EXAMINING FILIPINO STUDENTS' ADOPTION FACTORS ON SWITCHING FROM CASH TO MOBILE WALLET PAYMENTS: AN UTAUT THEORY APPROACH

A Thesis

Submitted to the Master's Study Program of Economics at the Faculty of Economics and Business in partial fulfillment of the requirements for the degree of

Master of Arts (M.A.)

by

Rosda L. Mangindalat

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UNIVERSITAS ISLAM INTERNASIONAL INDONESIA

DEPOK

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ABSTRACT

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The accelerated shift toward digital finance in Southeast Asia has placed mobile wallets at the forefront of financial innovation. In Philippines, however, mobile payment adoption remains inconsistent due to infrastructure, socio-economic, and behavioral factors. This study investigates the determinants influencing Filipino student's adoption of mobile wallet payments, using the Unified Theory of Acceptance and Use of Technology (UTAUT) as the primary framework. The research employed a quantitative design using a structure survey distributed to 171 Filipino student, with a majority residing in region 12 (SOCCSKSARGEN). Data was analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM) to test the relationships among six main constructs: Performance Expectancy, Effort Expectancy, Social Influence, Facilitating Conditions, Intention to Use, and Use Behavior. Findings revealed that Performance Expectancy and Effort Expectancy significantly influenced students' intention to use mobile wallets. Notably, Social Influence also showed a statistically significant effect, suggesting that continued relevance of peer and social norms in technology adoption among youth. Facilitating Conditions strongly predicted actual Use Behavior, indicating that access to digital infrastructure, device compatibility, and app usability are critical enablers of sustained adoption. The study also found that financial autonomy through allowance, scholarships, or part-time work moderated usage behavior. Most students had been using wallets for 6 to 12 months, and the majority preferred GCash, underscoring brand dominance and platforms loyalty. Practically, the results support the need for stake holders' specific intervention such as region sensitive infrastructure planning, digital literacy initiatives, and platforms designs tailored to student needs. Policy makers, educators, fintech developers, and digital inclusion advocates can benefit from this study's insights. Ultimately, this research contributes to the evolving discourse on digital finance by offering a nuanced view of mobile adoption among a digital savvy yet economically diverse youth population in the Philippines.

Keywords: *Mobile Wallet adoption, UTAUT, Filipino Students, Technology Acceptance, Digital Finance*

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CHAPTER I

INTRODUCTION

1.1 Background

The rapid growth of digital payments across Southeast Asia has been driven largely by improvements in internet infrastructure, government initiatives, and increasing digital literacy. Countries such as Singapore, Malaysia, and Thailand have seen widespread adoption of mobile payment systems, supported by robust internet penetrations rates ranging from 94% to nearly 98%5 as of 2024. The development of digital payments in the Philippines has lagged behind its ASEAN counterparts. With an internet penetration rate of approximately 73.6%, the Philippines falls into the mid-tier range among Southeast Asian nations. While this figure is comparable to countries like Vietnam and Indonesia, it does not reflect the broader infrastructural challenges that

Persist within the country, particularly in terms of internet speed, reliability, and accessibility in rural areas. According to Clarete (2029), underdeveloped infrastructure and limited internet connectivity have significantly hindered the growth of digital financial services in the Philippines. These challenges are especially relevant when viewed through the lens of the Unified Theory of Acceptance which identifies “Facilitating Conditions” as a key determinant of technology adoption. Without reliable and consistent access to the internet, individuals may perceive digital wallets as inaccessible or impractical. Furthermore, poor connectivity can negatively influence “Performance Expectancy” and Effort Expectancy.” Two other core constructs of the UTAUT model, as users may find mobile wallets less useful or more difficult to operate under unreliable network conditions. Cruz and Alcantara (2021) emphasized that internet reliability significantly affects mobile payment adoption among Filipino youth, suggesting that improving digital infrastructure is essential for increasing usage rates. This context underscores the importance of investigating the specific factors that influence mobile wallet adoption among Filipino students, particularly in relation to their access to internet services and the broader digital ecosystems in which they operate.

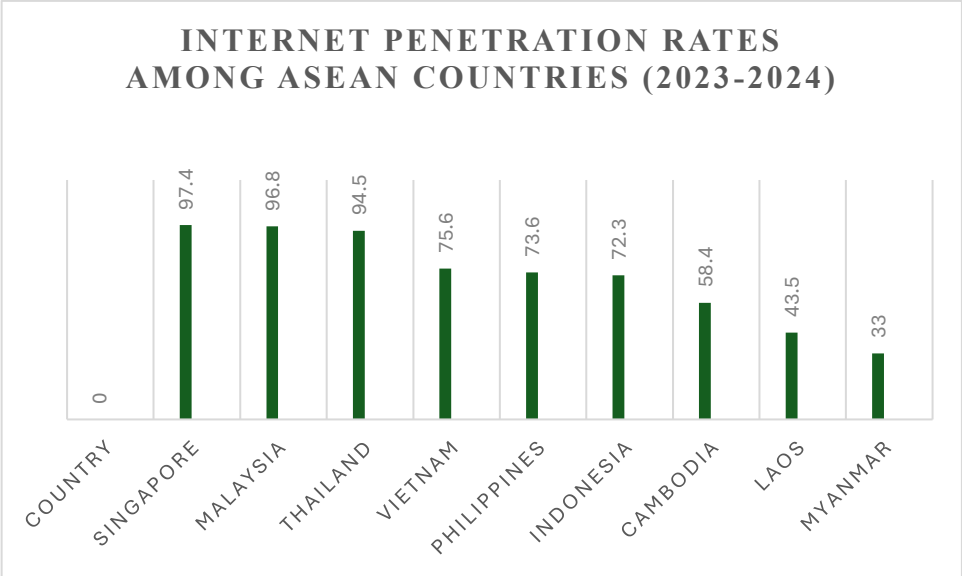


Figure 1.1 Internet Penetration Rates in ASEAN Country (2024)

Source: DataReportal: Global overview report

Despite these challenges, the Philippines has shown rapid growth in digital financial services in recent years, especially with the surge in mobile wallet usage among younger populations. Cash has served as a core medium of exchange for over 3,000 years. However, with advances in digital technology, traditional cash transactions are being increasingly replaced by electronic payment systems. According to Almeida and Inacio (2018), a shift towards a cashless society where physical money is replaced by digital record-is becoming more evident worldwide.

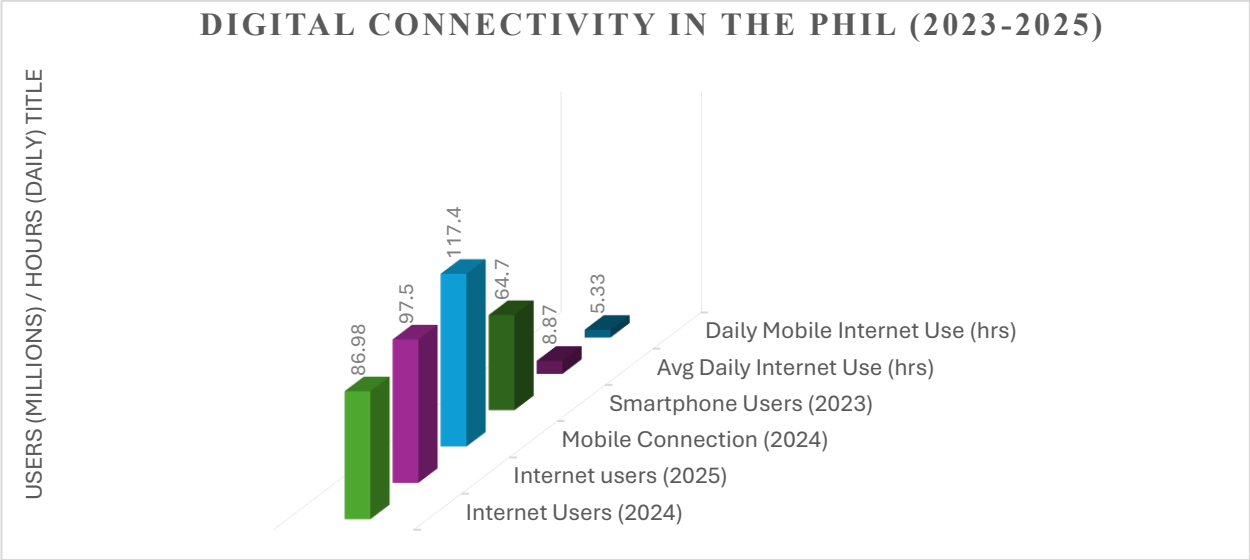


Figure 1.2 Digital Connectivity in the Philippines (2023-2025)

Source: DataReportal, 2024

In the Philippines, digital transformation is accelerating. As of 2020, 63 million Filipinos over half of the population were internet users, with the average user spending over 10 hours online daily (Cuchapinjp, 2023). By 2024, this figure increased significantly to 86.98 million internet users, and by 2025, further rose to 97.5 million, representing over 83% of the population (DataReportal, 2024). Mobile connectivity also remains high, with 117.44 million connections recorded in 2024, nearly matching the national population. Moreover, smartphone adoption continues to grow, with around 64.7 million users in 2023, and Filipinos now spend nearly 9 hours online daily, including over 5 hours via mobile devices. These updated statistics, visualized in figure confirm a robust and expanding digital ecosystems, strengthening the conditions necessary for widespread adoption of mobile banking and digital payment technologies, especially among tech-savvy youth.

At the same time, mobile phone penetration in the country exceeds 100%, and 75% of mobile phone users owned smartphones. These developments create a favorable environment for mobile banking and digital payments. Data from Bangko Sentral ng Pilipinas (BSP) indicates that e-money accounts increased significantly from just 5.7 million in 2019 to 27.5 million by the end of 2021. This surge was driven by middle- and low-income users, particularly those aged 15 to 49, and among residents of Mindanao and the ABC socioeconomic classes (Lee, 2022). E-money accounts have now surpassed

traditional bank accounts, which totaled 18 million in 2021, making mobile wallets the dominant financial tool in the country (BSP, 2021).

The COVID-19 pandemic further accelerated the shift toward digital payments by encouraging contactless transactions. Many Filipinos turned to platform like GCash and PayMaya for paying bills, sending money, shopping online, and other financial services. As a result, digital transactions became more integrated into daily life, with consumers citing convenience, speed, and accessibility as their primary motivators (Anico, 2025; Acopiado et al., 2022). However, adoption still faces barriers. Issues such as security concerns, lack of trust, inconsistent internet access, and limited digital literacy hinder the full integration of mobile wallet systems. Compared to more advanced ASEAN countries like Singapore, Malaysia, and Thailand, the Philippines continues to trail in terms of cashless readiness (Hinayon, 2020).

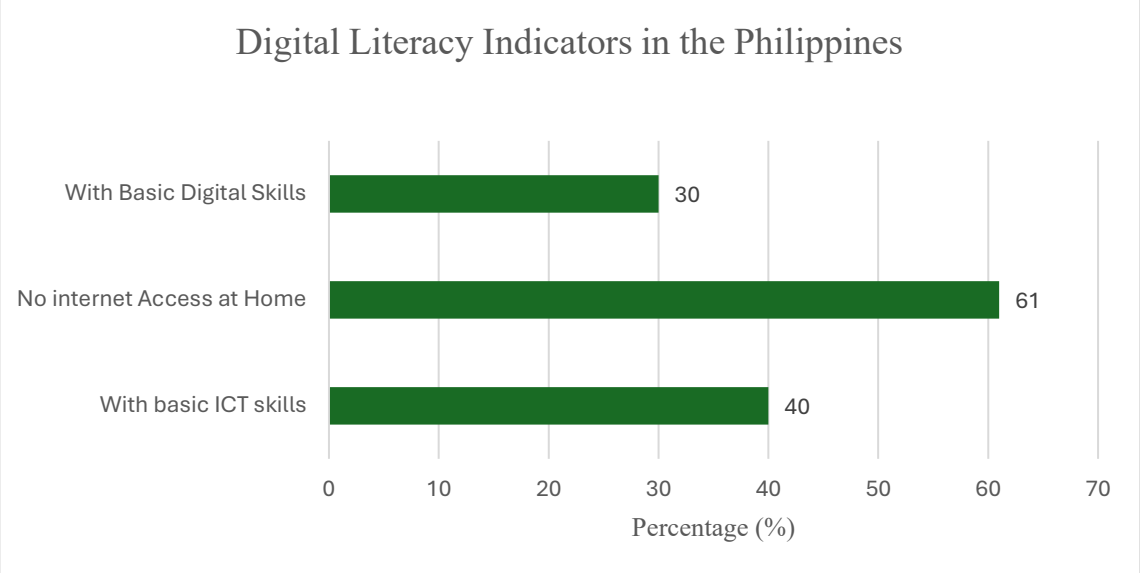


Figure 1.3 Digital Literacy in Philippines

Source: NICTHS 2019; EPRA IJMR 2024 (PSA data)

The data above reveals persistent structural and educational challenges. Notably, 61% of Filipino households still lack internet access, which hinders widespread engagement with mobile financial services. Furthermore, only 40% of individuals report having basic ICT skills, and an even smaller 30% possess general digital skills, indicating a considerable portion of the population may lack the confidence or competence to use digital platforms effectively. These limitations reflect not only a digital divide but also a broader issue of digital exclusion, particularly affecting those in rural or low-income areas.

Compared to ASEAN neighbors like Singapore, Malaysia, and Thailand countries that boast stronger ICT infrastructure and digital education programs the Philippines continues to lag in cashless readiness (Hinayon, 2020). This digital skills gap and lack of infrastructure directly impact the adoption of mobile wallets. Despite their growing popularity and potential to enhance financial inclusion.

The widespread use of mobile wallets presents both opportunities and challenges. On one hand, these platforms provide efficient, contactless, and accessible alternatives to cash, especially for the unbanked population. On the other hand, their adoption remains uneven due to technological, economic, and psychological factors. Understanding these factors particularly among Filipino students, a key demographic in digital consumption is critical for advancing financial inclusion and achieving a more robust digital economy. The statistics from 2020 show that 63 million Filipino citizens used the internet which represented more than half of the 105 million population. The Philippines has 105 million people in its population with 63 million using the internet primarily among adults over 16 years old. Meaning that half of the population in the Philippine internet users are above 16 years old. The country leads Asian internet usage averages because Filipinos spend 10 hours and 2 minutes daily on the internet stated by Cuchapinjp, 2023.

The recent 2019 Financial Inclusion Survey (FIS) Report produced identical survey results. A mobile phone exists in the possession of 69% of adult participants and among those who own mobile phones 75% possess smartphones. The percentage reaches 52% when looking at the total adult population. Population with smartphones is significantly higher than 38% in 2017 according to Cuchapinjp, 2023.

Table 1.1 E-money ownership

E-Money	20172	2018	2019	Growth Rate 2018-2019
Total amount of transactions (Inflow +outflow) (in billion PH)	963	1,090.1	1,485.3	36%
Active e-money accounts (in millions)	2.2	5.02	8.8	76%
Prepaid cards linked to E-money	25.21	28.2	20.6	-27%

Source: Cuchapinjp, (2023)

Mobile phones have established themselves as a practical means for mobile banking as well as electronic payment transactions. E-money transactions have increased both in quantity and value because of recent substantial growth (Cuchapinjp, 2023). A growing number of people are adopting digital payments according to this data table which indicates a permanent change in payment methods.

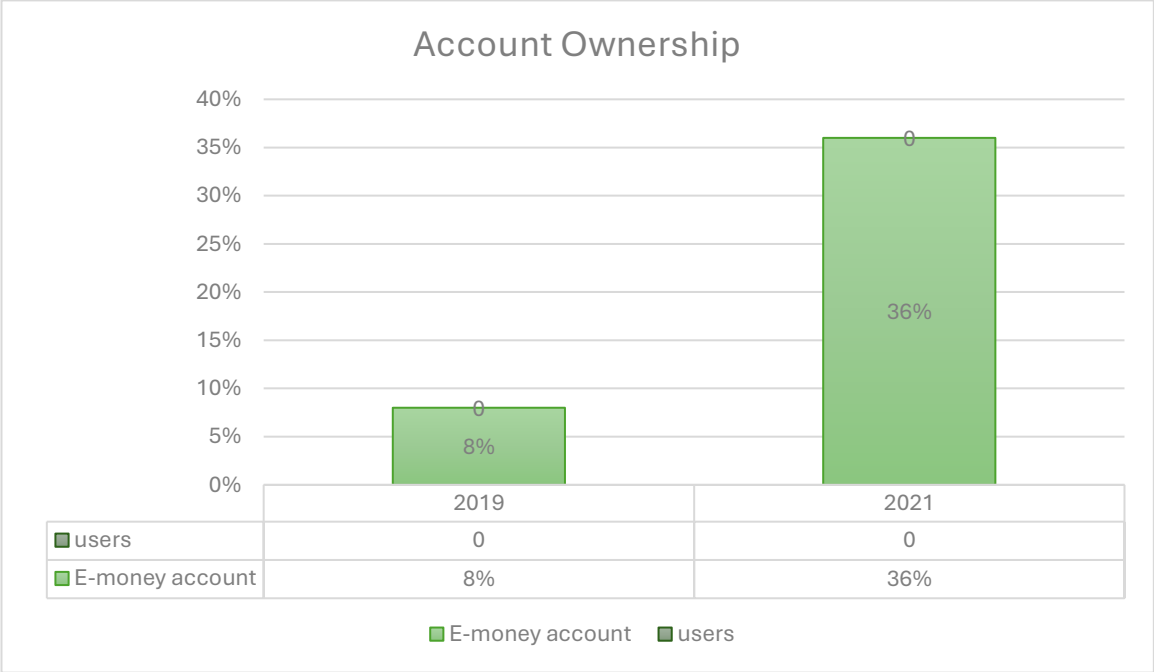


Figure 1.4 E-money ownership

Source: BSP (Bangko Sentral ng Pilipinas)

E-money accounts now outnumber traditional bank accounts since they have gained 27.5 million users compared to 18 million bank users. As the most owned account in 2021. Since 2019 when only 8% of Filipinos held e-money accounts the number has increased by four times to reach 36% in 2021 (BSP). ASEAN nations advance toward cashless economies, but the Philippines stands as an imitator of credit and debit cards adoption behind Singapore Malaysia and Thailand (Hinayon 2020). The digital transformation has generated positive effects on banking performance in ASEAN-5 countries while digital banking implementation produces substantial impacts on organizational profitability (Malik et al., 2020). The COVID-19 pandemic has quickened ASEAN's digital financial inclusion program so the region now leads other regions regarding digital account ownership and mobile money adoption. The digital progress occurs due to pre-existing digital infrastructure combined with previous digital development initiatives. Digital payment adoption within ASEAN progresses at a quicker rate than other regions as woman showed faster adoption than men (George & Xie, 2023).

The term "digital cash payments" refers to a wide range of payment methods, including contactless cards, debit cards, credit cards, charge cards, and plastic money. It also includes mobile payments conducted using mobile applications and phones, as well as conventional bank transfers and purchase orders. Conversely, the online transaction system is a regular, authorized way to conduct financial transactions over the internet. An online payment is one made electronically to a service provider or online merchant (Md Arif Hassan et al., 2020).

The demand for new payment systems is greater than that of traditional payment methods, which were only gradually growing. As a result, new digital payment technologies are becoming more prevalent (Hammond, 2021). Individuals have become habituated to online trade-in Digital marketing to sell and acquire goods and services due to the web's widespread engagement in our daily lives.

Individuals are electronically paying for goods and services over the Internet. Additionally, the growth of web-based commerce has resulted in the emergence of new financial requirements that, for the most part, cannot be addressed by traditional payment methods. As transactions between various business partners 2 continue to occur on the e-commerce platform, the old cash-based payment method has been gradually phased out and replaced with electronic payment systems (Khan B et al., 2017). As per the 2019 Mobile Payments Market – Growth, Trends, and Forecast (2020-2025) study by Mordor Intelligence, debit cards will persist as the most favored mode of payment in 2020. The most widely used

payment method will become the least widely used by 2022 when mobile wallets surpass it. A cashless economy might be closer than we think, as evidenced by the declining desire for cash (Rolfe, 2020). Only a few nations are seeing a rise in the use of mobile wallets as a form of payment, due to considerations like ease, perceived utility, and social influence, mobile wallets have become more and more popular in recent years, especially in developing countries (Mohamed Elgazouly et al., 2022).

As smartphone and high-speed data are significantly used among the people in India, digital wallets are relatively preferred (Ms. Ritu & P. Chawla, 2022). However, it means that although mobile payments could increase financial inclusion, these services are still popular only in a few countries (E. Dinz et al., 2011). Such requirements include technical characteristics of the mobile application such as perceived security and ease of use, social factors and contextual factors which include enabling and regulatory conditions (Mohamed Elgazouly et al., 2022). Knowledge of these processes is essential to the formulation of strategies to advance cashless societies and mobile wallet adoption (Mohamed Elgazouly et al., 2022; Amoroso, & Remy Magnier-Watanabe, 2012).

The advantages of mobile wallets over conventional cashless methods are greater. Additionally, some mobile wallets come with a physical card that may be used to make cash withdrawals. Even with all the capabilities that mobile wallets offer, their uptake is still erratic, with only a small number of nations eager to accept this mode of payment. There are several detrimental effects, such as the potential for people to become criminals who conduct IT crimes, and the challenges faced by networks and organized crime who take advantage of laws and restrictions. Government-instituted infrastructures that reduce the value of mobile wallet systems (Apau et al., 2019). Recent studies on digital payment adoption in the Philippines reveal a mixed landscape. Several studies demonstrate that people tend to use cash for their payments (Abrazado et al., 2024) but digital payments demonstrate growth particularly during the Covid-19 pandemic (Acopiado et al., 2022).

GCash stands as the leading digital payment platform in the market (Anico, 2025). People under thirty years old and those earning higher incomes and living in urban settings demonstrate more willingness to use digital payments according to Anico (2025) as well as Acopiado et al. (2022). The adoption of digital payments faces ongoing hurdles because users have security issues and technology difficulties plus low consumer awareness (Anico, 2025, Sanchez et al., 2024). Micro-entrepreneurs between 46-55 years old encounter barriers when accepting digital payments because they lack digital navigation ability and prefer traditional cash transactions (Sanchez et al., 2024). Digital payments receive positive

reception from users due to their efficient nature and their transparent systems and their convenient service delivery (Anico, 2025). The adoption of digital payments requires solution of identified obstacles together with improvements to accessibility (Sanchez et al., 2024; Anico, 2025).

1.2 Problem Statement

Despite the rapid growth of mobile wallet usage in the Philippines, particularly among the youth, the country continues to lag behind its ASEAN counterparts in overall digital payment adoption due to persistent challenges such as poor infrastructure, digital literacy, and security concerns. Although Filipino students represent a high connected and tech-savvy demographic, existing research has predominantly focused on general consumers, professionals, or entrepreneurs leaving a significant gap in understanding the specific behavioral drivers and obstacles faced by students.

