PANTAO
(International Journal of the Humanities and Social Sciences)
Volume 5, Issue 3
ISSN 3028-0877 | DOI 10.69651/2022PIJHSS

Barriers and enablers of using e-wallet in e-commerce

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ABSTRACT

This study investigated the barriers and enablers of using e-wallets in e-commerce transactions among personnel of the Department of Education – Schools Division Office (DepEd SDO) Roxas. Specifically, it determined the extent of barriers and enablers and examined the significant relationship between these variables. The barriers considered in the study included security concerns, technical issues, and limited awareness or knowledge, while the enablers comprised convenience, transaction speed, and incentives and rewards.A survey-correlational research design was utilized in this study. Data were gathered from selected teaching and non-teaching personnel of DepEd SDO Roxas through a structured survey questionnaire. The data were analyzed using appropriate statistical tools to determine the extent of barriers and enablers, while correlation analysis was employed to test the relationship between the variables. The results revealed that the extent of barriers in using e-wallets in e-commerce transactions among DepEd SDO Roxas personnel was high, indicating that respondents still encounter notable challenges in utilizing e-wallet services. In contrast, the extent of enablers was very high, suggesting that respondents strongly recognize the benefits and convenience offered by e-wallet platforms. Furthermore, the findings showed a significant positive relationship between barriers and enablers, indicating that these variables are significantly related and jointly influence the use of e-wallets in e-commerce transactions.Based on the findings, it is concluded that although e-wallets are widely perceived as beneficial and efficient among DepEd SDO Roxas personnel, existing barriers continue to affect their adoption and overall experience. Therefore, it is recommended that DepEd SDO Roxas strengthen initiatives such as training, awareness programs, and technical support to enhance users' confidence and maximize the effective utilization of e-wallets in e-commerce transactions.

Keywords: E-wallet adoption, e-commerce transactions, barriers and enablers.

Date Submitted: June 24, 2026
Date Accepted: June 30, 2026
Date Published: July 5, 2026

INTRODUCTION

The rapid advancement of digital technology has fundamentally transformed the manner in which individuals conduct financial transactions, particularly through the integration of internet connectivity, smartphones, and electronic commerce into everyday life. The evolution of electronic payment systems can be traced to the expansion of internet-based

*Corresponding author / Email: gwynethggorriceta@gmail.com
DOI: http://doi.org/10.69651/PIJHSS05031289

Recommended citation:
Gorriceta, G. G. (2026). Barriers and enablers of using e-wallet in e-commerce. Pantao (International Journal of the Humanities and Social Sciences) 5 (3), 596-607. http://doi.org/10.69651/PIJHSS05031289

commerce during the 1990s, when the rapid commercialization of the Internet created a growing demand for secure and efficient online payment mechanisms. This development paved the way for the emergence of digital wallets and other electronic payment technologies (Crede, 1995; OECD, 2006). The introduction of digital payment platforms such as PayPal in 1998 further accelerated the growth of electronic transactions by providing consumers with convenient means of conducting online payments. As mobile technologies continued to advance, e wallets evolved beyond simple payment instruments to become comprehensive financial platforms capable of supporting online purchases, fund transfers, bill payments, and various financial services. The widespread adoption of smartphones subsequently enhanced the accessibility and convenience of these platforms, resulting in the increasing global acceptance of e wallets as an integral component of digital financial ecosystems.

In the Philippines, the expansion of electronic commerce has paralleled the widespread adoption of digital payment applications such as GCash and Maya, both of which have significantly contributed to the country's transition toward a cashless economy. These platforms enable users to perform multiple financial transactions within a single application, thereby simplifying payment processes and improving overall transaction efficiency. The Coronavirus Disease 2019 pandemic further accelerated the adoption of digital payment systems as consumers increasingly preferred contactless and convenient alternatives to traditional cash-based transactions. Consequently, e wallets have emerged as an essential component of the Philippine digital economy by facilitating secure financial transactions while supporting the continuous growth of electronic commerce and digital financial services.

