructure, low awareness, and lingering concerns about trust and security. While national policies provide a strong foundation, the absence of city-specific strategies tailored to local realities leaves a gap in implementation. What is needed is a strategic framework that integrates technology, policy, and consumer behavior, one that not only addresses infrastructure but also meets consumer expectations for speed, security, interoperability, and added value through loyalty rewards and promotional integration.

Looking ahead, the promise of e-wallet adoption in the Philippines is undeniable. It offers significant benefits for the economy, businesses, and consumers alike—reshaping tax visibility, improving cash flow management, and influencing consumer behavior. For Tabaco City, where retail contributes substantially to local government revenue, accelerating cashless adoption could strengthen revenue administration, formalization, and economic inclusion.

But important questions remain: how can innovation be implemented smoothly in the retail sector, especially among larger companies with more capital, resources, and exposure to market risks?

Development Goals (SDG) Alignment

The study is aligned with Sustainable Development Goals (8) Decent work and Economic Growth; (9) industry Innovation and infrastructure; and (11) Sustainable Cities and Communities. Tabaco City, located in Albay Province in the Bicol Region, serves as a strategic locale for this study. As a growing commercial hub with a mix of traditional markets, small and medium-sized enterprises (SMEs), and modern retail establishments, the city reflects both the opportunities and challenges of digital transformation in local

economies. Retailers in Tabaco City are increasingly exposed to consumer demand for cashless transactions, including E-Wallet transactions. However, many remain constrained by issues of digital literacy, affordability, and trust. This makes the city an ideal setting to explore how executive-level strategies and policy frameworks can drive sustainable e-wallet adoption at the provincial cities and municipal level.

With the rapid rise of digital financial services, Tabaco City is experiencing a transformation in commerce—retailers are modernizing, investors are maturing, and consumers are increasingly satisfied with cashless convenience. Yet, localized insights remain limited, particularly in understanding how executive-level strategies influence adoption and performance. This gap underscores the need to benchmark Tabaco City’s progress against national financial inclusion goals and global digital transformation trends.

The legal and regulatory environment provides the backbone for this study. Republic Act No. 11127, the National Payment Systems Act, institutionalizes the Bangko Sentral ng Pilipinas’ (BSP) oversight of payment systems, ensuring safety, efficiency, and reliability in digital transactions (Bangko Sentral ng Pilipinas [BSP], 2024). More recently, Republic Act No. 11967, the Internet Transactions Act of 2023, strengthens consumer protection and merchant accountability in online and e-wallet transactions (Republic Act No. 11967, 2023). Complementing these laws, the BSP’s Manual of Regulations for Payment Systems (MORPS) consolidates policies on interoperability, risk management, and compliance for e-wallet providers (BSP, 2024). These frameworks collectively emphasize trust, transparency, and inclusivity—critical factors for sustainable adoption.

Despite these advances, challenges persist at the municipal level. Tabaco City’s retail sector must navigate issues of digital literacy, affordability, and trust, while aligning with evolving BSP regulations and executive strategies. This study aimed to contextualize Tabaco City within this evolving environment, offering actionable insights and a roadmap for sustainable transformation. Beyond immediate adoption, the research anticipates future opportunities in automation, artificial intelligence, and even cryptocurrency-based payments, positioning Tabaco City as a potential model for inclusive digital finance.

Ultimately, a focused strategy, strong policy alignment, and readiness at the executive level will enable businesses in Tabaco City to harness E-Wallet payments for growth, contributing not only to local competitiveness but also to the broader Philippine economy and financial inclusion agenda.

Several researches have been conducted on e-wallet transformation that Philippine retail has shifted from early exploratory studies to large-scale monitoring and policy reports that document rapid national adoption, regulatory consolidation, and growing merchant uptake creating a compelling reason for localized studies that contextualize executive strategies, merchant readiness, and consumer behavior within evolving frameworks – where retail ecosystems face unique challenges of digital literacy, affordability, and infrastructure readiness. National-level data now confirm that digital payments account for the majority of retail transactions – 57.4% in volume and 59% in value as of 2024 (BSP, 2024). This shift reflects both regulatory consolidation and growing merchant uptake, creating a favorable environment for E-Wallet adoption.

Economic and regulatory compliance studies highlight the role of the Bangko Sentral ng Pilipinas (BSP) in shaping the institutional environment. The BSP’s QR Ph initiative and circulars under the National Payment Systems Act (RA 11127) have standardized compliance expectations for e-money issuers and payment facilitators, driving interoperability and consumer trust (BSP, 2024). These frameworks establish a strong macro-policy context, but their translation into municipal-level strategies remains underexplored.

Technological fit and merchant readiness research shows wide availability of E-Wallet platforms and point-of-sale integrations, yet adoption varies by enterprise size and location. Micro and small retailers often cite interoperability gaps and terminal costs as barriers, while industry reviews emphasize continuous innovation—such as API partnerships and feature rollouts—as essential to retaining merchants and consumers (Thunes, 2024). Municipal strategies must therefore align with provider roadmaps to ensure sustainability.

From the customer and social perspective, surveys and literature syntheses identify security and privacy concerns as persistent determinants of adoption, though national confidence has improved with stronger safeguards (Piad, T. J. C. 2024). Market analyses further show higher transaction frequency when e-wallets are bundled with loyalty programs and / or merchant incentives. Evidence also suggests rapid diffusion when visible champions adopt e-wallets, with BSP data linking chain adoption to spillover effects among smaller merchants.

Training, operations, and frontline adoption studies underscore staff competence and change management as predictors of sustained merchant use after pilot programs. At the macro level, the Philippines has seen rapid growth in digital payments driven by regulatory standards (QR Ph), fintech expansion, and mobile-first consumer behavior, positioning the country as a fast-growing hub in ASEAN (Thunes 2024).

Enterprise-level effects: Emerging literature and practitioner reports indicate positive links between cashless adoption and improved record-keeping, reduced informal cash leakage, and new channels for digital promotions and loyalty — though rigorous causal studies at the city or barangay level remain limited, leaving gaps on direct measures of tax collection impacts and firm-level profitability.

These are the available studies with regards to digital transformation in the country, but none talks about Tabaco City, or other 3rd class cities where E-Wallet transformation is emerging in alignment with the market and demand trend.

Literature Review

Motivations of e-Wallet Payment System Adopters

This dynamic technology that conquered the global and national arena has paved the way for retailers to become accustomed to and implement e-wallets in their respective businesses. With the expected increase in demand and economic value of e-wallets, several updates and moves in national agencies support their successful use. Studies such as those conducted by the Philippine Institute for Development Studies (PIDS, 2021) highlighted the role of policy and coordinated programs in reducing barriers to digital payment adoption and leveraging wallets for inclusion and market efficiency. Benefits include boosting financial inclusion by providing accessible, low-cost alternatives to cash and traditional banking, especially in areas with low credit card penetration. The features and design of digital wallets must be matched to local needs and device compatibility to maximize uptake among consumers and small merchants. Thus, digital wallets have the potential to shift transaction patterns toward cashless methods; however, broader adoption depends on infrastructure, merchant readiness, and consumer education.

The National Economic and Development Authority (NEDA, 2022) reported that “digital payments are now part of the national resilience strategy.” Digital payments strengthen resilience by maintaining continuity of commerce during shocks, enabling contactless transactions during health crises, and supporting faster distribution of aid and subsidies through electronic channels. A mature digital payments ecosystem improves fiscal and monetary responsiveness by providing timely transaction data, expanding the reach of formal financial tools, and reducing reliance on cash logistics vulnerable in emergencies. Integrating digital payments with social protection and local government disbursement systems increases targeting efficiency and transparency, lowering leakage and speeding up relief delivery in times of need.

E-wallet adoption trends in the Philippines were discussed by Villanueva (2023) in *Digital Transformation in Provincial Retail* published in *Philippine Business Review*. He noted that adoption in provincial areas is growing steadily, driven by improved mobile internet access, merchant onboarding programs, and rising consumer familiarity with QR-based payments. Growth is often episodic and concentrated around market days, transport hubs, and barangay centers where peer demonstration and merchant champions create visible network effects. Younger, digitally literate consumers and remittance recipients adopt faster, while older or cash-centric segments require targeted education and trust-building measures. The push and stabilization of e-wallet use are driven by youth as adoption leaders (Salazar, 2021).

This is confirmed by Dela Cruz (2022), who affirmed that urban consumers adopt e-wallets for speed, convenience, and integrated promotions.

Policy support and institutional incentives are emphasized by PIDS (2021) and the Senate (2023). Clear performance benefits include faster transactions, reduced cash handling costs, improved sales tracking, and higher sales volumes driven by easier customer payments. Adoption is strongly shaped by peers, suppliers, and customer expectations; when nearby vendors, business associations, or influential customers use e-wallets, micro-enterprises perceive greater social pressure and normative support to adopt the technology.

This fintech innovation improves the economy and Filipino citizens. For example, digital payments expand access to basic financial services for unbanked and underbanked groups, creating pathways for savings, credit access, and formal transaction histories that can contribute to poverty reduction (Glindo et al., 2024).

While updates on the Philippine-wide studies reflect rapid growth in digital payment adoption. According to the Bangko Sentral ng Pilipinas (BSP, 2024), digital payment volume in the Philippines has grown rapidly, with the share of retail transactions migrating to digital channels rising sharply year on year and surpassing national targets. This signals a structural shift toward a cash-lite economy. Improvements in infrastructure, merchant onboarding, and consumer education have accelerated usage in both urban and provincial retail markets, increasing convenience and financial inclusion.

Reports from DTI Region V (2023) note that “retailers in Legazpi and Tabaco report increased customer satisfaction with e-wallet options.” For Tabaco City, establishments enabled for mobile transactions increased by 38% in 2023 (Tabaco City Business Permit Office, 2023). Adoption is most notable among younger business owners who lead trials and early acceptance of e-wallet payments, according to the Tabaco City Economic Enterprise Office (2023). Positive growth is further evidenced by Bicol University (2021), which found that 72% of student vendors prefer GCash over cash.

In Tabaco City and the Bicol Region, sources revealed a growing but uneven adoption landscape. Digital connectivity and related infrastructure vary between barangays, creating pockets where e-wallet acceptance and reliable transaction processing are feasible, and others where adoption is constrained by poor connectivity or hardware gaps (Tabaco City Planning Office, 2023). More to go for the city, and the officers include this in their strategy, as The Albay Provincial Government (2023) included expanding e-wallet access to rural retailers in its digital economy strategy. Tabaco City’s LGU (2023) Annual Investment Plan allocates budget lines for capacity building on digital payments, prioritizing merchant training, barangay-level workshops, and support for LGU staff to manage cashless rollout. Funding is earmarked for connectivity improvements at market hubs and selected public venues to reduce transaction failures and support merchant acceptance.

In addition, reports from DTI Albay (2023) highlighted improved customer satisfaction, while the Tabaco City Business Permit Office (2023) noted that adoption is highest among food and apparel retailers. More to go to Tabaco City E-Wallet adoption, progress was remarkably initialized by the big retail companies. The Philippine Statistics Authority (PSA, 2023) reported that retail sales volumes and values showed year-on-year variation across regions, with faster recovery in urbanized provinces while some rural areas lagged due to supply chain and mobility constraints. E-commerce and digital payment channels captured a growing share of retail transactions, with QR and card-based payments expanding particularly in localities with higher smartphone penetration and better internet quality.

Finally, Tabaco City retailers view digital payments as a way to modernize and compete. In interviews conducted in 2025, GCash was cited as the most preferred platform due to its ease of use (Tabaco City Retailer Interview, 2025).

Effects of e-Wallet System Adoption on Business Performance

Global studies emphasized the strategic role of e-wallets in enhancing customer engagement, operational efficiency, and competitive positioning. Singh and Srivastava (2020) and Flavián, Guinalú, and Lu (2020) show how mobile wallets drive loyalty and brand differentiation. The convenience and real-time nature of mobile wallet transactions increase opportunities for push notifications and location-based messaging that prompt repeat visits and impulse purchases. As Singh and Srivastava (2020) noted, “Mobile wallets are not just payment tools—they are platforms for customer engagement.”

While according to Flavián, Guinalú, and Lu (2020), “Mobile payment systems have become essential tools for enhancing customer experience and loyalty.” Mobile payments transform the customer experience by reducing transaction friction, personalizing interactions through stored preferences, and enabling seamless omnichannel journeys that increase perceived convenience and satisfaction. Consumer determinants include trust, ease of use, and adoption—improving usability and building institutional and technological trust directly enhances the customer experience. In service differentiation and competitive advantage, retailers benefit from other mobile-payment features, such as loyalty integration, tailored promotions, and faster checkout, differentiate their service offering and strengthen customer loyalty.

Saluja and Malik (2024) emphasized that “Digital wallets are reshaping consumer expectations and forcing retailers to rethink their engagement strategies.” They explained that digital wallets reshape business strategy by enabling new revenue streams through in-app purchases, cross-sell opportunities, and integrated value-added services that turn payments into engagement platforms. They also drive operational efficiency by automating payment reconciliation, reducing cash handling costs, and shortening the sales cycle, which improves working capital and lowers transaction overheads. Digital wallets support customer-centric strategies by capturing behavioral data that fuels personalization, dynamic pricing, and targeted promotions tied directly to purchase moments. Adoption of wallet ecosystems encourages partnerships and platform strategies, where merchants, payment providers, and third-party service vendors co-create bundled offerings that increase customer satisfaction and value.