Previous studies have explored mobile adoption using various models, yet limited application of **the Unified Theory of Acceptance and use of Technology (UTAUT)** framework specifically tailored to Filipino students exists. Furthermore, while factors such as trust, risk perception, and user habits are recognized as critical in technology adoption, they are rarely examined in-depth within the student's context.

This study addresses these gaps by applying the UTAUT framework to examine Filipino students from cash to mobile wallet payments. It aims to uncover the underlying motivations, barriers, and usage patterns that shape their adoption behavior, providing data-driven insight for educators, policymakers and mobile service providers.

1.3 Research Questions

The research is designed to answer the questions:

1) How does the implementation of UTAUT model on the Filipino students' adoption factors on switching from cash to mobile wallet payments?
2) How do current developments in the digital systems ecosystems in the Philippines influence students' adoption and usage of mobile wallets?

1.4 Research Objectives

To examine the implementation of UTAUT model on the Filipino students' adoption factors on switching from cash to mobile wallet payments.

To explore the current developments in the digital systems ecosystems in the Philippines influence.

1.5 Research Significance

The increasing mobile wallet adoption among students has the potential to transform financial systems in the Philippines and across Southern Asia. This research contributes to ongoing efforts in financial inclusion and the development of a cashless digital economy. It also provides actionable insights for educational institutions, fintech companies, and policymakers to enhance digital payment systems that are secure, accessible, and tailored for students' users.

1.6 Research Benefits

The results of this study will be of great benefit to the following groups.

1. **Academicians:** This research adds to the current understanding of digital payment adoption patterns among Filipino students while creating new knowledge about their adoption behavior. And it will help to improve knowledge about how Unified Theory of Acceptance and Use of Technology (UTAUT) functions in digital payment situations.
2. **Policymaker:** It helps government agencies including Bangko Sentral ng Pilipinas (BSP) and Department of Information and Communications Technology (DICT) gain assistance from this research for developing policies that advance digital financial inclusion.
3. **Stakeholders:** The data assists monetary institutions and fintech firms and mobile wallet providers to understand students' consumer preferences and conduct to deliver personalized services.
4. **Online Sellers**: They may be able to evaluate changing payment methods with the use of this study, which will give them data on the factors that influence students' adoption of moving from cash to mobile wallet payments.
5. **Future researchers**: Researchers who intend to conduct any related research on the factors that influence students' acceptance of mobile wallet payments over cash will find this study to be a useful resource.
6. **Public:** Digital payment systems promoted understanding of their financial advantages and safety factors as they support people through cashless system adoption while providing combined benefits for security and seamless operations.

1.7 Outlined of the Research

This thesis is structured into five chapters, each serving a distinct purpose in presenting a comprehensive investigation of the factors influencing Filipino students' adoption of mobile wallet payments using the UTAUT framework:

Chapter I – Introduction

This chapter presents the background of the study, highlighting the digital transformation in the Philippines financial landscape and the growing relevance of mobile wallets among students. It outlines the research problems, research questions, objective, significance, benefits, and limitations of the study. It sets the contextual foundation for the investigation and justifies the need for a focused study on a mobile wallet adoption among Filipino students.

Chapter II - Literature Review

This chapter reviews relevant literature on mobile wallet adoption, the Unified Theory of Acceptance and Use of Technology (UTAUT), and previous empirical studies. It discusses each UTAUT construct and how these influence user behavior. The chapter also presents critique of related models such as TAM, TPB, and DOI, and culminates with the conceptual framework and hypothesis development used for empirical testing.

Chapter III – Methodology

This chapter outlines the research design, approach, data collection procedures, and analytical methods employed in the study. It explains the use of Partial Least Square Structural Equation Modeling (PLS-SEM) for data analysis and details the demographic scope and sampling strategy, which focused on Filipino students aged 18 and above. The chapter also includes description of the research instruments, variables, and indicators, along with validity and reliability measures.

Chapter IV – Results and Discussion

This chapter presents and analyzes the findings of the study based on the data collected. It includes descriptive statistics, measurements and structural model assessments, and hypothesis testing results. The discussion interprets these findings by considering the UTAUT constructs and relates to the existing literature. Special attention is given to the role of social influence, infrastructure access, and brand preferences (e.g., Gcash dominance), as well as potential regional biases in the sample.

Chapter V – Conclusion, Implications, Recommendations, Limitations and Future Research

This final chapter summarizes the key findings and draws conclusion in relation to the research objectives. It outlines theoretical and practical implications, providing insights

for policymakers, educational institutions, fintech developers, and other stakeholders. The chapter also offer recommendation for future research and digital policy interventions aimed at enhancing mobile wallet and adoption among students in the Philippines also the limitations of the studies.

CHAPTER II

LITERATURE REVIEW

Modern societies increasingly depend on mobile payment solutions as a primary channel for digital transactions. Mobile wallets provide secure, user-friendly platforms for storing funds, managing transactions, and enabling seamless financial interactions via mobile interface. Understanding the behavioral and technological factors influencing adoption is critical for accelerating digital payment use, especially among students. This chapter presents a theoretical foundation and reviews empirical studies on mobile wallet adoption using the Unified Theory of Acceptance and Use of Technology (UTAUT) framework.

The wider implementation of digital payments systems depends on identifying key factors that lead students to switch from cash to mobile wallet transactions. Thus, in this section also the researcher will investigate some problems they encounter whenever they use mobile wallet payments. The mobile wallet adoption behavior of students functions as a valuable source of knowledge for expanding mobile wallet adoption throughout the region according to Nguyen (2021).

2.1 Theory of UTAUT model

The UTAUT model, developed by Venkatesh et al. (2003), is one of the most widely applied frameworks in technology acceptance research. It integrates components from eight existing models, including the Technology Acceptance Model (TAM), Theory of Planned Behavior (TPB), and Social Cognitive Theory (SCT). The model identifies four core determinants of intention and uses behavior: Performance Expectancy, Effort Expectancy, Social Influence, and Facilitating Conditions.

The Technology Acceptance Model (TAM), Theory of Planned Behavior (TPB), and Diffusion of Innovation (DOI) each have limitations in explaining technology adoption. TAM focuses mainly on perceived usefulness and ease of use but overlooks social environmental factors. TPB highlights psychological influences like attitudes and norms but lacks attention to technological and contextual elements. DOI explains how innovations spread but tends to generalize behavior, ignoring individual differences and external barriers. These limitations suggest that relying on a single model may be insufficient for capturing complex use behavior, especially in diverse or developing contexts.

While UTAUT has been effective in explaining technology adoption in various settings, critics note limitations. Shachak et al. (2019) argue that both TAM and UTAUT models offer narrow perspectives by focusing primarily on individual perceptions, while TPB lack environmental and contextual sensitivity (Faridi et al., 2020). Venkatesh et al. (2016) recommended expanding TAUT to include multi-behaviors. Kiwanuka (2015) also suggests integrating concepts from Diffusion of Innovation Theory to improve predictive power.

Despite this criticism, UTAUT remains widely use due to its empirical robustness and flexibility, particularly in studies examining mobile technology and financial service adoption (Alharbi et al., 2022).

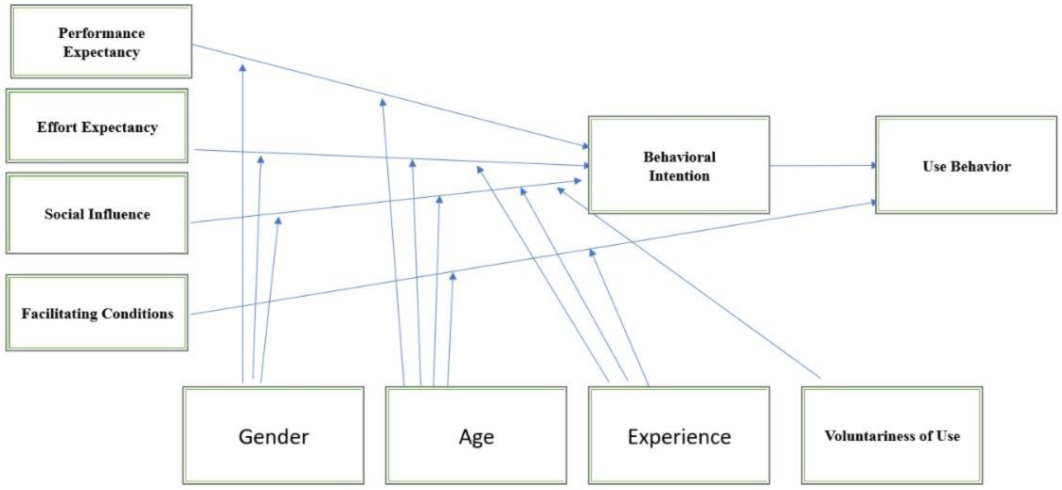


Figure 2.1 Unified Theory of Acceptance and Use of Technology

Source: Venkatesh et al. (2003)

To understand the behavioral intentions of the mobile wallet adoption, researchers tend to rely on some of the established theoretical frameworks from the UTAUT model.

2.2 Factors Influencing the Adoption of Mobile Wallets based on UTAUT Model

To understand the behavioral intentions of the mobile wallet adoption, researchers tend to rely on some of the established theoretical frameworks from the UTAUT model.

1) Performance Expectancy

   This refers to the perceived usefulness of the system in enhancing transaction efficiency. Mobile wallet users are more likely to adopt the technology when they perceive it as saving time and simplifying tasks (Venkatesh et al., 2003). Among

Southeast Asian students, mobile wallets are favored for being faster and more convenient than cash (Al-Mamun et al., 2020).

2) Effort Expectancy

Users rate their experience based on the difficulty of learning and using the platforms according to effort expectancy. Students at the Southeast Asian Institute of Technology along with other students requires effortless mobile wallet utilization. Students who belong to the digital native generation expect mobile interface to be friendly and easy to use because they simplify adoption (Suki, 2019). Students choose mobile wallets to present straightforward accessibility features in their systems.

3) Social Influence

The adoption of mobile wallets receives strong influence from social factors particularly among young demographic groups. The need to fit in with others together with social expectations motivates individuals to adopt mobile wallets because their friends and family members and peer community members use mobile payments in their everyday lives (Chong et al., 2019). Social media platforms together with advertisements contribute to student's perception development and adoption promotion of mobile wallets.

4) Facilitating Conditions

Three key factors that enable mobile wallet adoption to consist of mobile wallet service availability alongside reliable internet connection and proper compatibility for mobile wallet adoption in Southeast Asia heavily depends on mobile phone availability alongside affordable pricing on data plans and advanced internet connectivity (Goh et al., 2019). Students are more inclined to use mobile wallets when they have convenient access to technology and essential resources including reliable internet connections and reasonable payment fees (Nguyen, 2021).

2.3 Mobile Wallets

A mobile wallet is a digital wallet designed to be used on mobile devices, such as smartphones and tablets, as a payment method (León, 2021). It allows you to store credit, debit, and identity cards, among other things, online. These once physical cards are now stored in a mobile wallet, which functions similarly to a physical wallet in digital form. Customers may utilize safe, encrypted apps to access their mobile wallets and use them to pay for goods and services with digital versions of their cards. Mobile wallets have grown in popularity due to the low- or no-touch engagements clients can make to complete transactions (Findling & Rao, 2021). According to Kaur et al. (2020), mobile wallets have added a new and more adaptable manner of processing payments through the internet, even

though mobile payments have existed. Because of its simplicity and favorable influence on noncash transactions, Mumtaza et al. (2020) believe that mobile wallets could be the future of a cashless society. According to Iman (2018), mobile payments and mobile wallets are attractive in developing countries due to a lack of alternatives to cash, a lack of access to banking products, infrastructure, and excessive fees for money transfer services. Although mobile wallets have attracted much interest in emerging nations, adoption is still modest and inconsistent (Kaur et al., 2020, Mumtaza et al., 2020).

Researchers have studied the use e-wallets and mobile e-money services in the Philippines. Whether a person adopts something depends on how useful, safe, trustworthy, appropriate for their lifestyle and easy to use it is (Carillo, 2023). For millennials, the intention to use mobile e-money services relies a lot on their own attitude and how much control they believe they have over their activities. The practice of sharing mobile phone credits has influenced people to use mobile wallets through habits loyalty and reciprocity (Amoroso et al., 2021). Younger generations are being taught to expect and demand the ability to use their mobile wallet (SYKES, 2020). Students who use their phones to check their IDs or pay for extracurricular activities have grown up in a world where technology is continually evolving (Friedman, 2018).

In the Philippines, e-payments are commonly made without a bank account and are readily available via mobile phones. According to BSP statistics, more Filipinos used mobile wallets or electronic payment systems in 2018 than credit cards. Filipinos can perform digital financial transactions without using cash or credit cards using platforms like GCash and PayMaya (Zoleta, 2021). In a low-bank country like the Philippines, where bank accounts are not required, e-payment systems offer many potentials (Deloritos, 2021). The BSP (Bangko Sentral ng 16 Pilipinas) will increase digital payments by 2020, transitioning from a cash-based economy to a digitally based one. Because many more Filipinos hold mobile phones than bank accounts, it was the perfect strategy for transforming the local market into an advanced digital economy (Editors, 2021). According to a study undertaken by economic consultancy firm AlphaBeta, a strategic economic consulting firm established in Singapore that works with governments, businesses, investors, and other organizations, the Philippines' digital economy can generate up to Php 5 trillion through digital transformation by 2030.

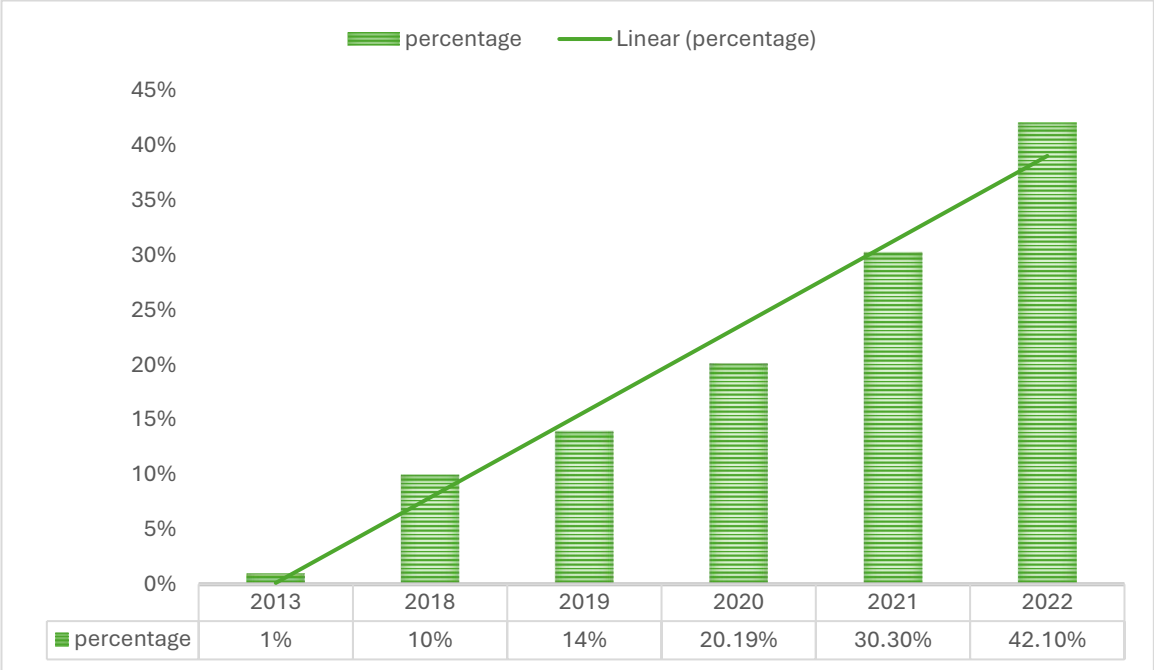


Figure 2.2 Share of Digital Payments BY VOLUME in 2022

Source: Classification: GENERAL, (2022).

The use of digital payments has increased nationwide during the past five years, reflecting a change in consumer preferences as more Filipino customers are switching from traditional cash-based to digital payment methods because of their ease, quickness, and safety (Classification: GENERAL, 2022). According to the most current measurement report, by 2022, the volume of digital payments will account for a much larger portion of all retail purchases. increased to 42.1%, helped by 611.7 million more retail payment transactions than the year before. In the meantime, digital payments account for 40.1% of all retail payments, or 78 billion USD, in terms of value (Classification: GENERAL, 2022).

2.4 Previous Studies

The following are the summarized findings and limitations of previous studies related to this study that use UTAUT model in relation of mobile wallet apps of Filipino student.

2.4.1 Synthesis of Previous studies

Over the years, numerous studies have explored the factors influencing the adoption of mobile wallets and digital payments systems, particularly within the Philippine and through the application of established technology acceptance models such as UTAUT.

The following reviews synthesize key empirical findings to provide a theoretical backdrop and to identify existing research gaps.

Plender and Matias (2020) examined the determinants of Filipino consumer' adoption of online Money Transfer Services (MTS). Their findings revealed that performance expectancy, hedonic motivation, and perceived value significantly influence adoption intention, whereas effort expectancy, social influence, and perceived risk showed negligible impact. While their study validated aspects of the UTAUT model, it was limited to general consumers and excluded students' demographics, thereby leaving room for more targeted investigations.

Cacas et al., (2022) conducted a study focusing on Generation X in the Philippines to understand mobile wallet adoption. They found that user-friendly interface, peer influence, and rebate incentives were the most influential factors, with social influence emerging as the strongest determinants of adoption. However, their scope was restricted to older demographics and Metro Manila, which limits the generalizability of their findings to younger populations or students in other regions.

Acopiado et al. (2022) explored the adoption of digital payments among firms during the COVID-19 pandemic. Their study showed that 67% of businesses adopted digital payment systems during the pandemic, with younger establishments and those with more employees more likely to adopt. While this research offered valuable insights into institutional adoption, it did not examine end-user behavior, particularly among students or individual consumers.

Anne (2024) analyzed digital payment adoption in conjunction with the growth of e-commerce in the Philippines. The study identified digital infrastructure and financial literacy as key barriers to widespread adoption, especially among low-income groups. Although it highlighted systematic challenges, the study did not have a theoretical model like UTAUT, nor did it focus on student populations.

Abrazado et al. (2024) focused on digital payments use among school staffs' members. While their findings showed a positive perception of digital transactions for purposes like mobile loads and internet payments, participants still preferred cash and human interaction over self-service options. Although relevant to the educational sector. The study did not include students and thus missed insights into youth adoption behavior.

Cendana and Palaoag (2020) examined how Philippines higher education institutions might integrate digital payments into school operations. They proposed the use

of “smart ID” payment systems for students, gaining strong support among working parents and administrators. However, the research primarily addressed institutional mechanism rather than individual student behavior and motivation.

Finally, Al-Saedi et al. (2020) conducted a meta-analysis to propose an extended UTAUT model for mobile payment adoption. Their analysis revealed performance expectancy as the strongest predictor of intention, followed by social influence and effort expectancy, while perceived risks had a little to no effect. Although their findings strengthened the UTAUT model, their validations sample was limited to user in Oman, making it less applicable to the Philippines.

In summary, existing studies have largely validated the core constructs of the UTAUT model particularly performance expectancy, effort expectancy, and social influence in influencing digital payment adoption. However, a noticeable gap persists in the application of these constructs specifically to Filipino students. Most studies either targeted populations, businesses, or institutional frameworks, while the youth demographic, particularly students in region like Mindanao, remain underexplored. This study addresses that gap by applying the UTAUT framework to examine the behavioral, social, and infrastructure factors influencing mobile wallet adoption among Filipino students.

Table 2.1 Previous Studies

No.	Authors and Year	Research Objective	Findings	Limitation
1	Plender and Matias (2020	The research aims to discover the essential factors which determine consumer adoption of online Money Transfer Service (MTS) in the Philippines.	The intention of users to adopt online survey money transfer services depends heavily on three factors: Performance expectancy, hedonic motivation and perceived value.	The adoption of online MTS requires resolving privacy and security issues to boost its popularity. The public requires better information about MTS

		To understand what drives Filipino consumers in the adoption of online MTS. The research helps concerned entities improve their product delivery while addressing common financial transaction issues.	The actual adoption of online money transfer services depends on facilitating conditions together with behavioral intention. The factors of effort expectancy, social influence, perceived risk and habit do not impact consumer use of money transfer services.	programs. The validation of the UTAUT models serves as the only scope of this research.
2	Cacas et al., (2020)	The study examines why Generation X people in the Philippines choose or avoid mobile wallet adoption by analyzing their perceptions of risk and usability and the effect of rebate incentives and social influence. The research investigates how	The perception of risk does not lead generation X users to develop more positive intentions regarding Gcash service adoption. Generation X shows positive intention toward Gcash service adoption because of three factors: user-friendly interfaces along	Future research would enhance its findings through mixed-method analysis because this study depended entirely on quantitative methods. The study should investigate supplementary influencing factors because this study examined just

		these factors affect Generation X users' decision to adopt Gcash mobile wallet.	with rebate offers and peer influence. Social influence stands as the leading factor which drives generation X to adopt Gcash services.	four influencing factors. Additional research should expand its scope to include all regions across the Philippines after studying Metro Manila.
3	Acopiado et al. (2022)	This research investigates how firms in the Philippines used digital payment while the COVID-19 pandemic was ongoing. The research investigates the elements which impacted the decision process regarding digital payment adoption among businesses shifting towards digital transformation.	A total of 67% of businesses started using digital payment methods because of the COVID-19 pandemic. The likelihood of adopting digital payments increased among younger establishments and partnership-based companies alongside business with large employees' numbers.	The paper fails to identify all the restricted elements and characteristics that challenge vulnerable enterprises when adopting digital payments systems because additional research in this field is required. This research study failed to investigate the support activities digital payment providers and financial technology developers provide to

				MSMEs for digital payment adoption. An assessment of digital payment platform competence and usability was absent from the paper which might limit understanding of adoption factors.
4	Anne (2024)	The paper examines both e-commerce expansion and digital payment adoption in the Philippines.	SMEs experienced higher profit levels because of digital payment systems even though this occurred primarily during the COVID-19 crisis. Digital payment adoption remains limited because low-income citizens face difficulties in financial education and trust security issues. E-commerce	Exploring e-commerce and digital payments requires application of different theoretical frameworks such as TAM and diffusion of innovations and UTAUT. The educational systems require campaigns to instruct people about financial education while establishing trust in digital payments systems. The

			growth advancement has strongly depended on government backing coupled with better digital infrastructure development.	inability to create digital infrastructure affects population groups in rural regions and underserved areas to obtain fair access to e-commerce platforms and digital payments systems.
5	Abrazado et al. (2024)	Quantify digital payment methods used by school staff members. The study examines digital payment perspectives of school employees while analyzing how their demographic characteristics and household profiles affect their utilization and perspectives.	Most users choose cash as their preferred payment method however they demonstrate comfort using digital devices when making transactions. Digital payment methods are frequently used by participants for mobile recharge/loads and cable/internet, and they have maintained this	The study is not targeting students.

			practice for more than three years. Participants see digital payment positively because it saves time and serves all needs, but they still prefer human customer service to self-service options.	
6	Cendana and Palaoag (2020)	Analyze how Philippine higher education institutions can accept a digital payment framework for their operations. Students should receive "Smart IDs" from their student IDs to use for payments. The system addresses behavioral problems which prevent students from making timely school fee payments.	9% out of the total student enrollment maintained outstanding tuitions fees when the semester ended. The payment delays for tuition fees among scholarship students reached 66% because they had more essential matters to handle. A smart card payment system gained favor from 75% of foreign-working	The data is not updated

			parents who wanted to ensure their money was used specifically for tuition fees. The research showed that 91.5% of respondents held favorable opinions about employing a smart ID system in university environments.	
7	Al-Saedi et al. (2020)	The study examines the most common factors extending the UTAUT model for mobile payment adoption using meta-analysis from 25 studies. A generalized extended UTAUT model serves as the proposal for mobile payment adoption. The proposed model will be validated through PLS-	The primary factor that influences users' intention to use M-payment systems is performance expectancy while social influence comes second followed by effort expectancy and perceived trust and perceived cost and self-efficacy. Users perceive risks in M-payment systems at such a	The research introduces an extended version of the UTAUT model for M-payment adoption, yet its validation remains incomplete. A validation of the model took place using data from 436 M-Payment users in Oman but this might restrict its applicability to other groups or environments.