Despite the increasing popularity and widespread availability of e wallet platforms, their adoption remains influenced by numerous factors that either impede or facilitate users' acceptance and continued utilization. Barriers to e wallet adoption refer to the obstacles and challenges that discourage individuals from embracing digital payment technologies in electronic commerce. Among the most frequently cited barriers are security concerns, which include fears related to unauthorized access, financial fraud, identity theft, and other cybersecurity threats. Such concerns diminish consumer trust and reduce the willingness to utilize e wallet services (Shin, 2009; Slade et al., 2015). In addition, technical issues, including unstable internet connectivity, application malfunctions, system downtime, and other technological limitations, negatively affect users' experiences and reduce confidence in electronic payment systems. These challenges become more pronounced in areas with inadequate digital infrastructure, where limited accessibility and unreliable connectivity further constrain the effective use of e wallets (Sharma et al., 2019; Singh et al., 2020). Limited awareness and insufficient digital literacy also constitute significant barriers because individuals who lack adequate knowledge regarding the functions, benefits, and proper use of e wallet applications may be reluctant to adopt digital payment technologies despite their potential advantages.

Conversely, several factors serve as enablers that encourage consumers to adopt and continuously utilize e wallets in electronic commerce. Enablers refer to conditions or attributes that facilitate users' acceptance of digital payment systems by enhancing their perceived value and overall experience. Among these, convenience remains one of the most influential factors because e wallets enable users to conduct financial transactions anytime and anywhere without the constraints associated with traditional payment methods (Dahlberg, Mallat, Ondrus, & Zmijewska, 2025). Transaction speed likewise enhances user satisfaction by allowing payments and financial transfers to be completed more efficiently. Furthermore, incentives and rewards, including cashback offers, promotional discounts, and other marketing campaigns, increase the attractiveness of e wallet platforms and motivate consumers to continue using these services (Liébana Cabanillas et al., 2020). The convergence of these enabling factors with continuous innovations in mobile technology and the growing acceptance of digital financial

services has substantially strengthened the adoption of e wallets across various sectors of society.

The growing body of literature one wallet adoption consistently demonstrates that consumer acceptance is influenced by several interrelated factors, including perceived usefulness, ease of use, trust, and behavioral intention. Although these studies have significantly contributed to understanding digital payment adoption, they have primarily focused on students, general consumers, and urban populations. Consequently, there remains a notable gap in the literature regarding the experiences of teaching and non-teaching personnel within educational institutions. This gap is particularly important because educational personnel represent a distinct professional group whose financial transaction behaviors may be shaped by organizational contexts, varying levels of digital literacy, and specific workplace demands. Addressing this gap contributes to a more comprehensive understanding of e wallet adoption by examining how barriers and enablers operate within the context of personnel employed in the Department of Education Schools Division Office of Roxas.

The present investigation is anchored on three complementary theories that collectively explain consumers' acceptance and use of digital payment technologies. The Technology Acceptance Model developed by Davis (1989) provides the fundamental theoretical basis by explaining that users' perceptions of usefulness and ease of use significantly influence their attitudes toward technology adoption. Within the context of e wallets, consumers are more likely to adopt and consistently utilize digital payment platforms when they perceive these systems as improving transaction efficiency while remaining simple to operate. Extending this perspective, the Unified Theory of Acceptance and Use of Technology proposed by Venkatesh et al. (2003) incorporates additional determinants of technology adoption, namely performance expectancy, effort expectancy, social influence, and facilitating conditions. These constructs explain how users' expectations of improved performance, the ease of system utilization, encouragement from significant others, and the availability of technological support collectively influence behavioral intentions and actual technology usage within the Philippine digital economy.

Further strengthening the theoretical foundation of the study is Rogers' Diffusion of Innovations Theory, which explains the adoption of innovations according to characteristics such as relative advantage, compatibility, complexity, trialability, and observability. This perspective provides valuable insights into the manner by which innovations such as e wallets spread across communities and organizations. By integrating the Technology Acceptance Model, the Unified Theory of Acceptance and Use of Technology, and the Diffusion of Innovations Theory, the study establishes a comprehensive framework for understanding the interaction between barriers and enablers that influence e wallet adoption. This integrated theoretical perspective facilitates the examination of barriers including security concerns, limited digital literacy, and unstable internet connectivity, alongside enabling factors such as convenience, promotional incentives, transaction efficiency, and perceived security. Collectively, these theories provide a robust conceptual lens for analyzing user behavior and explaining the varying levels of e wallet acceptance within the Philippine context.