Esawe and Elwkeel (2020) highlighted that “Digital transformation in retail requires strategic alignment between technology and business goals.” They noted that specific benefits of successful digital initiatives mapped to business objectives include faster checkout, higher basket value, and improved customer retention. Governance and cross-functional coordination ensure delivery of measurable business outcomes rather than isolated technical deployments. Investment in platforms allows retailers to reuse payment infrastructure for marketing and analytics, aligning IT economics with commercial goals. Clear KPIs and executive sponsorship reduce implementation risk and enhance the business value of early payment adoption.

The value of e-wallets lies in their simplification of everyday financial transactions by consolidating payment, receipt, and record-keeping functions into a single mobile interface, reducing the need for cash handling and manual bookkeeping. Streamlined payment flows and instant transaction confirmations lower cognitive and operational barriers for both consumers and small retailers, increasing transaction speed and perceived convenience. Automated features such as easy top-ups make routine financial management tasks simpler for users who previously relied on cash, improving financial visibility and control. Reducing friction in payments encourages more frequent small-value transactions and supports impulse purchases, which can raise sales volume for retail merchants adopting e-wallet acceptance (Ramli & Hamzah, 2021).

Success Factors in e-Wallet Adoption

The management vision and strategy are foundation of the success in digital transformation including e-Wallet. Adoption like this in provincial areas are diligently pursued. Even though system is talking about efficiency and effectiveness, the people are taking time and management is bounded to invest

in infrastructure and new processes. Management decisions are thoroughly performed considering: target customer, technology and process efficiencies, return on investment; and risks management.

Several studies had been completed in recent years, emphasis on strategic alignment and consumer behavior shifts. Cruz (2020) tackled that digital payment initiatives that must align technology choices with core retail objectives to convert capability into measurable business outcomes; misaligned technical projects produce limited customer or commercial impact; Consumer behavior shifts toward e-Wallet are driven by perceived convenience, social norms, and immediate incentives; retailers that fail to adapt their service design miss opportunities from changing purchase habits. Strategic alignment requires cross-functional coordination so payment features (checkout speed, loyalty integration, receipts) map directly to customer experience improvements and merchant KPIs; and Visible demonstrations of consumer benefits and localized marketing accelerate behavioral change by reducing perceived risk and normalizing e-wallet use within communities.

While Reyes (2022) discussed that e-wallet use is driven by usefulness and acceptance at merchants for both the consumers and retailers as part of the everyday financial toolkit for Filipino consumers: consumer demand and demonstrated merchant benefits; visible sales or speed gains among peer stores; Regulatory clarity and clear merchant dispute procedures improving uptake and routine usage; and Combination of consumer incentives (cashback, discounts) with merchant support (reconciliation tools, low onboarding costs) creates immediate network effects that accelerate local diffusion..

With regard to technology and process efficiencies, fintech providers such as GCash (2023) document MSME integration and financial inclusion where integration and financial inclusion discussing on: Interoperability and API-based integrations are highlighted as enablers that let third-party platforms and POS providers connect quickly to GCash, reducing technical barriers for local retailers; Cash frames incentives (transaction fee promos, merchant cashback, or co-funded marketing campaigns) as critical to accelerate merchant uptake and build network effects in local markets; and document stresses trust and compliance: visible consumer protection measures, dispute resolution workflows, and data privacy assurances are necessary to convert regular transactors.

Furthermore, customer satisfaction rises when e-wallets deliver speed, reliability, and clear receipts (Parungao, 2024). Moreover, the benefits of smartphones in driving e-wallet adoption were reiterated in Maya (2023), which declared that Smartphone ownership and app-centric product design are primary drivers of digital finance adoption in the Philippines, with mobile apps enabling QR payments, instant top-ups, and in-app financial services that replace many cash interactions; seamless account opening via mobile ID upload, one-tap transfers using usernames, and integrated features (savings, credit, cards) increase the perceived usefulness of e-wallets and reduce onboarding friction. Promotional nudges delivered through apps (cashback, referral bonuses, limited-time promos) accelerate trial and habitual use among smartphone users who respond to in-app incentives.

Smartphone's capabilities such as camera for QR scanning, persistent internet or intermittent offline flows, and push notifications - these shape which acceptance channels succeed in provincial retail: QR codes and simple scanned flows outperform complex POS integrations in low-infrastructure settings. These social signals more persuasive, accelerating diffusion within tightly knit retail communities (Baltazar et al., 2025).

Hindering Factors in e-Wallet Adoption

On the other hand, difficulties in establishing e-wallets in provinces with regard to infrastructure have been noted. Intermittent connectivity and limited POS hardware shape simpler adoption paths that favor QR code and offline-capable workflows over complex integrated POS systems (Villanueva, 2023).

In the study of De Vera (2021) on mobile wallet usage in urban and rural areas, urban settings showed faster and deeper adoption driven by higher smartphone penetration, better internet connectivity, and denser merchant networks that normalize e-wallet payments. Rural and provincial areas adopted more

slowly and unevenly, with adoption clustering around market days, remittance corridors, and transport hubs where demonstrated use created local network effects. Device and infrastructure constraints in rural settings favored lightweight acceptance channels such as QR codes and USSD over full POS integrations.

From the perspective of Bacamante and Campos (2024), security perceptions strongly influence consumers' intentions to use e-wallets. Concerns about data privacy, transaction safety, and fraud protection reduce adoption unless clearly addressed. Communicating concrete security benefits such as reduced cash handling risk, better transaction records, and fraud monitoring helps position e-wallets as safer and more convenient than cash for both shoppers and merchants. Likewise, regulatory reassurance and retailer-level cues such as security badges, staff knowledge, and clear refund and dispute processes translate technical security into consumer confidence at the point of sale.

Another is the clear guidance on dispute resolution, refund processes, and merchant responsibilities is highlighted to build consumer confidence in digital transactions at the retail point of sale (Department of Trade and Industry [DTI], 2022). These concerns are supported by the Senate of the Philippines (2023), which emphasized that legislative attention to the digital economy has prioritized consumer protection and regulatory clarity for digital payments.

Business investment challenges also hinder adoption. Spending primarily on advanced hardware and allocating resources toward merchant training, simple POS workflows, and reconciliation tools may yield higher returns but are often unaffordable for local merchants. Cross-functional planning between IT, operations, and commercial teams is necessary so payment features such as speed, receipts, refunds, and loyalty map directly to customer experience and sales metrics. Prioritizing low-friction, high-impact resources such as QR acceptance, staff scripts, and connectivity backup aligns investments with provincial retail realities and accelerates uptake (Torres, 2020).

In the end, customer acceptance and satisfaction on e-Wallet payment adoptions has to be considered serving the purpose of innovation. Thus, a careful balance of success and hindering factors must be performed before jumping in system adoption plus the open-mind reserved for future enhancements, governance requirements and other interferences that may evolve along with automation.

Theoretical Framework and Conceptual Framework

The dynamic pace of digitalization has fundamentally reshaped the landscape of organizational strategy, operations, and value creation. The transformation of retail banking through digital technologies is not merely a technical upgrade but a strategic reorientation of how institutions operate and deliver value. Olutimehin (2021) identifies five essential dimensions—strategic alignment, efficiency, customer-centricity, competitive advantage, and sustainability—to thrive in a digital economy. His framework emphasizes that digital initiatives must be embedded into the organization's long-term vision, ensuring that technology adoption strengthens resilience, enhances performance, and contributes to broader societal goals. To complement this organizational perspective, theories of technology adoption provide insight into how individuals and consumers respond to digital innovations. Davis's (1989) Technology Acceptance Model (TAM) explains that adoption is shaped by perceptions of usefulness and ease of use. Building on this, Venkatesh et al. (2003) developed the Unified Theory of Acceptance and Use of Technology (UTAUT), which incorporates factors such as social influence, facilitating conditions, and organizational readiness. These behavioral models highlight that successful digital transformation depends not only on strategic planning but also on user acceptance and institutional support.

Together, Olutimehin’s strategic lens and the behavioral insights of Davis and Venkatesh form a comprehensive theoretical foundation. Digital transformation in banking requires alignment between organizational goals and consumer adoption behaviors, ensuring that technological change is both strategically effective and socially sustainable.

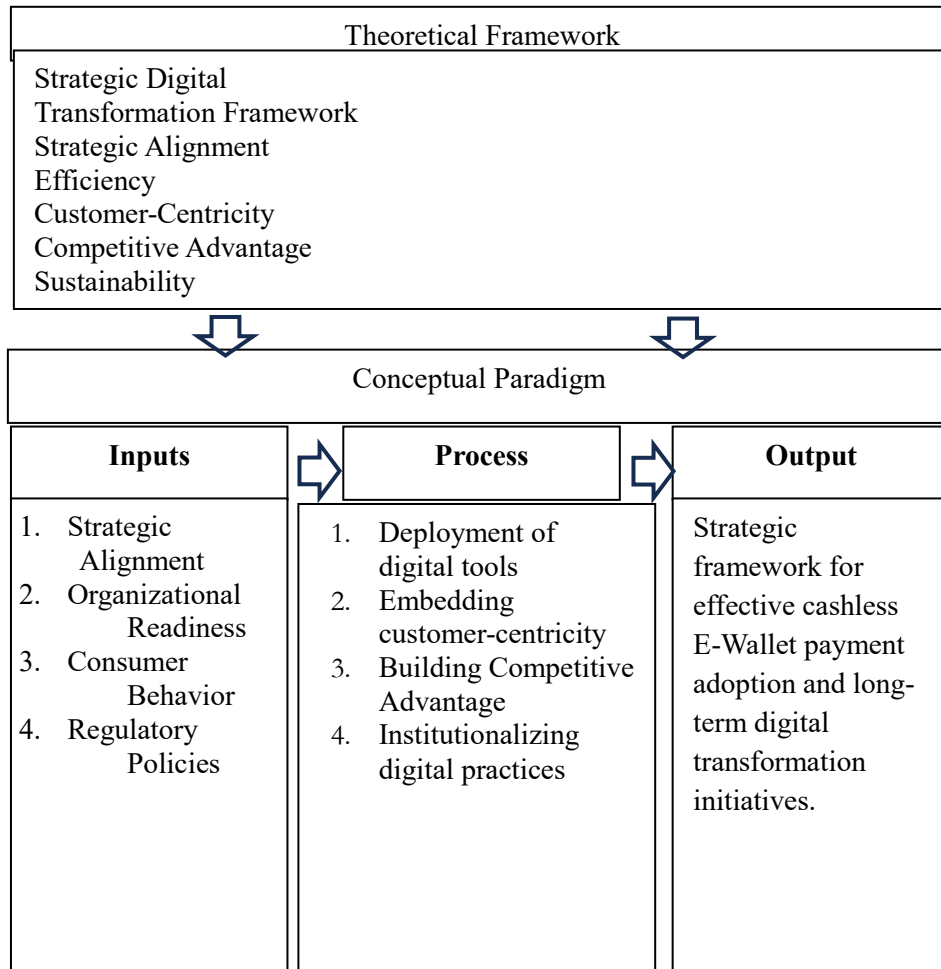


Figure 2. *Theoretical and Conceptual Paradigm*

The conceptual paradigm integrates Olutimehin’s strategic pillars with the dimensions of TAM and UTAUT, creating a holistic view of digital transformation: Strategic Alignment with Executive Strategies - Digital initiatives must be harmonized with organizational objectives (Olutimehin, 2021), while leadership strategies and vision play a decisive role in shaping adoption (Venkatesh et al., 2003; Davis, 1989); Efficiency with Organizational Readiness: Operational efficiency through automation and analytics (Olutimehin, 2021) is enabled by organizational readiness, ensuring that resources and infrastructure support digital adoption (Venkatesh et al., 2003); Customer-Centricity with Consumer Behavior: Personalization and seamless digital experiences (Olutimehin, 2021) align with Davis’s (1989) constructs of perceived usefulness and ease of use, expanded by Venkatesh’s inclusion of social influence and facilitating conditions; Competitive Advantage with Regulatory Policies: Innovation and agility create differentiation in banking services (Olutimehin, 2021), but regulatory frameworks shape the environment in which competitive advantage can be sustained (Venkatesh et al., 2003); and Sustainability with Holistic

Integration: Sustainability, including resilience and societal impact (Olutimehin, 2021), is reinforced by long-term adoption and institutionalization of digital practices (Davis, 1989; Venkatesh et al., 2003).

The Input – Process - Output model provides a structured way to integrate Olutimehin’s strategic pillars with the behavioral insights of Davis and Venkatesh: Inputs are: Strategic Alignment - Digital initiatives aligned with organizational goals and executive strategies (Olutimehin, 2021; Almashalah & Osses, 2020); Organizational Readiness- Availability of resources, infrastructure, and supportive culture (Venkatesh et al., 2003); Consumer Behavior - Perceptions of usefulness, ease of use, and social influence shaping adoption (Davis, 1989; Venkatesh et al., 2003); and Regulatory Policies - External compliance frameworks guiding sustainable innovation. Processes are: Deployment of digital tools such as automation, mobile banking, and analytics to drive efficiency; Embedding customer-centricity through personalization, accessibility, and seamless digital experiences; Leveraging innovation and agility through building competitive advantage while ensuring compliance with regulatory standards; and institutionalizing digital practices to foster sustainability, resilience, and inclusivity. Output is Strategic Framework That Guides Effective e-Wallet Payment Adoption and Long-Term Digital Transformation Initiatives.