		SEM methodology.	low level that it does not affect their intention to use these systems. The research investigation improves comprehension about which factors influence M-payment systems adoptions in Oman.	Perceived risk failed to demonstrate a significant effect on M-payment systems usage behavioral intention according to research findings.

Source: Process by author

2.5 Research Framework and Hypothesis Development

Mobile wallet payment adoption changed faster due to technological progress combined with the increased utilization of smartphones. The speed of mobile wallet adoption differs among Filipino students and other young adults because of multiple influencing variables. The established framework in the Theory of UTAUT for explaining why Filipino students adopt mobile wallets payment.

To ascertain the importance and strength of the connections between constructions, each hypothesis (H1 through H5) will be put to the test.

From UTAUT Theory

H1: Performance Expectancy positively influences Intention to use the technology.

H2: Expectancy positively influences Intention to use the technology.

H3: Social Influence positively influences Intention to use technology

H4: Facilitating Conditions positively influence actual Use Behavior.

Multiple studies use the UTAUT model to examine technology adoption. Rachmawati et al., Taiwo & Downe, 2013 as well as Yuwono & Masdjojo, 2023 demonstrate solid evidence showing that performance expectancy and social influence and

effort expectancy boost behavioral intention to use technology. Performance expectancy establishes the most powerful link among these relationships according to Taiwo and Downe (2013). Numerous authors suggest that facilitating conditions along with behavioral intentions result in actual use behavior (Rachmawati et al., 2020; Yuwono & Masdjojo, 2023), yet Taiwo and Downe (2013) report these relationships as weak. Research reveals contradictory finding about how behavioral intention links UTAUT construct to use behavior among various studies (Yuwono & Masdjojo, 2023). Different contexts and technologies studied present varying strengths and significance in relationships according to research findings about the UTAUT model.

H5: Intention to use has a positive impact on the use behavior of mobile wallet payment.

In a mobile wallet payment scenario, intention to use has a positive effect. Concerning this purpose, several factors include perceived utility, perceived ease of use, and individual creativity (Al-Herwi et al., 2021; To & Trinh, 2021). A few prior studies that examine mobile wallets' adoption have used Technology Acceptance Model (TAM) and its extensions (To & Trinh, 2021; Al-Herwi et al., 2021). Moreover, behavioral intention to use mobile payments is influenced by social influence, trust, perceived performance expectancy, and facilitating conditions (Jameel et al., 2023). Jameel et al. (2023) revealed that effort anticipation has a weak relationship with intention. The analysis of the sample shows that perceived behavioral intentions of retailers to promote mobile wallets are positively associated with the behavioral intentions to use them (Tripathi et al., 2021).

This model positions Intention to Use as a mediating variable, consistent with UTAUT, capturing the psychological pathaway from perception to behavior (Diego Fettermann & Calegari, 2024; Bazelais et al., 2022).

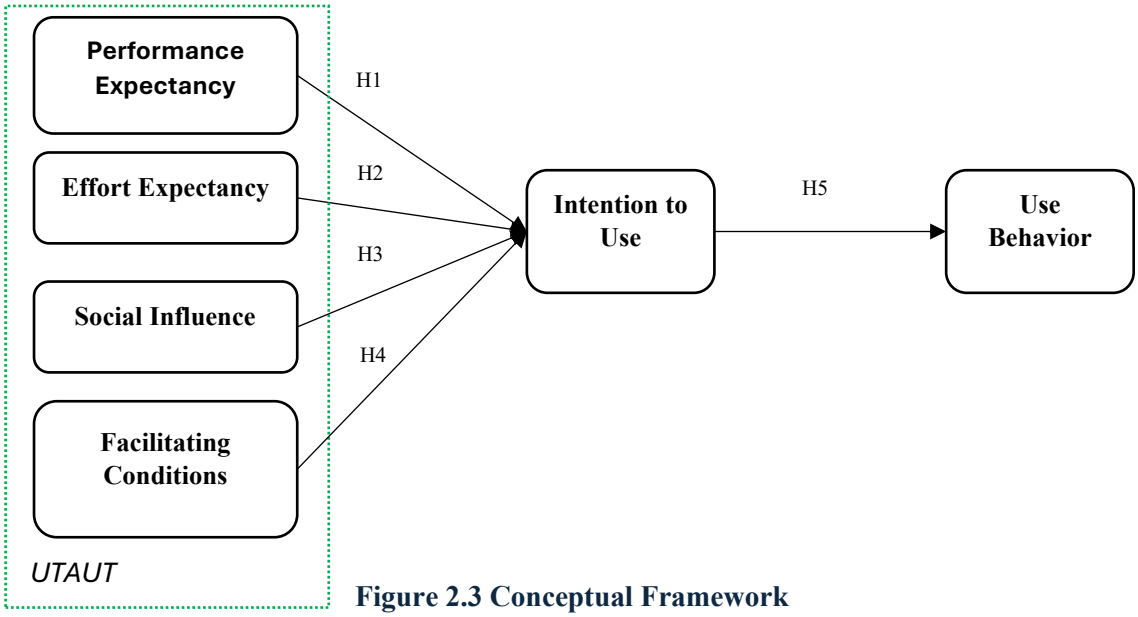


Figure 2.3 Conceptual Framework

Source: Process by author

Presented in figure 2.3 is the research framework of the study, UTAUT model was used in this study to understand the factors influencing Filipino Students Shift from cash to mobile wallet Payment Key constructs include performance expectancy, effort expectancy, social influence, facilitating conditions, intention to use as mediating variables, and use behavior. It is necessary to include a mediating variable such as intention to use because it shows a better understanding of the behavioral process through which actual usage occurs. Instead of a direct relationship of factors such as performance expectancy or social influence and mobile wallet adoption, intention to use helps outline the psychological process by which such factors become action. This facilitates a more accurate and theoretically informed picture of user behavior consistent with models such as the UTAUT in which behavioral intention is a key predictor of technology adoption.

Research has consistently shown that behavioral intention to utilize technologies is positively impacted by performance expectancy, effort expectancy, and social influence (Diego Fettermann & Luiz Philipi Calegari, 2024; Paul Bazelais et al., 2022; Bashar Salim, 2012; Fazlyn Persen et al., 2020). In turn, actual use behavior is influenced by behavior intention (Paul Bazelais et al., 2022; Diego Fettermann & Luiz Philipi Calegari, 2024). This design model framework shows the various aspects that define technology acceptance and utilization.

CHAPTER III

METHODOLOGY

3.1 Type of Research

This study adopts a quantitative research approach, employing survey questionnaires to measures the variables associated with the UTAUT model in the context of Filipino students' adoption of mobile wallet payments. Data were collected via an online survey distributed to Filipino student participants. Given the widespread use of mobile phones among university-aged individuals (Deloitte, 2017), this demographic is considered tech-savvy and well-positioned for digital payment adoption. However, students with limited technological experience may show hesitation due to unfamiliarity (Cochrane, 2021). The survey was distributed through Facebook Messenger, ensuring broad reach among students' groups. All students who received the survey were invited to participate voluntarily. Purposive sampling was employed to select respondents who met specific criteria relevant to the study. This method allows researchers to deliberately target individuals based on their characteristics and relevance to the research objectives (Tongco, 2007). It is widely used in behavioral and technology adoption studies where the population needs to meet particular inclusion criteria (Etikan, Musa, & Alkassim, 2016.

3.2 Research Approach

This research employs Partial Least Square Structural Equation Modeling (PLS-SEM) as its analytical method. PLS-SEM is suitable for exploratory studies involving multiple constructs and complex path models, particularly in early-stage theoretical development. According to Hair et al. (2014), the recommended minimum sample size in PLS-SEM can be determined using two general rules of thumb: (1) multiplying the number of indicators by 5 to find the lower boundary, and (2) multiplying the maximum number of indicators for any single construct by 10 to find the upper boundary. In this study, there are 16 indicators, so the minimum sample size based on the first rule is:

n = 16 x 5 = 80 respondents

To ensure higher accuracy and validity in structural modeling, the researcher followed the second rule:

n = 16 x 10 = 160 respondents

This sample size ensures sufficient statistical power for conducting path analysis, hypothesis testing, and validity assessment in complex models using reflective constructs,

Therefore, the researcher targeted and achieved at least 171 respondents, meeting the requirements for robust PLS-Sem analysis.

Although the recommended minimum sample size for this study was 160 respondents, the research opted to include 171 participants to enhance the statistical rigor of the PLS-SEM analysis. As noted by Hair et al. (2017), increasing sample size beyond the baseline improves the stability of parameter estimates, strengthens model reliability, and provides greater precision in hypothesis testing. Additionally, oversampling serves as a safeguard against issues such as missing data, non-normal distributions, or outliers, which can affect model fit and path analysis. According to Marcoulides and Saunder (2006), a larger sample also increases statistical power, enabling more robust conclusions, particularly in models using reflective constructs. In studies using purposive sampling like this one which focused on Filipino students, additional responses can partially address potential biases and support more generalizable findings. Therefore, the final sample, size 171, not only meets but slightly exceeds methodological standards, reinforcing the credibility of the research results.

3.3 Data and Data Sources

Primary data was collected through online surveys administered via Google Forms. The questionnaire gathered information on respondents' socio-demographic characteristics (e.g., sex, age, civil status, year level, funding source, region of residence) and mobile wallet usage. Respondents were also asked how long they have been using mobile wallet payment applications to assess their level of experience and familiarity with technology. The survey utilized in this study was administered using Google Forms and disseminated primarily through Facebook Messenger. This multi-platform approach was chosen for several practical reasons.

Google Forms was selected as the primary data collection tool due to its accessibility, ease of use, and ability to automatically compile and organize responses. It allowed the researcher to design a structured questionnaire aligned with the constructs of the UTAUT model, including multi-choice and Likert-scale items. The platforms also ensured data consistency and security, while simplifying the transfer of response for satisfied analysis via PLS-SEM.

Facebook Messenger, on the other hand, was used as a distribution channel because of its widespread use among Filipino students. As a social networking application, Facebook is deeply embedded in the daily digital habits of young Filipinos. Messenger provides a

convenient and direct communication channel where users are more likely to engage with links shared by peers or trusted contacts. This method allowed the research to:

1. Reach a larger and targeted audience efficiently, especially those aged 18-23, who are digitally active and responsive on messaging platforms.
2. Encourage participation by sending personalized invitations and reminders
3. Create engagement through live session and real-time clarifications during the survey period (as briefly noted in the study's methodology, including a Facebook live broadcast to address security concerns and improve transparency).

By combining Google Forms with Facebook Messenger, the researcher ensured broader participation while maintaining respondents' convenience and privacy. This strategy was especially effective for purposive sampling, as it enabled the researcher to directly contact Filipino students from different regions, institutions, and background while ensuring that participants met the study's criteria (i.e., being Filipino students aged 18 and above). Moreover, the method facilitated quick dissemination and feedback collection within a short time frame, making it ideal for a study targeting a digitally connected youth demographic.

The data collected from the online survey were treated with the utmost confidentiality. Results were automatically tallied and tabulated using Google Forms to Facilitate accurate interpretation. After the completion of data collection, responses were encoded into Microsoft Excel to enable systematic organization, data cleaning, and preparation for analysis. The secondary data included literature from previous research studies related to mobile wallet adoption and the UTAUT framework.

3.4 Object and Subject of Research

The object of this research is mobile wallet payment adoption. The subject is Filipino students, and the study aims to identify the factors that influence their shift from cash to mobile wallet payments using the UTAUT framework.

3.5 Data Collection Methods and Data Instrument

A total of 171 Filipino students' respondents completed the online survey and were included in the final analysis. The survey link was disseminated through Facebook Messenger and Google Forms, targeting students aged 18 and above from various regions of the Philippines, with the majority from region 12 (SOCCSKSARGEN). While the exact number of students who received the survey link was not tracked (since the link was shared broadly across Messenger groups, academic circles, and during Facebook Live sessions),

the study employed purposive sampling to ensure that only those meeting the study's inclusion criteria a students, aged 18+, and with mobile wallet experience) were collected valid. Prior to the final survey, a pilot test involving 136 participants was conducted to evaluate the questionnaire's clarity, reliability, and validity. Feedback from this pre-test phase helped refine the final version of the instrument. Of the distributed links and shared invitations, 171 valid and completed responses were collected and deemed usable for analysis. These responses met all completeness checks and eligibility conditions and were processed using PLS-SEM (Partial Least Square Structural Equation Modeling), which requires a minimum sample size of approximately 160 respondents (based on the model's indicators).

Thus, while the total number of recipients is unknown due to the open nature of digital sharing, the final usable sample for statistical analysis was 171 respondents. The survey was carefully targeted to Filipino students aged 18 and above through purposive sampling ensure the relevance of the data. The final sample met the required size threshold for PLS-SEM analysis, as determined by establishing methodological guidelines.

The researcher used the frequency, percentage rate, and means to interpret the gathered data. A 5-point Likert scale was used on the questionnaire to determine which identified factors influence the students the most to adopt mobile wallets, ranging from "Strongly Disagree" on one end to "Strongly Agree. "It was measured by ranking, which is the highest among the overall means for every factor. The range used to describe the Likert scale used on the questionnaire.

Table 3.1 Range of answer options on the Liker scale

Range	Agreement
4.21 – 5.00	Strongly Agree
3.41 – 4.20	Agree
2.61 – 3.40	Neutral
1.81 – 2.60	Disagree
1.00 – 1.80	Strongly Disagree

3.6 Data Analysis

Data was analyzed using PLS-SEM due to its suitability for exploratory models, complex structural relationships, and both small and moderate sample sizes (Hair et al., 2017; Sarstedt et al., 2014). PLS-SEM supports predictive modeling and the analysis of reflective and formative constructs, making it a powerful tool in behavioral and technology acceptance studies (Henseler, Ringle, & Sinkovics, 2009). It is also grounded in the theory of reasoned action and theory of planned behavior, which highlight the role of intention in predicting actual behavior (Ajzen & Fishbein, 1980; 1991. The UTAUT models extends these theories by integrating multiple predictors of technology use behavior, such as performance expectancy, effort, and social influence.

3.6.1 Descriptive Statistics

Descriptive statistics were used to summarize the demographic characteristics of respondents and their responses to the questionnaire. These statistics included frequences, percentages, means, and standard deviations, which provided essential insight into patterns and tendencies within the data set (Zikmund et al., 2010), Frequency distribution helped in understanding the prevalence of demographic groups while measures of central tendency and dispersion offered clarity on the general attitudes of respondents.

Descriptive statistics also enabled a clearer visualization of mobile wallet usage behavior, supporting analysis of adoption trends. According to Creswell (2014), descriptive analysis is vital in quantitative research as it provides a foundational understanding of the dataset before inferential analyses are performed. Furthermore, Churchill and Iacobucci (2002) emphasized that descriptive data play a crucial role in verifying data accuracy, identifying missing our outlier responses, and ensuring proper interpretation before conducting hypothesis tests.

Statistical approach of descriptive statistics helps researchers organize and summarize data which creates a basis for understanding research finding and data collection

(Harbison & Simmon, 20040. The field of descriptive statistics includes central tendency measures including mean, median and mode and visual representations through tables and charts (Martias, 2021). The data description methods and data visualization techniques enhance meaningful interpretation of data, yet they cannot extend conclusions past the analyzed information or perform hypothesis testing (Downie & Staryy, 22019).

The study begins with an analysis of descriptive statistics to present the socio-economic profiles of respondents regarding (Sex, Age, Civil Status, Year level, course, Source of Fund, Region of residence). These results will establish the characteristics of the sample. The research sample consist of Filipino students.

The analysis will provide statistical data which illustrates main variables for the

UTAUT model as it relates to Examining Filipino Students' Adoption Factors on Switching from Cash to Mobile Wallet Payments: An UTAUT Theory Approach. Understanding such patterns serves to determine both the frequency of adoption influence and students' agreement with statements about UTAUT framework. The data analysis process detects both data irregularities as well as data anomalies which need correction before proceeding with advanced investigative methods. This research foundation enables the study to progress toward subsequent hypothesis testing while preparing for the structural model evaluation.

3.6.2 Measurement Model Evaluation

Organizational research requires a crucial measurement model evaluation process to determine the reliability and validity of construct measures according to Hair et al., (2021). The key evaluation criteria for reflective measurement models consist of indicators reliability together with internal consistency reliability and both convergent validity and discriminant validity (Hair et al., 2021). The evaluation procedures begin with measurement model assessment followed by structural model assessment (Janadari et al., 2016).

The study employs a reflective model which requires evaluation of its measurement model through tests for internal reliability and composite reliability and both convergent and discriminant validity (Janadari et al., 2016). The evaluation process determines which construction measures should be included in path models while it strengthens the research validity.

1.) Convergent Validity

The evaluation of convergent validity determines the extent to which measurements of connected theoretical variables show correlation (Shenoy et al., 2021). The degree of convergent validity affects research outcomes substantially because small deviations from perfect measures convergence generate substantial variations in the research finding (Carlson & Herdman, 2012). Recommendations state that validities exceeding r=.70 are appropriate while measures with validities below r=.50 should be eliminated (Carlson & Herdman, 2012).

a. Factor Loading

Factor loading above 0.70 indicate sufficient construct validity (Wardatul Akman Din & S. Bidin, 2014; Ramlah Lopez et al., 2021).

b. Average Variance Extracted (AVE)

AVE provides an assessment method to evaluate construct indicator strength and show strong indicator contribution when values exceed 0.50 (P. Fithri et al., 2024). The assessment methods follow the recommendations established by Hair et al., (2013) for determining convergent validity.

2.) Discriminant Validity

A critical characteristic of psychological scales is discriminant validity, which guarantees that constructs are measured independently (Schweizer, 2014). Modern methods use confirmatory factors models with latent variables, which were previously evaluated using multitrait-multidimensional matrices (Schweizer, 2014). After taking measurement error into consideration, Cho and Ronkko (2020) offer a new definition based on correlation between measures. They present the assessment methods $\chi 2$(sys) and CICFA (sys). Using simulations, Matthes & Ball (2018) assessed six popular approaches and discovered that, depending on the situation, some were more accurate than others. For a systematic evaluation of content validity, Johnson et al. (2014) suggests a quantitative approach known as Discriminant Content Validity (DCV). The six steps in DCV are judging identification, item selection, and constructing definition. It can be used to choose relevant items for measuring theoretical construction either before or after data collection. These methods seek to improve the reliability and validity of measurements used in marketing and psychology studies.

3.) Internal Consistency Reliability

Internal consistency reliability determines the item correlation strength within a measurement tool (Campo-Arias & Oviedo, 2008; English & Keeley, 2015). The reliability assessment uses Kuder-Richardson's formula 20 for dichotomous items together with Cronbach's alpha for polytomous items and acceptable results fall between 0.70 to 0.90 (Campo-Arias & Oviedo, 2008). Cronbach's alpha stands as the top choice for reliability assessment because it generates all feasible split-half values (English & Keeley, 2015). The three-step procedure for estimating internal consistency reliability involves descriptive analysis followed by measurement model testing and coefficient calculation with confidence intervals according to Viladrich et al., (2017). The proposed method works with different measurement scales such as unidimensional quantitative or ordinal instruments and unidimensional scales with methodological effects as well as multidimensional scales (Viladrich et al., 2017). The consistency levels of scales differ between populations so healthcare providers must report results consistently (Campo-Arias & Oviedo, 2008).

3.6.3 Structural Model Evaluation

The evaluation of structural models in PLS-SEM analyzes path coefficient importance and significance together with model explanatory and predictive capabilities (Hair et al., 2021). The evaluation of both measurement and structural models takes place in the process while reliability and validity serve as fundamental assessment criteria for the measurement model (Janadari et al., 2016). The five-step process for evaluating structural model start with assessing collinearity followed by path coefficients testing R^2 evaluation and effect size (F^2) measurement and predictive relevance (Q^2) testing (Janadari et al., 2016).

1.) Multicollinearity Test

The detection of multicollinearity involves evaluation of correlation matrices as well as analysis of variance inflation factors (VIF) and eigenvalues of correlation matrices (Paul, 2008; Risnawati, 2023). Multicollinearities exist when a VIF value surpasses 5 according to Risnawati (2023). The MTest provides statistical evidence for Klein's rule and VIF detection through its role as a nonparametric bootstrap test for identifying multicollinearity (Morales Onate & Morales-Onate, 2023). Through the Mtest research, we can create a bootstrap distribution for determining coefficient of determination while performing significance testing

to decide which variables should be removed (Morales Onate & Morales-Onate, 2023). Ridge regression and principal components regression serve as techniques to decrease the level of multicollinearity even though its total eliminations impossible (Paul, 2008.

2.) Path Coefficient

Path coefficient analysis represents a statistical method that assesses linear model variables causality relationship (Seibel, 1972). Path coefficients function as standardized partial regression coefficients to analyze correlation matrices according to Seibel (1972) and Abebe (2017).

3.) Coefficient of Determinants (R^2)

The regression analysis measures known as coefficient of determination (R^2) demonstrates how well predictors explain dependent variable variation (Zhang, 2017). The practice of interpreting and applying (R^2) produces various difficulties. R^2 serves as an inconsistent estimator when measurement errors affect the observation according to Cheng at al., (2014). The various alternative R^2 statistics do not except for linear models with intercept terms according to Kvalseth (1985). According to Helland (1987) R^2 functions as population parameter estimator only if regressors demonstrate random distribution. Researchers have proposed different variants of (R^2) statistics for multiple measurements error model (Cheng et al., 2014) while extending this concept to generalized linear models (Zhang, 2017). The interpretation and utilization of R^2 in regression analysis should be done cautiously because of its known restrictions.