Guided by these theoretical perspectives and the identified research gap, the conceptual framework of the study examines the relationship between the barriers and enablers associated with the use of e wallets in electronic commerce. The framework identifies barriers, specifically security concerns, technical issues, and limited awareness or knowledge, as factors that may hinder users from adopting and effectively utilizing e wallet services. Conversely, convenience, transaction speed, and incentives and rewards represent the enablers that encourage and facilitate users' acceptance and continued use of digital payment platforms. The framework

assumes that the barriers encountered by users are associated with the enablers they perceive in utilizing e wallets for electronic commerce transactions. Accordingly, this study seeks to determine the extent of these barriers and enablers and examine the relationship between them among teaching and non-teaching personnel of the Department of Education Schools Division Office of Roxas City. By addressing an underrepresented population within existing scholarship and grounding the investigation in established technology adoption theories, the study contributes meaningful empirical evidence that may support the development of initiatives aimed at strengthening digital payment adoption, enhancing financial inclusion, and promoting the effective utilization of e wallets within educational institutions and the broader Philippine digital economy.

Statement of the problem

The main purpose of this study was to determine and analyze the barriers and enablers that influence the use of e-wallets in e-commerce transactions among the DepEd Teaching and Non-Teaching Personnel in the Schools Division of Roxas City for the school year 2025-2026.

Specifically, the study sought to answer the following questions:

1. What is the extent of barriers in using e-wallets in e-commerce transactions?
2. What is the extent of enablers in using e-wallets in e-commerce transactions?
3. Is there a significant relationship between barriers and enablers of using e-wallet in e-commerce?

METHODOLOGY

This chapter discusses the research design and methodology used in the study, including the purpose of the study, the research design, the subjects, the data gathering instruments, the process of data collection, the research procedure employed in the conduct of the investigation, and the statistical tools used in the analysis of data.

This study aims to determine the barriers and enablers of using e-wallets in e-commerce among the teaching and non-teaching personnel of the DepEd School Division of Roxas City. Specifically, it seeks to assess the extent to which security concerns, technical issues, and limited awareness or knowledge serve as barriers to e-wallet usage, and how convenience, transaction speed, and incentives and rewards function as enablers of e-wallet adoption in e-commerce transactions. The study also aims to examine the relationship between these barriers and enablers and the respondents' use of e-wallets in e-commerce. Using quantitative data, the researcher employed the survey-correlational research design to determine the extent of, and the relationships among, barriers and enablers of using e-wallet in e-commerce among the teaching and non-teaching personnel of the Department of Education (DepEd) School Division of Roxas City. In this study, the independent variables are the barriers of using e-wallet in e-commerce, while the dependent variables are the enablers of using e-wallet in e-commerce among the teaching and non-teaching personnel of the DepEd School Division of Roxas City. To analyze the data, the study employed descriptive statistics such as mean and standard deviation to determine the level of enablers and barriers of e-wallet usage and interpret the respondents' level of agreement based on a Likert scale, and to determine the relationship between the enablers and barriers of e-wallet usage, the Pearson Product Moment Correlation Coefficient (Pearson r) will be used. All statistical tests will be interpreted at a 0.05 level of significance, where the null hypothesis will be rejected if the p value is less than 0.05, indicating a significant result.

The respondents of this study consist of teaching and non-teaching personnel from the Department of Education Schools Division Office (SDO) Roxas. These include personnel

actively involved in instructional duties such as classroom teachers, master teachers, and school heads who facilitate the teaching and learning process, and employees who perform administrative, technical, and support functions such as clerks, administrative officers, records personnel, and other staff who are not directly involved in classroom instruction but contribute to the overall operation of the school system within the education sector and are potential users of e-wallet services for e-commerce transactions. The inclusion of these two groups ensures a comprehensive representation of DepEd personnel with varying roles, technological exposure, and experiences in digital financial transactions. Their participation is essential in determining the perceived barriers, such as security concerns, technical difficulties, and lack of knowledge or limited awareness, as well as the enablers, including convenience, transaction speed, and incentives and rewards, influencing the use of e-wallets in e-commerce.

