FACTORS INFLUENCING E-WALLET USAGE OF GEN Z COLLEGE STUDENTS IN PURCHASING FASHION ITEMS: THE MEDIATING ROLE OF BEHAVIORAL INTENTION

Manuel Alexander C. Bonotan IV [1)], Hernando Antonio A. Cesa [2)], Francis Amiel L. Dugenia [3)], Martin Andrew C. Marin [4)], Antonio E. Etrata, Jr. [5)]

[1,2,3,4,5)] College of Commerce and Business Administration, University of Santo Tomas, Manila Philippines

Corresponding author: aeetrata@ust.edu.ph

Abstract

This study investigates the factors influencing Generation Z college students' adoption of e-wallets for purchasing fashion items in Manila-based colleges. With the rapid rise of digital payment systems and the growth of e-commerce in the fashion industry, understanding the variables that affect e-wallet adoption among this demographic has become essential for both academic institutions and industry stakeholders. Using a quantitative research design, the study primarily employs descriptive correlational analysis and surveys for data collection, utilizing a 1-6 Likert scale, where 1 indicates the lowest agreement and 6 indicates the highest. Partial Least Squares Structural Equation Modelling (PLS-SEM) was applied to assess the relationships between the key constructs. The results highlight that Behavioral Intention is a critical determinant in the adoption of e-wallets among Generation Z students, especially for purchasing fashion items. Moreover, Perceived Ease of Use, Perceived Usefulness, and Perceived Security were found to directly influence e-wallet usage, with these effects being significantly mediated by Behavioral Intention. This research provides important insights for both educators and industry stakeholders. For academic institutions, the findings suggest the need to incorporate digital payment education into curricula to foster a better understanding of emerging payment technologies. For fashion e-commerce businesses and payment providers, the study underscores the importance of enhancing Perceived Ease of Use, Perceived Usefulness, and Perceived Security to increase the adoption of e-wallets. Tailored marketing strategies that emphasize convenience, security, and utility could drive greater engagement with this tech-savvy demographic, ultimately improving user satisfaction and sales performance in the fashion sector.

Keywords: E-Wallet, Perceived Ease of Use, Perceived Usefulness, Perceived Security, Behavioral Intention

Introduction

Payment modes in purchasing products have seen some change in the past decades, globally expanding the demand of cashless transactions alongside the digital mode of payment. Moreno et al., (2022) said that digital wallets have transformed the shopping experience of the consumers by providing money transfer options that include convenience. The adoption of electronic wallets (e-wallets) is crucially affected by the perception of the customer in transactions of electronic payment. The purchase pattern of Filipino customers has aligned with the growing sector of electronic wallet use in the Philippines. Retailers now depend on mobile wallets GCash, GrabPay and, Maya to serve customers through cashless transactions.

Despite the growing adoption of e-wallets, there remains a significant gap in understanding the specific factors that drive Generation Z consumers to use these digital payment systems for purchasing fashion items. While previous research has explored the use of e-wallets for payments related to tuition fees, bills, food, and other essential services, there has been limited attention given to the adoption of e-wallets in the context of fashion e-commerce and retail shopping. This study seeks to bridge this gap by identifying and analyzing the key determinants that influence the decision-making process of Generation Z college students in the Philippines when using e-wallets for fashion-related purchases. Specifically, the study examines how Perceived Ease of Use, Perceived Usefulness, Perceived Security, and Behavioral Intention impact e-wallet adoption in this particular shopping context.

The primary aim of this research is to understand the factors that contribute to the adoption of e-wallets for fashion shopping among Generation Z college students in Manila. The existing literature primarily focuses on more utilitarian uses of e-wallets, such as for paying bills or tuition fees, but lacks insights into how these platforms are leveraged in discretionary spending like fashion purchases. This gap in the literature is particularly relevant given the growth of e-commerce and the increasing preference for digital payments among young consumers. By exploring these factors, the study contributes to a more nuanced understanding of how e-wallets are shaping consumer behavior in the fashion sector, particularly within a key demographic that is highly engaged with digital technology and online shopping.

This research significantly contributes to the field of business education by emphasizing the importance of integrating digital financial literacy, particularly e-wallet adoption, into the curricula of higher education institutions. By examining the behavioral factors that influence Generation Z college students' usage of e-wallets for fashion-related purchases, the study equips business educators with empirical evidence to design programs that foster technological readiness, innovation adoption, and financial technology (FinTech)

competencies among future business professionals. Furthermore, it advances pedagogical practices in International Business Education by highlighting how digital payment systems shape consumer decision-making behavior, which is essential for preparing students for the evolving digital marketplace.

Literature Review

E-Wallets

A study by Perez (2022) said that technology smartphones has a huge role in daily life in society today, mostly among young adults in the 21st century, they are described as technology enthusiasts for this generation's era is leaned towards advanced smartphone technology. Mobile device innovations enabled users to execute payment transactions through an e-wallet service system. According to Chauhan and Shingari (2017) and his team an e-wallet represents a virtual payment system which functions as a substitute for traditional currency to carry out financial transactions in business operations. Using e-wallets shortens transaction time while enabling new methods of payment that will remain effective and secure for upcoming years. An e- wallet system like the ones described by Kanimozhi and Kamatchi (2017) divides into three general groups and each group provides unique financial transaction services. Open e-wallets exist for purchases and fund transfers and withdrawals at banks or automatic teller machines. Semi- closed e-wallets represent the default choice for e-commerce businesses because the main distribution role belongs to telecommunication companies. Closed e-wallets find high demand among merchants because they restrict buyers to obtain products from an approved vendor list.