4.) Effect Size (F^2)

The statistical measure known as F^2 helps determine effect strength in multiple regression along with mixed-effects models as explained by Selya et al. (2012). This measure shows the actual effect size between groups by focusing on the magnitude instead of mixing it with sample size number (Coe, 2012). The F^2 measure in structural equation modeling supports researchers to identify the influence that individual constructs have on endogenous latent variables (Samartha & Kodikal, 2018).

5.) Predictive Relevance (Q^2)

Prediction models require Q^2 as their essential evaluation metric for diverse applications. The quantum-like framework enables researchers to use Q^2 for modeling both user relevance states and information retrieval uncertainty (Buccio et al., 2011).

3.6.4 Mediating Effects

It investigates dependent variable changes between independent variables by understanding their relationship with one or more intervening variables (mediator) through mediation analysis. This research studies the elements that affect Filipino students to move from cash to mobile wallet payment methods. This study applies UTAUT theory to determine adoption determinants and analyze how these elements interact by way of mediating relationships between students' mobile wallet attitudes and their adoption decision.

3.6.5 Hypotheses Testing

The purpose of hypothesis testing is to verify whether research framework relationships receive through empirical evidence. Structural equation Modeling (SEM) will serve to test every hypothesis. The relationship between the two variables is statistically and practically significant when both the p-values are below 0.05 and the coefficient magnitude meets or exceeds the set practical significance thresholds.

3.7 Variables and Indicators

Variable Indicators in this study are as follows:

Table 3.2 Factors affecting Acceptance and the Use of Mobile wallet payment

Codes	Indicators	Source
1. Performance Expectancy (PE)		
PE01	Mobile wallets are easy and fast to use.	(Gupta & Associates (2020)
PE02	Using Mobile wallet makes the handling of payments easier.	
PE03	Convenient to use anytime, anywhere.	
2. Effort Expectancy (EE)		
EE01	It is easy for me to understand the operation of mobile wallet systems.	(Suki, 2019)
EE02	The instructions and protection are easy to follow.	
EE03	I know the steps on how to receive and send money using mobile wallets.	
3. Social Influence (SI)		
SI01	My colleagues encourage me to use mobile wallet payment.	(Chong et al., 2019)
SI02	My supervisor supports me to use mobile wallet payments.	
SI03	I believe that most people who are important to me think I should use mobile wallet payment.	
4. **Facilitating Condition (FC)**		
FC01	I have experiences lagging on using my mobile wallet applications.	(Alswaigh & Aloud, 2021).
FC02	I can easily access my mobile applications even though I am only using my cellular data connection.	
FC03	I can use my mobile wallet anywhere with my cellular data connection.	
5. **Intention to Use (IU)**		
IU01	I intend to use a mobile wallet for my future transactions.	(Felick kurnia, 2021.)
IU02	I am willing to adopt mobile wallet payments as my primary method of payment.	

6. Use Behavior (UB)		
UB01	I often use mobile wallet payment for transaction.	(B. Santoso & S. L. Siregar, 2018).
UB02	I regularly use a mobile as my method of payment for purchases.	

Source: Processed by author

CHAPTER IV

RESULT AND DISCUSSION

4.1 Results Analysis

4.1.1 Respondents Profile

A total of 171 Filipino students' respondents participated in the study. The demographic analysis revealed a female majority (71%), with 29% identifying as male. In terms of age, 76%.6 were between 18 and 23 years old, which is typical for senior high school and college students. Most respondents were single (96%), consistent with their student status.

Academic level distribution shows that 28.07% were fourth-year college students, followed by 22.81% first-year students. Notably, the study included respondents from various years level and even postgraduate students, allowing a broader understanding of students' perspective on mobile wallet adoption. Regarding financial sources, 70% reported receiving allowances, 14% had scholarship stipends, and 12% earned from part-time work, indicating varying levels of financial independence. Geographically, the study was heavily concentrated in region (SOCCSKSARGEN), which accounted for 80% of respondents. While this offers valuable insights into regional behavior, it limits the national generalizability of the findings.

Table 4.1 Respondents Characteristics

Respondent Profile	Frequency (n)	Percentage (%)
Your Sex		
Female	122	71%
Male	49	29%
Age		
18-20 years old	62	36.26%
21- 23 years old	69	40.35%
24 and above	40	23.39%
Your civil status		
Single	164	96%
Married	7	4%
Your year level		
Senior Highschool	19	11.11%
1st year college	39	22.81%

2nd Year College	23	13.45%
3rd Year College	23	13.45%
4th Year College	48	28.07%
Postgraduate	19	11.11%
Your source of fund		
Allowance	120	70%
Scholarship Stipend	24	14%
Part-time job	20	12%
Others	7	4%

Source: Processed by author

From the table above, based on Sex (Gender) distribution, a total of 122 participants out of 171 individuals in the study identified as female (71%). A total of 49 males among 167 participants constitute 29% of the research sample. The composition of female respondents in the sample might affect behavioral patterns because gender appears significant for mobile wallet adoption according to UTAUT extensions.

In age distribution, 21-23 years old has 69 respondents which is the largest group, followed by 18-20 years old with 62 respondents and 24 and above with 40 respondents. Most respondents identify as young adults between the ages of 18 and 23 years old (76.6% of respondents). Among 171 respondents the 18-20 and 21-23 groups collectively represent 131 respondents, which amounts to 77% of total respondents. The data consistently shows that most respondents belong to traditional-age students' group which include high school seniors and undergraduate college students. The respondents aged 24 or older forty representing 23% of the respondents. This group includes postgraduate students alongside late starting students who work alongside their studies. The old age group evaluated mobile wallet performance differently than their younger counterparts.

According to the civil status data, 96% of respondents (164 people) identify as single while 4% (7people) are married. Only 4% are married. Most respondents belong to an age bracket where schooling overlaps with early adulthood which explains the data pattern.

The large number of single respondents in the study reflects the majority students' population which consists of young adults, since age shows they are mostly between 18-23 years old. Educational stages commonly show that most people stay unmarried because they concentrate on their studies and remain financially dependent and work on their

personal growth. Although civil status does not act as a direct moderator in UTAUT the related elements of life stage and financial behavior and technological priorities can affect behavioral intentions.

Most participants belong to fourth-year college students as they form the biggest of 48 from a total of 171 respondents demonstrating their substantial representation in this sample. The following are the first-year college students who number 39 respondents (22.81%). The research sample includes 23 respondents from each of the second- and third-year college groups who collectively form 13.45% of the total respondents. The study features equal participation rates of 19 respondents or 11.11% of senior high school students. The research data reveals and even distribution of respondents across students' academic stages while students approaching graduation make up the largest response group.

For the last category of respondents' characteristics, which is the source of funds, an allowance from parents or guardians serves as the main financial source for 70% of the surveyed students (120 individuals). Students' financial dependance reaches high levels particularly among high school seniors and students studying at the first two levels of college. A portion of respondents (24 out of 174) benefit from government and institution-based scholarship stipends according to the collected. Part-time work enables 12% of students (20 respondents) to supplement their finances, demonstrating both financial independence and likely involvement in personal financial planning.

7 respondents (4% of total) reported diverse income sources beyond traditional employment or scholarships. These alternatives sources may include entrepreneurship or informal work and remittances. Students who receive funds from multiple sources show different mobile wallet applications usage patterns based on their income diversity. Scholarship recipients and students with part-time jobs utilize mobile wallets to manage funds efficiently but students who receive allowance often use them for peer-driven transactions and convenience. Students with different financial sources show varying impacts on performance expectancy and facilitating conditions according to their management of financial resources and their perception of mobile wallet technology benefits.

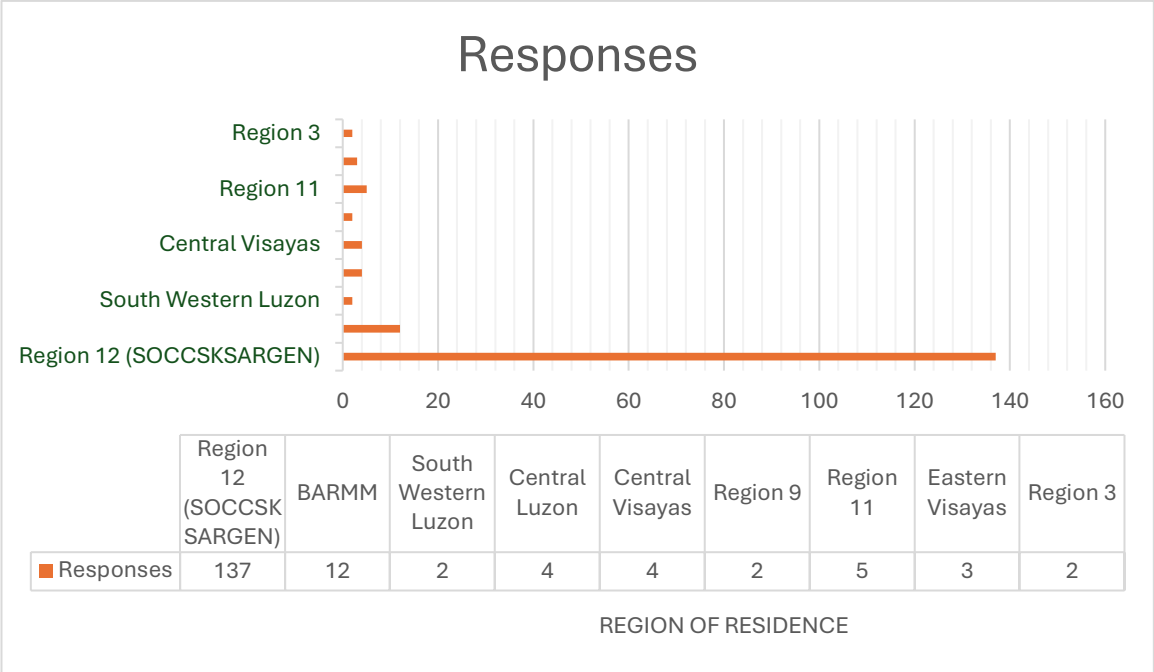


Figure 4.1 Respondents Region of Residence

Source: Processed by author

Based on the figure above, it shows that most students who respond to the online survey come from Mindanao area region 12 SOCCSKSARGEN with a frequency of 137 people (80%), In this region it covers 4 provinces namely, South Cotabato, Cotabato, Sultan Kudarat, Sarangani and General Santos City. That's what SOCCSKSARGEN stand for formerly known as Central Mindanao. Follow by student's respondent from BARMM (Bangsamoro Autonomous Region and Muslim Mindanao) with 12 people (7%), region 11 with 5 responses from students (3%) and region 9 with 2 responses from students (1.1%).

The researcher had the chance also to have respondents from Visayas area in Central Visayas 4 responses (2.3%) and 3 responses from Eastern Visayas (2%). And in Luzon area specifically central Luzon has 4 responses (2.3%), and Southwestern Luzon with 2 responses from students (1.1%), Region II with 2 responses (1.1%).

The sample distribution in this study shows a significant concentration of respondents from SOCCSKSARGEN (Region XII), which accounted for approximately 80% of the total 171 participants. SOCCSKSARGEN, located in the southern-central of Mindanao, comprises four provinces: Cotabato, Sarangani, South Cotabato, and Sultan Kudarat as well as the highly urbanized General Santos City and the independent component city of Cotabato. These regions' Strongs representation in the dataset can be attributed to the researcher's physical proximity, academic and social network connections,

and targeted outreach efforts focused primarily on Mindanao-based student communities, particularly through Facebook Messenger, institutional contacts, and online academic groups. These outreach methods were more effective in SOCCSKSARGEN than in other regions, where digital reach and engagement were relatively limited.

As a result, the sample may not fully reflect the diverse experience and conditions of students from other Philippines regions, particularly Luzon and Visayas, where internet infrastructure, urbanization, and digital wallet penetration levels may differ significantly. This regional imbalance introduces potential bias, particularly in interpreting factors such as facilitating conditions and social influence, which may vary across socio-economic and geographic contexts.

To handle this bias, the study explicitly acknowledges its purposive sampling limitations and does not generalize findings beyond the sample scope. The insights remain valid within the context of respondents and provide a valuable baseline for understanding mobile wallet adoption among Mindanaoan students. Future research is recommended to expand the geographic coverage using stratified or quota-based sampling across all regions of the Philippines to ensure national representativeness, allowing for a more nuanced comparison across regional and cultural settings.

Mobile Wallet Usage

The analysis showed that GCash was the dominant mobile wallet platform, used by 96% of respondents. Other platforms, including PayMaya and PayPal, had marginal adoption. This trend reflects GCash's strong market presence, especially in region 12. In terms of duration, 32.7% of respondents had been using mobile wallets for 6 to 12 months, followed by 28.1% with 1 to 3 years' experience, and 19.9% for over 3 years. This distribution suggests that while adoption is still emerging, it is steadily gaining ground among students.

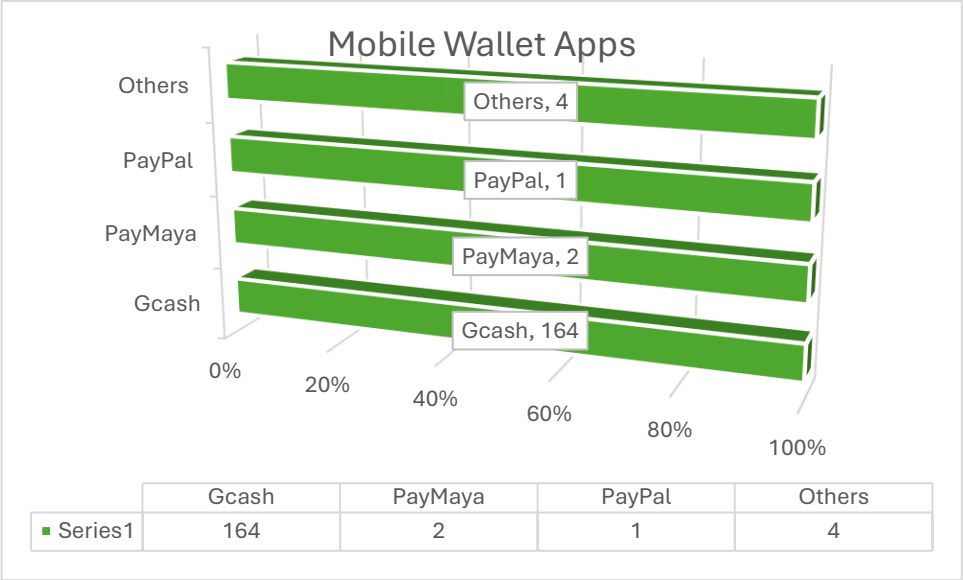


Figure 4.2 Mobile Wallet Application

Source: Processed by author

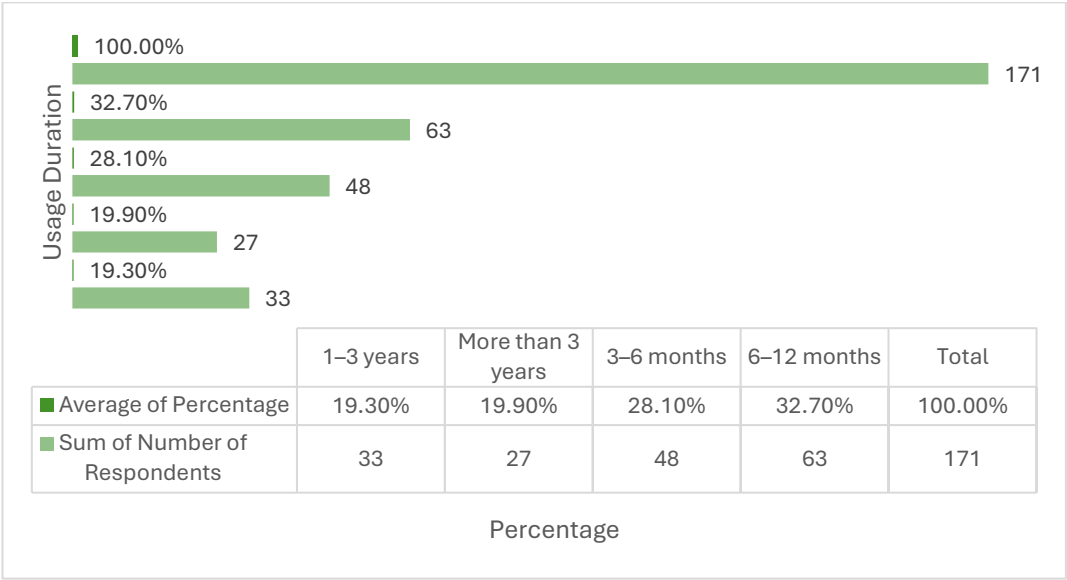
The survey results show GCash dominates mobile wallet usage because 96% of respondents, or 164 people out of 171 users, have selected this platform. The remaining mobile apps including PayMaya (1%) PayPal (1%) and no one from the respondents choose 7-11 CLIQQ Pay, the rest answer others (2%). The sample data shows that Gcash stands out as the most popular mobile wallet choice among the Filipino students in the sample, particularly who live in region 12.

Gcash demonstrates powerful market control while showing signs of delivering high performance outcomes and GCash adoption seems strongly influenced by social influence together with facilitating conditions because it has become the default standard. the author investigated Filipino student adoption factors for mobile wallet payments based on UTAUT theory by distributing an online questionnaire through Google forms which lasted two weeks and another two days for doing a live on Facebook. The author demonstrated the survey link's safety to Facebook viewers to prevent concerns about e-wallet account security. Pilot research with 136 participants evaluated both the questionnaire and guidance instructions after participants feedback to determine the survey's validity and reliability. The research focused on Filipino students who were 18 years old or above throughout Luzon, Visayas, and Mindanao. The chosen sampling method helped us collect information from a wide range of respondents. The survey instrument was distributed through Google Forms, and it was shared on Facebook

Messenger and WhatsApp. It was also sent by the Author to teacher colleagues and distributed it by them to their assigned class advisories.

This figure shows the distribution of the respondents according to how they have been using mobile wallets, with 171 respondents in total. There is a rather even distribution between the different time intervals the greatest share respondents have been using mobile wallets for 6-12 months, which means that a great number of people are still newcomers to the technology (orange segment). The middle section of the pie chart represents 28.1% of the respondents who have been using mobile wallets for 1-3 years, which may be regarded as a stable group of mid-term users, while the last section, which is green, has 19.9% of respondents who have been using mobile wallets for more than 3 years and may be considered as an experience group of users. Finally, 19.3% of respondents have been using mobile wallets for 3-6 months which is evident from the blue colored portion, which suggests that still a sizeable proportion of the consumers are in the experimentation stage.

This distribution indicates that more people are using the mobile wallet as a payment method and most of the respondents have been using the mobile wallet for a medium duration of 1-3 years and some of the respondents have been using it for 6-12 months which shows that a cross-section of people are using the mobile wallet.



	1–3 years	More than 3 years	3–6 months	6–12 months	Total
Average of Percentage	19.30%	19.90%	28.10%	32.70%	100.00%
Sum of Number of Respondents	33	27	48	63	171

Figure 4.3 How long have you been using mobile wallet applications?

Source: Processed by Author

Mobile Wallets Apps

The change in the direction of digitalization has greatly changed how people transact and manage their money. In the Philippines there are number of such mobile wallet apps including Gcash, PayPal, PayMaya, and 7-eleven CLIQQ Pay, that have become popular in facilitating a wide variety of financial transactions on the user's smartphone, from bill payment and money transfer to in-store purchases, the mobile wallet apps mentioned below are used in this study.

Gcash, Gcash is a mobile wallet application that enables real-time money transfers, immediate payments of bills and fees to over 40 billers, load purchases, and online remittances, including PayPal funds. Gcash QR lets you take mobile payments from your consumers using quick, easy, and secure RQR technology. Customers log into the Gcash App, swipe left, scan their unique QR code, and enter the payment amount. According to Bayugo (2021), Gcash's partnership with American Express makes both domestic and international purchases online possible through Virtual Pay. Credit has a "purchase now, pay later" feature. You can do various operations, including paying bills, booking movies, and reloading or borrowing money. You will also get rebates or other benefits for your purchases. There are various methods for depositing and withdrawing money. You may exchange money with other Gcash users and earn money from them. However, some disadvantage of using this app is that convenience shop operator 7-Eleven will begin charging a 1% convenience fee on Gcash cash-in transactions on May 17, 2021 (Reymart 2021), and it costs 20 PHP for every transaction above 1000 PHP, plus there is a 2% service fee for each transaction.

PayMaya, PayMaya enables you to manage your money properly, thoroughly screen your investments, take advantage of incredible deals, and even earn rewards on your purchases. PayMaya-affiliated businesses allow you to pay with a fast QR code scan. The moment you activate your e-wallet, you will get an immediate virtual MasterCard that may be used for online purchases. You do not have to verify your account to deposit into your PayMaya wallet. You may use PayMaya to pay bills, buy prepaid loads, transfer, and receive money from other users. Everybody benefits from the constant promotions and discounts (Bayugo, J. E. 2021).

However, changing your phone number may be quite a hassle. Additionally, you are not permitted to establish several accounts in your name. You would need to supply valid photo identification, a written letter, and an email, which will take three and seven days. Furthermore, it costs 15 PHP for every 1000 PHP that you deposit, and when you

activate your virtual card, you must have a balance of at least 100 pesos. To get a physical card that can be used to make cash withdrawals, you must first go through the verification procedure, and a government-issued ID is required for this.

PayPal, PayPal permits businesses and individuals with an email address to send and receive money online securely and conveniently, a safer, easier, and more efficient method. The network is based on an existing bank account and credit card, resulting in a real-time payment mechanism (PayPal.com 2017). PayPal is now the most widely used third-party online payment system globally. More than 137 million people in 193 countries and 26 different currencies use PayPal daily, resulting in an average of 8 million transactions.

7-11 CLIQQ Pay, this application is advantageous for loyal 7-Eleven consumers. CLiQQ is 7-Eleven's mobile application that enables customers to manage their rewards points, pay bills, and connect to Wi-Fi. You may earn rewards points every time you purchase a 7-eleven location nationwide, and c can redeem your earned points for anything from the rewards catalog.

One of the benefits of the CLiQQ wallet is its ease when it comes to paying bills without visiting a crowded branch. It creates barcodes for transactions that must be completed at a 7-Eleven cashier. Nonetheless, there is no withdrawal option for the prepaid card, and the points or Dollars in your wallet cannot be used to pay for purchases.