The sample size of the study was determined using Slovin's Formula, a widely used method for estimating the appropriate number of respondents when the population size is known. According to Tejada and Punzalan (2012), Slovin's Formula helps researchers obtain a representative sample while controlling the acceptable level of sampling error. Collection of data was done on the computed sample of three hundred sixteen (316) teaching and non-teaching personnel of the Department of Education in the Schools Division of Roxas City for the school year 2025-2026. The study employed proportionate stratified random sampling (John W. Creswell and J. David Creswell, 2018) to ensure that both teaching and non-teaching personnel were adequately represented according to their proportion in the total population. The respondents were first divided into two strata: teaching personnel and non-teaching personnel. Thereafter, the sample size for each group was determined proportionately based on its share of the total population. This sampling technique was considered appropriate because it allowed each subgroup to be represented fairly and proportionately, thereby enhancing the representativeness and reliability of the study findings. With regard to the distribution of respondents, the teaching personnel had a population of 1,296 and a sample size of 272, corresponding to 86.08% of the total sample, while the non-teaching personnel had a population of 207 and a sample size of 44, corresponding to 13.93% of the total sample, yielding a total population of 1,503 and a total sample size of 316, or 100%.

The study utilized a researcher-made questionnaire as the primary data gathering instrument. The questionnaire was developed by the researcher based on a review of related literature and studies on the barriers and enablers of using e-wallets in e-commerce. It was designed to gather relevant data from the teaching and non-teaching personnel of the Department of Education Schools Division Office (SDO) Roxas for the school year 2025-2026. The instrument consists of several parts. The first part, the Demographic Profile, gathers information on respondents' age, gender, educational background, occupation, and frequency of online shopping, which helps contextualize the results and identify trends based on demographic variables. The second part, the Barriers of Using E-Wallet in E-Commerce Questionnaire, contains a thirty (30) item research-made questionnaire to assess security concerns, technical difficulties, and lack of knowledge that may prevent or discourage respondents from using e-wallets. Respondents rated items on a 5-point Likert scale, where a score of 5 corresponded to Strongly Agree, 4 to Agree, 3 to Undecided, 2 to Disagree, and 1 to Strongly Disagree. To interpret the results of the extent of the barriers of using e-wallet in e-commerce, the following scale and verbal description were used: a scale of means of 4.21 to 5.00 was described as Very High, 3.41 to 4.20 as High, 2.61 to 3.40 as Moderate, 1.81 to 2.60 as Low, and 1.00 to 1.80 as Very Low. Prior to its administration, the researcher-made questionnaire was subjected to expert evaluation to determine the relevance, clarity, and appropriateness of the items in measuring the barriers of using e-wallets in e-commerce. The

reliability of the questionnaire was tested using Cronbach's Alpha, which was based on responses from thirty (30) teaching and non-teaching personnel of DepEd School Division of Roxas City who were not included in the main study. The factor analysis of the Barriers of Using E-Wallet in E-Commerce Questionnaire yielded eight components extracted, explaining a cumulative variance of 79.63%, indicating that the extracted factors adequately represented the observed variables. The extraction of eight components suggests that respondents perceived barriers to e-wallet usage as multidimensional.

The third part of the instrument, the Enablers of Using E-Wallet in E-Commerce Questionnaire, contains a thirty (30) item research-made questionnaire that evaluates factors that encourage e-wallet adoption, such as convenience, speed of transactions, and incentives and rewards. Respondents rated items on a 5-point Likert scale, where a score of 1 corresponded to Strongly Disagree, 2 to Disagree, 3 to Uncertain, 4 to Agree, and 5 to Strongly Agree. To interpret the results of the extent of the enablers of using e-wallet in e-commerce, the following scale and verbal description were used: a scale of means of 4.21 to 5.00 was described as Very High, 3.41 to 4.20 as High, 2.61 to 3.40 as Moderate, 1.81 to 2.60 as Low, and 1.00 to 1.80 as Very Low. Prior to its administration, the researcher-made questionnaire was likewise subjected to expert evaluation to determine the relevance, clarity, and appropriateness of the items in measuring the enablers of using e-wallets in e-commerce. The reliability of the questionnaire was tested using Cronbach's Alpha, which was based on responses from thirty (30) teaching and non-teaching personnel of DepEd School Division of Roxas City who were not included in the main study. The factor analysis of the Enablers of Using E-Wallet in E-Commerce Questionnaire yielded four components explaining a cumulative variance of 85.17%, indicating that the factors explained a substantial portion of the variability in respondents' perceptions. The extracted factors corresponded closely to the dimensions, thereby supporting the construct validity of the instrument.