This integrated framework demonstrates that digital transformation in retail banking is both a strategic and behavioral process. Olutimehin’s (2021) organizational pillars provide the structural foundation, while Davis’s TAM (1989) and Venkatesh’s UTAUT (2003) explain the mechanisms of adoption and acceptance. The conceptual paradigm thus presents digital transformation as a holistic endeavor—one that ensures competitiveness, efficiency, customer loyalty, and sustainability while remaining aligned with organizational goals and responsive to consumer behavior.

The literature converges on the view that e-wallet adoption in the retail sector is both an opportunity and a challenge. Motivations are strong, success factors are clear, but hindering conditions remain significant in provincial contexts like Tabaco City. Adoption outcomes depend on the interplay of infrastructure readiness, regulatory support, merchant incentives, and consumer trust. When strategically aligned and customer-centric, e-wallet systems enhance business performance, foster financial inclusion, and contribute to sustainable digital transformation.

Motivations for Adoption center on financial inclusion, convenience, and resilience. Studies highlight that e-wallets provide accessible, low-cost alternatives to cash and traditional banking, particularly in areas with low credit card penetration. National agencies such as PIDS (2021), NEDA (2022), and BSP (2024) emphasize policy support, infrastructure improvements, and consumer education as drivers of adoption. Localized reports from Tabaco City and the Bicol Region further revealed that youth, digitally literate consumers, and remittance recipients act as primary adoption drivers, while merchant readiness and peer influence accelerate diffusion.

Success Factors are anchored in strategic alignment, management vision, and customer-centric strategies. Cruz (2020) and Reyes (2022) emphasize that adoption succeeds when digital payment initiatives are aligned with retail objectives, supported by merchant incentives, and reinforced by consumer trust. Organizational readiness, executive strategies, and regulatory clarity are critical enablers, while fintech providers such as GCash and Maya demonstrate how interoperability, promotional campaigns, and smartphone-driven design reduce onboarding friction and enhance usability. Customer satisfaction is heightened when e-wallets deliver speed, reliability, and clear receipts, reinforcing adoption as a competitive advantage.

Hindering Factors highlight infrastructure gaps, security concerns, and resource constraints. Villanueva (2023) and De Vera (2021) note that intermittent connectivity, limited POS hardware, and uneven rural infrastructure slow adoption, favoring QR-based workflows over complex integrations. Bacamante and Campos (2024) stress that consumer perceptions of security and fraud protection must be addressed through visible safeguards and dispute resolution mechanisms. Torres (2020) adds that high costs of advanced hardware and merchant training pose barriers, particularly for small retailers, requiring low-friction, high-impact solutions tailored to provincial realities.

Effects on Business Performance are evident in enhanced customer engagement, operational efficiency, and competitive positioning. Singh and Srivastava (2020), Flavián et al. (2020), and Saluja and Malik (2024) demonstrated that mobile wallets not only streamline transactions but also serve as platforms for customer loyalty, personalized promotions, and data-driven strategies. Operational efficiency is achieved through reduced cash handling, faster reconciliation, and improved sales tracking, while customer-centricity drives satisfaction, retention, and revenue growth.

Tabaco City's retail sector is a major contributor to local revenue and employment. This national ecosystem, combined with private-sector e-wallet rollout and merchant onboarding initiatives, makes Tabaco City a high-impact setting to study retail digital payment transformation and its implications.

Literatures rarely present a validated, integrated framework tailored to large taxpayers in provincial retail ecosystems that explains how organizational readiness, technology architecture, and managerial capacity interact to produce successful transformation. This concludes Lack of multidimensional frameworks combining organizational, technological, and managerial factors.

Few robust studies use financial and operational performance indicators to assess how e-wallet adoption affects liquidity, cost structure, sales growth, reconciliation time, and customer lifetime value in large retail firms; thus, there's sparse measurement of business performance outcomes for large retailers

This study focused on implementation landscape in mapping the adoption of e-wallets; examination of executive decision-making such as motivations, risk perceptions, and policy alignment.

There is a scarcity of localized studies that link e-wallet adoption to executive strategy patterns in big retailers, and measures of operational efficiency in making strategic choices about e-wallet integration, investment, and risk management.

Objectives of the Study

This study sought to design a strategic framework that will guide the adoption and sustainable use of e-wallet systems in Tabaco City's retail sector. Specifically,

- 1) To identify the motivations of the E-Wallet payment systems adopters in the Tabaco City retail sector;
- 2) To determine the perceived effects of E-Wallet system adoption on business performance, specifically in terms of sales volume, operational efficiency, and customer satisfaction;
- 3) To identify the factors that have contributed to e-wallet payment adoption along:
 - 3.1 Success factors
 - 3.2 Hindering factors; and
- 4) To propose a strategic framework for effective cashless E-Wallet payment adoption and long-term digital transformation initiatives.

METHODS

Research Design

This proposal used a mixed-methods type of research, with qualitative inquiry approaches integrated for businesses, and with quantitative descriptive designs for customers, with the purpose of assessing e-Wallet Adoption in Tabaco City. The Qualitative method was used to the business representatives regarding their motivations on adoption of e-Wallet, its business impact, and strategic outlook. The Quantitative Analysis was used with customers regarding experiences on e-Wallet adoption success factors, hindering factors, and customer engagement.

Participants of the Study

The research included 16 business respondents and 128 customer participants. Sixteen businesses were purposively selected to represent international, national, regional, and local operations across major retail sectors, namely supermarkets and groceries, department stores, fast food chains, pharmacies, gasoline stations, and hotel and restaurant establishments. All selected businesses were known users of QRPh applications for e-wallet transactions. Interviews were conducted with owners, executives, managers, supervisors, and officers-in-charge to capture diverse organizational perspectives.

In addition, 128 customer respondents were conveniently selected from schools and offices familiar to the researcher. This sampling approach provided access to individuals with varying levels of exposure to e-wallet transactions, thereby offering insights into consumer experiences and perceptions.

Research Instrument

Research Instruments used for businesses were interview, hardcopy answer sheets, email, or google form as preferred by the respondents. While a different survey questionnaire was sent to customers using google form. The questionnaires were formulated based on settings here in the Philippines. Three persons validated the interview and survey questions namely Dr. Marigold Cura – a Department Head in Emillio Aguinaldo College – BS Real Estate Management, Dr. Joeys Gold Yong – a preschool teacher, and Ms. Iris Gerlyn Barbante CPA, MBA – a government employee to check the contents and relevance of the questionnaires, they also validated the thoughts of the questionnaire. This enabled the researcher to ensure the correctness of the wordings used in the questionnaires based on the perspective of the respondents.

Likert scale was used to measure the customers' response rating of their extent of agreement to factors indicated, to determine a respondent's perspective.

The Likert Scale

Scale	Range	Adjectival Rating	Interpretation
5	4.51-5.00	Strongly Agree	The respondent highly agrees
4	3.51-4.50	Agree	The respondent agrees
3	2.51-3.50	Moderately Agree	The respondent somewhat agrees
2	1.51-2.50	Disagree	The respondent disagrees
1	1.00-1.50	Strongly Disagree	The respondent highly disagrees

Sources of Data

The sources of primary data were questionnaires with businesses representatives available and permitted to perform the interview and fill-out the structured questionnaires as applicable. Secondary data are: articles on digital payments adoption and outcomes in Philippine and Southeast Asian; Government reports from Banko Sentral ng Pilipinas publications, and LGU economic and financial reports; Industry data from fintech providers such as GCash and Maya on adoption volume, trends, and IMF and World Bank working papers on retail digital payments; and other academic literature regarding their observation and feedback on retail payment practices in Tabaco City Albay.

Data Gathering Tools and Techniques

The data gathering tools used in this study are structured interview and survey questionnaire for business executives, managers or supervisors involved in decision making, evaluation, or implementation of e-Wallet adoption to elicit detailed accounts of adoption motivations, operational impacts, and managerial practices. These methods were able to provide the direct answer to the objectives of the manuscript efficiently while it fits the preference of the interviewee.

The researcher worked on securing permission from the Tabaco City – LGU-City Treasurer’s Office to avail of a list of top business tax contributors and gather 16 e-wallet Adoptors for the business tax year 2025. Then a list of businesses using e-wallet through QR PH were identified, whom letter to companies were sent to chosen businesses asking for approval to conduct an interview through hardcopy document, email, or google form as preferred by the respondents.

For the customers, an online survey through google form link was provided to those using e-wallets to capture perceptions on success factors, hindering factors and customer engagement. Secondary data, including sector reports and treasury records, were triangulated with primary findings to ensure contextual validity. This method effectively and efficiently measured the extent of agreement of customers to the questionnaires, in relation to the objectives of the manuscript.

Statistical Tools and Analysis

Interview transcripts to business adopters and survey responses to customers were coded thematically. Emerging themes were organized into categories reflecting motivations, performance outcomes, enabling conditions and barriers. These were synthesized into a multidimensional framework.

Thematic Analysis Procedure

To ensure flexibility, clarity, and rigor the author used a systematic thematic analysis procedure was employed for data obtained from business respondents. Through The Six Phases of Braun and Clarke’s Thematic Analysis (Stevens, 2024).

The Six Phases of Braun and Clarke’s Thematic Analysis

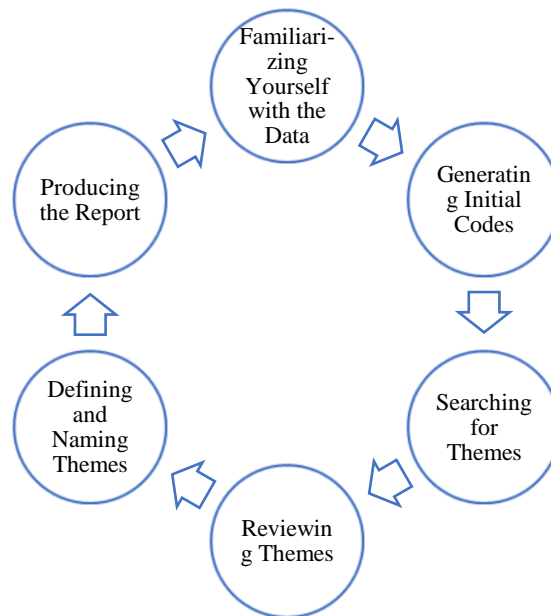


Figure 3. *The Six Phases of Braun and Clarke’s Thematic Analysis*

The Six Phases of Braun and Clarke’s Thematic Analysis: Familiarizing Yourself with the Data – this is the first step involves immersing yourself in the data to become deeply familiar with its content; this includes reading and re-reading the data, and noting down initial ideas; Generating Initial Codes - in this phase, one starts identifying interesting features of the data systematically across the entire dataset, involving coding segments of data that appear relevant to your research question; Searching for Themes –

after the list of codes, the next step is to collate them into potential themes, themes and sub-themes; Reviewing Themes – this involves checking that the themes work in relation to the coded extracts and the entire dataset; Defining and Naming Themes - you refine each theme and identify the essence of what each theme is about.

One defines the specifics of each theme and the overall story they tell about the data, clear and concise names for each theme are developed to reflect the content and scope of the themes; last is the Producing the Report – this involves writing up the analysis, weaving together the analytic narrative and data extracts, for a compelling data story. Below are the Thematic coding and analysis approach used:

Objective	Method	Respondents	Tool	Analysis
To identify the motivations of the E-Wallet payment systems adopters in the Tabaco City retail sector.	Qualitative	Businesses (16)	Interview + Survey	Thematic + Triangulation
To understand the perceived effects of E-Wallet system adoption with regards to business performance specifically:				
Sales Volume	Qualitative	Businesses (16)	Interview + Survey	Thematic + Triangulation
Operational Efficiency	Qualitative	Businesses (16)	Interview + Survey	Thematic + Triangulation
Customer Satisfaction	Qualitative Quantitative	Business (16) + Customers (128)	Interview + Survey	Thematic + Mean + Triangulation
Factors get the factors that are perceived to have contributed to the E-Wallet payment adoption. 3.1. Success Factors 3.2 Hindering Factors	Qualitative Quantitative	Business (16) + Customers (128)	Interview + Survey	Thematic + Mean
To propose a strategic framework for effective cashless E-Wallet payment adoption and long-term digital transformation initiatives.	Integrative	All	Synthesis	Conceptual

For Objective 1 To identify the motivations of the e-wallet payment systems adopters in the Tabaco City retail sector. A structured interview with 16 business respondents were conducted. Responses were coded to identify recurring themes such as customer convenience, operational efficiency, and strategic competitiveness, which were then synthesized into motivational categories. Then triangulated with the survey results and related literature.

For Objective 2, to understand the perceived effects of e-wallet system adoption with regards to business performance specifically: sales volume, operational efficiency, and customer satisfaction. The three dimensions were examined. Sales volume and operational efficiency were assessed through interviews and surveys with the 16 businesses, with thematic coding highlighting improvements in transaction speed, reconciliation, and reduced cash handling losses. Customer satisfaction and engagement involved both business and customer respondents (16 businesses and 128 customers). The thematic coding captured qualitative insights, while customer survey data were analyzed using mean scores to quantify satisfaction levels. Then triangulated with the survey results and related literature.