E-wallet is highlighted as a form of pre-paid account for storing money, which can be utilized to have transactions in the future. In light of this, e-wallet allows users to virtually store their cash and coupons from stores or promotions, conduct their payments, withdrawal of cash, and make money transfers. These e-wallets can be used to buy in both offline and, of course, online stores (Syifa & Tohang, 2020).

Perceived Ease of Use

People tend to view a technology as hassle-free when they believe it does not require significant effort to use. When users perceive a system as easy to operate, their intention to adopt it increases (Burgess & Worthington, 2021). To and Trinh (2021) define perceived ease of use as individuals' assessment of the physical and mental effort required to engage with a particular system. Supporting this, Tan et al. (2020) found through descriptive analysis that participants considered ease of use a more influential factor in their willingness to adopt e-wallets than perceived usefulness.

Using Partial Least Squares Structural Equation Modelling (PLS-SEM), Belmonte et al. (2024) demonstrated that perceived ease of use significantly impacts users' intention to adopt e-wallet technology. Furthermore, Nawi et al. (2024) highlight that a higher perceived ease of use suggests users find a system intuitive and user-friendly, which increases the likelihood of its acceptance and continued use. Thus, it is posited that:

H1: Perceived ease of use influences behavioral intention.

Perceived Usefulness

Perceived usefulness refers to an individual's belief that a technology offers specific benefits that enhance their daily life (Burgess & Worthington, 2021). The stronger this belief, the more likely the individual is to intend to use the technology. Burgess and Worthington (2021) further assert that perceived usefulness develops when a person believes that using a particular system will improve their performance or productivity. Notably, generational differences shape how individuals interact with technological advancements and external influences. When pricing strategies are subtle and easily overlooked, businesses must implement them thoughtfully to ensure effectiveness. Services tailored to younger consumers such as internet streaming, online gaming, and public transportation not only meet their needs but also simplify daily tasks and enhance their understanding of service value (Adiani et al., 2021). Supporting this, Xia and Goulias (2022) found that perceived usefulness significantly influences individuals' intentions to adopt autonomous vehicles, highlighting its critical role in shaping behavioral intentions. Thus, it is hypothesized that:

H2: Perceived usefulness influences behavioral intention.

Perceived Security

Perceived security, as defined by Arpaci et al. (2015), refers to the extent to which users believe that the technology they use particularly systems handling sensitive data such as financial transactions or personal information is secure and protected from misuse. Singh and Srivastava (2020) emphasized that trust becomes a critical factor when users feel secure and confident in using a financial service. Accordingly, perceived security is regarded as a foundational requirement for user trust (Adiani et al., 2021). According to Lee et al. (2020), perceived security is a vital component of the Technology Acceptance Model (TAM), particularly in the context of e-wallets, where safety and the convenience of hassle-free transactions are primary concerns. Karim et al. (2022) argue that e-wallet providers should prioritize privacy and security as core features to foster positive user attitudes. They further suggest that user-friendly applications can significantly influence customers' future usage intentions. To build and retain trust, providers must implement advanced encryption technologies and robust security systems to ensure the protection of user data. Moreover, maintaining and

enhancing service quality is essential to meet evolving customer expectations and strengthen trust (Moreno et al., 2022). Studies also show that perceived security has a strong positive influence on continued intention to use mobile payments (Zhang et al., 2019) and e-Filing systems (Tahar et al., 2020). It is therefore hypothesized that:
H3: Perceived Security influences behavioral intention.

Behavioral Intention

According to Rahmadhani et al. (2022), behavioral intention reflects an individual's willingness or plan to use a particular system or service to support their activities. Lee et al. (2017) also noted that attitude plays a significant role in shaping behavioral intention, which Chai and Dibb (2014) define as the extent to which a person has consciously considered performing a future behavior. In addition, Adu et al. (2021) found that behavioral intention functions as a mediating variable in their study on podcast adoption in Nigeria. Similarly, Ahmed and Sheikh Ali (2014) reported that behavioral intention significantly mediates the relationship between predictor variables and user satisfaction. This highlights the importance of including behavioral intention as a mediating variable in research models. Supporting this, Shetu et al. (2022) found that behavioral intention partially mediates the relationship between perceived usefulness and ease of use, further underlining its critical role in influencing technology acceptance outcomes. Therefore, it is hypothesized that:
H4: Behavioral intention influences the use of E-wallets.
H5: Behavioral intention mediates the effect of perceived ease of use on usage of e-wallets.
H6: Behavioral intention mediates the effect of perceived usefulness on usage of e-wallets.
H7: Behavioral intention mediates the effect of perceived security on usage of e-wallets.