4.1.2 Descriptive Statistic Analysis

Table 4.2 Average (Mean) Score of Questionnaire Items

Code	Statement	Mean
Independent Variables: PE, EE, SS, FC		
Performance Expectancy (PE)		
PE01	Mobile wallets are easy and fast to use.	4.04
PE02	Using Mobile wallet makes the handling of payment easier.	4.09
PE03	Convenient to use anytime, anywhere.	3.91
Mean (Performance Expectancy)		**4.01**
Effort Expectancy (EE)		
EE01	It is easy for me to understand the operation of mobile wallet systems.	3.87

EE02	The instructions and protection are easy to follow.	3.85
EE03	I know the steps on how to receive and send money using mobile wallets.	4.13
Mean (Effort Expectancy)		**3.95**
Social Influence (SI)		
SI01	My colleagues encourage me to use mobile wallet payment.	3.60
SI02	My supervisor supports me to use mobile wallet payments.	3.49
SI03	I believe that most people who are important to me think I should use mobile wallet payment.	3.65
Mean (Social Influence)		**3.58**
Facilitating Condition (FC)		
FC01	I have experiences lagging on using my mobile wallet applications.	3.58
FC02	I can easily access my mobile applications even though I am only using my cellular data connection.	3.57
FC03	I can use my mobile wallet anywhere with my cellular data connection.	3.62
Mean (Facilitating Condition)		**3.59**
Mediating Variable: IU		
Intention to Use (IU)		
IU01	I intend to use a mobile wallet for my future transactions.	3.91
IU02	I am willing to adopt mobile wallet payments as my primary method of payment.	3.87
Mean (Intention Use)		**3.89**
Dependent variable: UB		
Use Behavior (UB)		

UB01	I often use mobile wallet payment for transaction.	3.70
UB02	I regularly use a mobile as my method of payment for purchases.	3.65
Mean (Use Behavior)		**3.675**

Source: Processed by author

1.) **Performance Expectancy (Mean: 4.01)**

Respondents agreed that mobile wallets improve efficiency, are convenient, and easy to use. Performance expectancy relates to the user's perception of how the use of a mobile wallet improves the efficiency of transactions. The overall mean of 4.01/5.00 shows that the respondents agree with the statement that it is convenient, fast and makes handling payments easier to use mobile wallets. This high score indicates that the users of mobile wallet technology understand certain benefits that come with the use of technology.

2.) **Effort Expectancy (Mean: 3.95)**

Students found mobile wallets understandable and easy to navigate.

Perceived ease of use relates to the ease of using mobile wallet systems and the understandability of technology. The score of 3.95 means that the users have a good level of understanding of mobile wallets and it is easy for them to use it. This shows that the actions involve sending and receiving money and users are comfortable dealing with the systems.

3.) **Social Influence (Mean: 3.58)**

Social Influence refers to the extent to which individuals perceive that important other such as friends, family or peers, believe they should use a particular technology. Although the descriptive mean for social influence was 3.58, which falls within the "Agree" range on the Likert scale, the PLS-SEM analysis confirmed that this construct is statistically significant in influencing students' intention to adopt mobile wallet payments. This indicates that Filipino students are indeed influenced by their social networks when deciding whether to use mobile wallets. The significance of this construct aligns with the findings of Chong et al. (2019) and Nguyen (2021), who observed that peer pressure, familial encouragement, and social media exposure positively affect mobile payment adoption, especially among young, digitally connected populations. In the Philippines context, where digital trends often spread virally through platforms like Facebook, TikTok, and group chats, students are more likely to adopt mobile wallets if they see others in their community using them.

This highlights the importance of word-of-mouth influence, social proof, and endorsement by peers or authority figures in driving digital payment adoption. The statistical significance of these factors supports the inclusion of Social Influence in the UTAUT framework and emphasizes the need for fintech providers and

policymakers to consider peer-led marketing and community-based campaigns when promoting mobile wallet usage among youth.

4.) **Facilitating Conditions (Mean: 3.59)**

Access to data connections and app usability were moderately rated.

This indicator focuses on the availability of resources and helps us to use mobile wallets efficiently. A mean of 3.59 means that users are fairly satisfied with technology support like data connection, though there is a possibility of experiencing a little lag in the connection from time to time.

5.) **Intention to Use (Mean: 3.89)**

There is a strong willingness to adopt mobile wallets as a primary payment method.

Future usage intention describes the user's attitude and their plan to use mobile wallets in the future. With a score of 3.89, this means that the participants have a positive attitude towards using mobile wallets in future uses and are willing to incorporate it into their usage patterns.

6.) **Use Behavior (Mean: 3.675)**

Students' frequently willingness to adopt mobile wallets as a primary payment method.

This indicator measures the current level of interaction users have with the mobile wallet systems. The mean of 3.675 indicates that the respondents use the service rather often, but not necessarily very often. Thus, the score suggests that while many users have a mobile wallet, the actual use is not yet as widespread or ingrained in daily activities.

4.1.3 SEM-PLS Model Analysis

This analysis adopts the Partial Least Square (PLS) method for its variance-based or component-based analysis. The model derivation occurred through the implementation of Partial Least Square (PLS) methods. Method is as follows:

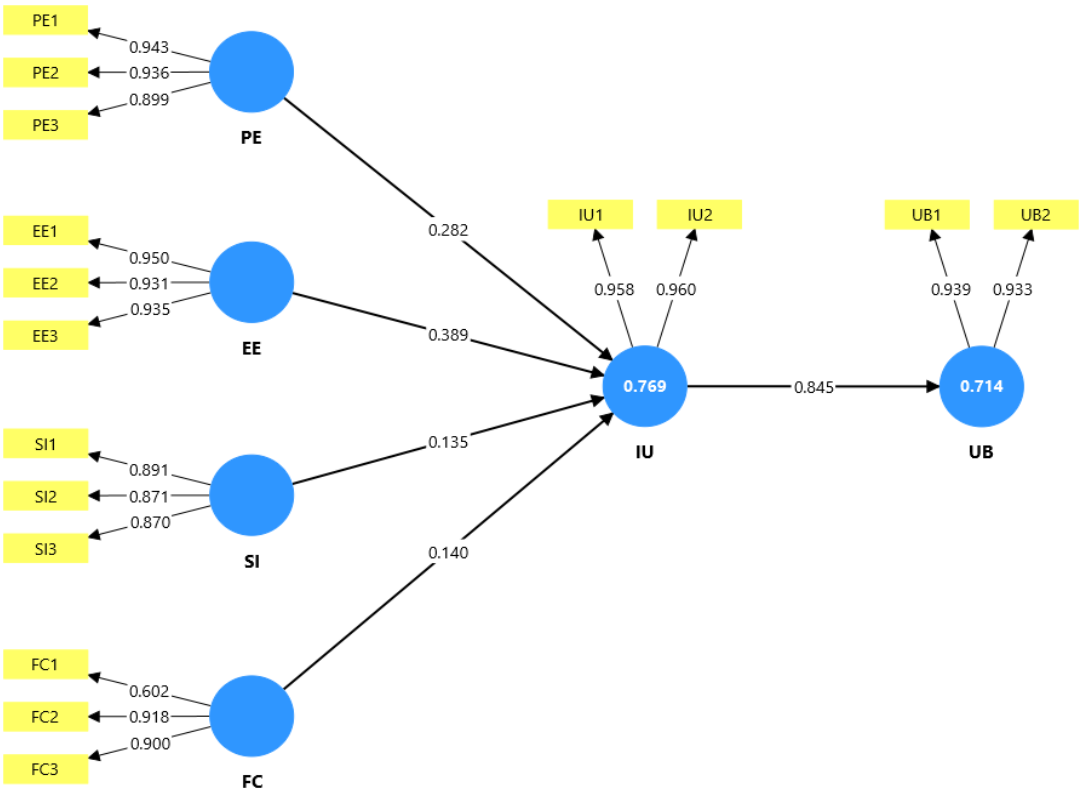


Figure 4.4 Algorithm Model

Source: processed by author with Smart PLS 4

4.1.4 Measurement Model Assessment

In the case of Measurement Model Assessment, the researcher uses convergent validity, reliability, and discriminant validity were assessed using SmartPLS.

- Convergent Validity: All construct showed AVE > 0.50, with outer loadings mostly above 0.90, indicating strong validity.
- Internal Consistency: All Cronbach's Alpha and Composite Reliability scores exceed 0.70, confirming reliability.
- Discriminant Validity: Fornell-Larcker and HTMT criteria were satisfied across all constructs, supporting the distinctiveness of each latent variable.

Table 4.3 Convergent Validity Test results

Variable	Indicator	Outer Loading	AVE	Description
Effort Expectancy	EE1	0.950	0.881	Valid
	EE2	0.931		Valid
	EE3	0.935		Valid

Facilitating Condition	FC1	0.602	0.671	Valid
	FC2	0.918		Valid
	FC3	0.900		Valid
Intention to Use	IU1	0.958	0.920	Valid
	IU2	0.960		Valid
Performance Expectancy	PE1	0.943	0.858	Valid
	PE2	0.936		Valid
	PE3	0.899		Valid
Social Influence	SI1	0.891	0.770	Valid
	SI2	0.871		Valid
	SI3	0.870		Valid
Use Behavior	UB1	0.939	0.876	Valid
	UB2	0.933		Valid

Source: Processed by author

The outcomes of the Convergent Validity Test table 4.3 above show that the measurement model shows overall strong convergent validity for most construct, as evidenced by high outer loadings and satisfactory values of Average.

Effort Expectancy has very strong indicator reliability with outer loads between 0.931 and 0.950, and an AVE of 0.881, which is much higher than the threshold. This shows that all the three indicators are valid measures of the construction.

In Facilitating Condition, we have two very strong indicators (FC2 and FC3) with an outer loading >0.90, while FC1 is below the recommended cutoff at 0.602. The AVE for the construction is, however, 0.671, which is still acceptable. FC1 may be weak but in general construct still valid. When inspecting construct validity, the average variance extracted (AVE) tells us how much of the variance in a construct is explained by the measurement, not by errors (Mendes dos Santos & Cirillo, 2021). If the is higher than 0.50, even weak standardized loadings belong 0.60 may be considered part of a valid construct (Afthanorhan et al., 2020).

Intention to Use has two indicators only and both have very high loading (0.958 and 0.960) and AVE of 0.920 which imply excellent convergent validity and very reliable indicators.

Performance Expectancy also demonstrates high validity with all three indices loading above 0.89 and AVE at 0.858, indicating consistent and reliable measures.

Social Influence is acceptable with outer loadings ranging between 0.870 and 0.891 and an AVE 0.770. So, the three indicators for SI are all valid.

Use Behavior contains two indicators with outer loading of 0.939 and 0.933 and AVE of 0.876, indicating excellent convergent validity and high indicator reliability.

Table 4.4 Fornell-Larcker Criterion Score

	EE	FC	IU	PE	SI	UB
EE	0.939					
FC	0.756	0.819				
IU	0.849	0.741	0.959			
PE	0.878	0.752	0.829	0.926		
SI	0.793	0.699	0.750	0.741	0.877	
UB	0.762	0.710	0.845	0.754	0.746	0.936

Source: Processed by author

The Fornell-Larcker criterion indicated in Table 4.4 above is applied to test discriminant validity, which guarantees that each construct in the model is separate and measures a different concept. Based on this criterion, the square root of the Average Variance Extracted (AVE) for each construct (shown in a bold along the diagonal) must be larger than its correlation with any other construct (off-diagonal values in the same row and column).

In this table, the Fornell-Larcker criterion is satisfied for each construct. For instance, the square root of the AVE for Efforts Expectancy (EE) is 0.939, which is greater than its correlations with other constructs including Facilitating Conditions (FC=0756), Intention to Use (IU=0.849), Performance Expectancy (PE=0.878), Social Influence (SI=0.793), and Usage Behavior (UB=0762). Similarly, the square root of the AVE Facilitating Conditions (0.819) is greater than its correlations with EE (0.756), IU (0.741), PE (0.752), SI, (0.699, and UB (0.710). This same pattern is seen for all constructs in the model. This result implies that each construct has more variance with its own indicators than with the indicators of other constructs thus confirming that discriminant validity is well established across all the latent variables. Although there was an earlier concern about the reliability of one facilitating Conditions item (FC1), this Fornell-Larcker analysis proves that the overall construct still holds in differentiating itself from others constructs in the model.

Table 4.5 Heterotrait-Monotrait Ratio (HTMT)

	EE	FC	IU	PE	SI	UB
EE						
FC	0.918					
IU	0.920	0.907				
PE	0.949	0.912	0.904			
SI	0.884	0.881	0.843	0.835		
UB	0.849	0.896	0.953	0.850	0.868	

Source: Processed by author

Table 4.5 shows the Heterotrait-Monotrait Ratio of Correlations (HTMT, which is a stricter approach to discriminant validity in structural equation modeling. HTMT assesses the proportion of between-construct correlations (heterotrait-heteromethod) to within-construct correlations (monotrait-hetermethod) and assists in the decision of whether constructs are empherically different from each other. It is usually assumed that a threshold for HTMT is 0.90 (or more conservatively, 0.85 for stricter analysis).

In the table above, HTMT values are at or close to the 0.90 threshold:

Effort Expectancy (EE) and Intention to Use (IU): 0.920, EE and Performance Expectancy (PE): 0.949, EE and Facilitating Conditions (FC): 0.918, FC and PE: 0.912, FC and Usage Behavior (UB): 0.896, IU and UB: 0.953.

These values indicate that some constructions, especially EE, FC, IU, and PE, show high correlations that can compromise discriminant validity. The particularly high HTMT between IU and UB (0.953), and EE and PE (0.949), exceed the 0.90 level, which indicates possible overlap in the way these constructs are understood or measured by respondents.

	EE	FC	IU	PE	SI	UB
EE1	0.950	0.694	0.799	0.799	0.752	0.738
EE2	0.931	0.708	0.766	0.842	0.745	0.672
EE3	0.935	0.726	0.824	0.831	0.737	0.733
FC1	0.525	0.602	0.496	0.436	0.517	0.470
FC2	0.663	0.918	0.651	0.691	0.593	0.623
FC3	0.658	0.900	0.657	0.689	0.604	0.635
IU1	0.823	0.729	0.958	0.801	0.719	0.771

IU2	0.807	0.692	0.960	0.789	0.720	0.848
PE1	0.812	0.691	0.802	0.943	0.663	0.708
PE2	0.852	0.691	0.791	0.936	0.695	0.700
PE3	0.772	0.712	0.705	0.899	0.706	0.689
SI1	0.702	0.624	0.620	0.681	0.891	0.639
SI2	0.624	0.502	0.597	0.570	0.871	0.620
SI3	0.749	0.693	0.739	0.689	0.870	0.694
UB1	0.767	0.653	0.809	0.745	0.694	0.939
UB2	0.656	0.677	0.772	0.665	0.702	0.933

Table 4.6 Cross Loading Score

Source: Processed by author

Table 4.6 shows the cross-loading scores that are used to further test discriminant validity in a measurement model. Cross-loading analysis is used to check if, for each indicator, it loads most on the assigned latent construct, compared to other constructs. Good discriminant validity is achieved in that each item should load more strongly on its own construction than on any other.

The Effort Expectancy (EE) items-EE1 (0.950), EE2 (0.931), and EE3 (0.935) load highest on EE, which provides support that these items are good and valid for the EE construct, although they have moderates cross-loading for others constructs. For Facilitating Conditions (FC), FC2 (0.918) and FC3 (0.900) demonstrate high loadings on FC and low loadings elsewhere. However, FC1 (0.9602) can be seen to have noticeably weaker loading on its assigned construct and has relatively high cross loading (0.525 on EE and 0.517 on SI). This is consistent with earlier findings that FC1 is a marginal item and may diluting the discriminant validity of the FC construct.

The Intention to Use (IU) items, IU1 (0.958) and IU2 (0.960), load clearly highest on IU, validating them. The Performance Expectancy (PE) items (PE1: 0.943, PE2: 0.936, PE3: 0.899) also load highest on PE with high internal consistency. Social Influence (SI) items, SI1 (0.891), SI2 (0.871) and SI3 (0.870) load highest on SI, suggesting good discriminant validity. The items for the Usage Behavior (UB)- UB1 (0.939) and UB2 (0.933) load highest on their intended construct.

The cross-loading analysis reveals that many items load highest on their respective constructs endorsing discriminant validity. The only issue is FC1 which has low loading constructs. This confirms previous worries that FC1 might be a weak indicator, though it

does not seriously weaken the overall construct validity, s long as the other FC items are strong.

Internal Consistency Reliability

The following measures are used to test reliability and convergent validity of the constructions. The table 4.7 below contains the internal consistency and reliability statistics for each latent variable in the model using Cronbach's Alpha, Composite Reliability (rho_c and rho_a), and Average Variance Extracted (AVE).

Table 4.7 Internal Consistency Test Results

Variable	Cronbach's Alpha	Composite Reliability (rho_a)	Composite Reliability (rho_c)	AVE	Description
EE	0.932	0.934	0.957	0.881	Reliable
FC	0.736	0.774	0.856	0.671	Reliable
IU	0.913	0.914	0.958	0.920	Reliable
PE	0.917	0.922	0.948	0.858	Reliable
SI	0.851	0.860	0.909	0.770	Reliable
UB	0.858	0.860	0.934	0.876	Reliable

Source: Processed by author

All constructions are at or above this threshold except for Facilitating Condition (FC) which has a marginal alpha of 0.736- still went within acceptable limits, but slightly weaker than others. Composite Reliability (rho_c) of more than 0.70 is believed to be good. All constructs including FC (0.856) across this threshold, indicating that the latent variables are measured reliably by their indicators. AVE (Average Variance Extracted) should exceed 0.50 to prove that construction explains more than half of the variance in its indicators. All constructs satisfy this criterion, with values between 0.671 (FC) and 0.920 (IU) which are high levels of convergent validity.

Overall, the results indicate that most constructions have shown excellent internal consistency and reliability, and especially high scores for EE, IU, PE, SI and UB. Despite having relatively low reliability metrics, Facilitating Conditions (FC) has values that are still higher than the minimum levels, which indicates it is a statistically appropriate construct. Nevertheless, its weaker position in comparison with the others should be pointed out and discussed as a shortcoming or a potential for development.

4.1.5 Structural Model Assessment

Table 4.8 Multicollinearity Test

To ensure the validity and robustness of the structural model, a multicollinearity test was conducted using the Variance Inflation Factor (VIF). Multicollinearity occurs when two or more independent variables in a regression model are highly correlated, which can inflate the standard errors of the coefficient estimates and lead to unreliable or unstable statistical inferences. VIF is a commonly used diagnostic tool to detect multicollinearity, where a VIF is a commonly used diagnostic tool to detect multicollinearity, where a VIF value greater than 5 or 10 indicates potential multicollinearity concerns depending on the threshold adopted by the researcher.

	VIF
EE-> IU	5,627
FC->IU	2,662
IU->UB	1,000
PE->IU	4,774
SI->IU	2,899

Source: Processed by author

From the table, it is observed that Effort Expectancy (EE → IU) has the highest VIF value of 5.627, which exceeds the conservative threshold of 5. This suggests a potential multicollinearity issue involving EE when predicting Intention to Use (IU). Similarly, Performance Expectancy (PE → IU) reports a relatively high VIF of 4.774, though still within the acceptable range. Social Influence (SI → IU) and Facilitating Conditions (FC → IU) demonstrate moderate VIF values of 2.899 and 2.662 respectively, indicating low moderate multicollinearity risks. Finally, the path from Intention to Use to Usage Behavior (IU → UB) shows a VIF of 1.000 indicating no multicollinearity. According to Hair et al. (2017), VIF values below 10 are acceptable, while Diamantopoulos and Siguaw (2006) also affirms that multicollinearity becomes problematic only when VIF exceeds 10.

The VIF results indicate that multicollinearity is not a major concern for most of the constructs in the model, with the exception of Effort Expectancy (EE), whose VIF exceeds the recommended cut off of 5. This elevated VIF suggests that EE might share a high degree of correlation with other predictors of IU, particularly Performance Expectancy (PE) or Social Influence (SI). In many technology adoption models, EE and PE are conceptually and empirically related, as both constructs measure perceived ease and usefulness of a system, respectively. This, some degree of overlap is expected.

However, the presence of VIF = 5.627 for EE warrants caution. If multicollinearity is too severe, it could inflate standard errors, bias the estimation of regression coefficients, and obscure the true relationship between EE and IU. In such cases, it becomes difficult to assess the individual contribution of EE to IU, as the shared variance with other constructs could distort its predictive power. While this issue does not invalidate the model, it highlights the need to interpret the path coefficient of EE → IU with caution.

Overall, the multicollinearity test shows that the model maintains an acceptable level of collinearity among the constructs. Only EE marginal exceeds the threshold, indicating a moderate multicollinearity concern that should be monitored but does not critically threaten the validity of the model. Nevertheless, the general multicollinearity diagnostics suggest that the structural model is statistically sound.

Table 4.9 Path Coefficients

	Original Sample (O)	Sample means (M)	Standard deviation (STDEV)	Statistics (|O/STDEV|)	P values	Description
EE->IU	0.389	0.381	0.098	3,958	0.000*	Significant
FC->IU	0.140	0.143	0.070	1,994	0.046*	Significant
IU->UB	0.845	0.843	0.028	30,398	0.000*	Significant
PE->IU	0.282	0.283	0.099	2,856	0.004*	Significant
SI->IU	0.135	0.139	0.061	2,222	0.026*	Significant

*Significant at a 5% significance level (α = 0.05)

Source: Processed by author

Table 4.9 presents the path coefficients and statistical significance of the paths between constructions in the model.

The relationship between H1: Performance Expectancy (PE) and Intention to Use (IU) shows a positive and significant effect of PE on IU mobile wallet technology was found with a path coefficient of 0.0282 and a p-value of 0.004. People will use mobile wallets more often if they feel it will help them complete transactions and manage their

finances more efficiently. Likewise, Plender & Matias (2020) and Al-Saedi et al. (2020) found that performance expectancy is a top factor influencing technology adoption, especially in digital and mobile payment situations. The reason students and tech-savvy groups use mobile wallets is that they find it easier and more efficient to manage their finances or finish tasks.

H2: Effort Expectancy (EE) positively influences Intention to use (IU) technology.

The path coefficient is 0.389 and the p-value is 0.000, both suggesting that Effort Expectancy (EE) has a strong impact on the Intention to Use mobile wallets. A high coefficient means that users tend to use mobile wallets more often when they find interface user-friendly and simple to understand. The finding here is like Cacas et al. (2020), who found user-friendly design was very important for Generation X in deciding to use GCash. Since most survey respondents are students or young people who have used mobile technology before, how easy it is to use the app matters a lot in shaping their behavioral intention.

H3: Social Influence positively influences Intention to use technology

There is a statistically significant relationship between Social Influence (SI) and Intention to Use on the value of 0.135 and a p-value of 0.026. While its impacts is less than that of other factors, it points out the role of peers, family or social norms in making people use mobile wallets. Cacas et al., (2020) report that peer influence was the primary reason for many Generation X users to adopt the Internet. Likewise, Al-Saedi et al (2020) concluded that social influence is the second biggest factor influencing people to use M-payments. Their actions could be affected by the example of their peers or by trend popular among young people on the internet.

H4: Facilitating Condition positively influences actual Use Behavior

The relationship between Facilitating Conditions (FC) and Use Behavior (UB) is significant, but only moderate, because the path coefficient is 0.140 and the p-value is 0.046. As a result, having adequate support infrastructure (smartphones, internet, app compatibility and assistance) makes it more likely for users to start using mobile wallets. This matches the findings of Plender & Matias (2020) and Cendana & Palaoag (2020), where having the right conditions was key for using technology. Sincere reliable digital infrastructure matters a lot, it’s likely that, despite having the skill, many users in urban or semi-urban areas still need it to use mobile payments.