For Objective 3 - to get the factors that are perceived to have contributed to the e-wallet payment adoption: 3.1 Success Factors; and 3.2 Hindering Factors. A mixed data from businesses and customers were coded to distinguish enabling conditions (e.g., infrastructure investment, interoperability, staff training) from barriers (e.g., connectivity instability, system errors, transaction fees, and low digital

literacy). Both thematic analysis and mean scores were used to validate findings across respondent groups. Then triangulated with the survey results and related literature.

Finally, Objective 4 - To propose a strategic framework for effective cashless e-wallet payment adoption and long-term digital transformation initiatives. An integrated all coded themes into a conceptual synthesis. This framework linked motivations, performance outcomes, success factors, and barriers into a strategic roadmap for effective e-wallet adoption and long-term digital transformation in Tabaco City's retail sector.

Ethical Considerations

Ethical considerations followed the Philippine Data Privacy Law (RA 10173), with voluntary informed consent and anonymized data reporting. Participants were retail business executives and managers with informed consent from their Executive Director who received a written explanation of the study's purpose. Consent forms included Voluntary participation clause, Assurance of confidentiality and data protection, and contact information for the researcher. Data Collection and Privacy, Data will be collected through surveys, interviews, and secondary data; data were stored and retained only for the duration of the study; and no individual business or respondent was named in reports without explicit written consent.

RESULTS AND DISCUSSIONS

Adopter 1

Adopter 1 is a large regional company operating in Tabaco City with more than six years of continuous business presence. The company is structured as a corporation, reflecting its formal governance and organizational scale. As part of its digital transformation initiatives, the enterprise has adopted multiple e-wallet platforms, specifically GCash, Maya, and ShopeePay, to facilitate cashless transactions. The respondent serves in a managerial capacity for a prominent retail corporation with a long-standing legacy in Philippine commerce. The company has embraced an omni-channel payment approach, accepting cash, checks, debit/credit cards, and e-wallets to maximize customer convenience.

The motivation for adopting e-wallets stemmed from the strategic need to align with the rapid digital transformation of the Philippine economy and the evolving habits of modern consumers. However, the transition was not without challenges. The enterprise faced complex system integration issues with existing POS systems and had to manage the learning curve of customers accustomed to cash-heavy transactions.

Despite these hurdles, the company observed a definitive shift in consumer behavior. Digital payments streamlined checkout processes and encouraged higher transaction values. Adoption rates became the key metric of success: in prime locations, cashless transactions surged from 20% to 60%, while company-wide adoption rose from 15% to 25% by early 2026. Looking ahead, Adopter 1 anticipates that digital payments will surpass cash as the primary transaction method within the next 3–5 years.

To sustain this momentum, the enterprise emphasizes the need for robust telecommunications infrastructure, particularly stronger internet penetration in provincial store locations, to prevent transaction timeouts and maintain consumer trust.

Adopter 1 described how their long-standing retail corporation embraced E-Wallets to keep pace with the digital habits of modern consumers. "We saw adoption rates surge from 20% to 60% in prime locations," they noted, underscoring how customer behavior shifted once convenience aligned with infrastructure. Yet, system integration with legacy POS platforms remained a hurdle. Accordingly, sustaining momentum requires stronger provincial internet penetration and customer education to normalize cashless habits. As Cruz (2020) argues, infrastructure readiness is decisive, while Villanueva (2023) highlights peer influence as a catalyst for adoption.

Adopter 2

Adopter 2 is a large regional company with more than six years of continuous operation in Tabaco City. The company is structured as a corporation, reflecting its formal governance and organizational scale. To modernize its payment systems and enhance customer convenience, the enterprise has adopted GCash and Maya as its primary e-wallet platforms.

The respondent oversees daily operations in a large retail enterprise, ensuring sales and profitability targets are met while maintaining operational efficiency. The company currently accepts cash, debit/credit cards, GCash, Maya, and online payments, reflecting a hybrid approach to customer transactions. The motivation for adopting e-wallets was rooted in efficiency for retailers and convenience for customers. By integrating cashless systems, the business aimed to streamline billing and reduce reliance on physical cash handling.

During implementation, the enterprise encountered network issues and low customer awareness about e-wallet usage, which slowed adoption. Despite these challenges, the shift to cashless payments has been well received by customers, who appreciate the faster and more seamless checkout process. Success is measured through customer satisfaction, faster billing, and reduced reliance on physical cash. Since adoption, the enterprise has observed a steady increase in cashless transactions, with projections that digital payments will account for 30% of total transactions within the next 3–5 years.

Looking forward, Adopter 2 emphasizes the need for stronger security measures, reliable network infrastructure, and sustained marketing campaigns from government and fintech partners to encourage regular use among both customers and retailers.

For Adopter 2, efficiency and convenience were the twin motivations. The operations manager explained that “customers appreciated faster billing and less reliance on cash,” though network instability and low awareness slowed adoption. Hence, awareness campaigns and stronger security measures are essential. Villanueva (2023) emphasizes that digital literacy gaps in provincial cities hinder adoption, making government-fintech collaboration vital.

Adopter 3

Adopter 3 is a large regional company that has been operating in Tabaco City for more than six years. The company is structured as a corporation, reflecting its formal governance and organizational capacity. To strengthen its digital transformation initiatives, the enterprise has adopted multiple e-wallet platforms, specifically GCash, Maya, and ShopeePay, to facilitate cashless transactions.

The respondent is a member of the management team responsible for treasury and finance functions, with three years of experience in the retail industry. Their role spans multi-store operations, cash management systems, and continuous process improvement initiatives. The company accepts a mix of traditional and digital payment channels, including cash, debit/credit cards, and major e-wallet platforms widely used in the Philippine retail market.

The motivation for adopting e-wallets was driven by changing customer preferences, the need for faster transaction processing, and reducing cash-handling risks. Digital payments were also seen as a way to improve convenience for both customers and store personnel.

Implementation challenges included system integration with POS platforms, ensuring stable internet connectivity across all locations, managing transaction fees, and training staff to confidently handle digital transactions. Despite these hurdles, the company observed a noticeable increase in cashless adoption, particularly among younger and urban customers. This shift contributed to smoother checkout experiences and, in some locations, incremental sales uplift due to faster transaction turnaround.

Success is measured through transaction mix analysis (cash vs. digital), reduction in cash variances, settlement timeliness, customer feedback, and operational efficiency indicators such as queue time and reconciliation turnaround.

Looking ahead, Adopter 3 expects digital payments to become a dominant mode of transaction, further integrated into loyalty programs, analytics, and financial reporting, while cash continues to decline in relevance.

To sustain this transformation, Adopter 3 emphasizes the need for clearer regulatory guidance, reliable digital infrastructure, lower transaction costs, enhanced cybersecurity, and structured training programs for businesses and employees.

The finance manager of Adopter 3 viewed e-wallets through the lens of treasury operations. “We saw fewer cash variances and faster reconciliation,” they shared, though transaction fees and POS integration remained pain points. With this, a clear regulatory guidance on transaction costs and structured staff training can reduce friction. Cruz (2020) identifies transaction costs as a hindrance, while Villanueva (2023) stresses training as a success factor.

Adopter 4

Adopter 4 is a large regional company that has been operating in Tabaco City for more than six years. The company is structured as a corporation, reflecting its formal governance and organizational scale. To strengthen its digital transformation initiatives, the enterprise has adopted multiple e-wallet platforms, specifically GCash, Maya, and ShopeePay, to facilitate cashless transactions.

The respondent has over 20 years of experience in the retail industry, serving in a role focused on governance, financial controls, and sustainability. Their responsibilities include promoting timely and accurate decision-making, maximizing profit, managing expenses, and ensuring effective audit and compliance systems are in place.

The company currently uses manual cash, online banking, debit/credit cards, and e-wallets, reflecting a diversified payment approach. The motivation for adopting e-wallets was driven by market share expansion, sales growth, operational efficiency, prevention of cash theft, and enhancing customer inclusivity and satisfaction.

Implementation challenges included complicated system alignment and occasional delays in payment settlement, sometimes taking more than two days. Despite these issues, the company observed positive changes in customer behavior: larger basket sizes, increased purchase frequency, stronger engagement from younger generations, and higher sales even outside traditional peak periods like weekends and payday.

Success is measured through transaction mix analysis, reduction in cash variances, settlement timeliness, customer feedback, and operational efficiency indicators such as queue time and reconciliation turnaround.

Looking ahead, Adopter 4 expects digital payments to drive higher sales volume, reduced cash theft, easier audits, stronger transaction trails, and improved customer satisfaction.

To sustain this transformation, Adopter 4 emphasizes the need for a growing e-wallet ecosystem that reduces reliance on cash transactions, supported by reliable infrastructure and continued fintech innovation.

With over 20 years in retail governance, Adopter 4’s respondent linked e-wallet adoption to sustainability and compliance. “We noticed larger basket sizes and stronger engagement from younger customers,” they explained, though settlement delays sometimes disrupted financial controls. Accordingly, digital trails strengthen audits, but settlement timeliness must improve. Villanueva (2023) highlights generational influence as a driver of fintech adoption.

Adopter 5

Adopter 5 is a large international company that has been operating in Tabaco City for more than six years. The company is structured as a corporation, reflecting its established governance and organizational scale. To advance its digital transformation initiatives, the enterprise has adopted multiple e-wallet platforms, specifically GCash, Maya, and ShopeePay, to facilitate cashless transactions.

The respondent has worked as a store pharmacist for 14 years, bringing a frontline perspective to retail operations and customer service. The business currently accepts cash, e-wallets, cards, QR Ph, and gift cards, reflecting a diverse payment ecosystem designed to meet customer preferences.

The motivation for adopting e-wallets was primarily customer convenience—making transactions easier and more accessible. However, implementation faced challenges, particularly slow or poor internet connectivity, which occasionally disrupted seamless payment processing.

Despite these issues, the company observed increased sales performance after adopting digital payments. Customers appreciated the convenience, and the system has proven to be a big help both to the company and its clientele. Success is measured informally through customer satisfaction and operational ease, with digital payments reducing friction in everyday transactions.

Looking ahead, Adopter 5 envisions digital payments becoming even more convenient and integral to purchasing behavior over the next 3–5 years. To sustain this transformation, the respondent emphasizes the need for reliable and consistent internet connectivity, which remains the critical enabler for smooth e-wallet adoption in retail settings.

The store pharmacist at Adopter 5 emphasized customer convenience: “Digital payments have been a big help to both us and our clientele.” Connectivity issues occasionally disrupted transactions, but overall sales performance improved. Consequently, reliable internet remains the critical enabler. Cruz (2020) underscores infrastructure gaps as barriers, consistent with this experience.

Adopter 6

Adopter 6 is a large international company that has been operating in Tabaco City for more than six years. The company is structured as a corporation, reflecting its established governance and organizational scale. To modernize its payment systems and enhance customer convenience, the enterprise has adopted GCash and Maya as its primary e-wallet platforms.

The respondent has served as a restaurant manager for 15 years, bringing extensive experience in retail operations and customer service. The business currently uses cash and online payments, with e-wallets integrated to meet evolving customer preferences.

The motivation for adopting e-wallets was convenience—making transactions faster and easier for both customers and staff. However, implementation was challenged by technical issues and unstable internet connections, which occasionally disrupted seamless payment processing.

Despite these hurdles, the company observed positive changes in customer behavior and sales performance following the adoption of digital payments. Customers increasingly embraced cashless options, contributing to smoother operations and improved satisfaction. Success is measured through monthly performance monitoring, tracking transaction volumes and operational efficiency.

Looking ahead, Adopter 6 expects digital payments to deliver faster transactions, cost savings in cash management and security, and stronger operational efficiency over the next 3–5 years.

To sustain this transformation, Adopter 6 emphasizes the importance of strong and reliable public internet connections, ideally free and widely available, to support consistent e-wallet adoption across retail and restaurant settings.

Adopter 6’s restaurant manager reflected: “Cashless options made operations smoother and customers happier,” though unstable internet connections often disrupted service. Henceforward, public investment in free, reliable internet could democratize adoption. Villanueva (2023) notes infrastructure reliability as a recurring hindrance in provincial fintech ecosystems.

Adopter 7

Adopter 7 is a large national company that has been operating in Tabaco City for more than six years. The company is organized as a corporation, reflecting its formal governance and established organizational scale. To strengthen its digital transformation initiatives, the enterprise has adopted GCash, Maya, and QRPh applications as part of its payment systems.

The respondent serves as the Store-In-Charge, responsible for ensuring the smooth flow of daily operations, managing stocks, and consolidating sales reports. The store accepts a wide range of payment methods, including cash, mobile and card payments, gift certificates, vouchers, and tap-to-pay cardless transactions, reflecting a comprehensive approach to customer convenience.

The motivation for adopting e-wallets was part of the company's broader innovation strategy, ensuring alignment with global technological trends and keeping pace with evolving consumer expectations.

Implementation challenges included the shift from traditional face-to-face training to virtual training sessions, which required adjustments in staff learning and adaptation. Despite this, the company observed positive changes in customer behavior, particularly in terms of convenience and smoother transaction experiences.

Success is measured primarily through transaction volume, which reflects the growing acceptance of digital payments among customers. Looking ahead, Adopter 7 anticipates that the future of digital payments will depend on the availability and competitiveness of mobile and digital wallet platforms in the market.

To sustain this transformation, Adopter 7 emphasizes the importance of security and fraud prevention measures from both government and fintech partners, ensuring trust and reliability in digital transactions.