Methods

This study examined the factors influencing the use of e-wallets for purchasing fashion items from retail stores. A quantitative approach was employed, with a primary focus on descriptive correlational analysis. This research method is known for its directness, low cost, and speed, as noted by Lappe (2000). Data were collected through a survey instrument, which consists of pre-defined questions aimed at gathering information from participants. The survey was validated by two academicians from an autonomous university and an industry practitioner. The researchers adapted an existing survey on e-wallets, using a 1-6 Likert scale, where 1 represents the lowest and 6 represents the highest level of agreement.

The study utilized Partial Least Squares - Structural Equation Modeling (PLS-SEM), a sophisticated statistical technique known for its ability to estimate complex models with latent variables and their interrelationships (Sarstedt et al., 2017). This methodology allowed for a deeper analysis of the factors influencing behavioral intentions to use e-wallets in shopping, specifically for purchases of fashion items. The researchers used WARP PLS version 8.0 as the primary tool for PLS-SEM analysis, chosen for its effectiveness in handling complex modeling tasks. Additionally, SPSS version 22 was used to prepare and preprocess the collected data before analysis.

By combining these two software tools, the researchers ensured a robust and reliable examination of the data, providing valuable insights into the factors driving e-wallet adoption in fashion retail. The results of this study contribute to a more comprehensive understanding of how e-wallets are influencing consumer behavior, particularly in the context of fashion shopping.

Results and Discussion

Table 1 depicts the attributes of the 389 respondents demographically, focusing on their age, sex, location, and university affiliation. The age distribution shows that the majority of respondents are 21 years old (112 respondents or 28.8%) and 22 years old (124 respondents or 31.9%), indicating that most participants are in their early twenties. Other age groups include 20 years old (63 respondents or 16.2%), 19 years old (28 respondents or 7.2%), and 23 years old (46 respondents or 11.8%). A smaller percentage of respondents fall within the 18 (9 respondents or 2.3%), 24 (5 respondents or 1.3%), and 25 (2 respondents or 0.5%) age groups, highlighting that the sample primarily consists of students nearing graduation.

In terms of sex, there is a relatively balanced distribution, with 192 respondents (49.4%) identifying as male and 185 respondents (47.6%) as female. Additionally, 12 respondents (3.1%) chose not to disclose their sex. This distribution ensures that perspectives from both male and female consumers are well represented while acknowledging a small group who prefer not to specify their gender identity.

Table 1. Demographic Characteristics of the Respondents (n= 389)

Demographic	Category	Frequency	**%**
Age	18	9	2.3%
	19	28	7.2%
	20	63	16.2%
	21	112	28.8%
	22	124	31.9%
	23	46	11.8%
	24	5	1.3%

Demographic	Category	Frequency	%
	25	2	0.5%
Sex	Male	192	49.4%
	Female	185	47.6%
	Rather not say	12	3.1%

Table 2 shows the behavioristic and psychographic analysis of the 389 respondents provides critical insights into their purchasing habits, preferred shopping platforms, and sources of brand discovery related to fashion item products. The data reveals that the majority of respondents exhibit occasional purchasing behavior (50.1%), followed by those who shop once a month (36.8%), while a smaller segment (4.9%) purchases weekly, and 6.7% shop annually.

Regarding shopping preferences, an overwhelming 79.7% of respondents prefer brick-and- mortar stores, underscoring the importance of the in-store shopping experience. The sensory and tactile aspects of shopping, such as fabric feel and fit testing, appear to play a vital role in customer decision-making.

Table 2. Behavioristic/ Psychographic Profile of the Respondents (n = 389)

Behavioristic Profile	Group	Frequency	Percentage
How often do you purchase fashion item products?	Once a week	19	4.9%
	Once a month	143	36.8%
	Once a year	26	6.7%
	Occasional	195	50.1%
	Others	6	1.5%
Where do you usually purchase?	Brick-and-mortar store	310	79.7%
	Shopee	2	0.5%
	Lazada	1	0.3%
	Uniqlo online store	73	18.8%
	Others	3	0.8%

Discriminant validity was assessed by using the Fornell-Larcker criterion that examines the square root of Average Variance Extracted (AVE) against other construct correlations. The establishment of discriminant validity requires square root AVE (diagonal values in Table 3) to exceed all inter-construct correlations (off-diagonal values) (Fornell & Larcker, 1981). The assessment findings demonstrate that each construct fulfills this criterion to establish that the studied variables represent different model aspects.

Perceived Usefulness (0.745) has a square root of AVE higher than its relationship with Perceived Ease of Use (0.63), Perceived Security (0.523), Usage of E-wallet (0.559), and Behavioral Intention (0.554), confirming its conceptual independence. Similarly, Perceived Ease of Use (0.72) demonstrates discriminant validity, with an AVE square root exceeding its correlations with Perceived Security (0.537), Usage of E-wallet (0.57), and Behavioral Intention (0.568). Perceived Security (0.759) also maintains distinctiveness, with an AVE square root greater than its correlations with Usage of E-wallet (0.569) and Behavioral Intention (0.597), ensuring minimal conceptual overlap.