H5: Intention to use has a positive impact on the use behavior of mobile wallet payment.

The correlation between Intention to Use (IU) and actual Use Behavior (UB) is the strongest, with a coefficient of 0.845 and a p-value of 0.000, meaning IU has a very strong and significant impact on UB. It provides a main principle of the UTAUT model. That the intention to use a system is a main factor in whether people use it. Support for this comes from prior studies such as Plender & Matias (2020) and Al-Saedi et al. (2020) which consistently showed that intention is a major factor in using mobile payments. This means that, when the respondents decide to use mobile wallets, they are likely to carry out the action.

All five hypotheses hold true and the intention to use is the greatest predictors of actual usage, all in all, all suggested relationships in the model are statistically significant at the 0.05 level or better.

while effort expectancy and performance expectancy are the leading influencers of the intention. The findings are in line with what UTAUT research has shown and reflect the interest of the respondents-people who are likely younger and enjoy using technology, as well as social support. The results suggest that while social influence and necessary conditions matter, the main reason for frequent mobile wallet use is being around peers and having the right infrastructure. According to Anne (2024) and Acopiado et al. (2022), better digital education and infrastructure help more people in understanding areas use mobile wallets.

Table 4.10 Coefficient of Determination (R2)

	R-square	R-square adjusted
IU	0.769	0.763
UB	0.714	0.712

Source: Processed by author

Table 4.10 shows the coefficient of determination (R^2) that tells how much variance in the dependent variable variables are accounted for by the model. The R^2 value for Intention to Use (IU) is 0.769, that is 76.9% of its variance is explained by EE, PE, SI, and FC. For Usage Behavior (UB), the R^2 is 0.714 which means that IU alone accounts for 71.4% of the variance is usage behavior. These are high values, which show that the model has great explanatory power for both IU and UB.

Table 4.11 Effect Size (F2)

	f-square	Description
EE->IU	0.116	Medium Effect
FC->IU	0.32	Small Effect
IU->UB	2,492	Large Effect
PE->IU	0.072	Small Effect
SI->IU	0.027	Small Effect

Source: Processed by author

Table 4.11 shows the effect size (f^2) of every exogenous variable upon its endogenous variable. The medium effect of Effort Expectancy on IU ($f^2 = 0.116$) is higher than that of Facilitating Conditions, Performance Expectancy, and Social Influence with C values of 0.032, 0.072 respectively. The link between Intention, Use and Usage Behavior has a very large effect size ($f^2 = 2.429$) highlighting the importance of this link in influencing actual user behavior.

Table 4.12 Predictive Relevance

	Q^2predict	RMSE	MAE	Description
IU	0.760	0.498	0.385	The model is predictive relevance
UB	0.643	0.607	0.482	

Source: Processed by author

Table 4.12 shows the predictive relevance of the model using Q^2 predict, Root Mean Square Error (RMSE) and Mean Absolute Error (MAE). The Q^2predict for Intention to Use (IU) is 0.760, and for Usage Behavior (UB) it is 0.643. As both values are far above zero this means that the model has a good predictive relevance of IU and UB. Also, the values of RMSE and MAE confirm this conclusion. So, it's only moderate degree of accuracy in terms of the prediction for RMSE for IU that has a result of 0.498 and for the MAE is 0.385. The RMSE for UB is a little higher at 0.607 and the MAE at 0.482, which is a little less accurate than for IU, but still within acceptable limits. In general, these findings indicate that the model is acceptable to predict the target construct, especially IU, thus verifying its predictive relevance.

Table 4.13 Specific Indirect Effects

Variables	Specific indirect effects
EE->IU->UB	0.329
FC->IU->UB	0.118
PE->IU->UB	0.238
SI->IU->UB	0.114

Source: Processed by author

Table 4.13 displays the exact indirect effect of the independent variables Effort Expectancy (EE), Facilitating Conditions (FC), Performance Expectancy (PE), and Social Influence (SI) to Usage Behavior (UB) through Intention to Use (IU). The highest indirect effect is from Effort Expectancy (EE) to UB via IU, with value 0.329, which means ease of use has significant impact on behavioral usage by first increasing intention. Performance Expectancy (PE) then is 0.238 with an indirect effect, meaning that perceived usefulness of the mobile wallet also enhances intention, which promotes actual use. The two constructs, Facilitating Conditions (FC) and Social Influence (SI) have lower indirect effects of 0.118 and 0.114 respectively, which suggest a more moderate but still positive role in influencing usage behavior through intention. These results show the mediating role of IU in converting user perception into actual behavior consequences.

4.1.6 Hypothesis Testing

The hypothesis testing in this model determines the significance of latent variable relationships. All straight paths from independent variable (Performance Expectancy (PE), Effort Expectancy (EE), Social Influence (SI), and Facilitating Conditions (FC) to Intention to Use (IU), as well as from by non-zero path coefficients.

Table 4.14 Hypothesis Testing

Hypothesis	Path	Coefficient	Strength	Significance (Assumed p< 0.05)	Description
H1:PE→IU	Supported	0.282	Moderate	Significant	PE has a positive moderate effect on IU
H2:EE→IU	Supported	0.389	Strong	Significant	EE has a strong positive effect on IU
H3:SI→IU	Supported	0.135	Weak	Significant	SI has a weak but positive effect on IU
H4:FC→IU	Supported	0.140	Weak	Significant	FC has a very strong positive effect on IU
H5: IU→UB	Supported	0.845	Very Strong	Significant	IU has a very strong positive effect on UB
R^2 (IU to IU)	-	0.769	High		IU with 76.9% explained by PE, EE, SI, and FC

R^2 (UB to UB)	-	0.714	High		UB with 71.4% explained by IU

Source: Processed by author

The outcomes of the hypothesis testing prove that all suggested relationships in the research model are statistically significant. Effort Expectancy (EE) is the most powerful predictor of Intention to Use (IU) among the four predicts ($\beta = 0.389$, $p < .05$), which means that the easier the mobile wallet seems to users, the more they intend to use it. Performance Expectancy (PE) also has meaningful positive impact on IU (β 0.282, $p < .05$) as users' belief in the system's usefulness increase their usage intention. At the same time, both Facilitating Condition (FC) ($\beta = 0.140$, $p < 0.05$) and Social Influence (SI) ($\beta = 0.135$, $p < .05$) influence IU positively, but not as much. This means that, while environmental support and social pressure affect behavioral intention, they are weaker than people's perception of utility and usability.

Importantly, IU has an extremely strong and meaningful impact on UB ($\beta = 0.845$, $p < .05$), thus supporting the theory that behavioral intention represents the driving force of technology adoption behavior. The model accounts for 76.9% of IU variance and 71.4% of UB variance, which is a strong explanatory power and evidence for the structural validity of the UTAUT-based framework in the study of mobile wallet adoption. This shows indeed that all hypothesized relationships in the model are supported, and statistically significant, with Effort Expectancy and Intention to Use being the most powerful constructs to predict behavioral outcomes.

4.2 Discussion

This study has revealed important aspects about Filipino students using mobile wallets which are explained using the Unified Theory of Acceptance and Use of Technology (UTAUT). All the main constructions used by the model; performance expectancy, effort expectancy, social influence, facilitating conditions, intention to use and use behavior, were found to influence the results differently and these were also influenced by the respondents' demographics and regions.

Performance Expectancy and Effort Expectancy had the strongest positive effects on Intention to Use. This suggests that students prioritize ease of use and perceived usefulness when adopting mobile wallets, consistent with finding from Suki (2019) and Al-Mamun et al. (2020)

Social Influence was statistically significant, indicating that peer recommendations, societal norms, and the opinions of important others play meaningful role in shaping Filipino students' intention to adopt mobile wallet payments. This aligns from previous studies such as Chong et al. (2019), which emphasize the influence of social networks on technology adoption. The result highlights the importance of group dynamics and social validation, especially within the collectivist cultural context of the Philippines.

Facilitating Conditions significantly affected Use Behavior, affirming that access to reliable data connections and device compatibility encourages usage. The strong relationship between Intention to Use and Use Behavior confirms UTAUT's theoretical structure and findings from To & Trinh (2021).

Gcash's near universal usage among respondents highlights how platform dominance may shape user behavior. It is usability, Low barriers to entry, and promotional offers may strengthen perceived and facilitating conditions.

The researcher suggested that these constructs play a role in influencing Filipino students' intention to use mobile wallets, with behavioral intention acting as a mediator between them and actual use. Many studies have shown that the intention to use e-learning, mobile health or payment apps is often predictive by performance expectancy, effort expectancy, facilitating conditions and social influence (Abbad, 2021 Candra et al., 2024 and Linge et al., 2023).

Over the past few years, more students in the Philippines have been using mobile wallets for payments because of digital change, better networks and trying to use less cash. With e-wallets, users can buy things without having to bring cash or cards, as they replace traditional ways to pay (Chelvarayan et al., 2022). Because the Philippines is undergoing digital change and better network development, students and young professional are now using mobile wallets more frequently for payment related to their education and health.

The researchers applied the Unified Theory of Acceptance and Use of Technology (UTAUT) to find out what influence Filipino student's intentions and use of technology. To address how people learn to use technology, Venkatesh et al. (2003) introduced the UTAUT model.

4.2.1 Performance Expectancy and Mobile Wallet Adoption

Performance expectancy (PE) measures how much an individual thinks that using technology will benefit their work performance. As a result, using a mobile wallet is believed to be more convenient, quicker and more efficient for handling finances. As a

result, PE was found to improve Filipino students' desire to use mobile wallets, supporting Hypothesis 1 (H1). The results are in an agreement with studies done previously. Al-Mamun et al., (2020) determined that students believe mobile wallets are very useful when it comes to making urban transactions for transportation, food and online payments. Since the banking systems in the Philippines is mostly digital, the use of mobile wallets plays a significant role in shaping people's opinion about them. Since 96% of students use Gcash, as shown in the data, it seems that the service provides what users want. Perceived utility, which is comparable to performance expectancy, is one of the most important factors, expectancies, is one of the most important factors that influence mobile wallet intention, according to Jameel et al. Because the performance expectancy score is high (mean = 4.01), students believe mobile wallets to be reliable and simple to use. The survey showed that 80% of students were from region 12 (SOCCSARGEN), a Mindanao region that has worked to increase digital literacy among its people. The region's students may have grown to appreciate mobile wallets because GCASH provides easy access and special services like payments for school activities and sending money.

4.2.2 Effort Expectancy and Ease of Use

If people think it will be easy to use, they are more likely to adopt new technology. The results of this study suggest that EE positively and significantly influenced intention to use, as expected by hypothesis 2. Filipino students are familiar with easy-to-use interfaces and systems that quick to respond. The survey results indicate that students find mobile wallet applications easy to use, as the average score (Mean = 3.95) for EE is high match the demographics: most respondents (76.6%) were between 18 and 23 years old and were in their first to fourth year at college. Since they were born into a digital era, they are very familiar with mobile technology. Intriguingly, people aged 24 and over and postgraduate students (23.39% of the sample) might need special education, because their use of social media is influenced by other reasons such as convenience, rather than social norms. Studies done before this one have supported this outcome. Suki (2019) found that young consumers appreciate platforms that are simple to use and learn. To and Trinh (2021) found that the ease of use plays a major role in determining whether students and young professionals intend to use mobile wallets.

As most respondents in this research are aged 18-23 their familiarity with mobile applications helps them perceive using the app as simple, which affects their decision to use it.

4.2.3. Social Influence in a Peer-Driven Culture

Social Influence (IS) was statistically but the least influential of the UTAUT predictors. This finding suggests a growing autonomy among Filipino students in making technology-related decisions. While social issues such as friend's usage or endorsement from instructors encourage adoption to some extent, most students relied on personal assessment of usefulness and ease of use.

This result is diverse from studies focused on older demographic, such as Generation X (e.g., Cacas et al., 2022), where peer pressure and social norms were primarily motivators. Among students, particularly those aged 18 – 23, technology usage appears more self-determined. Nevertheless, peer conversations and community sharing remain influential in creating awareness of features, promotions, or cashback schemes. Notably, students from urban areas were more independent in their decision-making, whereas those from rural regions were more likely to rely on recommendations from friends and family. This suggests that regional digital maturity plays a moderating role in social influence.

SI is also an important part of the UTAUT model. This deals with the extent to which someone thinks important others in their life want them to use a specific technology. According to this study, SI was associated with students' interest in using mobile wallets, confirming Hypothesis 3 (H3). Yet, the effect was not as strong as the ones with PE and EE (Mean = 3.58). Although students recognize social influence, it is not the main reason they start using mobile wallets. These results could be because students and particularly female students, are strongly involved in making financial choices. Studies have found that women turn to digital platforms for their ease and security and their effects on others may be hidden in trends or experiences instead of being openly pressuring. Since collectivism is common in the Philippines, people still care about what others think and what their family approves of. The study by Chong et al. (2019) pointed out that peer support motivates young adults to start using mobile technology. The fact that Gcash is the most popular app among students suggests that people use it because of both personal wishes and the advice of others. Amoroso et al. (2021) have shown that regular peer-to-peer transactions such as sharing credit may lead more people to use mobile wallets. Using mobile wallets is more popular among students due to social media, influences and promotions.

One clear example of how social influence out in practice is the overwhelming preference for Gcash among the respondents. The dominance of Gcash over other mobile wallets platforms such as Pay Maya and Pay Pal among Filipino students' can be attributed

to a combination of social, functional, and contextual factors. Gcash has established itself as the most widely used digital wallet in the country, creating a strong network effect where students adopt it largely because their peers, families, and local merchants also use the same platform. This reflects the role of social influence, a key construct in the UTAUT model, where behavioral intention is shaped by the opinions and practices of people deemed important by the user. Furthermore, Gcash is designed specifically for the Philippines market, offering localized services such as utility bill payments, mobile top-ups, QR-based purchases, and government transactions, all of which are highly relevant to the daily financial activities of students. Compared to PayPal, which is more oriented towards international payments and freelance income, or Pay Maya, which has a smaller user base and fewer incentives, Gcash offers a more practical and user-friendly experience. Its simple interface, seamless mobile number integration, and frequent promotional offers such as cashback and rewards further enhance its appeal. While cost many influences wallet selection to some extent, the findings of this study suggest that students are primarily motivated by convenience, ease of use, accessibility, and peer influence, rather than transaction cost. Thus, Gcash's widespread usage is not solely due to affordability, but because it meets the behavioral expectations and social context of the youth demographic in the Philippines.

4.2.4 Facilitating Conditions: Infrastructure and Accessibility

Facilitating Conditions (FC) referring to access to smartphones, mobile internet, app compatibility, and user support directly influenced Use Behavior. Respondents emphasized that stable internet and compatible devices were essential for uninterrupted wallet usage. Students using prepaid mobile data reported interruptions, especially in rural areas like BARMM and Region IX, highlighting digital inequality in infrastructure access. These Findings strongly support the need for region-sensitive digital planning. While the urban- rural divide is well-documented in national reports, this study adds a behavioral lens student in poorly connected areas using wallets less frequently or limited usage to load purchases and tuitions payments. Moreover, the availability of customer support via chatbots or live agents on wallet platforms played a vital role in encouraging continued use. Students expressed frustration with unresponsive systems, suggesting that accessible assistance improve retention.

The role of digital literacy also emerged under FC. Respondents with basic ICT skills were more likely to explore advanced features linking bank accounts or paying bills

online. Hence, future strategies should include digital literacy training to enhance facilitating conditions and promote comprehensive usage.

Hypothesis 4 is supported by the findings which prove that having favorable conditions encourages people to use mobile wallets. Points to consider here are internet service, the availability of smartphones and compatibility with apps. The mean score for FC was 3.59, meaning that respondents generally agreed on this question. While most Filipino students have access to phones and the internet, problems with the internet and apps can stop them from using everything without a hitch. This matters a lot when looking at the results by region. Students in BARMM, Region 11 and Region 9, belonging to the Mindanao subset, may have missed out on using mobile wallets due to poor or unreliable infrastructure. In contrast, people in Central Luzon and Visayas said they use the internet more, likely because they have better connectivity and technology. Such gaps should encourage mobile wallet companies and policy makers to help expand digital infrastructure in underserved regions. Similarly, Goh et al. (2019) pointed out that technological infrastructure plays a big role in encouraging the use of new technologies in developing countries. Moreover, Nguyen (2021) stressed that facilitating conditions should cover both the infrastructure and the education of customers as well as their support.

4.2.5 Intention to Use and Actual Use Behavior

Intention to Use (IU) significantly predicted actual Usage Behavior (UB), in line with UTAUT assumptions. A high path coefficient ($\beta = 0.845$) revealed that intention was a strong precursor to behavioral change. This transition was especially evident in students who viewed wallets not only as tools for necessity (e.g., tuition) but also convenience (e.g., e-commerce, food delivery). Students with stronger behavioral intentions reported higher frequency and diversity of mobile wallet transactions. Use Behavioral intentions also varied also varied by financial source students with scholarship and part-time income were more frequent users, likely due to greater financial autonomy. This insight bridges psychological intention with socioeconomic context. Addressing Objective 2. Moreover, duration of usage played a role. Students who had used mobile wallets for over 6 months reported habitual usage, such as scanning QR codes in canteens or using wallets in public transport. This behavioral integration marks a shift from initial experimentation to lifestyle incorporation.

Hypothesis 5 supports those which states that a person's intention to use is linked to their actual use. People who wish to pay with mobile wallets are more likely to do so in real life. Tripathi et al. (2021) also found that behavioral intention plays a major role in

determining whether mobile wallet users use their wallets. The average intention to use was 3.89, most of their incomes from allowance (70%), some from scholarship (14%) and only a few from part-time work (12%). Since they rely on allowances, students using mobile wallets mostly make transfers to friends, buy meals and cover transportation. Users who hold scholarships or jobs are more likely to go on the platforms to save or manage their funds. The information could help mobile wallet services to design tools and budgetary features that suit each group. and the use behavior score was 3.675. It appears that many respondents started using mobile wallets early and have moved on to using them regularly. It was interesting to see that students in rural or underdeveloped areas use mobile wallets just as much as students in urban areas. Increasing usage frequency may be achieved by using user engagement strategies targeted at new users in areas where the internet is not widely available.

While students seem ready to use mobile wallets only a few use them. Research has shown that the gap often exists because of problems with the internet, issues on the site or shops not being able to accept payments (Anico, 2025; Sanchez et al., 2024). Besides, feeling of security and trust which were not part of the original UTAUT, could also affect how people behave.

4.2.6 Integration with Previous Studies

The results of this study align and contrast with multiple previous works:

1. In contrast to Cacas et al., (2020), where peer influence dominated, this study finds effort expectancy and infrastructure as stronger predictors for students.
2. Like Al-Saedi et al (2020), this study validates the dominant role of performance expectancy and effort expectancy but situates it in the context of digital youth.
3. Unlike Anne (2024), who emphasized e-commerce-driven adoption, this study reveals that education-related needs and peer transaction are primary drives among students.

The outcomes of this study confirm and extend results seen earlier in the UTAUT studies, especially about student demographic and areas. Finding in Region 12 (SOCCSARGEN) that students expect good results in school are consistent with Anico (2025) and Acopiado et al. (2022) which note that younger, urban users rely on digital payments because of their usefulness and convenience. The fact that GCash is used widely in region 12 points to a connection between platform availability and improved performance views. Effort expectancy was valuable for all students, especially for first- to second- year college students, who feel at ease with new mobile technology. The findings

support Suki's work (2019), while adding that ease-of-use perceptions are greatly affected by the person's age and education level. Unlike what Cacas et al. (2020) and Chong et al. (2019) observed, social influence was only moderately significant in the present study.

Using mobile wallets is so common in region 12, there is not much excitement or peer encouragement for each other to start using them. Most of the time, the learning environment was favorable, but students in rural parts of Mindanao using data reported delays occasionally. Despite what Anne (2024) highlights about challenges in underserved regions. Mobile ecosystems like Gcash can succeed in those places. More students with scholarship or part-time jobs said they were willing to try mobile wallets, so it appears that how busy and how financially responsible people are influence their decision to use them, as noted in Carillo (2023) and Amoroso et al. (2021). To sum up, many people acted the same with the app, but those who saved or spent for a month or more generally did a lot more, mostly those from areas lacking banking access. The findings prove the claims of Iman (2018) and Sanchez et al. (2024) that being underbanked and understanding usage are both very important for adoption. All things considered, this work connects UTAUT adoption variables with the students' age, gender, form of funding and where they live to explore how socio-economic and geographic diversity affect digital payment habits in the country.

Further information and justification for using the UTAUT model can be found in previous studies. According to Plender & Matias (2020), the use of online money transfer in the Philippines was mainly influenced by PE and FC. On the other hand, Cacas et al. (2020) found that social influence and rebate offers were the main reasons Generation X users decided to use Gcash. Despite differences in age groups, both Generation X and students agree that making digital payments is important because of their usability and what their friends suggest. According to Acopiado et al (2022), digital payments grew drastically during the pandemic because they were required. Companies and individuals were required to put in place new ways to avoid contact. Previously, necessity influenced them find them convenient, valuable and useful in their daily and academic routines. Although Anne (2024) and Abrazado et al. (2024) studied various groups, they both noticed the impact of PE, FC and SI on UTAUT.

One main drawback in their studies was that students were not included and this research aims to correct that. According to Cendana & Palaoag (2020), students are now ready to use digital tools in their education, so "Smart IDs" should be used in higher education. What they found indirectly demonstrates that UTAUT constructs are significant

for school-related payment systems and digital services. According to Al-Saedi et al. (2020), PE and SI are reliable predictors of mobile payment usage around the world. Their proposal includes trust and perceived cost in the UTAUT model which is a gap this study plans to explore further.

4.2.7 Hypothesis Integration and Structural Model Insights

The SEM analysis in this study confirmed that the UTAUT constructs are related to mobile wallet adoption. All the hypotheses (H1 to H5) were substantiated, which demonstrates that UTAUT can be applied successfully here.

Table 4.15 Hypothesis Integration and Structural Model Insights

H1: PE → Intention to Use	**→Significant**
H2: EE →Intention to Use	→Significant
H3: SI→Intention to Use	→Moderately Significant
H4: FC →Use Behavior	→Significant
H5: IU → Use Behavior	→ Strongly Significant

Source: Processed by author

The Fornell-Larcker Criterion and HTMT Ratio showed that the constructs in the model are independent of each other. Furthermore, convergent validity demonstrated that most outer loading were above 0.90 which means the survey items correctly measure what they are meant to.