For Adopter 7, e-wallets were part of a broader innovation strategy. The store-in-charge explained that virtual training posed challenges, but transaction volumes reflected growing acceptance. Although staff training must adapt to digital formats - a more creative visuals and engaging training will help improve the success trainings, as well as considering face-to-face or live trainings for critical transactions. Whereas fraud prevention remains critical. Cruz (2020) highlights organizational readiness as a success factor.

Adopter 8

Adopter 8 is a large international company that has been operating in Tabaco City for more than six years. The company is organized as a corporation, reflecting its established governance and organizational scale. To modernize its payment systems and improve customer convenience, the enterprise has adopted GCash as its primary e-wallet platform.

The respondent has served as an Officer-In-Charge (OIC) for 10 years, overseeing daily operations and ensuring smooth store performance. The business currently accepts cash and e-wallet payments, reflecting a hybrid approach to customer transactions.

The motivation for adopting e-wallets was primarily efficiency—digital payments save time by eliminating the need to handle cash and count change, thereby streamlining operations.

Implementation challenges centered on inconsistent internet access, which disrupted seamless payment processing and occasionally frustrated customers. Despite this, the company observed positive changes in customer behavior and sales performance, with digital payments contributing to smoother transactions and improved satisfaction.

Success is measured holistically, with the respondent noting that the system has been “completely” effective in supporting both company operations and customer convenience. Looking ahead, Adopter 8 expects digital payments to continue shaping businesses by making purchases more convenient for customers over next 3–5 years.

To sustain this transformation, Adopter 8 emphasizes the need for stronger security and fraud prevention measures from both government and fintech partners, ensuring trust and reliability in the growing e-wallet ecosystem.

The officer-in-charge described adoption as “completely effective,” despite inconsistent internet. Customers embraced the convenience, and efficiency gains were evident. Therefore, security and fraud prevention are essential to sustain trust. Villanueva (2023) stresses that consumer trust hinges on reliability.

Adopter 9

Adopter 9 is a large national company that has been operating in Tabaco City for more than six years. The company is organized as a corporation, reflecting its established governance and organizational scale. To modernize its payment systems and enhance customer convenience, the enterprise has adopted GCash and Maya as its primary e-wallet platforms.

The respondent has worked as a Retail Manager for almost 11 years, overseeing store operations and ensuring smooth customer transactions. The business currently accepts cash and non-cash payments, including GCash, PayMaya, and card transactions, reflecting a hybrid approach to meet diverse customer preferences.

The motivation for adopting e-wallets was simplicity and efficiency—digital payments reduce hassle for both customers and staff. However, implementation faced challenges with internet connectivity, which occasionally disrupted transaction flow.

Despite these issues, the company observed that customers could easily adapt to cashless systems, appreciating the convenience and reliability of digital payments. Success is measured through customer feedback and the practical benefits of digital devices, which have been recognized as helpful tools in daily operations.

Looking ahead, Adopter 9 expects digital payments to be a big help in the next 3–5 years, streamlining processes and reducing reliance on cash. Interestingly, unlike other adopters, Adopter 9 expressed no immediate need for government or fintech support, suggesting confidence in the current system's sustainability.

Adopter 9's retail manager emphasized simplicity: "Customers adapted easily, and we don't feel the need for government support." So, some firms achieve self-sustaining adoption, reflecting organizational maturity. Cruz (2020) notes readiness reduces dependence on external interventions.

Adopter 10

Adopter 10 is a large local enterprise that has been operating in Tabaco City for between one to three years. Despite being relatively new in the market, the company is structured as a corporation, reflecting its formal governance and organizational capacity. To modernize its payment systems and strengthen customer convenience, the enterprise has adopted GCash and Maya as its primary e-wallet platforms.

The respondent works as an Officer-In-Charge, responsible for preparing monthly purchases and expenses for BIR compliance and supporting day-to-day operational tasks. With one year of experience in the retail industry, their role provides a unique perspective on how digital payments intersect with compliance and operational efficiency.

The business currently uses cash and online payments, with e-wallets integrated to improve efficiency and convenience. The motivation for adoption was the ability to streamline processes, make transactions easier for customers, and ensure transactions are easily traceable for reporting and compliance purposes.

Implementation challenges included technical issues, customer unfamiliarity with e-wallets, and dependence on internet connectivity, which sometimes hindered smooth adoption. Despite these challenges, the company observed noticeable changes in customer behavior and sales performance, with digital payments offering faster and more convenient transactions.

Success is measured through transaction success rates and the increasing number of users, reflecting both operational reliability and customer acceptance. Looking ahead, Adopter 10 expects digital payments to make the business more efficient and attractive to customers, reinforcing convenience as a competitive advantage.

To sustain this transformation, Adopter 10 emphasizes the need for stable internet connections, stronger security measures, and lower service fees from government and fintech partners, ensuring both affordability and trust in the system.

The Officer-In-Charge highlighted compliance benefits: “Transactions are traceable for reporting and BIR compliance.” Technical issues and customer unfamiliarity slowed adoption, but efficiency gains were clear. This proves that lower service fees and stable internet are vital for SMEs. Villanueva (2023) identifies affordability as a barrier for small enterprises.

Adopter 11

Adopter 11 is a large national company that has been operating in Tabaco City for more than six years. The company is organized as a corporation, reflecting its established governance and organizational scale. To modernize its payment systems and enhance customer convenience, the enterprise has adopted GCash and Maya as its primary e-wallet platforms.

The respondent has worked as a Retail Manager for 10 years, overseeing store operations and ensuring smooth transaction flows. The business currently uses POS systems, online payments, and e-wallets, reflecting a diversified payment ecosystem designed to meet customer needs.

The motivation for adopting e-wallets was to enable fast and easy transactions while minimizing risks such as cash loss or cashier shortages. This strategic move aligned with both operational efficiency and customer convenience.

Implementation challenges included internet connectivity issues and data usage concerns, which occasionally disrupted transaction reliability. Despite these challenges, the company observed positive changes in customer behavior and sales performance, with digital payments contributing to smoother operations.

Success is measured through improvements in turn-around time, highlighting operational efficiency as a key performance indicator. Looking ahead, Adopter 11 sees digital payments as an ongoing transformation, expected to further streamline processes and reduce reliance on cash.

To sustain this momentum, Adopter 11 emphasizes the need for a unified system that integrates all payment platforms, simplifying operations and ensuring consistency across transactions.

Adopter 11’s retail manager explained: “Digital payments minimized risks like cash loss and cashier shortages.” Connectivity issues persisted, but turnaround time improved. This concludes that, unified systems integrating all platforms can simplify operations. Cruz (2020) emphasizes integration as a success factor.

Adopter 12

Adopter 12 is a medium local enterprise that has been operating in Tabaco City for between one to three years. Despite its relatively recent establishment, the company is organized as a corporation, reflecting its formal governance and structured operations. To modernize its payment systems and enhance customer convenience, the enterprise has adopted GCash, Maya, and Atome as its primary e-wallet platforms.

The respondent works as a Hotel Supervisor, with one year of experience in the retail and hospitality industry. Their role involves supervising daily transactions, managing staff, and overseeing stock operations. The hotel currently accepts cash, credit cards, Maya, QR Ph, and e-wallets, reflecting a diverse payment system designed to meet customer needs.

The motivation for adopting e-wallets was to enable convenient and faster transactions, improving efficiency for both customers and staff. However, implementation challenges included unstable internet connections and delays in processing refunds, which occasionally disrupted seamless operations.

Despite these challenges, the adoption of digital payments has led to positive changes in customer behavior, providing comfort and hassle-free transactions for both parties. Success is measured primarily in terms of sales performance, with digital payments contributing to smoother and more reliable operations.

Looking ahead, Adopter 12 expects digital payments to deliver more advanced and sustainable transactions over the next 3–5 years, further enhancing efficiency and customer satisfaction.

To sustain this transformation, they emphasize the need for faster and more stable internet connectivity, which remains the critical enabler for consistent e-wallet adoption in the hospitality sector.

The hotel supervisor noted: “Digital payments made transactions more comfortable and hassle-free.” Refund delays and unstable internet were challenges. This follows that, hospitality requires stable connectivity and efficient refund mechanisms. Villanueva (2023) highlights customer satisfaction as a key success metric.

Adopter 13

Adopter 13 is a large national company that has been operating in Tabaco City for more than six years. Unlike most large corporations, this business is structured as a sole proprietorship, reflecting a unique ownership model within its scale. To modernize its payment systems and enhance customer convenience, the enterprise has adopted GCash and Maya as its primary e-wallet platforms. The respondent refused to undergo the interview but willingly answered the survey questions.

Adopter 14

Adopter 14 is a small local enterprise that has been operating in Tabaco City for more than six years. The business is organized as a sole proprietorship, reflecting a streamlined ownership model typical of smaller enterprises. To modernize its payment systems and improve customer convenience, the enterprise has adopted GCash and Maya as its primary e-wallet platforms. The respondent refused to undergo the interview but willingly answered the survey questions.

Adopter 15

Adopter 15 is a small local enterprise that has been operating in Tabaco City for more than six years. The business is organized as a sole proprietorship, reflecting a streamlined ownership model typical of smaller enterprises. To modernize its payment systems and improve customer convenience, the enterprise has adopted GCash as its primary e-wallet platform.

The respondent is the owner of a micro-enterprise, with nine years of experience in retail operations. The business currently accepts cash and digital wallets (GCash), reflecting a simple yet effective payment system tailored to customer needs.

The motivation for adopting e-wallets was primarily customer convenience, ensuring faster and easier transactions. However, implementation challenges included technical issues and reliance on internet connectivity, which occasionally disrupted seamless operations.

Despite these hurdles, the owner observed clear changes in customer behavior and sales performance, noting that digital payments have been embraced positively. Success is measured with confidence—described as “100%” effective—indicating strong satisfaction with the system’s impact on both the business and its customers.

Looking ahead, Adopter 15 expects digital payments to boost sales further, as more people increasingly rely on e-wallets for everyday transactions. To sustain this transformation, the owner emphasizes the need for offline availability of e-wallet systems, ensuring reliability even in areas with unstable internet connectivity.”

Smaller enterprises adopted e-wallets mainly for customer convenience. One micro-enterprise owner described adoption as “100% effective,” though technical issues and reconciliation challenges remained. It may be considered that, offline availability of e-wallets could support micro-enterprises. Though, a clear regulations and reconciliation standards are vital. Cruz (2020) and Villanueva (2023) both highlight inclusivity and regulatory clarity as enablers of sustainable adoption.

Adopter 16

Adopter 16 is a large regional enterprise that has been operating in Tabaco City for more than six years. The company is organized as a corporation, reflecting its established governance and organizational scale. To strengthen its digital transformation initiatives and enhance customer convenience, the enterprise has adopted GCash, Maya, and QRPh as its primary e-wallet platforms.

The respondent worked as a supervisor for one year, overseeing daily operations and ensuring smooth transaction processes. The business currently uses e-wallet payments (GCash, Maya, QR Ph), reflecting a strong commitment to digital transformation in retail.

The motivation for adopting e-wallets was the need for fast and convenient transactions, reducing friction for both customers and staff. However, implementation challenges included payment reconciliation issues, which required careful monitoring to ensure accuracy and completeness of records.

Despite these challenges, the company observed positive changes in customer behavior and sales performance, with customers increasingly embracing cashless transactions. Success is measured when all payments are properly recognized and reconciled, underscoring the importance of financial accuracy and operational reliability.

Looking ahead, Adopter 16 expects digital payments to improve cash flow monitoring and reporting, as transactions are recorded automatically and in real time. This integration is seen as a key enabler of efficiency and transparency in financial management.

To sustain this transformation, Adopter 16 emphasizes the need for clear regulations and policies from government and fintech partners to ensure the security of digital transactions and protect both businesses and customers.

Adopter 16's experience highlights the dual nature of digital transformation: while adoption enhances efficiency and customer satisfaction, reconciliation and compliance remain critical. The case illustrates how corporate governance structures can support adoption, but also how policy clarity is essential to sustain trust in digital transactions. Thus, businesses must invest in reconciliation systems to ensure accuracy and compliance; clear government and fintech regulations are needed to safeguard digital transactions; real-time reporting and cash flow monitoring can strengthen competitiveness and transparency; and security and fraud prevention measures remain central to sustaining adoption. This aligns with Cruz (2020), who stressed that organizational readiness and integration are decisive success factors, and Villanueva (2023), who emphasizes the importance of regulatory clarity and consumer trust in provincial fintech ecosystems.

The cases of e-wallet adoption discussed motivations, challenges, and transformations across enterprises of varying sizes and governance structures. From large corporations with established governance systems to micro-enterprises run by sole proprietors, the narratives converge on a shared recognition: digital payments are no longer optional but essential for competitiveness, efficiency, and customer satisfaction.

Retail managers, supervisors, and owners consistently described adoption as a response to changing consumer behavior. One corporation noted that cashless transactions surged from 20% to 60% in prime locations, while a micro-enterprise owner confidently described e-wallets as *"100% effective"* in boosting convenience and sales. For larger enterprises, adoption was tied to strategic alignment with national digital transformation initiatives, ensuring competitiveness in a modernizing economy. Mid-sized and smaller businesses emphasized customer inclusivity, recognizing that E-Wallets allowed them to serve diverse clientele, including younger generations and those without access to traditional banking.