The researcher followed a systematic process in gathering the necessary data for the study. Prior to the conduct of the study, a formal communication letter from the Graduate School of Filamer Christian University was prepared by the researcher and duly signed by the Dean. A formal letter requesting permission to conduct the research was prepared and submitted to the Office of the Schools Division Superintendent of DepEd Schools Division Office of Roxas. Upon approval, coordination with the school heads and concerned offices was undertaken to facilitate the smooth administration of the survey. The questionnaires were distributed through printed questionnaires or Google Forms to the teaching and non-teaching personnel who met the inclusion criteria of the study. The Google Forms link was disseminated to the identified respondents through online platforms such as email and messaging applications. Furthermore, the researcher assured the respondents that all information provided would be treated with utmost confidentiality and would be used solely for academic purposes. Participation in the study was entirely voluntary. After the retrieval of the questionnaires from both printed questionnaires and Google Forms, the responses were checked for completeness, organized, coded, and tabulated for statistical analysis. The data were then prepared for interpretation in accordance with the objectives of the study.

The following statistical tools were used to analyze the data. The mean, an average value of the respondents' answers, was used to determine the overall level of agreement of the respondents toward the statements in the questionnaire. It was used to determine the extent of barriers and enablers in using e-wallets in e-commerce transactions, computing the average responses of the participants for each indicator, such as security concerns, technical issues, and limited awareness for barriers, as well as convenience, transaction speed, and incentives and rewards for enablers. The computed mean scores were then interpreted using a descriptive scale to determine whether the responses fall under very low, low, moderate, high, or very high levels. The standard deviation, a measure of variability of the responses from the mean

indicating whether the responses are closely clustered or widely dispersed, was employed to measure the variability or dispersion of the responses. This helped determine the consistency of the respondents' perceptions regarding the barriers and enablers of e-wallet usage. The Pearson Product Moment Correlation Coefficient (Pearson r), a statistical tool used to measure the degree and direction of relationship between two variables, was used to determine whether there is a significant relationship between barriers and enablers. The computed correlation value was then compared to the level of significance set at 0.05 to determine whether the relationship is statistically significant.

RESULTS AND DISCUSSION

The results of this study are grounded in data gathered from three hundred sixteen (316) teaching and non-teaching personnel of the Department of Education Schools Division Office (SDO) Roxas, comprising 272 teaching personnel and 44 non-teaching personnel selected through proportionate stratified random sampling for the school year 2025-2026, who served as respondents following a survey-correlational research design. Data were collected using a researcher-made questionnaire measuring the barriers to and enablers of using e-wallets in e-commerce transactions, and the results were analyzed using descriptive statistics, specifically the mean and standard deviation, and inferential statistics, specifically the Pearson Product Moment Correlation Coefficient (Pearson r), at a 0.05 level of significance. The discussion that follows is grounded entirely in the data gathered and is interpreted in direct relation to the specific objectives of the study, namely to determine the extent of barriers to e-wallet usage, to determine the extent of enablers of e-wallet usage, and to examine the relationship between these barriers and enablers among the teaching and non-teaching personnel of the DepEd School Division of Roxas City.

The extent of barriers in using e-wallets in e-commerce transactions was found to be High (M=3.92, SD=0.54), indicating that the teaching and non-teaching personnel generally experience a high level of barriers when using e-wallets for online transactions. This result suggests that issues such as transaction errors, security concerns, technical issues, and limited awareness are commonly encountered by users. This finding may be attributed to the increasing incidents of online scams, phishing attacks, unauthorized transactions, and data privacy concerns, which make users cautious about conducting financial transactions through digital platforms. In addition, technical problems such as unstable internet connectivity, application glitches, delayed transaction processing, and system downtime may discourage users from fully relying on e-wallet services. Furthermore, some respondents may still have limited knowledge regarding the features, benefits, and security measures of e-wallet applications, resulting in uncertainty and hesitation in their use. These findings are consistent with previous studies, such as those of Dahlberg et al. (2015) and Slade et al. (2013), which emphasize that security concerns, system reliability, and limited acceptance remain key obstacles in mobile payment adoption. Overall, the result suggests that although e-wallets are increasingly used, several practical and technological challenges still hinder their full and efficient adoption in e-commerce.