Furthermore, Usage of E-wallet (0.836) exhibits discriminant validity, as its square root of AVE surpasses its correlations, which range from 0.749 to 0.884, confirming it as a separate construct. Lastly, Behavioral Intention (0.824) maintains its uniqueness, with its highest correlation of 0.569 with Perceived Security still lower than its AVE square root. These results confirm that all constructs exhibit sufficient discriminant validity, ensuring that each variable distinctly contributes to understanding the factors influencing the behavioral intention and actual usage of E-wallets in fashion purchases among Generation Z college students in Manila. This validation strengthens the reliability of the model, confirming that the constructs measure independent but interrelated factors that impact E-wallet adoption in retail transactions.

Table 3. Square Roots of Average Variance Extracted (AVE) coefficients and Inter-construct Correlation

Latent Variables	Perceived Usefulness	Perceived Ease of Use	Perceived Security	Usage of E-Wallet	Behavioral Intention
Perceived Usefulness	0.745	0.630	0.523	0.554	0.559
Perceived Ease of Use	0.630	0.720	0.537	0.568	0.570
Perceived Security	0.523	0.537	0.759	0.597	0.569
Usage of E-Wallet	0.559	0.570	0.569	0.836	0.581
Behavioral Intention	0.554	0.568	0.597	0.581	0.824

Diagonal values are the square roots of AVE, and off-diagonals are inter-construct squared correlations

Table 4 reveals how the emerging model shows strong matches with statistical standards for fit and quality indicating its good model fit and dependability. The model reveals an Average Path Coefficient (APC) of 0.361 together with a p-value lower than 0.001 which indicates that the average level of variable relationships is substantial and statistically valid. Statistical findings demonstrate that the Average R-squared (ARS) reaches 0.440 while the Average Adjusted R-squared (AARS) stands at 0.437 with extremely low p-

values of below 0.001. This indicates that the model explains 44% of the dependent variable variance in this behavioral research study context

The model maintains reliability because its Average Block Variance Inflation Factor (AVIF) stands at 1.658 and its Average Full Collinearity Variance Inflation Factor (AFVIF) is 1.897 which both remain below the 3.3 threshold. The Tenenhaus GoF rating equals 0.476, surpassing the critical value of 0.36 for large useful effects providing evidence that the model matches the observed data structure effectively. The analysis shows that the model's Simpson's Paradox Ratio stands at 1.000 while R-squared Contribution Ratio matches the same value, which confirms both complete absence of Simpson's paradoxes and consistent reliable predictor R-squared contributions. The value of 1.000 in SSR signifies that statistical suppression affects none of the model relationships so the relationships we observe exist naturally without artificial data distortions

All assessed metrics demonstrate that the emerging model possesses superior standards of fit which makes it an effective tool for explaining the studied behavioral processes.

Table 4. Model Fit and Quality Indices of the Emerging Model

Measure	Estimate	Threshold	Interpretation
Average path coefficient (APC)	0.361, p <0.001	p < .05	Significant
Average R-squared (ARS)	0.440, p <0.001	p < .05	Significant
Average adjusted R-squared (AARS)	0.437, p <0.001	p < .05	Significant
Average block VIF (AVIF)	1.658	≤ 3.3	Ideally
Average full collinearity VIF (AFVIF)	1.897	≤ 3.3	Ideally
Tenenhaus GOF (GoF)	0.476	≤ .36	Large
Simpson's paradox ratio (SPR)	1.000	= 1.00	Ideally
R-squared contribution ratio (RSCR)	1.000	= 1.00	Ideally
Statistical suppression ratio (SSR)	1.000	= 1.00	Ideally

Emerging Model

Figure 1 depicts the structural model results from PLS-SEM (Partial Least Squares - Structural Equation Modeling), illustrating the relationships between key constructs influencing E-wallet usage for fashion items. The model includes Perceived Usefulness (PU), Perceived Ease of Use (PEOU), Perceived Security (PS), Behavioral Intention (BI), and Usage of E-wallet (Usage). The arrows indicate the hypothesized relationships, with path coefficients (β values) and significance levels (p-values) showing the strength and significance of these relationships

The R^2 values indicate the percentage of variance explained in the dependent variables. Behavioral Intention (BI) has an R^2 of 0.48, meaning that 48% of its variance is explained by PEOU ($\beta = 0.25$, $p < 0.01$), PS ($\beta = 0.32$, $p < 0.01$), and PU ($\beta = 0.25$, $p < 0.01$). This suggests that Perceived Usefulness, Perceived Ease of Use, and Perceived Security significantly influence Behavioral Intention

Additionally, Usage of E-wallet (Usage) has an R^2 of 0.53, indicating that 53% of its variance is explained by BI ($\beta = 0.22$, $p < 0.01$), PS ($\beta = 0.33$, $p < 0.01$), and PU ($\beta = 0.14$, $p < 0.01$). This implies that Behavioral Intention, Perceived Security, and Perceived Usefulness significantly drive actual E-wallet usage, while PEOU indirectly influences usage through BI. Overall, the model highlights the crucial role of Perceived Security and Behavioral Intention in E- wallet adoption among Generation Z college students in purchasing fashion items in retail stores.