Despite enthusiasm, challenges were common. Managers spoke of unstable internet connections, system integration issues, and settlement delays that disrupted trust. Smaller enterprises highlighted transaction fees and digital literacy gaps as barriers to wider adoption. Yet, across cases, the benefits outweighed the hurdles: smoother operations, larger basket sizes, faster billing, and stronger customer satisfaction.

The collective experiences of adopters illustrate that e-wallet adoption is both a technological shift and a cultural transformation. Businesses that embraced governance, compliance, and structured training adapted more smoothly, while those with limited resources struggled with infrastructure and affordability. The narratives also highlight generational dynamics: younger customers were more willing to embrace cashless systems, while older demographics required education and reassurance. This interplay between consumer demand, organizational readiness, and technological reliability underscores the complexity of digital transformation in provincial contexts.

Cruz (2020) emphasizes that organizational readiness and integration are decisive success factors, while Villanueva (2023) points to infrastructure gaps and peer influence as critical in shaping adoption trajectories. These findings resonate strongly with the lived experiences of Tabaco City retailers.

With these, businesses must invest in reconciliation systems and compliance mechanisms to ensure accuracy; stable internet connectivity remains the most urgent enabler of sustained adoption; government and fintech partners must provide clear regulations, reduce transaction costs, and strengthen fraud prevention; awareness campaigns and security measures are essential to build confidence among hesitant users; SMEs and micro-enterprises require tailored support, including offline functionality and affordable transaction fees, to ensure equitable participation in digital ecosystems.

The synthesis of adopters' experiences reveals that e-wallet adoption in Tabaco City is not a uniform process but a layered transformation shaped by organizational scale, consumer behavior, and infrastructure realities. While challenges persist, the collective momentum points toward a future where cashless transactions become the norm. By embedding adoption within a framework of governance, technology, management, and customer trust, Tabaco City's retail sector can achieve resilience, inclusivity, and competitiveness in the evolving Philippine economy. The perspectives of the objectives are discussed on the following pages.

Motivations of the E-Wallet Payment Systems Adopters in the Tabaco City Retail Sector

The interview responses revealed four main motivations for adopting E-Wallets: Customer Convenience and Satisfaction (7 adopters), Operational Efficiency and Risk Management (4 adopters), Strategic Competitiveness and Innovation (2 adopters), and Market Expansion and Inclusivity (1 adopter). Two adopters did not provide responses.

Theme 1: Customer Convenience and Satisfaction

The dominant motivation across adopters is Customer Convenience and Satisfaction. Businesses recognize that modern consumers value speed, ease, and reduced friction in transactions. This reflects a consumer-driven push where businesses adopt e-wallets primarily to meet evolving customer expectations. The convenience with customers considering the ease of not bringing money anywhere, no bulky coins in pockets, no need to find ATMs to get cash and no related transaction fee.

"Efficiency for retailers and convenience for customers." – Adopter 2

"Easier, convenient to the customer." – Adopter 5

"Convenience" – Adopter 6

"Less hassle." – Adopter 9

"For convenient and faster transaction." – Adopter 12

"For the convenience of the customers" – Adopter 15

"Payment is fast and convenient." – Adopter 16

Thus, retailers are responding to a clear consumer demand. Customers want transactions that are quick, seamless, and free from the burdens of cash handling; convenience is central to marketing strategies; campaigns on speed and ease of use strengthen customer satisfaction and loyalty, especially among younger, digitally literate consumers.

Theme 2: Operational Efficiency and Risk Management

Four adopters pointed to efficiency and risk reduction. Businesses adopt e-wallets to streamline operations, reduce manual errors, and mitigate risks associated with cash handling – with emphasis on faster processing, reduced cashier errors, and minimized theft. Thus e-wallets are internal tools for streamlining operations and ensuring accountability.

“Changing customer preferences, faster transaction processing, reduce cash-handling risks.” – Adopter 3

“It saves time because it eliminates cash and counting change.” – Adopter 8

“Efficient and more convenient, easily track the transaction.” – Adopter 10

“Fast and easy transaction, minimize cash loss or cashier shortage.” – Adopter 11

Conversely, some still prefers to pay cash according to Adopter 12,

“Some prefers to pay cash to have smaller bills for payment to transportation, tricycles. Thus, it will help if the government will have a wholistic project that will cater the E-Wallet payment for mode of transportation – just like in other countries.”

Thus, e-wallets are not just customer experience-facing tools; they are internal transformation - mechanisms for efficiency and accountability. Respondents highlighted reduced cashier errors, minimized theft, and faster reconciliation. Also, retailers should invest in staff training and system integration to maximize efficiency gains. And as suggested by Adopter 12, policymakers can extend adoption to transportation and micro-vendors to ensure holistic operational efficiency across the local economy.

Theme 3: Strategic Competitiveness & Innovation

Most establishments are using GCash and Maya, there are some that accepts ShopeePay, and there are others that terms it as QR PH. This is in alignment with RA 11127, National Payment Systems Act. Two adopters framed adoption as a strategic necessity:

“Our transition was driven by the strategic need to adopt to the rapid digital transformation of the Philippine economy. We recognize that staying competitive requires aligning with the technological habits of the modern consumer.” – Adopter 1

“This is part of the company’s innovation and to be updated to global and technological trend.” – Adopter 7

Adoption of QR Ph interoperability standards further aligns with the National Payment Systems Act (RA 11127). Thus, for some retailers, adoption is not optional but a strategic imperative to remain competitive in a digitizing economy.

Theme 4: Market Expansion & Inclusivity

A smaller but significant group connects digital payment E-Wallet adoption to growth, inclusivity, and expanded customer reach – boosting revenue. One adopter linked adoption to inclusivity and expanded reach:

“Market share, sales increase, operational efficiency, no losses thru cash theft, customer inclusivity and satisfaction” – Adopter 4

Interview result revealed that 89% of Gen Z and Millennial customers prefer e-wallets, underscoring inclusivity and market expansion. Thus, e-wallets broaden participation, particularly among younger, tech-savvy consumers and unbanked populations.

These interview findings are reinforced by the survey result that customer demand (fifteen out of 16) and operational efficiency (fourteen out of 16) were the most cited factors across entities, security (eight out of 16) and marketing incentives (seven out of 16) were highlighted, and peer influence (two out of 16) reflected how competitive pressure shaped adoption decisions.

The triangulation of interviews, survey data, and literature highlights that customer convenience is the dominant motivation. Businesses recognize that modern consumers value speed, ease, and reduced friction in transactions. This aligns with Singh and Srivastava (2020) and Flavián et al. (2020), who found that mobile wallets enhance loyalty by reducing transaction friction. Locally, Villanueva (2023) observed that provincial consumers increasingly value QR-based payments for their simplicity.

Operational efficiency and risk management were also evident in both interviews and surveys. Entities such as R2 and Adopter 3 emphasized faster processing and reduced cash-handling risks. This supports Ramli and Hamzah's (2021) findings that streamlined payment flows improve accountability, and Cruz (2020), who stressed the importance of aligning digital initiatives with operational goals.

Strategic competitiveness and innovation were highlighted by adopters who viewed e-wallets as part of modernization agendas. This resonates with Dieffenbacher (2024) and Agustian et al. (2023), who argue that digital transformation is essential for competitiveness, and aligns with the National Payment Systems Act (RA 11127).

Finally, inclusivity and market expansion were reflected in both interviews and survey data. Adopter 4 emphasized inclusivity, while survey results showed that younger consumers (Gen Z and Millennials, comprising 89% of respondents) overwhelmingly preferred e-wallets. This aligns with Reyes (2022), who noted that incentives accelerate diffusion, and Pelaez et al. (2024), who emphasized digital transformation's role in promoting social inclusion.

With this, retailers should prioritize convenience and efficiency in their adoption strategies, ensuring seamless integration into customer experiences; government and fintech providers must address infrastructure gaps and extend adoption to transportation and micro-vendors, promoting equitable digital transformation; policy frameworks should emphasize innovation and competitiveness, aligning local adoption with national digital transformation economy; and inclusivity strategies are essential, ensuring that platforms remain accessible to younger, tech-savvy consumers and unbanked populations.

Perceived Effects Of E-Wallet System Adoption on Business Performance, Specifically in Terms of Sales Volume, Operational Efficiency, and Customer Satisfaction

The interview questionnaire, "Have you observed changes in customer behavior or sales performance since adopting digital payment?", the comments of seven respondents considering two themes were both separately reflected. Eight Adopters recognized effects of increased sales, two observed the improved operational efficiency, while eleven noticed the improved customer satisfaction. Two Adopters did not respond in the interview question, but participated in the survey questions. Cited comments by Adopters are on the next pages.

Theme 1: Increased Sales Volume

Eight adopters recognized that e-wallets contributed to higher transaction volumes, larger basket sizes, and more frequent purchases, particularly among Millennials and Gen Z customers - four out of sixteen answered "yes", while four other responses are noted below:

"Definitive shift in consumer behavior. The convenience of digital payments ... and higher transaction values" – Adopter 1

"Increase in customer adoption, ... incremental sales uplift."- Adopter 3

"Increase in basket size, frequency of purchase, more younger generations buying." – Adopter 4

"Yes, increased sales performance." – Adopter 5

Thus, e-wallet adoption directly stimulates sales growth by expanding both transaction frequency and value. Younger consumers, who dominate digital payment usage, are reshaping retail dynamics in Tabaco City. Together with this, retailers should leverage transaction data to refine marketing strategies, target younger demographics, and optimize inventory management.

Theme 2: Improved Operational Efficiency

For the interview questions, two adopters emphasized efficiency gains. Respondents highlighted smoother checkout, reduced cash handling, and minimized cashier errors:

“Definitive shift in consumer behavior. The convenience of digital payments has streamlined the checkout process and higher transaction values” – Adopter 1
“Yes, it gives comfort and hassle-free transaction for both parties.” – Adopter 12

Most businesses reported tracking digital payments separately from cash, enhancing accountability and transparency. Thus, e-wallets are not only customer-facing tools but also internal mechanisms for efficiency. Tracking digital payments independently signals a shift toward data-driven management.

Theme 3: Improved Customer Satisfaction

Eleven adopters observed improved customer satisfaction, citing faster service, convenience, and seamless payment experiences. Five out of sixteen Adopters responded “yes”, while other six Adopters has below comments:

“Payment process is faster appreciated by customers.” – Adopter 2.
“Increase in customer adoption, smoother checkout....” - Adopter 3.
“Yes, in terms of convenience.” – Adopter 7.
“They can easily adopt” – Adopter 9
“Yes, adopting digital payments led to noticeable changes because they are faster and more convenient.” – Adopter 10.
“Yes, it gives comfort and hassle-free transaction for both parties.” – Adopter 12.

Thus, customers value the comfort and ease provided by digital payments, which enhances loyalty and repeat usage. Adoption is not merely a technological upgrade but a customer-centric strategy.

The findings align with customer survey results from 128 respondents (Table 1). I am very much satisfied with the services of e-wallets ($\bar{x} = 4.0$), I frequently use E-Wallets monthly ($\bar{x} = 3.9$), and I recommend E-Wallet to my friends and family ($\bar{x} = 4.1$) as “Agree.” Overall customer engagement scored 4.0, confirming that e-wallet adoption enhances satisfaction, frequency, and advocacy.

Table 1. *Customer Engagement in Relation to e-Wallet Adoption*

Customer Engagement Factors	\bar{x}	Adjectival Rating
I am very much satisfied with the services of E-Wallets.	4.0	Agree
I frequently use E-Wallets monthly	3.9	Agree
I recommend E-Wallet to my friends and family	4.1	Agree
Overall Customer Engagement	4.0	Agree

Legend: 1.00-1.50 Strongly Disagree; 1.51-2.50 Disagree; 2.51-3.50 Moderately Agree; 3.51-4.50 Agree; 4.51-5.00 Strongly Agree

These interview findings are strengthened by the survey result that sixteen of sixteen adopters responded that their sales increased, underscoring the universal recognition of sales growth as a direct effect of e-wallet adoption; fifteen of sixteen adopters reported improved operational efficiency, with Adopter 8

not responding to this survey item; and fifteen of sixteen adopters reported improved customer satisfaction, with Adopter 8 not responding to this survey item.

The triangulated findings confirm that e-wallet adoption in Tabaco City's retail sector leads to measurable improvements in business performance: Sales growth reflects consumer behavior shifts toward digital payments, consistent with global studies showing that mobile wallets encourage repeat purchases and impulse buying through convenience and integrated promotions (Singh & Srivastava, 2020; Flavián et al., 2020).

Operational efficiency demonstrates internal transformation, aligning with organizational readiness frameworks. Streamlined payment flows reduce operational barriers and improve accountability (Cruz, 2020; Ramli & Hamzah, 2021).

Customer satisfaction highlights the customer-centric nature of adoption, echoing findings that digital wallets reshape engagement by offering seamless experiences (Saluja & Malik, 2024; Villanueva, 2023).

With this, retailers should harness transaction data to refine marketing strategies, target younger demographics, and optimize inventory management; E-wallets must be integrated into financial oversight systems to strengthen transparency and accountability; customer satisfaction should be emphasized in adoption strategies, with loyalty programs and personalized promotions built around digital payments; and policymakers can promote awareness campaigns and digital literacy programs to normalize e-wallet use, while fintech providers should continue designing user-friendly platforms that prioritize convenience.