4.2.8 Implications of Findings

From a theoretical point of view, the study uses UTAUT to study students. While UTAUT has been used in research on professionals, SMEs or all people, this study proves its constructs among Filipino students. What is learned from this study can be applied by stakeholders to enhance digital payment use among Filipino students. First, it is clear from the high measures that students believe mobile wallet platforms, particularly GCASH, meet their expectations for speed, convenience and ease of use. So, the fintech business ought to focus on delivering user-friendly tools, as many early users come from this young group of people. Yet since social pressure and necessary conditions are not fully satisfied, adoption is still someway held back by a lack of infrastructure and resources in less connected areas, like some places in Mindanao. For this reason, special efforts like reduced mobile data prices, enhanced networks and informative sessions at the community level can help eliminate the digital divide.

Having scholarships and part-time jobs encourages students to both plan for use and act on their plans, showing that being financially responsible makes them more likely to use the platform overtime. Both educational institutions and government offices such as the BSP can make use of this information by blending financial literacy with digital finance training, mainly for underprivileged students who live far from urban centers. Also, mobile wallet makers should design services that fit the needs of certain students' groups, like providing scholarships for school shoppers or budgeting tools for students. As a result, these findings indicate that both the technologies and the characteristics of the students and

regions play a role, meaning policy makers and companies must join forces to encourage more students to use mobile wallets across the country. Aligned with objective, which seeks to provide practical and actionable recommendation based on the finding, this study proposes strategies for key stakeholders to enhance mobile wallet adoption among Filipino students.

For Policymakers to address regional disparities in mobile wallet usage, it is imperative for the government to prioritize investments in digital infrastructure, particularly in underserved and rural areas. Bridging the digital divide can significantly reduce adoption gaps and foster inclusive financial participation. In addition, government agencies such as the Department of Information and Communications Technology (DICT) and the Department of Education (DepEd) are well-positioned to implement mobile literacy programs. These initiatives should be tailored to the unique needs of students and designed to build foundational competencies in the use of mobile financial technologies.

For Educational Institutions Universities and other academic institutions play a critical role in normalizing the use of mobile wallets among the student population. One strategic approach is to establish partnerships with fintech platforms to facilitate the integration of mobile wallets services into campus systems such as tuition payment portals and internal financial services. Furthermore, students' affairs offices can leverage these platforms for more efficient stipend disbursement and the issuance of digital student identification cards. Such applications not only streamline administrative processes but also reinforce daily usage of mobile wallets, contributing to habitual engagement.

And for Fintech Developers mobile wallet platforms must consider the usability needs of their primary and emerging user base, particularly students from rural or marginalized regions. Simplified interfaces, support for local languages, and offline functionalities are critical features that can enhance accessibility and user retention in low-connectivity environments. Moreover, incorporating gamified educational tools such as rewards for completing financial literacy modules or budget management challenges can sustain long term interest and deepen user's understanding of digital finance.

The results provide suggestions for schools, policymakers and companies in the fintech field. Collectively, these targeted recommendations offer a roadmap for multi-sector collaboration in fostering a more inclusive, literate, and digitally empowered student populations.

This discussion also demonstrates that UTAUT explains Filipino student's adoption of mobile wallets well. Performance expectancy, Effort expectancy, Social Influence and Facilitating conditions strongly influence an individual's intention and behavior. Researchers have found that convenience, the ease of use, influence from peers and the state of technology all matter. Yet, the fact that people do not always behave as they intend demonstrates that issues like trust, security and policy support should be further studied. The research proves that importance of UTAUT and emphasizes that models should be tailored to specific groups, like students.

4.2.9 Cross-Cutting Insights and Emerging Trends

Beyond the individual construct of the UTAUT model, this study has brought to light several intersecting themes that reflect the evolving nature of mobile wallet adoption among Filipino students. While quantitative data supports the predictive power of constructions like Effort Expectancy and Performance Expectancy, a qualitative reading of the results highlights more nuanced and context-specific insight that may inform future refinements of technology adoption frameworks in developing nations.

Digital Maturity and Technological Autonomy

One of the most prominent themes is the increasing role of digital maturity in shaping mobile wallet behavior. Students with greater digital exposure through daily interactions with smartphones, online learning platforms, and social media tend to exhibit more consistent and confident usage patterns. Platforms familiarity, combined with growing financial independence (such as managing personal allowances or small incomes), contributes to a heightened sense of self-efficacy in using mobile financial tools. These findings suggest that digital competence is not merely a prerequisite for adoption but a dynamic process that deepens with continued engagement and experience.

Filipino students, particularly those aged 18 to 23 who dominate the sample, demonstrate a high degree of digital maturity. This aligns with the concept of technological autonomy, where decisions to adopt or reject technology are increasingly based on personal needs and experiential assessments rather than social pressures or external validation. This trend signifies that UTAUT's social constructs may require recalibration when applied to digital-native populations.

Socioeconomic Influence on Adoption

Another salient theme is the influence of socioeconomic factors on mobile wallet use. The data shows that students who receive regular allowances or possess stable income

sources are more likely to engage in frequent mobile transactions. These students tend to perceive mobile wallets as practical tools for daily expenditures, online purchases, and budgeting. In contrast, those with limited financial resources use technology less frequently, reflecting a digital divide that mirrors existing economic inequalities. This insight underscores the importance of addressing affordability and accessibility when promoting inclusive financial technologies among youth populations.

Platform Preference and Brand Loyalty

The study also observed a high degree of brand loyalty, with Gcash emerging as the most preferred platform among respondents. This preference appears to be driven by perceptions of reliability, ease of use, and extensive merchant integration. The dominance of Gcash suggests that once users establish trust and routine use with a particular platform, they are less likely to switch to alternatives. Such loyalty may also be reinforced by peer influence and institutional promotion (e.g., partnerships between schools and Gcash), creating a feedback loop that strengthens brand attachment.

Cultural Transitions in Decision-Making

Finding points toward a subtle yet meaningful cultural shift in students' financial behavior. Traditionally, Filipino financial decision-making is heavily influence by family norms and collective consultation. However, the growing autonomy observed in students' mobile wallet usage signals a move toward more individualized financial practices. The convenience, privacy, and control offered by mobile wallets empower students to make independent decisions about spending, saving, and managing allowances. This transition reflects a broader transformation in youth culture one that embraces digital independence and personal agency within financial ecosystems.

Socioeconomic Status and Usage Patterns

While UTAUT captures behavioral intention well, the actual usage patterns of mobile wallets are deeply affected by financial background and income sources. Students who receive allowance often use mobile wallets for basic transactions such as food, fare, and peer transfers. Meanwhile, those with part-time jobs or scholarship stipend tend to engage more frequently in fund management, savings, and bill payments. These findings suggest that income type functions as a latent moderator, affecting how technological construct translate into real world behavior.

Regional Disparities and Infrastructure

The study's regional concentration in SOCCSKSARGEN (Region 12) underscores both the potential and limitation of digital inclusion. Despite lower national infrastructure how pockets of digital readiness can emerge due to localized campaigns, community-led digital literacy programs, or fintech-targeted marketing. However, the same cannot be assumed for other less-represented regions. Therefore, geographic segmentation should be considered in both future research and practical interventions.

Psychological and Emotional Factors

Although not explicitly measured in this study, the literature strongly supports the role of psychological elements like trust, perceived risk, and financial anxiety as emerging determinants in mobile payment adoption. Given the financial vulnerability of many students, their hesitance or enthusiasm to adopt a mobile wallet may also be driven by concerns over fraud, data breaches, or digital scams, factors not directly captured by UTAUT. Future studies could integrate constructions from behavioral economics or the Technology Trust Model (TTM) to provide a more holistic view.

Post-Pandemic Behavioral Persistence

The COVID-19 pandemic catalyzed digital payment behaviors across the Philippines. An open question remains: are the current levels of mobile wallet usage a temporary adaptation or a permanent behavioral shift? While the strong usage scores in this study suggest stickiness, longitudinal follow-ups are needed to assess whether such behaviors persist as face-to-face interactions and cash transactions regain ground.

Platforms Differentiate and Brand Influence

Students overwhelmingly identified Gcash as their primary mobile wallet, with lesser mentions of Maya, PayMaya, or PayPal. This points to a form of brand entrenchment, where familiarity, market penetration, and network effects create user loyalty. This monopolistic behavior might limit comparative evaluation of other platforms, potentially skewing usage data. Future research could include platforms choices as a variable to determine if differences in features, incentives, and usability affect UTAUT constructs.

Taken together, these thematic insights complement the quantitative validation of the UTAUT model, offering a more holistic view of mobile wallet adoption among Filipino students. They illustrate how technological, economic, and cultural dimensions intersect to shape adoption behaviors.

4.2.10 Implications for UTAUT Model Extensions

The results of this study, grounded in the original UTAUT model, offer strong empirical support for the model's key constructs, Performance Expectancy, Effort Expectancy, Social Influence, facilitating conditions, Intention to Use, and Use Behavior. However, emerging patterns from the data suggest that modifications or extension to the UTAUT model may be necessary to enhance its explanatory power in the specific context of Filipino students and mobile wallet technologies.

1. **Incorporating Trust and Perceived Risks as Moderators**

   Although not part of the core UTAUT model, previous research (e.g., Jameel et al., 2023; Amoroso & Magnier-Watanabe, 2012) has emphasized trust and perceived risk as essential factors in mobile payment adoption. Given the increasing awareness of cybersecurity threats, scams, and data breaches in the Philippines, particularly among younger users, integrating these constructs could significantly improve the model's relevance in fintech-related research. Trust may moderate both Intention to Use and Use Behavior, especially when mobile wallets are used for larger or high-frequency transactions.

2. **Recognizing Socioeconomic Status as a Contextual Variable**

   The results of this study indicate that students' financial sources (e.g., allowance of part-time work, scholarship) influence how they perceive and use mobile wallets. Thus, socioeconomic status (SES) may act as contextual moderator that shapes the strength of relationships among UTAUT constructs. For instance, students with stable income sources may place greater importance on Performance Expectancy, while those with limited access to funds may prioritize Facilitating Conditions or transactions-related incentives.

3. **Adding Digital Literacy as a Facilitating Condition**

   The current model operates Facilitating Conditions mainly through access to technology and internet services. However, the Philippines demands and expanded view that includes digital literacy, the ability to safely and effectively use mobile apps, manage privacy settings, and avoid fraud. A student might have full internet access but may lack the confidence or skills to use financial technologies correctly. Therefore, Digital Literacy could either be integrated as a sub-dimension of Facilitating Conditions.

4. **Accounting for Cultural Values and Peer Dynamics**

   Social Influence was statistically significant in this study, but its mechanisms may differ from the way it operates in Western countries. Filipino culture is inherently collectivist, and pakikisama (maintaining smooth interpersonal relationships) and hiya (a sense of social or embarrassment) may reinforce the desires to adopt behaviors seen as socially normative. Future versions of the UTAUT model could benefit from culture-sensitive adaptations, particularly in collectivist societies where peer behavior carriers more weight than organizational influence.

5. **Platforms Characteristics and User Experience**

   The overwhelming dominance of Gcash among respondents also suggests that platform specific attributes such as user interface, rewards, convenience, and brand familiarity may play a hidden role in behavioral intention. Integrating a Technological Attribute layer to the UTAUT framework, as seen in some TAM-UTAUT hybrids, could allow for the inclusion of factors like perceived value, interface satisfaction, and customer support experience.

6. **Introducing Behavioral Habit or Loyalty**

   As mobile wallet use matures, behavior may shift from intention-based to habit-based use. The UTAUT2 model introduced habit as an additional construct for consumer context. Given that a portion of students in this study have been using

mobile wallets for over 1-3 years, the inclusion of habit or behavioral reinforcement may help explain continued usage, even when other construction (Social Influence or Performance Expectancy) is neutral.

7. **Trust and Perceived Risk**

   Despite the increasing uptake of mobile wallets, underlying concerns regarding data privacy, online fraud, and financial security remain salient among users. These concerns, though often unspoken, may act as latent inhibitors to full adoption, particularly where digital literacy is unevenly distributed. As such, future studies should consider incorporating trust and perceived risk as quantifiable variables within adoption frameworks. Measuring students' perceived vulnerability and their trust in fintech platforms could yield deeper insights into the psychological barriers that hinder sustained use.

8. **Socioeconomic Status as a Moderating Variable**

   Socioeconomic status (SES) appears to play a moderating role in the frequency and nature of mobile wallet use. Students with regular incomes whether through family allowances, scholarship, or part-time work tend to engage with mobile wallets more frequently and diversely. Students with limited or irregular financial resources may demonstrate lower usage due to constrained spending capacity. This suggests that SES related adoption behaviors should be integrated into future research models that refine predictive validity.

9. **Cultural Dimensions and Contextual Sensitivity**

   Understanding mobile wallet adoption in the Philippines also requires attention to cultural constructs. Filipino collectivist values such as *pakikisama* (social harmony) and *hiya* (sense of shame or modesty) may subtly shape digital behavior and decision-making process. For instance, peer influence or perceived social appropriateness may influence whether students adopt or avoid new technologies. Integrating these cultural dimensions into behavioral models can improve explanatory power especially when studying communities where social norms strongly influence individual choices.

10. **Platform-Specific Attributes and User Preference**

    The choice of mobile wallet platforms among students is influenced not only by social factors but also by the specific features and user experience each platform offers. Usability, intuitive interface design, and value-added elements such as cashback reward or promotional discounts contribute significantly to platform preference. These functional attributes should be treated as independent variables

in adoption studies, as they directly impact user satisfaction and long-term engagement. Examining how these features interact with behavioral constructs like Effort Expectancy or Performance Expectancy could offer refined analytical insights.

11. **Habit Formation and Long-Term Use**

    Finally, the transitions from initial adoption to sustained usage involves a critical process of habit formation. While behavioral intention is a strong predictor of early use, long-term engagement often depends on the development of routine and subconscious behavior. Future research should therefore explore the temporal dimension of mobile wallet use, possibly by integrating habit-related constructions or longitudinal methodologies. Modeling how intention evolves into habitual behavior can help distinguish between short-term curiosity and lasting adoption, offering a more robust understanding of technology integration into daily life.

CHAPTER V

CONCLUSION

5.1 Conclusion

This study aimed to examine the key factors influencing Filipino student's adoption of mobile wallet payments, employing the Unified Theory of Acceptance and Use of Technology (UTAUT) as the primary theoretical framework. The investigation was conducted through quantitative analysis using Partial Least Squares Structural Equation Modeling (PLS-SEM), focusing on six core conducts: Performance Expectancy, Effort Exppectancy, Social Influence, Facilitating Conditions, Intention to Use, and Use Behavior. The empirical findings demonstrate that Effort Expectancy and Facilitating Conditions exerted significant effects on student's behavioral intention and actual use of mobile wallets. These findings indicate that perceived ease of use and the availability of technical and infrastructural support are central to students' decision-making processes regarding m-wallet adoption. Notably, while Performance Expectancy also exhibited influence, it was not as strong as initially hypothesized. Social Influence, surprisingly, showed no significant effect, suggesting that Filipino students may be less swayed by peer or societal pressure in adopting digital payments technologies than previously expected.

Furthermore, the study affirmed that Behavioral Intention served as a robust mediating variable between the UTAUT predictors and actual Use Behavior. This alignment with the core tenets of the UTAUT model reinforces its theoretical validity in the context of mobile financial technology adoption among digitally literate youth in emerging economies. Additionally, demographic characteristics such as age, gender, income source, and geographic region were found to moderate usage patterns, thereby highlighting the contextual heterogeneity of digital adoption behaviors.

Overall, the study concludes that mobile wallet adoption among Filipino students is principally driven by pragmatic consideration namely usability and enabling infrastructure rather than social influence. This finding underscores the importance of creating environments that support digital literacy and accessibility to facilitate sustained adoption.

This study emphasizes that Filipino students are not merely passive consumers of mobile financial services but active agents of digital transformation. Their decisions are shaped by ease of use, functional benefits, peer norms, and infrastructure access but also

by attitudes, perceived autonomy, and emotional responses to innovation. In moving toward cashless economy, the Philippines must view students not only as beneficiaries but as co-creator of digital finance. Bridging policy, designs, education, and theory is crucial for making mobile wallet technologies inclusively trusted, and future ready.

5.2 Implications

5.2.1 Theoretical Implications

This research extends the application of the UTAUT framework to the specific context of Filipino students, contributing to the broader discourse on technology acceptance in emerging digital economies. The findings underscore the significance of Effort Expectancy and Facilitating Conditions as predictors of behavioral intention and usage behavior, reaffirming the core assumptions of the model.

The limited impact of Social Influence in this study challenges prevailing assumptions regarding collectivist cultural orientations in Southeast Asia and suggests the need to recalibrate theoretical expectations based on demographic or generational shifts in digital behavior. Moreover, by considering moderating variables such as financial autonomy and regional digital infrastructure, this study offers a more nuanced and context sensitive understanding of UTAUT applications. These insights can inform future theoretical refinements and extensions of the mode, especially in youth-driven or education-oriented research environments.

5.2.2 Practical Implications

The study's findings have significant implications for range of stakeholders, including fintech developers, policymakers, educational institutions, and digital inclusion advocates. For fintech providers, the strong influence of Effort Expectancy highlights the need for intuitive user interface design, seamless onboarding processes, and responsive customer support systems. Application usability must be tailored to the specific digital behaviors and expectations of student's users.

Facilitating Conditions, particularly the availability of stable internet connectivity and compatible devices, were shown to be decisive in shaping adoption. Thus, digital infrastructure investment by governments and telecom providers remains a critical enabler of mobile financial services.

Educational institutions are also positioned to play a vital role in fostering adoption by integrating digital payment literacy into curricula, conducting awareness campaigns, and facilitating partnerships with financial technology providers. Collective, these implications

emphasize the importance of a multi-stakeholder approach to fostering equitable and sustainable mobile wallet adoption among the student's population.

5.3 Recommendations

Based on the findings and implications of the study, the following recommendations are proposed to support enhanced adoption and sustained use of mobile wallets platforms among Filipino students:

5.3.1 Recommendations for Students

Students are encouraged to develop digital financial literacy through participation in structured programs and independent exploration of m-wallet features. Engagement in awareness initiatives can foster informed and responsible usage while increasing confidence in digital financial transactions.

5.3.2 Recommendations for Fintech Providers

Fintech firms should prioritize:

1. Developing user-centric platforms with simplified interfaces and multilingual support.
2. Ensuring compatibility with low-specification devices to accommodate users from less-developed regions.
3. Incorporating in-app educational tools and gamified onboarding processes.
4. Providing real-time customer support and feedback mechanisms tailored for students' users.

These interventions can lower the perceived effort and enhance user satisfaction, driving continued engagement.

5.3.3 Recommendations for Policymakers and Institutions

Policymakers, in collaboration with educational institutions and local government units, should:

- Implement regionally sensitive digital literacy programs.
- Develop inclusive financial education policies that integrate mobile payment systems into school curricula.
- Strengthening consumer protection regulations to address security concerns and increase public trust.
- Expand digital infrastructure investments, especially in rural and underserved areas

These initiatives will help bridge the digital divide and foster greater inclusivity in mobile payment ecosystems.

5.3.4 Recommendations for Future Research

Several directions for further research are identified:

1. Emerging Technologies: Future studies may explore how blockchain, artificial intelligence, or biometric systems influence trust and adoption of m-wallets.
2. Longitudinal Research: A time-series analysis can capture evolving usage behaviors and habitualization processes that are not evident in cross-sectional studies.
3. Comparative Analysis: Investigations comparing rural and urban student populations, or cross-country comparisons within ASEAN, could provide deeper insights into regional patterns of adoption.
4. Platform-Specific Factors: Future work should consider brand-level differences (e.g., Gcash Vs. Maya) to better understand the impact of design, trust mechanisms, and reward systems on user loyalty.

5.4 Research Limitation

While this study offers valuable insights into the factors influencing Filipino students' adoption of mobile wallet payments, several limitations must be acknowledged to contextualize the findings and guide future research.

First, the geographical of scope of the study was predominantly concentrated in region 12 (SOCCSKSARGEN), which accounted for a significant proportion of the respondents. Although the region offers meaningful perspectives on mobile wallet usage is a semi-urban and rural context, the findings may not be generalizable to students from other regions in the Philippines, particularly those residing in highly urbanized areas such as Metro Manila or Cebu. Regional disparities in infrastructure, digital literacy, and socio-economic conditions may influence technology adoption behaviors, this limiting the external validity of the study.

Second, the cross-sectional nature of research design restricts its ability to capture dynamic behavioral changes over time. As behavioral intention and usage patterns may evolve due to technological developments, policy shifts, or changing social norms, the results reflect only a snapshot of adoption behavior at a single point in time. Longitudinal or panel data would be more appropriate for tracking the development of digital payments habits and establishing causal inferences.

Third, the reliance on self-reported data introduces the possibility of response biases. Participants may have over or under reported their actual usage, motivations, or challenges due to social desirability bias, memory limitations, or subjective interpretations of survey items. While every effort was made to ensure clarity in the questionnaire, misinterpretation or personal biases cannot be eliminated.

Fourth, the study did not differentiate between mobile service providers. Platforms such as Gcash, Maya, or Coins.ph may vary significantly in terms of interface, security features, promotional incentives, and customer service. As such, the findings represent a general assessment of mobile wallet adoption rather than a provider specific analysis. Future research that compares user perceptions and satisfaction across platforms may yield more granular insights.

Finally, the rapid evolution of financial technology presents a challenge to the temporal relevance of the study. Mobile payments systems are continuously updated, and new features or regulations may alter user behavior in the future. As such, the insights presented herein should be interpreted with caution, particularly considering emerging innovations such as AI-driven services, digital identify verification, and government-led digital inclusion programs.

Acknowledging these limitations does not undermine the value of the study but rather highlights areas where future research may expand, refine, or validate the findings within broader or more diverse contexts.

This study is subject to several limitations that should be considered when interpreting its findings. First, the scope of the research is limited to Filipino students, which means that the results may not be generalizable to other segments of the population, such as working professionals, older adults, or micro-entrepreneurs. These groups may have different motivations, digital literacy levels, and usage behaviors, which are not captured in this analysis.

Second, the data collection was geographically concentrated, with a majority of respondents coming from region 12 (SOCCSARGEN). While this allowed for focused insights into a specific student’s population, it also restricts the study’s ability to reflect national trends, especially differences between students in urban versus settings or from other Philippines regions. Consequently, regional disparities in digital infrastructure, socioeconomic conditions, and mobile wallet availability may not be fully represented.

Third, the use of purposive sampling and self-administered surveys introduces potential bias. Since the respondents self-reported their behavior and perceptions, the data may be influenced by social desirability bias, recall inaccuracies, or subjective interpretations of the questionnaire items. These issues could affect the reliability and objectivity of the response.

Additionally, the study does not include an analysis of external factors such as economic shifts, regulatory changes, inflation, or rapid technological developments, all of which could significantly influence mobile wallet adoption. Without integrating these contextual elements, the research provides a more limited view of adoption behavior that may not hold under changing macroeconomics or policy conditions.

Moreover, while the research offers valuable insight into the Philippine student experience, it does not make comparisons with other ASEAN countries where digital payment systems may be more advanced. A comparative approach could have highlighted regional best practices and placed the Philippine case in broader context.