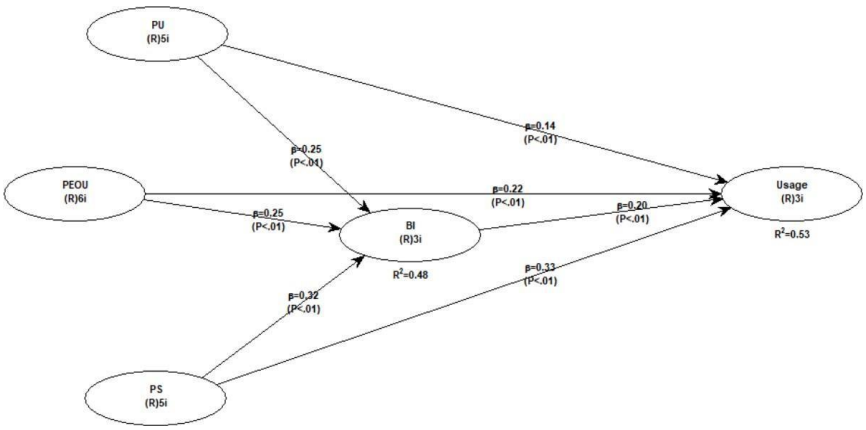

Figure 1. The Emerging Model

Path Analysis and Hypothesis Testing

Table 5a shows the results of the testing of hypothesis using PLS-SEM (Partial Least Squares - Structural Equation Modeling), examining the relationships between key constructs influencing E-wallet usage fashion items purchases. The table incorporates path coefficients (β values), p-values, effect sizes (f^2), and their

interpretations based on Cohen's (1988) guidelines. All hypotheses tested in the model were found to be statistically significant ($p < 0.001$), with medium effect sizes, supporting their inclusion in the study

The result of Hypothesis 1, which indicates a significant effect of Perceived Ease of Use (PEOU) on Behavioral Intention (BI) with a path coefficient of $\beta = 0.253$, is strongly supported by existing literature. Burgess and Worthington (2021) argue that individuals are more inclined to adopt a technology when they perceive it as hassle-free and requiring minimal effort. Similarly, To and Trinh (2021) define PEOU as the degree to which users believe that interacting with a system demands limited physical and mental effort—highlighting its influence on user intention. Tan et al. (2020) further emphasize this relationship by showing, through descriptive analysis, that ease of use was a more decisive factor than perceived usefulness in participants' willingness to adopt e-wallets. This finding is reinforced by Belmonte et al. (2024), who, using Partial Least Squares Structural Equation Modelling (PLS-SEM), demonstrated a significant impact of PEOU on users' intention to adopt e-wallet technologies. Additionally, Nawi et al. (2024) conclude that systems perceived as intuitive and user-friendly are more likely to be accepted and continuously used. Taken together, these studies confirm the result of H1 and underscore the crucial role of perceived ease of use in shaping intentions toward e-wallet adoption

The result of Hypothesis 2, which demonstrates that Perceived Usefulness (PU) significantly influences Behavioral Intention (BI) with a path coefficient of $\beta = 0.320$, is well supported by existing literature. Perceived usefulness is defined as an individual's belief that a technology provides tangible benefits that enhance daily life (Burgess & Worthington, 2021). The stronger this belief, the greater the individual's intention to adopt and use the technology. Burgess and Worthington (2021) also emphasize that perceived usefulness is shaped by the belief that a particular system can improve personal productivity or task performance. Moreover, as Adiani et al. (2021) note, generational preferences play a role in how individuals perceive usefulness, especially when services such as online gaming, streaming platforms, and public transportation are designed to simplify tasks and demonstrate clear service value. This relevance to everyday needs enhances perceived usefulness and, in turn, influences behavioral intention. Supporting this, Xia and Goulias (2022) found that perceived usefulness was a significant determinant in users' willingness to adopt autonomous vehicles, further confirming its critical role in shaping behavioral decisions. Thus, the findings of H2 are consistent with the broader body of research, reinforcing the idea that perceived usefulness is a key driver of technology adoption

The findings of Hypothesis 3, which indicate that Perceived Security (PS) has a significant effect on Behavioral Intention (BI) with a path coefficient of $\beta = 0.251$, are consistent with prior research. Perceived security is defined as the extent to which users believe that the technology they use particularly systems involving sensitive information such as financial transactions or personal data is secure and safeguarded from unauthorized access or misuse (Arpaci et al., 2015). This perception of security plays a vital role in building user trust. Singh and Srivastava (2020) highlight that trust becomes a key factor when users feel confident in the safety of financial technologies, reinforcing the importance of perceived security as a foundation for trust (Adiani et al., 2021). Within the Technology Acceptance Model (TAM), perceived security has been identified as a critical factor, especially in the context of digital payment systems like e-wallets, where users demand both security and convenience (Lee et al., 2020). Karim et al. (2022) argue that emphasizing privacy and security features is essential for fostering positive user attitudes, while also noting that intuitive, user-friendly design enhances future usage intentions. To this end, providers must adopt advanced encryption and robust security frameworks to protect user data and strengthen trust. As Moreno et al. (2022) suggest, continuous improvement of service quality is also necessary to meet user expectations. Supporting these perspectives, empirical findings by Zhang et al. (2019) and Tahar et al. (2020) confirm that perceived security significantly influences users' continued intention to adopt mobile payment systems and e-Filing services. Therefore, the significant result for H3 reinforces the critical role of perceived security in shaping behavioral intention, particularly in digital and financial technology adoption