Factors that contributed to the e-Wallet payment adoption - Success Factors.

On the interview question, "How do you measure the success of your payment system?", the responses were systematically categorized and coded according to the following themes: Competitive advantage and Market Adoption – with six comments from respondents; Operational Efficiency – with three comments, Sustainability, Governance and Security – with two comments, and Customer-Centricity and Experience – with three comments. One adopter answered completely, while one answered 100%. While responses of Adopters 4 & 5 were considered in two thematics. Two adopters did not respond in the interview question, but participated in the survey questions. Responses are below.

Theme 1: Competitive Advantage and Market Adoption

Retailers often measured success by how quickly customers embraced e-wallets and how this translated into revenue growth. Others pointed to sales volume and transaction monitoring as indicators of success. Six comments from Adopters proved this:

Success is measured through adoption rates. In our prime location, cashless transactions surged from 20% to 60%. Across the entire company, we have seen a consolidated increase from 15% to 25% as of early 2026, indicating a strong upward trajectory for digital finance. – Adopter 1

"Increase in sales volume, ..." – Adopter 4

"Thru monitoring of monthly performance." – Adopter 6

"Transaction volume." – Adopter 7

"Success measured by transaction success rate and increase in number of users." – Adopter 10

"In terms of sales" – Adopter 12

Thus, success here is about survival and growth, where retailers see e-wallets as a way to keep pace with consumer habits and secure their place in a changing marketplace.

Theme 2: Operational Efficiency

Other businesses see success in terms of smooth operations and fewer errors at the till. Adopters measured success through settlement time, reduced variances and processing turn-around time. Three Adopters mentions

“Transaction mix analysis, reduction in cash variances, settlement timeliness, operational efficiency. – Adopter 3

“Big help to the company as well as to the customer” – Adopter 5.

“Improved turnaround time.” – Adopter 11

This reflects how efficiency gains are central to organizational success. Thus, success is felt in the day-to-day rhythm of business—fewer errors, faster reconciliation, and less time wasted on cash handling.

Theme 3: Sustainability, Governance, and Security

Respondents also stressed accountability and reduced risks, pointing to governance, policy, and regulatory clarity as enabling conditions. Success is also about embedding digital payments into pointing to reduced cash theft, improved audit trails, and accurate reconciliation, ensuring accountability and long-term sustainability. Two Adopters pointed these in their notes below:

“...lesser cash theft, ease in cash audit and control, audit trail in transactions.” – Adopter 4.

“When all the payments are recognized and reconciled.” – Adopter 16

Thus, success is about building systems that are accountable and sustainable for the long term. Thus, policymakers must provide enabling governance and regulatory clarity, while fintech providers must deliver secure, reliable systems that minimize risks.

Theme 4: Customer-Centricity and Experience

Finally, adopters reminded us that success is validated by the customer satisfaction. Below are the three customer’s feedbacks based on business perspective:

“Customer satisfaction, faster billing, no physical cash to be carried.” – Adopter 2

“Big help to the company as well as to the customer” – Adopter 5

“They appreciate the help of the device.” – Adopter 9

On perspective of customers, 128 respondents rated e-wallets as follows:

Table 2. *Customer Survey Result: Success Factors using E-Wallet*

Success Factors Using E-Wallet	\bar{x}	Adjectival Rating
E-Wallets are easy to use	4.3	Agree
E-Wallets are useful	4.3	Agree
E-Wallet’s Discounts and Loyalty Rewards are worth considering.	4.0	Agree
E-wallet’s platform security measures are trustworthy.	3.7	Agree
Peer Influence impacts the use of E-Wallets.	3.9	Agree
Overall Success Factors	4.0	Agree

Legend: 1.00-1.50 Strongly Disagree; 1.51-2.50 Disagree; 2.51-3.50 Moderately Agree; 3.51-4.50 Agree; 4.51-5.00 Strongly Agree

Easy to use ($\bar{x} = 4.3$), e-wallets are useful ($\bar{x} = 4.3$), E-Wallet's Discounts and Loyalty Rewards are worth considering ($\bar{x} = 4.0$), E-wallet's platform security measures are trustworthy ($\bar{x} = 3.7$), and Peer Influence impacts the use of e-wallets ($\bar{x} = 3.9$) also contributed positively. Overall, customers rating of 4.0 "Agree" See on Table 2.

Thus, e-wallets are successful tools, validating adoption outcomes through user experience. And success is felt when customers smile at faster service, appreciate the convenience, and come back again. The success factors align with the survey rating on the extent of agreement or disagreement of adopters on the following factors: investment, infrastructure, governance, policy, competition, digital disruption, security, socio-economic factors, employee training, regulatory, customer behavior, all highly (4.1-4.5), interpreted as "the respondents agree" indicating pronounced consensus. Note that there is no added success factor by the respondents.

Success is achieved when these converge, ensuring competitiveness, efficiency, and customer trust. Literature supports this: Cruz (2020) emphasized strategic alignment of digital initiatives with retail objectives; while Agustian et al. (2023) highlighted that adoption is a strategic necessity in a digitizing economy; Ramli and Hamzah (2021) found that streamlined payment flows reduce errors and improve oversight. Baltazar et al., (2025) observed that QR-based workflows outperform complex POS systems in provincial settings, enhancing efficiency; Flavián et al. (2020) noted that trust and perceived safety are critical in digital payment adoption; Villanueva (2023) also underscored that secure infrastructures are essential for sustaining customer confidence in fintech platforms; Almashalah & Osses (2020) underscored governance clarity and strategic alignment as prerequisites for sustainable digital transformation. Reyes (2022) and Saluja & Malik (2024) emphasized customer engagement and incentives.

The triangulation of adopter interviews, survey ratings, and literature confirms that success in e-wallet adoption is multi-layered. It requires: Organizational readiness (investment, governance, accountability); Technological reliability (security, efficiency, adaptability); Managerial oversight (monitoring, training, compliance); and Customer validation (satisfaction, convenience, loyalty). With this, e-wallet Adoption succeeds when these factors converge. Without organizational structures, secure technology, managerial accountability, and consumer trust, success risks being fragmented.

Factors that contributed to the e-Wallet payment adoption - Hindering Factors.

The interview comments on the question of "What challenges have you faced during implementation?" resulted to: ten comments on network connectivity issues; three considered system integration; two candidly opened the concern on training; four in governance; and two in customer familiarity. Some respondents' quotes were considered in several themes. One respondent has non-response.

Theme 1: Network Connectivity Issues

Internet connectivity problems were the most frequently cited barrier. Adopters spoke of unstable internet and technical disruptions that slowed transactions. Ten adopters mentioned this in their responses.

"Network issue and low awareness in customers. ...ensuring stable internet connectivity in all locations,"
– Adopter 2.

"...ensuring stable internet connectivity in all locations..." – Adopter 3

"Slow to poor internet connection." – Adopter 5.

"Technical issues, connection." – Adopter 6.

"Inconsistent internet access." – Adopter 8.

"Internet Connection" – Adopter 9,

"We encountered technical issue...and dependence on the internet." – Adopter 10.

"Internet Connection and data usage" – Adopter 11.

“Internet Connection” – Adopter 12

“Sometimes technical issues...and reliance on the internet.” – Adopter 15

Thus, even when businesses are ready, fragile infrastructure undermines trust and efficiency. With this, policymakers must prioritize digital infrastructure development, especially in underserved areas, while technology providers should invest in upgrading connectivity and minimizing system errors.

Theme 2: System Integration

Adopters’ challenges reported challenges in integrating E-Wallet systems with existing Point of Sale (POS) platforms. Three considered this as barriers:

“The primary hurdles involved complex system integration (aligning digital payments with our existing POS systems) ...” – Adopter 1.

“Key challenges included system integration with existing POS platforms,” – Adopter 3.

“Complicated System Alignment. And there are times that the payment settlement takes more than two days” – Adopter 4.

These organizational hurdles reveal gaps in structural readiness. Thus, integration create financial strain and operational inefficiency, discouraging smaller retailers. Hereafter, businesses must invest in integration solutions.

Theme 3: Training

Leadership and investment in human capital are essential for smooth adoption to ensure staff capability, establish accountability mechanisms, and align operations with external requirements. While two adopters have these candid comments on training:

“...and training staff to confidently handle digital payment transactions” – Adopter 3

“Staff training virtual rather than face-to-face.” – Adopter 7

Limitations particularly reliance on virtual methods rather than face-to-face methods were noted as barriers. Thus, without capable staff and strong managerial oversight, digital payment systems cannot be fully optimized.

Theme 4: Governance

This concerns included fees, refund delays and reconciliation difficulties. Four Adopters pointed to refund delays and reconciliation difficulties as follows:

“...Managing transaction fees.” – Adopter 3.

““there are times that it takes more than two days to receive the payment settlement.” – Adopter 4

“it takes too long to process refund” – Adopter 12.

“Reconciliation of the payments.” – Adopter 16.

Thus, weak governance structures undermine accountability and erode trust in digital payments.

Theme 5: Customer Familiarity

Some adopters noted that customers were not yet fully comfortable with e-wallets. This was cited by two adopters:

“... and managing the learning curve of our customer base as they transitioned away from traditional cash-heavy habits.” – Adopter 1.

“Not all customer is familiar with e-wallet, ...” – Adopter 10.

The study shows that customer acceptance is the ultimate validation of adoption outcomes. Without consumer education and trust, even well-integrated systems may fail to gain traction. In alignment with customer perspective, Table 3 on next page, discussed the more detailed perspective of customers with regards to hindrances on E-Wallet adoption based on survey with 128 customers.

Table 3. *Customers’ Hindering Factors or Challenges using E-Wallet*

Hindering Factors or Challenges using E-Wallet	\bar{x}	Adjectival Rating
Poor internet connection	3.8	Agree
Difficulty to use	2.5	Disagree
Security concerns	3.3	Moderately Agree
High transaction fees	3.1	Moderately Agree
Rampant fraud and errors	3.3	Moderately Agree
Overall	3.2	Moderately Agree

Legend: 1.00-1.50 Strongly Disagree; 1.51-2.50 Disagree; 2.51-3.50 Moderately Agree; 3.51-4.50 Agree; 4.51-5.00 Strongly Agree

Customer survey data confirmed these barriers: poor internet connection ($\bar{x} = 3.8$, Agree), security concerns ($\bar{x} = 3.3$, Moderately Agree), high transaction fees ($\bar{x} = 3.1$, Moderately Agree), and rampant fraud/errors ($\bar{x} = 3.3$, Moderately Agree). Overall, customers rated hindering factors at 3.2 (“Moderately Agree”), showing that challenges are significant but manageable. Difficulty to use had an adjectival rating of “Disagree” – thus, the e-wallet system is not difficult to use.

Accordingly, customer acceptance is the ultimate validation of adoption outcomes. The interview relates with the survey with the following results: Internet reliability - fourteen out of 16; System Error - twelve out of 16; Security Measures – eleven out of 16; Transaction Fees – eleven out of 16; Customer Familiarity – eleven out of 16; Staff Training – nine out of 16.

These hindering factors are interconnected: poor infrastructure undermines efficiency, integration challenges create financial strain, weak training limits staff capability, governance gaps erode trust, and customer unfamiliarity slows adoption. Villanueva (2023) observed that provincial adoption is slowed by intermittent connectivity, while Baltazar et al. (2025) noted that QR-based workflows thrive in low-infrastructure settings but broader adoption requires stable networks; Torres (2020) found that small retailers struggle with hardware structures, limiting adoption; while Reyes (2022) emphasized that simplified workflows are essential to overcome these barriers; Reyes (2022) stressed that merchant support and training are critical for adoption diffusion; also, Cruz (2020) emphasized that organizational readiness must include staff capability and accountability; also Torres (2020) found small retailers struggle with system costs; Baltazar et al. (2025) noted QR workflows thrive in low-infrastructure settings but require stable networks; Bacamante & Campos (2024) emphasized safeguards and dispute resolution mechanisms. The triangulation of adopter responses, customer surveys, and RRL confirms that hindering factors are interconnected. Poor infrastructure worsens system errors, high fees discourage adoption, weak training limits staff capability, governance gaps undermine accountability, and customer unfamiliarity slows acceptance. Therefore, Adoption success depends on addressing these barriers holistically.

To resolve, retailers must strengthen governance, invest in staff training, and integrate digital payments into reconciliation systems; policymakers should prioritize infrastructure development, regulate transaction fees, and provide clear governance frameworks; fintech providers must deliver secure, reliable systems, simplify integration, and enhance user experience through intuitive design and loyalty programs; and customer education and awareness campaigns are essential to build trust and normalize adoption.

Proposed Strategic Framework for Effective Cashless E-Wallet Payment Adoption and Long-Term Digital Transformation Initiatives

This framework was developed through integrative analysis combining qualitative themes and quantitative findings. This study integrated the critical dimensions influencing e-wallet adoption in the retail sector.

The framework is built around four interconnected pillars, each addressing key learnings from adopter experiences, performance outcomes, and implementation challenges.