The extent of enablers in using e-wallets in e-commerce transactions was found to be Very High (M=4.41, SD=0.67), indicating that the teaching and non-teaching personnel strongly agree that there are significant factors that encourage or support the use of e-wallets in e-commerce transactions. This very high rating suggests that users generally find e-wallets beneficial and supportive of their online purchasing activities, which contributes positively to their acceptance and continued use. This finding supports the study of Davis (1989) on the

Technology Acceptance Model (TAM), which explains that perceived usefulness and perceived ease of use significantly influence users' intention to adopt technology; in this context, respondents perceive e-wallets as useful due to their convenience, speed, and efficiency in e-commerce transactions. Similarly, Venkatesh et al. (2003), in the Unified Theory of Acceptance and Use of Technology (UTAUT), found that performance expectancy and facilitating conditions are key factors that encourage the use of new technologies, including mobile payment systems, aligning with the current finding that users are highly motivated by the advantages and support features of e-wallets. In addition, studies by Shin (2009) and Mallat (2007) highlight that incentives such as discounts, cashback rewards, and promotional offers significantly increase user adoption and continued use of mobile payment services, and these findings are reflected in the present study, where respondents strongly recognize these enablers as major reasons for using e-wallets. Another possible reason for this very high rating is the increasing digitalization of financial transactions and the growing acceptance of e-wallets by online merchants and e-commerce platforms; as e-wallets become more integrated into daily financial activities, users perceive them as practical, accessible, and beneficial tools for managing their purchases and payments, with the widespread use of smartphones and internet services also possibly contributing to the positive perception of e-wallets among the respondents.

To determine the relationship between the barriers and enablers of using e-wallets in e-commerce, the Pearson Product Moment Correlation Coefficient was computed. The result revealed a strong significant positive relationship between barriers and enablers in using e-wallets in e-commerce, $r = 0.679^*$, $p = 0.000$, and since the p value is less than the 0.05 level of significance, the null hypothesis, which states that there is no significant relationship between barriers and enablers, is rejected. This means that as respondents perceive higher barriers, they also tend to perceive higher enablers in using e-wallets. This relationship may seem unexpected at first, but it can be explained by the idea that users are simultaneously aware of both the advantages and disadvantages of e-wallet systems. Even if users experience challenges such as technical issues, security concerns, or limited awareness, they also strongly recognize the benefits such as convenience, speed, and promotional incentives, suggesting that both barriers and enablers coexist in the user experience rather than canceling each other out. As users increasingly engage in e-wallet transactions, they become more aware of both the advantages and challenges associated with the technology. Respondents who recognize the convenience, transaction speed, and incentives offered by e-wallets are also likely to encounter issues related to security concerns, technical difficulties, and limited knowledge, and consequently, their awareness of the benefits is accompanied by an awareness of the barriers. Overall, the inferential analysis confirms that there is a significant relationship between the independent variable, barriers, and the dependent variable, enablers, in using e-wallets in e-commerce among the respondents, and these finding highlights that both barriers and enablers jointly influence users' experiences and perceptions in digital financial transactions.

Taken together, the findings of this study demonstrate that the barriers to using e-wallets in e-commerce among the teaching and non-teaching personnel of the DepEd School Division of Roxas City were High ($M=3.92$, $SD=0.54$), the enablers of using e-wallets in e-commerce were Very High ($M=4.41$, $SD=0.67$), and the two variables were significantly and positively correlated ($r = 0.679^*$, $p = 0.000$), leading to the rejection of the null hypothesis of no significant relationship. These results directly address the objectives of the study by establishing that although respondents encounter considerable barriers related to security concerns, technical issues, and limited awareness, they simultaneously perceive very high levels of enablers related to convenience, transaction speed, and incentives and rewards, and that the degree of perceived barriers is meaningfully associated with the degree of perceived enablers rather than operating as opposing or mutually exclusive experiences. The findings

contribute to the field by clarifying that barriers and enablers of e-wallet adoption are not independent or inversely related phenomena but rather coexisting dimensions of the same user experience, reinforcing theoretical perspectives such as the Technology Acceptance Model and the Unified Theory of Acceptance and Use of Technology, which emphasize that both challenges and perceived benefits shape technology adoption behavior. These results, grounded firmly in the data gathered from the 316 respondents and the statistical procedures applied, provide the empirical basis for the summary of findings, conclusions, and recommendations to be presented in the succeeding chapter.