The result of Hypothesis 4 confirms that Behavioral Intention (BI) significantly influences actual E-wallet Usage (USAGE), with a path coefficient of $\beta = 0.204$. This finding is consistent with prior research emphasizing the strong link between an individual's intention and their actual behavior. According to Rahmadhani et al. (2022), behavioral intention reflects a person's willingness or plan to use a specific system or service to support their daily activities. Lee et al. (2017) further highlight that an individual's attitude plays a crucial role in shaping this intention, while Chai and Dibb (2014) define it as the extent to which someone has made a conscious decision to perform a particular future behavior. These studies collectively underscore that when individuals express a clear intention to adopt a technology, such as an e-wallet, this intention often translates into actual usage. The significant relationship found in this study supports this perspective and affirms behavioral intention as a reliable predictor of e-wallet adoption and use in real-world settings

These findings validate the Technology Acceptance Model (TAM), emphasizing the critical part of ease of use, usefulness, and security in influencing behavioral intention, which subsequently drives actual E-wallet usage. The results suggest that improving user experience, demonstrating the benefits of E-wallets, and ensuring robust security measures can enhance digital payment adoption among Generation Z college students in Manila.

Table 5a. Summary of Hypothesis Testing (One-Segment)

Path	Path Coefficients (β)	P Values	Effect Sizes (f^2)	Effect Size Interpretation (Cohen, 1988)**	Description	Decision
H1: PEOU → BI	0.253	<0.001	0.157	Medium	Significant	H1 is supported
H2: PU → BI	0.320	<0.001	0.216	Medium	Significant	H2 is supported
H3: PS → BI	0.251	<0.001	0.153	Medium	Significant	H3 is supported
H4: BI → USAGE	0.204	<0.001	0.151	Medium	Significant	H4 is supported

Note: Perceived Ease of Use (PEOU); Perceived Usefulness (PU); Perceived Security (PS); Behavioral Intention (BI); Usage of E-Wallet (USAGE)Cohen Effect size: **0.02 – small, 0.15 – medium, 0.35 - large

Mediation Analysis

The mediation analysis investigated the intricate mechanisms by which Behavioral Intention (BI) mediates the relationships between Perceived Ease of Use (PEOU), Perceived Usefulness (PU), and Perceived Security (PS) on the actual Usage (USAGE) of E-wallets for fashion purchases. The findings reveal a nuanced partial mediation across all examined hypotheses, indicating that while PEOU, PU, and PS exert direct influences on E-wallet usage, their effects are significantly channeled through behavioral intention

The results of Hypotheses H5, H6, and H7 confirm the mediating role of Behavioral Intention (BI) in the relationship between key antecedents Perceived Ease of Use (PEOU), Perceived Usefulness (PU), and Perceived Security (PS) and actual e-wallet usage. In Hypothesis H5, BI significantly mediated the relationship between PEOU and usage, with a total effect of 0.589 ($p < 0.001$), a direct effect of 0.367 ($p < 0.001$), and an indirect effect of 0.222 ($p < 0.001$). Similarly, Hypothesis H6 demonstrated BI's mediation between PU and usage, revealing a total effect of 0.551 ($p < 0.001$), a direct effect of 0.321 ($p < 0.001$), and an indirect effect of 0.230 ($p < 0.001$). Hypothesis H7 found that BI also significantly mediates the relationship between PS and usage, with a total effect of 0.643 ($p < 0.001$), a direct effect of 0.425 ($p < 0.001$), and an indirect effect of 0.218 ($p < 0.001$)

These findings are in line with prior research that emphasizes the central role of behavioral intention as a mediator in technology adoption. Adu et al. (2021) explicitly identified behavioral intention as a mediating variable in their study on podcast adoption, illustrating its ability to bridge the influence of external factors on actual use. Similarly, Ahmed and Sheikh Ali (2014) reported that behavioral intention significantly mediates the relationship between predictor variables and user satisfaction, reinforcing its role in translating attitudes and perceptions into tangible user behavior. Supporting this, Shetu et al. (2022) found that behavioral intention partially mediates the relationship between perceived usefulness and ease of use, further underlining its importance within the Technology Acceptance Model (TAM) framework. These consistent findings highlight the necessity of including behavioral intention as a mediating construct to fully understand how users move from perception to action in adopting digital technologies such as e-wallets

Therefore, these findings substantiate the critical mediating function of behavioral intention within the Technology Acceptance Model (TAM) framework, particularly concerning E- wallet adoption for purchases among Generation Z college students in Manila. While PEOU, PU, and PS exert direct effects on actual usage, their influences are significantly potentiated through behavioral intention. To enhance E-wallet adoption rates within this demographic, stakeholders should prioritize the optimization of user interfaces, clearly communicate the practical benefits of E-wallet usage, and implement robust security protocols. Concurrently, strategic initiatives aimed at strengthening user intent such as targeted engagement campaigns and comprehensive awareness programs are essential to translate favorable perceptions into sustained adoption behaviors.