Finally, the study is bound by temporal constraints, as it captures data from a specific point in time. With the fast pace of technological change, especially in financial technology, mobile wallet platforms and user preferences may evolve rapidly, potentially rendering some findings outdated in the near future. Future longitudinal research would be beneficial to assess the sustainability of current adoption patterns over time. While this study offers a focused and meaningful exploration of mobile wallet adoption among Filipino students, its limitations point to the need for broader, more diverse, and comparative future research efforts.

5.5 Future Research

While this study offers valuable insights into the adoption of mobile wallet payments among Filipino students using the Unified Theory of Acceptance and Use of Technology (UTAUT), several avenues for future research remain. These directions are crucial for expanding the empirical understanding of mobile wallet usage and enhancing the generalizability and applicability of the findings.

1. Incorporation of Additional Constructs and Extended UTAUT Models

Future research can explore the integration of additional variables such as trust, perceived risk, technological anxiety, habit formation, and personal innovativeness into the UTAUT framework. Several previous studies have shown that these constructs significantly influence technology adoption, especially in financial contexts. Including these factors

could yield more comprehensive understanding of user behavior and reveal nuanced differences in the digital finance ecosystem.

2. Cross-Regional and Cross-Cultural Comparative Studies

Given the demographic concentration of respondents in region (SOCCSKSARAGEN), future studies could replicate the research across other regions of the Philippines or among Filipino communities abroad. A comparative analysis between urban and rural student population or between students from different ASEAN countries could highlight structural, cultural, or economic factors influencing mobile wallet adoption. Such cross-regional comparisons would enrich the body of acknowledge by capturing diverse socio-technological environments and digital readiness levels.

3. Longitudinal and Experimental Designs

This study adopted a cross-sectional approach, capturing student perceptions at a single point in time. Future research would benefit from longitudinal designs that observe changes in adoption behavior over time, particularly as fintech platforms evolve and new policies or technologies are introduced. Moreover, experimental or quasi-experimental studies could test the impact of specific interventions-such as digital literacy workshops, promotional campaigns, or security enhancements on mobile wallet adoption and sustained use.

4. Exploring the Role of Emerging Technologies

With the advancement *o*f *blockchain, artificial intelligence (AI),* and *biometric authentication,* the mobile wallet landscape is rapidly evolving. Future research should explore how these emerging technologies influence user perceptions regarding security, ease of use, and trust. Investigating students' awareness and readiness to adopt next-generation financial technologies would contribute significantly to both academic literature and industry practice.

5. Qualitative and Mixed Method Approach

While the current study employed quantitative survey and PLS-SEM analysis, qualitative methods such as in-depth interviews or focus group discussions could provide deeper insight into student motivations, cultural influence, and barriers to adoption. A mixed methods approach would allow triangulation of findings and a richer exploration of subjective experiences and contextual variables that quantitative models may overlook.

6. Policy Impact and Digital Literacy Assessment

Future research could assess the impact of government and institutional policies on mobile wallet adoption. Evaluating the effectiveness of existing programs by the Bangko Sentral ng Pilipinas (BSP), Department of Information and Communications Technology (DICT), or private fintech initiatives could help determine whether these efforts are addressing students needs effectively. Additionally, studies focusing on measuring digital financial literacy levels among students could serve as baseline data for targeted interventions.

7. Mobile Wallet Use Beyond Payment Functions

While this study focused primarily on mobile wallets as payment tools, future investigations could examine broader use cases, such as savings, investments, insurance, and educational payments. Understanding how students engage with the expanding features of mobile wallets can reveal patterns of financial behavior and identify areas where mobile financial services can support holistic financial well-being.

8. Platform-Specific and Comparative Studies

Given the dominance of Gcash identified in this study, further research could explore platform specific adoption factors by comparing Gcash with other digital wallets like Maya, Shopee Pay, or Grab Pay. Factors such as user interface design, promotional features, and trustworthiness can be assessed to understand that drives platform loyalty or multi-platform usage among students

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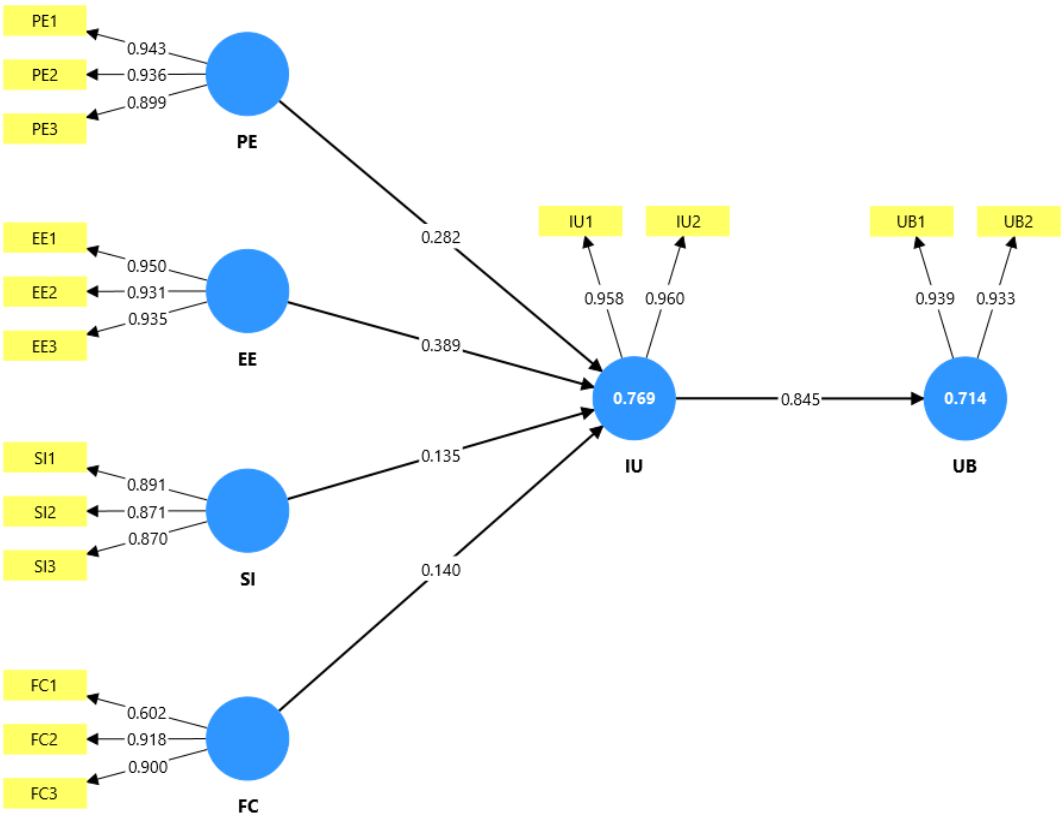
APPENDICES

Appendix 1. fPLS-SEM Algorithm Model



Appendix 2. Outer Loadings

	Outer loadings
EE1 <- EE	0.950
EE2 <- EE	0.931
EE3 <- EE	0.935
FC1 <- FC	0.602
FC2 <- FC	0.918
FC3 <- FC	0.900
IU1 <- IU	0.958
IU2 <- IU	0.960
PE1 <- PE	0.943
PE2 <- PE	0.936
PE3 <- PE	0.899
SI1 <- SI	0.891
SI2 <- SI	0.871
SI3 <- SI	0.870

UB1 <- UB	0.939
UB2 <- UB	0.933

Appendix 3. Construct Reliability and Validity

AVE	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Average variance extracted (AVE)
EE	0.932	0.934	0.957	0.881
FC	0.736	0.774	0.856	0.671
IU	0.913	0.914	0.958	0.920
PE	0.917	0.922	0.948	0.858
SI	0.851	0.860	0.909	0.770
UB	0.858	0.860	0.934	0.876

Appendix 4. Fornell-Larcker Criterion

	EE	FC	IU	PE	SI	UB
EE	0.939					
FC	0.756	0.819				
IU	0.849	0.741	0.959			
PE	0.878	0.752	0.829	0.926		
SI	0.793	0.699	0.750	0.741	0.877	
UB	0.762	0.710	0.845	0.754	0.746	0.936

Appendix 5. HTMT

	EE	FC	IU	PE	SI	UB
EE						
FC	0.918					
IU	0.920	0.907				
PE	0.949	0.912	0.904			
SI	0.884	0.881	0.843	0.835		
UB	0.849	0.896	0.953	0.850	0.868	

Appendix 6. Cross Loadings

	EE	FC	IU	PE	SI	UB
EE1	0.950	0.694	0.799	0.799	0.752	0.738
EE2	0.931	0.708	0.766	0.842	0.745	0.672
EE3	0.935	0.726	0.824	0.831	0.737	0.733
FC1	0.525	0.602	0.496	0.436	0.517	0.470
FC2	0.663	0.918	0.651	0.691	0.593	0.623
FC3	0.658	0.900	0.657	0.689	0.604	0.635
IU1	0.823	0.729	0.958	0.801	0.719	0.771
IU2	0.807	0.692	0.960	0.789	0.720	0.848
PE1	0.812	0.691	0.802	0.943	0.663	0.708
PE2	0.852	0.691	0.791	0.936	0.695	0.700
PE3	0.772	0.712	0.705	0.899	0.706	0.689
SI1	0.702	0.624	0.620	0.681	0.891	0.639
SI2	0.624	0.502	0.597	0.570	0.871	0.620
SI3	0.749	0.693	0.739	0.689	0.870	0.694
UB1	0.767	0.653	0.809	0.745	0.694	0.939

Appendix 7.VIF Results

	VIF
EE -> IU	5,627
FC -> IU	2,662
IU -> UB	1,000
PE -> IU	4,774
SI -> IU	2,899

Appendix 8.Path Coefficient Results

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (|O/STDEV|)	P values
EE -> IU	0.389	0.381	0.098	3,958	0.000
FC -> IU	0.140	0.143	0.070	1,994	0.046
IU -> UB	0.845	0.843	0.028	30,398	0.000
PE -> IU	0.282	0.283	0.099	2,856	0.004
SI -> IU	0.135	0.139	0.061	2,222	0.026

Appendix 9.Coefficient Determination (R2)

	R-square	R-square adjusted
IU	0.769	0.763
UB	0.714	0.712

Appendix 10.Effect Size (f2)

	f-square
EE -> IU	0.116
FC -> IU	0.032
IU -> UB	2,492
PE -> IU	0.072
SI -> IU	0.027

Appendix 11. Predictive Relevance Result (Q2)

	Q^2predict	RMSE	MAE
IU	0.760	0.498	0.385
UB	0.643	0.607	0.482
The model is predictive relevance			

Appendix 12. Specific Indirect Effect Result

	Specific indirect effects
EE -> IU -> UB	0.329
FC -> IU -> UB	0.118
PE -> IU -> UB	0.238
SI -> IU -> UB	0.114

Appendix 13. Research Questionnaire

FILIPINO STUDENTS' ADOPTION FACTORS ON SWITCHING

FROM CASH TO MOBILE WALLET PAYMENTS BASED ON UTAUT THEORY

Direction: Please answer each question as accurate as possible by placing a check (/) in the box or filling in the blanks provided.

A: Socio-economic background

(Sex, Age, Civil Status, Year level, Course, Source of Fund, Region of residence)

- **Your Sex:**

☐ Female
☐ Male

- **Your age:**

☐ 18-20 years old
☐ 21-23 years old
☐ 24 and above

- **Your civil status:**

☐ Single
☐ Married

- **Your year level:**

☐ Senior Highschool
☐ 1st year College
☐ 2nd year College
☐ 3rd year College
☐ 4th year College
☐ Postgraduate

- **Your source of fund**

☐ Allowance
☐ Scholarship Stipend
☐ Part-time job

Others: _____

- **Region of Residence**

Pls, Indicate here: _____

B. Factors Affecting Acceptance and the use of Mobile wallet payment

1. **What mobile wallet app are you using?**

☐ G-cash

☐ Paymaya

☐ PayPal

☐ 7-11 CLIQQ Pay

☐ None

Other: _____

2. **How long have you been using mobile wallet?**

☐ 3-6 months

☐ 6-12 months

☐ 1-3 years

☐ More than 3 years

B. Please indicate your degree of agreement on the following statements by checking the boxes given ranging from: Factors affecting Acceptance and the Use of Mobile wallet payment.

Strongly Disagree= 1, Disagree=2, Neutral=3, Agree=4, Strongly Agree=5

Performance Expectancy (PE)

- Mobile wallets are easy and fast to use.

☐ Strongly Disagree (1)

☐ Disagree (2)

☐ Neutral (3)

☐ Agree (4)

☐ Strongly Agree (5)

- Using Mobile wallet makes the handling of payments easier.

☐ Strongly Disagree (1)

☐ Disagree (2)

☐ Neutral (3)

☐ Agree (4)

☐ Strongly Agree (5)

- Convenient to use anytime, anywhere.

- Strongly Disagree (1)
- Disagree (2)
- Neutral (3)
- Agree (4)
- Strongly Agree (5)

Effort Expectancy (EE)

- It is easy for me to understand the operation of mobile wallet systems.
- Strongly Disagree (1)
- Disagree (2)
- Neutral (3)
- Agree (4)
- Strongly Agree (5)
- The instructions and protection are easy to follow.
- Strongly Disagree (1)
- Disagree (2)
- Neutral (3)
- Agree (4)
- Strongly Agree (5)
- I know the steps on how to receive and send money using mobile wallets.
- Strongly Disagree (1)
- Disagree (2)
- Neutral (3)
- Agree (4)
- Strongly Agree (5)

Social Influence (SI)

- My colleagues encourage me to use mobile wallet payments.
- Strongly Disagree (1)
- Disagree (2)
- Neutral (3)
- Agree (4)
- Strongly Agree (5)
- My supervisor supports me to use mobile wallet payments.

Strongly Disagree (1)

Disagree (2)

Neutral (3)

Agree (4)

Strongly Agree (5)

- I believe that most people who are important to me think I should use mobile wallet payments.

□ Strongly Disagree (1)
□ Disagree (2)
□ Neutral (3)
□ Agree (4)
□ Strongly Agree (5)

Facilitating conditions (FC)

- I have experience lagging on using mobile wallet applications.

□ Strongly Disagree (1)
□ Disagree (2)
□ Neutral (3)
□ Agree (4)
□ Strongly Agree (5)

- I can easily access my mobile applications even though I am only using my cellular data connection.

□ Strongly Disagree (1)
□ Disagree (2)
□ Neutral (3)
□ Agree (4)
□ Strongly Agree (5)

- I can use my mobile wallet anywhere with my cellular data connection.

□ Strongly Disagree (1)
□ Disagree (2)
□ Neutral (3)
□ Agree (4)

- Strongly Agree (5)
- Agree (4)

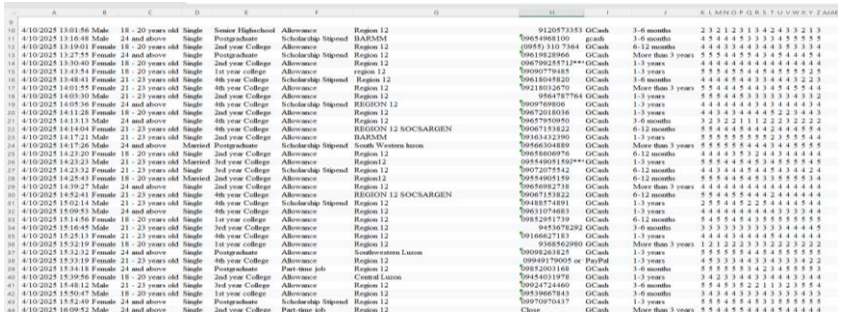
Intention to Use (IU)

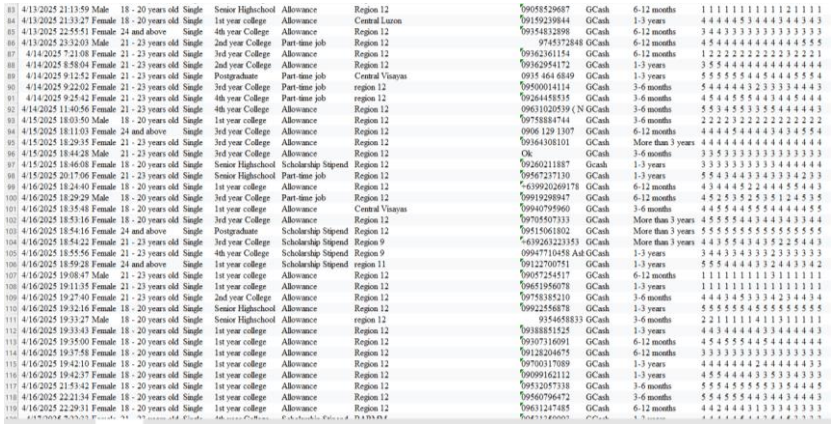
- I intend to use a mobile wallet for my future transactions.
- Strongly Disagree (1)
- Disagree (2)
- Neutral (3)
- Agree (4)
- Strongly Agree (5)
- I am willing to adopt mobile wallet payment as my primary method of payment.
- Strongly Disagree (1)
- Disagree (2)
- Neutral (3)
- Agree (4)
- Strongly Agree (5)

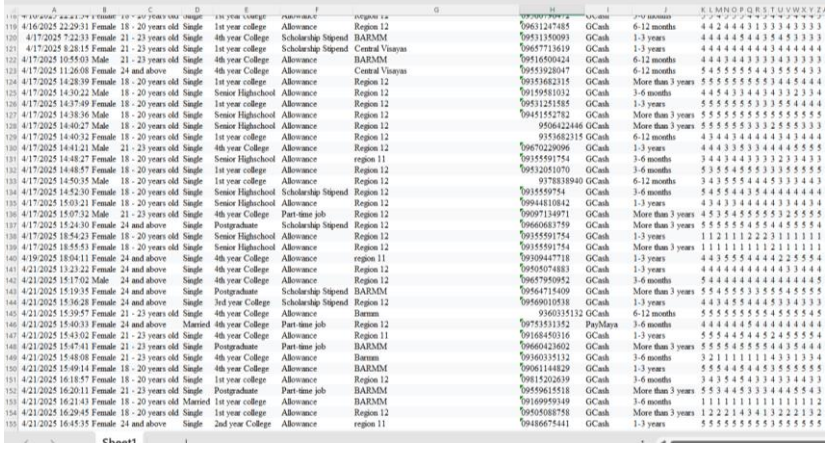
Use Behavior (UB)

- I often use mobile wallet payment for transactions.
- Strongly Disagree (1)
- Disagree (2)
- Neutral (3)
- Agree (4)
- Strongly Agree (5)
- I regularly use a mobile as my method of payment for purchases.
- Strongly Disagree (1)
- Disagree (2)
- Neutral (3)
- Agree (4)
- Strongly Agree (5)

Appendix 14. Survey Instrument







155	4/21/2025 16:45:35	Female	24 and above	Single	2nd year College	Allowance	region 11	09486675441	GCash	1-3 years	5	5	5	5	5	5	5	5	5	3	5	5	5	5	5	5
156	4/21/2025 16:49:24	Female	18 - 20 years old	Single	1st year college	Scholarship Stipend	Region 12	9302660421	GCash	6-12 months	4	3	2	2	4	3	4	3	2	4	2	2	3	4	3	4
157	4/21/2025 16:57:25	Female	18 - 20 years old	Single	2nd year College	Allowance	Region 12	09369725657	GCash	6-12 months	5	4	4	4	4	4	4	4	4	3	4	3	4	4	3	3
158	4/21/2025 17:11:39	Female	21 - 23 years old	Single	3rd year College	Part-time job	Region 12	0930 921 1966	GCash	More than 3 years	5	5	4	5	5	4	5	5	5	5	4	4	5	5	5	5
159	4/21/2025 18:58:41	Female	18 - 20 years old	Single	Senior Highschool	Allowance	Region 12	09302660421	GCash	3-6 months	4	3	5	3	4	4	3	3	3	4	3	3	4	3	3	3
160	4/21/2025 21:20:49	Female	21 - 23 years old	Single	4th year College	Part-time job	Region 12	09364198769	GCash	1-3 years	4	5	5	5	5	5	5	5	5	4	3	3	4	5	4	4
161	4/22/2025 14:31:14	Female	24 and above	Single	4th year College	Allowance	Region 12	09854388189	GCash	1-3 years	5	5	5	5	5	5	4	4	4	4	4	3	4	4	4	3
162	4/22/2025 14:34:42	Female	18 - 20 years old	Single	1st year college	Allowance	Region 12	09752809101	GCash	1-3 years	5	4	4	4	4	3	3	2	4	4	3	4	4	4	4	4
163	4/22/2025 14:37:04	Female	21 - 23 years old	Single	4th year College	Allowance	Region 12	09263750735	GCash	3-6 months	4	3	4	5	5	5	3	3	3	4	4	3	3	4	4	3
164	4/22/2025 14:37:43	Female	21 - 23 years old	Single	3rd year College	Allowance	Region 12	09534932883	GCash	1-3 years	5	4	5	4	4	5	4	4	4	4	4	4	4	4	4	4
165	4/22/2025 14:51:10	Male	18 - 20 years old	Single	1st year college	Allowance	Region 12	9551242384	GCash	6-12 months	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
166	4/22/2025 15:16:25	Male	24 and above	Single	4th year College	Scholarship Stipend	Region 12	9351487724	GCash	3-6 months	5	5	4	4	3	4	4	3	3	4	5	5	5	4	4	4
167	4/22/2025 15:43:41	Male	24 and above	Single	4th year College	Allowance	Region 12	09515011340 - T	GCash	3-6 months	3	3	5	3	3	5	4	4	3	4	4	3	3	3	4	3
168	4/22/2025 17:42:15	Female	21 - 23 years old	Single	4th year College	Allowance	Region 12	09923881839	GCash	More than 3 years	4	4	4	4	4	4	4	4	3	4	2	2	4	4	4	3
169	4/22/2025 21:22:16	Male	18 - 20 years old	Single	1st year college	Allowance	Region 12	For allowance	GCash	6-12 months	4	4	4	5	4	5	2	2	4	4	4	4	4	4	2	4
170	4/23/2025 9:30:53	Female	24 and above	Single	4th year College	Part-time job	Region 12	09456416868	GCash	More than 3 years	1	1	1	2	1	1	2	2	1	2	1	1	1	1	1	1
171	4/23/2025 16:20:36	Male	24 and above	Single	Postgraduate	Scholarship Stipend	Region 12	09395587614	GCash	More than 3 years	5	5	5	5	5	5	3	3	5	3	5	5	5	5	5	5
172	4/23/2025 19:44:54	Female	24 and above	Single	Postgraduate	Allowance	Region 12	9675838343	GCash	1-3 years	1	1	3	1	1	1	4	1	1	1	3	3	1	1	1	3
173	4/25/2025 6:49:18	Female	21 - 23 years old	Single	3rd year College	Allowance	Region 12	09107485688	GCash	6-12 months	5	5	5	5	5	5	5	5	5	5	3	3	5	5	5	5