CONCLUSION

This chapter presents the synthesis of the investigation by integrating the summary of the problem, methods and findings, the conclusions derived from the results, and the recommendations for future application and research. The study examined the barriers and enablers of using e-wallets in e-commerce among teaching and non-teaching personnel of DepEd SDO Roxas, involving 316 respondents composed of 272 teaching personnel and 44 non-teaching personnel. Specifically, it sought to determine the extent of barriers and enablers in using e-wallets for e-commerce transactions and to establish whether a significant relationship exists between these variables. A quantitative survey correlational research design was employed, utilizing a researcher made questionnaire that underwent expert validation and pilot testing to establish its reliability and internal consistency through Cronbach's Alpha. Necessary revisions were incorporated prior to the actual administration of the instrument. Respondents were selected through stratified random sampling, with the sample size determined using Slovin's Formula. The collected data were analyzed using frequency and percentage distribution, mean, standard deviation, and the Pearson Product Moment Correlation Coefficient.

The findings demonstrated that the respondents experienced a high extent of barriers in using e-wallets for e-commerce transactions, indicating that security concerns, technical issues, and limited knowledge or awareness continue to influence their overall experience with digital payment platforms. Although e-wallets have become increasingly integrated into everyday financial transactions, users still encounter challenges associated with cybersecurity risks, application errors, internet related issues, and insufficient familiarity with certain platform features. At the same time, the respondents reported a very high extent of enablers, reflecting their strong recognition of the convenience, accessibility, ease of use, rapid transaction processing, and promotional incentives offered by e-wallet platforms such as GCash, Maya, ShopeePay, GrabPay, PalawanPay, and Coins.ph. These findings indicate that the practical benefits provided by digital payment applications remain highly valued despite the persistence of existing challenges.

Moreover, the study established a strong significant positive relationship between barriers and enablers of using e-wallets in e-commerce. This finding suggests that respondents who possess greater awareness of the advantages and facilitating factors associated with e-wallets are likewise more conscious of the challenges and risks accompanying their use. Consequently, positive and negative experiences coexist within the adoption of digital payment technologies, reflecting the complex nature of consumer behavior toward e-wallet utilization. While users continue to recognize concerns related to security, technical reliability, and digital literacy, these issues do not diminish their appreciation of the efficiency, convenience, and rewards that e-wallets provide. Overall, the findings confirm that e-wallets remain highly

accepted and influential tools for digital transactions among DepEd personnel because their perceived benefits outweigh the disadvantages associated with their use.

The findings further imply that sustained improvements in security, technical stability, and user education are essential for enhancing the adoption and continued utilization of e-wallets in e-commerce transactions. Strengthening users' knowledge and confidence through digital literacy initiatives, cybersecurity awareness programs, and continuous technical support can reduce perceived risks while maximizing the advantages of digital payment technologies. Likewise, improving the reliability and transparency of e-wallet systems can reinforce user trust and encourage more frequent and confident utilization.

In light of these findings, the study recommends a collaborative approach among consumers, e-wallet providers, e-commerce platforms, financial institutions, and government agencies to strengthen the adoption and effective utilization of e-wallets. Consumers should continue developing their digital literacy by participating in educational programs, remaining informed about cybersecurity practices, creating strong passwords, enabling two factor authentication, avoiding suspicious links, monitoring transaction histories, and fully utilizing beneficial features such as cashback programs, rewards, bill payment services, and secure payment options while maintaining safe digital payment habits. E-commerce platforms should continue strengthening the integration of e-wallet payment systems by providing secure, reliable, transparent, and user-friendly transaction environments, offering exclusive discounts, vouchers, cashback promotions, loyalty rewards, responsive customer support, and efficient payment monitoring to improve customer satisfaction and encourage continued usage. Similarly, e-wallet providers should sustain and enhance convenience, transaction speed, reward programs, application functionality, and user interface design while continuously improving fraud detection mechanisms, encryption technologies, account verification processes, real time transaction alerts, system reliability, application performance, and educational campaigns that increase users' understanding of e-wallet functions and security measures. Government agencies and policymakers should reinforce consumer protection policies, strengthen regulatory frameworks governing e-wallet services, invest in digital infrastructure and financial inclusion programs, support digital payment initiatives, and implement comprehensive financial literacy and public awareness campaigns that address security concerns, technical issues, and limited awareness while promoting convenience, efficiency, and wider adoption of e-wallets. Likewise, financial institutions should improve the security, reliability, accessibility, and efficiency of their e-wallet services by strengthening multi factor authentication, fraud detection systems, transaction monitoring, customer education, technical support, and attractive incentive programs that reinforce consumer trust and encourage the sustained use of digital payment platforms. Collectively, these initiatives are expected to reduce existing barriers, strengthen enabling factors, and promote the long-term acceptance, satisfaction, and effective utilization of e-wallets in e-commerce transactions.

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