Table 5b. Mediation Analysis (Effect for path with two segments)

Path	Total Effect	P-value	Direct Effect	P-value	Indirect Effect	P-value	Description	Interpretation	Remark
H5: PEOU → BI → USAGE	0.589	<0.001	0.367	<0.001	0.222	<0.001	Significant	Partial Mediation	H5 is supported
H6: PU → BI → USAGE	0.551	<0.001	0.321	<0.001	0.230	<0.001	Significant	Partial Mediation	H6 is supported
H7: PS → BI → USAGE	0.643	<0.001	0.425	<0.001	0.218	<0.001	Significant	Partial Mediation	H7 is supported

Note: Perceived Ease of Use (PEOU); Perceived Usefulness (PU); Perceived Security (PS); Behavioral Intention (BI); Usage of E-Wallet (USAGE)

Conclusion

Based on the results of the study, it can be concluded that:

1. Perceived usefulness influences behavioral intention, this shows that Generation Z college students look at e-wallets as a useful tool in making their fashion items purchases in retail stores.
2. Perceived ease of use influences behavioral intention, and demonstrates that e- wallets are accessible, effortless, and convenient as a mode of payment for fashion items purchases in retail stores.

3. Perceived Security influences behavioral intention, this shows that Generation Z college students have a high level of trust in using e-wallets in their purchases due to its security measures.
4. Behavioral intention influences usage, this suggest that there is a high tendency among Generation Z college students to use e-wallets as their preferred payment method.
5. Behavioral intention mediates the effect of perceived ease of use on usage of e- wallet, this shows that a user-friendly E-wallet platform amplifies the behavioral intention that leads to usage of E-wallet purchases of fashion items of Generation Z college students.
6. Behavioral intention mediates the effect of perceived usefulness on usage of e- wallet, which suggests that the user's perception of an E-wallet's utility directly enhances the behavioral intention that leads to usage of Generation Z college students Manila when making their purchases.

Acknowledgement
The authors would like to sincerely thank the respondents of this study and the technical guidance provided by the Statistician.

References

Adiani, W., Aprianingsih, A., & Purwanegara, M. S. (2021). Cashless society in progress: Capturing different generations' perspectives toward external influence in E-wallet usage. Journal of Economics, Business, & Accountancy Ventura, 24(2), 205–219. https://doi.org/10.14414/jebav.v24i2.2677

Adu, I., Ziden, A., & Ismail, A. (2021). Mediating effect of behavioural intention on podcast acceptance. Education and Information Technologies, 26. 1–28. https://doi.org/10.1007/s10639-020-10385-z

Ahmed, I., & Sheikh Ali, A. (2014). Mediating effects of behavioral intention between 3G predictors and service satisfaction. Jurnal Komunikasi: Malaysian Journal of Communication, 30(Special Issue), 10. https://doi.org/10.17576/JKMJC-2014-30SI-07

Arpaci, I., Cetin, Y., & Turetken, O. (2015). Impact of perceived security on organizational adoption of smartphones. Cyberpsychology, Behavior, and Social Networking, 18(12), 1–7. https://doi.org/10.1089/cyber.2015.0243

Belmonte, Z. J., Prasetyo, Y.T., Cahigas, M.M., Nadlifatin, R., Gumasing, M.J. (2024). Factors influencing the intention to use e-wallet among generation Z and millennials in the Philippines: An extended technology acceptance model (TAM) approach. Acta Psychologica, 250. https://doi.org/10.1016/j.actpsy.2024.104526.

Burgess & Worthington, (2021). Technology Acceptance Model. In Persuasion Theory in action. Pressbooks. Retrieved October 13, 2024, from https://ua.pressbooks.pub/persuasiontheoryinaction/chapter/technology-acceptance-model/

Chai, J., & Dibb, S. (2014). How consumer acculturation influences interpersonal trust. Journal of Marketing Management, 30(1-2), 60–89. https://doi.org/10.1080/0267257X.2013.800896

Chauhan, M., & Shingari, I. (2017). Future of e-wallets: A perspective from under graduates'. International Journal of Advanced Research in Computer Science and Software Engineering, 7(8), 146. https://doi.org/10.23956/ijarcsse.v7i8.42

Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. Journal of Marketing Research, 18(1), 39-50. https://doi.org/10.1177/002224378101800104

Kanimozhi G. & K.S. Kamatchi. (2017). Security aspects of mobile based e-wallets. International Journal on Recent and Innovation Trends in Computing and Communication, 5(6). 1223-1228.

Karim, M. W., Chowdhury, M. A., & Haque, A. K. (2022). A study of customer satisfaction towards E-wallet payment system in Bangladesh. American Journal of Economics and Business Innovation, 1(1), 1–10. https://doi.org/10.54536/ajebi.v1i1.144

Lappe, J.M. (2000). Taking the mystery out of research: Descriptive Correlational design. Orthopedic Nursing, 19(2).