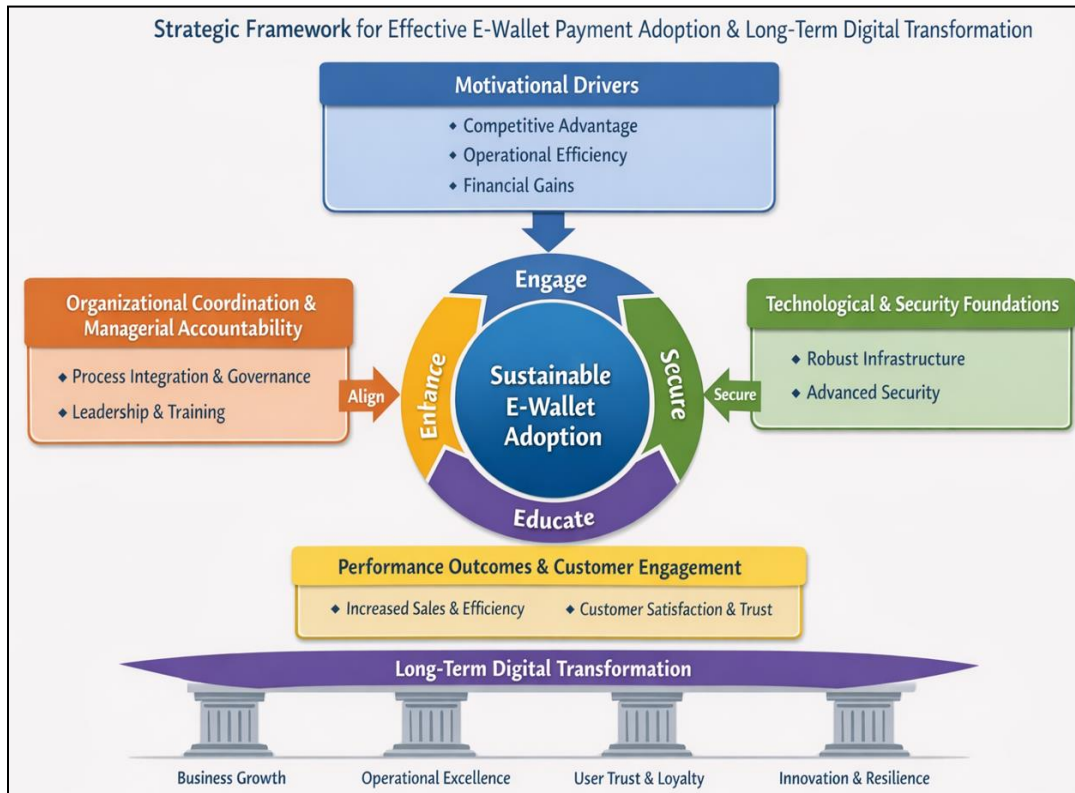


Figure 4. *Strategic Framework for Effective e-Wallet Payment Adoption and Long-Term Digital Transformation*

Adopt a phased, stakeholder-aligned roadmap: (1) Engage — run customer awareness and merchant onboarding campaigns; (2) Enable — secure interoperable, low-cost payment solutions and improve connectivity; (3) Enhance — invest in POS integration, reconciliation tools, and security controls; (4) Educate — implement ongoing, practical training and inclusion initiatives. Establish a local coordination mechanism (public-private working group) to monitor progress, resolve systemic issues, and scale successful pilots across Tabaco City.

Motivational Drivers

As Competitive Advantage, businesses adopt e-wallet to stay ahead in a rapidly digitizing market. Digital payments have become a catalyst for financial inclusion and operational efficiency, especially during the pandemic” (Bangko Sentral ng Pilipinas, 2023). Operational Efficiency, works on faster billing, reduced cash handling, and streamlined reconciliation. Financial Gains, talks about business performance in relation to increased sales and reduced theft risks

Organizational Coordination and Managerial Accountability

Organizational Coordination and Managerial Accountability success enablers confirmed with the study are investment, infrastructure, governance, policy alignment, and leadership. “System integration and staff training are critical for micro-enterprises to fully benefit from e-wallet adoption” (IEOM, 2025). On the other hand, hindrances are POS integration issues, transaction fees, reconciliation delays, and training gaps. With this, businesses must restructure workflows, allocate responsibilities, and invest in staff development. Policymakers should regulate transaction fees and support SME onboarding

Technological Alignments & Security Controls

Technological Alignments & Security Controls success enablers are reliable infrastructure, secure platforms, and fast transaction processing. Whereas hindrances identified are internet instability, system errors, and security concerns. “Stable internet and robust security measures are essential for building trust in digital wallets” (FasterCapital, 2025). To work on the challenges, technology providers must enhance infrastructure and security. Government investment in digital connectivity is vital, especially in regional areas like Tabaco

Customer Feedback & Performance Outcomes

Customer Feedback & Performance Outcomes success enablers are Customer satisfaction, convenience, and loyalty. While hindrances recognized are unfamiliarity with E-Wallets and low digital literacy. With these, businesses and local government units must launch awareness campaigns and provide user-friendly interfaces. Customer trust is the ultimate validation of adoption success. This framework shows that e-wallet adoption is a strategic convergence of motivation, readiness, reliability, leadership, and customer engagement. Each dimension must be strengthened while barriers are systematically addressed.

Long-Term Implications for Tabaco City

Long-Term Implications for Tabaco City are composed of four pillars namely: Business Growth which is achieved through increased sales and digital competitiveness; Operational Excellence to be realized with streamlined processes and reduced cash handling; User Trust & Loyalty that is built through secure, convenient experiences; and Innovation & Resilience that is enabled by digital infrastructure and dynamic-adaptive leadership.

The triangulated findings confirm that effective e-wallet adoption requires a strategic convergence of motivation, readiness, reliability, leadership, and customer engagement. Motivational drivers emphasize competitiveness and efficiency (Bangko Sentral ng Pilipinas, 2023). Organizational readiness and accountability highlight governance and training (IEOM, 2025). Technological reliability underscores infrastructure and security (FasterCapital, 2025). Customer validation emphasizes satisfaction and trust as ultimate measures of success.

Consecutively, retailers must restructure workflows, invest in staff training, and integrate reconciliation systems; policymakers should regulate transaction fees, strengthen governance, and invest in digital infrastructure; technology providers must deliver secure, interoperable platforms and improve connectivity; and Local government and businesses should run awareness campaigns and prioritize customer education to normalize adoption.

This framework positions Tabaco City to transition from hybrid systems to predominantly cashless ecosystems within 3–5 years, ensuring competitiveness, inclusivity, and resilience in the evolving Philippine economy.

DISCUSSIONS

This Study aims to promote e-wallet adoption to retailers specially in Tabaco City and other provinces by providing Strategic guide in adoption focused on assessments of impacts on business performance and sustainability. The results provide significant insights among retail businesses that e-wallet integration is not merely a technological upgrade but represents a broader shift toward digital business transformation. Retailers increasingly recognize e-wallet digital payment systems as tools that enhance operational efficiency, improve customer experience, and strengthen competitive positioning in a rapidly digitalizing marketplace. These findings highlight the strategic importance of digital payment technologies as enablers of financial inclusion and modern retail operations in provincial economies.

Adopters in Tabaco City were motivated by competitive advantage, operational efficiency, and financial gains. They emphasized faster billing, reduced cash handling, and increased sales volume as key drivers. As the Bangko Sentral ng Pilipinas (BSP) noted, *“Consumers experienced the convenience and ease of using digital payments, while many merchants also quickly shifted to online platforms to make their operations more efficient”* (BSP, 2023).

Adopters reported measurable improvements in Sales Volume, reduced risks of theft, and streamlined reconciliation processes. Operational Efficiency was enhanced through faster billing and reduced queue times. Customer Satisfaction increased due to convenience and reduced need for physical cash. This aligns with FasterCapital’s observation that,

“Stable internet and robust security measures are essential for building trust in digital wallets” (FasterCapital, 2025), which directly impacts customer satisfaction and loyalty.

Success and Hindering factors are multidimensional that has to related to each other. e-Wallet adoption success factors are: Organizational Coordination which includes Investment, infrastructure, governance, policy alignment; Technological Alignment are Security, reliability, flexibility to disruption; Managerial Accountability involves Training, and Compliance Monitoring; and Customer Feedback comprised of Satisfaction, convenience, loyalty.

“System integration and staff training are critical for micro-enterprises to fully benefit from e-wallet adoption” (IEOM Society, 2025)

Hindering Factors are: Organizational, relating to POS integration issues, reconciliation challenges, transaction fees; Technological, which are internet instability, system errors, security gaps; Managerial, specifically training limitations, compliance oversight; and Customer, like unfamiliarity of E-Wallet transactions, awareness gaps.

The strategic framework integrates motivational drivers, organizational readiness, technological reliability, managerial accountability, and customer feedback. It positions E-Wallet adoption as a multidimensional process leading to long-term digital transformation.

As the Development Academy of the Philippines emphasized, *“Digital transformation requires not only technology but also organizational change and citizen engagement”*, (Development Academy of the Philippines, 2025).

CONCLUSION

Motivational drivers are both consumer-driven and strategically aligned with modernization agendas. While convenience dominates, efficiency and competitiveness are equally critical for sustainability. This study supported the principles of the Technology Acceptance Model by Fred Davis in 1989 and by the Unified Theory of Acceptance and Use of Technology, (Venkatesh, Morris, Davis, & Davis, 2003), which is a model designed to explain user intentions and behavior in adopting new technology.

Adoption motivations are predominantly customer-driven: retailers adopt E-Wallets mainly to deliver convenience and improve customer satisfaction. Secondary motivations include operational efficiency and risk reduction, strategic competitiveness, and market expansion. Inclusivity, though less cited, represents a long-term opportunity for equitable digital transformation.

e-Wallet Adoption positively influences business performance, but the magnitude of benefits depends on overcoming technological and organizational barriers. E-wallet adoption yields measurable performance benefits—faster transactions, improved reconciliation, reduced cash loss, and higher customer satisfaction—yet the magnitude of gains varies by infrastructure reliability and managerial readiness. Sales uplifts occur where technology and internal processes are aligned; where they are not, benefits remain limited.

Adoption depends on a socio-technical alignment: success factors include investment in infrastructure, interoperable standards, staff training, and customer acceptance; hindering factors include unreliable internet, POS integration problems, transaction fees, system errors, and low digital literacy among some customer segments. These enablers and barriers interact—technological fragility and managerial gaps often negate organizational investments.

Success in e-wallet adoption is both operational and relational. It depends on embedding digital payments into organizational routines, ensuring secure and efficient systems, sustaining managerial accountability, and validating outcomes through customer satisfaction. This positions the sector for sustainable digital transformation, consistent with the frameworks highlighted by Cruz (2020), Ramli & Hamzah (2021), Flavián et al. (2020), Villanueva (2023), Almashalah & Osses (2020), and Reyes (2022). Everything works in an interconnected ecosystem for a successful E-Wallet adoption.

e-Wallet adoption is both an opportunity and a challenge. Success requires coordinated strategies across stakeholders, while hindrances demand targeted interventions. Addressing these barriers positions the sector for sustainable digital transformation, consistent with the insights of Villanueva (2023), Torres (2020), Reyes (2022), Flavián et al. (2020), and Bacamante & Campos (2024). Internet reliability is the most critical constraint, and security concerns. Though retailers and consumers demonstrate a growing willingness to embrace digital payment technologies, the sustainability of adoption depends largely on technological readiness at the national or regional level.

A viable strategic framework must integrate motivation (demand), organizational readiness, technological reliability, managerial accountability, and customer engagement. Sustainable digital transformation is achieved when these dimensions are aligned and supported by policy measures (infrastructure, interoperability, cost mitigation) and continuous monitoring.

Recommendations

Businesses should leverage these motivations by aligning adoption strategies with competitive positioning and by investing in awareness campaigns to sustain customer engagement. Businesses should foreground customer convenience in service design and communications, making cashless options visible and simple at point of sale. Complement marketing with brief, practical staff scripts so frontline employees can guide customers through transactions. Local government and industry partners should fund targeted awareness campaigns that highlight convenience and consumer protections to accelerate demand.

Businesses must leverage transaction data, integrate digital systems, and prioritize customer convenience; policymakers must address infrastructure gaps, promote inclusive adoption, and strengthen

consumer protection; fintech providers should design secure, user-friendly platforms and support merchants with incentives and reconciliation tools. track simple performance indicators (transaction speed, reconciliation accuracy, sales trends, customer satisfaction) to quantify benefits and identify bottlenecks. Invest incrementally in POS integration and reconciliation tools to convert convenience into operational gains. Managers should run short pilot tests when introducing new features to measure impact before scaling.

Adopt a dual strategy: strengthen enablers and mitigate barriers.

Recommendations on the success factors shows that E-Wallet adoption is an ecosystem interaction: Organizational Coordination and Responsibility, Technological Alignments & Security Controls, Managerial Accountability, and Customer Feedback.

Infrastructure, governance, training, and customer education must converge to sustain adoption. Practically, this means (a) negotiating merchant-friendly pricing or SME packages with providers; (b) adopting interoperable QR and reporting standards; (c) implementing routine, hands-on staff training and simple accountability protocols; and (d) coordinating with local authorities and ISPs to improve connectivity in commercial zones. Design inclusion programs for older adults, transport users, and informal vendors to broaden uptake.

The following are recommendations for stakeholders of E-Wallet adoption: for Businesses to Invest in integration and reconciliation systems; for Managers to Strengthen training and compliance monitoring; for Technology Providers to enhance infrastructure and security; for Policymakers to help regulate transaction fees, expand digital infrastructure, and support awareness campaigns; and for Customers to engage in education programs to build trust and confidence in digital payments.

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