Lee, Jais, M., Wen, C., & Zaidi, N. (2020). Factors affecting the adoption of e-wallet in Sarawak. International Journal of Academic Research in Accounting, Finance and Management Sciences, 10(2), 244-256. https://doi.org/10.6007/IJARAFMS/v10-i2/7446

Lee, E.Y., Lee, S.B., & Jeon, Y. (2017). Factors influencing the behavioral intention to use food delivery apps. Social Behavior and Personality: An International Journal, 45(9), 1461– 1473. https://doi.org/10.2224/sbp.6185

Moreno, D. E., Maniclang, I., Tongson, Y., Trinidad, K., Vicuña, A., & Belviz, J. (2022). The impact of COVID-19 pandemic on consumer usage intention of electronic wallets in the Philippines. Journal of Business and Management Studies, 4(3), 28-35. https://doi.org/10.32996/jbms.2022.4.3.3

Nawia, N.C., Husna Sarirah Husinb, H.S., Al-Jahwaric, N.S., Zainuddind, S. A., Noor Ullah Khana, N.U., Hassang, A. A., Wan Suzanna Aafanii. W.S., Ibrahimg, A., Mohamedg, A.F., Syima Mohd, N. & Hasand, M.Z. (2024). The path to sustainability begins with going paperless: Antecedents of intention to use electronic wallet using serial mediation approach. Heliyon, 10 (2).

Perez, R. C. (2022). Perception of e-wallets as the mode of payment for online enrollment in Marinduque State College. Ho Chi Minh City Open University Journal of Science - Economics and Business

Administration, 13(2), 3–18. https://doi.org/10.46223/hcmcoujs.econ.en.13.2.2272.2023
Rahmadhani, S., Buchdadi, A., Fawaiq, M., Agung Prasetya, B. (2022). Determinants of intention to use e-wallet in Generation Z. BISMA (Bisnis dan Manajemen), 15(1). 60-77. 10.26740/bisma.v15n1
Sarstedt, M., Ringle, C. M., & Hair, J. F. (2017). Partial Least Squares Structural Equation Modeling. Handbook of Market Research. 1–40. https://doi.org/10.1007/978-3-319-05542-8_15-1
Shetu, S. N., Islam, M.M., Promi. S.I. (2022). An empirical investigation of the continued usage intention of digital wallets: The moderating role of perceived technological innovativeness. Future Business Journal, 8(1):43. doi: 10.1186/s43093-022-00158-0
Singh, S., & Srivastava, R. K. (2020). Understanding the intention to use mobile banking by existing online banking customers: An empirical study. Journal of Financial Services Marketing, 25(3), 86–96. https://doi.org/10.1057/s41264-020-00065-5
Syifa, N., & Tohang, V. (2020). The use of E-Wallet System. 2020 International Conference on Information Management and Technology (ICIMTech). https://doi.org/10.1109/icimtech50083.2020.9211213
Tahar, A., Riyandh, H. A., Sofyani, H., & Purnomo, W. E. (2020). Perceived ease of use, perceived usefulness, perceived security and intention to use e-filing: The role of technology readiness. The Journal of Asian Finance, Economics and Business, 7(9), 537–547. https://doi.org/10.13106/JAFEB.2020.VOL7.NO9.537
Tan, K., Aziz, F., Hee, O., Goh, C. F., Lim, K., Saadon, M. & Sang Long, C. (2020). E-Wallet acceptance among undergraduates in Malaysia. Test Engineering and Management, 83. 12990 - 12998
To, A. T., & Trinh, T. H. (2021). Understanding behavioral intention to use Mobile Wallets in Vietnam: Extending the TAM model with trust and enjoyment. Cogent Business & Management, 8(1). https://doi.org/10.1080/23311975.2021.1891661
Xia, J. & Goulias, K. (2022). Perceived usefulness and intentions to adopt autonomous vehicles. Transportation Research Part A: Policy and Practice, 16(2022), 171-185. https://doi.org/10.1016/j.tra.2022.05.007
Zhang, J., Luximon, Y., & Song, Y. (2019). The role of consumers' perceived security, perceived control, interface design features, and conscientiousness in continuous use of mobile payment services. Sustainability, 11(23), 6843. https://doi.org/10.3390/su11236843

Authors' Bibliography

Manuel Alexander C. Bonotan IV. He obtained his Bachelor of Science in Business Administration, major in Marketing Management from the University of Santo Tomas, Manila, Philippines, in 2025. His major research interests include advertising, social media marketing, and e-commerce.

Hernando Antonio A. Cesa. He obtained his Bachelor of Science in Business Administration, major in Marketing Management from the University of Santo Tomas, Manila, Philippines, in 2025. He is now helping his family run their business.

Francis Amiel L. Dugenia. He obtained his Bachelor of Science in Business Administration, major in Marketing Management from the University of Santo Tomas, Manila, Philippines, in 2025. His main research areas focus on consumer behavior, brand management, and business analytics.

Martin Andrew C. Marin. He obtained his Bachelor of Science in Business Administration, major in Marketing Management from the University of Santo Tomas, Manila, Philippines, in 2025. His major research interests include e-commerce, advertising, and social media marketing.

Antonio E. Etrata, Jr was born in Binalonan, Pangasinan, on November 24, 1981. He earned his Bachelor of Science in Commerce from the University of he Cordilleras, Baguio City, Philippines in 2001. Furthermore, he obtained his Master in Business Administratiotn in 2013 and Doctor of Philosophy, major in Commerce in 2020, both from the University of Santo Tomas, Manila, Philippines. In addition, he gained his Post-Doctoral degree in Strategic Management and Leadership from the Philippine Christian University, Manila, Philippines in 2023. His main research areas encompass brand marketing, consumer behavior, sustainability, and corporate social responsibility