

Examining consumers attitude towards E-wallet utilization as a payment method using technology acceptance model: A perspective from young generations in Nueva Ecija, Philippines

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Abstract: This study aims to provide valuable insights into how consumers interact with e-wallets in order to understand their behaviors and preferences. This perspective and behavior can help businesses and institutions better understand consumer behavior and develop strategies to increase e-wallet adoption. This research study is descriptive in nature. The researchers utilized frequency, percentage, weighted mean, and pearson R as statistical treatment. According to the findings, majority of respondents stated that Information Privacy is the most common and most encountered problem related to their use of e-wallets, while few reported the fewest, which were Unauthorized Application Updates. The statement implies that the majority of respondents were concerned about their information's security and safety. According to respondents, fear stems from concerns about others gaining unauthorized access, data breaches, or the misuse of sensitive information. Conduct interviews and surveys in your community to find out why people aren't using e-wallets. The researchers recommended implementing training programs on e-wallet usage to educate the community through focused campaigns, enhancing the usability and accessibility of the application for ongoing enhancement.

Keywords: *Consumer attitude, E-Wallet utilization, Payment method, Technology acceptance Model, Technology.*

1. Introduction

Over the past few years, consumer behavior has experienced a significant change due to fast technology progress. One notable innovation among these is the widespread adoption of electronic wallets (e-wallets) as a preferred choice for conducting online transactions. The study conducted by Agustin, Marvella, and Deviarti (2023) highlights the growing use of e-wallets as a method of digital payment. This demonstrates a notable change in consumer behavior and the use of financial technologies.

E-wallets, which are essentially digital equivalents of physical wallets, have completely transformed the world of digital payments. They provide a smooth and convenient payment system that can be accessed via computers or smartphones, making it easy to carry out transactions for a wide range of products and services, such as groceries and airline tickets, without the need for cash or actual credit cards. Electronic wallets have become progressively popular, particularly among younger generations, due to their enhanced convenience.

The utilization of e-wallets is not merely a temporary trend; rather, it is supported by a variety of factors. Electronic wallets have become a dependable and widely accepted means of digital payments as a result of the growing prevalence of smartphones and internet usage in emerging countries (Ramli &

Hamzah, 2021). The simplicity of not needing to carry physical wallets or cards, along with the capability to handle transactions while on the move, further amplifies the attractiveness of e-wallets. In addition, the security attributes linked to e-wallets are a significant factor in their increasing popularity. Mathai & Mathai (2024) observed that the use of a digital wallet enables users to securely and conveniently carry out transactions. These characteristics offer consumers a feeling of assurance and confidence, which is essential for the acceptance of any novel financial technology.

Aside from ease and security, the significance of social impact must not be disregarded. Graf-Vlachy et al. (2018) asserted that in general, social influence exerts a substantial impact on human behavior and specifically on the adoption of technology. Younger customers, who are more inclined to embrace new technologies at an early stage, frequently lead the earliest phases of adoption, thereby exerting an influence on wider demographic segments.

Students and other young individuals in the Philippines have had a notable impact on the financial sector, namely through the widespread adoption of e-wallets and digital payment methods. In urban areas of Nueva Ecija, particularly in Cabanatuan City, students enjoy enhanced accessibility to these technologies, which enables the convenient use of e-wallets for diverse transactions, encompassing the acquisition of school supplies, payment of tuition fees, and covering daily expenses such as food and transportation. The digital payments sector in the Philippines has experienced substantial transformations in recent years, mostly as a result of initiatives like the National Retail Payment System (NRPS) led by the Bangko Sentral ng Pilipinas (BSP) since 2015. These cooperative efforts have played a crucial role in making electronic payments more accessible and widely used throughout the archipelago, thus democratizing their usage. The younger generation has adopted this approach in their consuming habits, primarily because of their expertise with cellphones and enhanced internet connectivity.

Nevertheless, residents of Nueva Ecija have similar concerns regarding security and trust, just as the rest of the country. Many individuals have reservations about utilizing electronic wallets due to concerns around potential data breaches and fraudulent activities. These results are consistent with the research conducted by Dwivedi et al. (2021), which showed that 48 percent of participants cited security, privacy, or fraud concerns as the main barriers to adopting e-wallets. Younger generations, who are particularly vulnerable to security and trust issues, may not be fully aware of the security measures implemented by e-wallet providers. Their lack of awareness can render consumers vulnerable to numerous e-payment schemes and scams, which could ultimately result in a decline in their use of e-wallets.

In order to encourage the extensive utilization of e-wallets, it is imperative for businesses and organizations in Nueva Ecija to tackle present gaps and formulate plans based on solid evidence. To promote a more comprehensive and strong digital payment system, it is important to address consumer worries over privacy and security, while also improving the perceived convenience and advantages of e-wallets. In order to address these problems, it is crucial to employ a model that evaluates the ongoing adoption of e-wallets. Therefore, the researchers identified the Technology Acceptance Model (TAM).

According to *Technology Acceptance Model - TheoryHub - Academic theories reviews for research and T&L* (n.d), the Technology adoption Model (TAM) proposes that users' adoption of technology can be predicted by their behavioral intention, which is influenced by their perception of the technology's usefulness in performing a task and its ease of use. In the context of security and trust issues regarding e-wallet usage, Nueva Ecija can enhance adoption and usage among its residents, particularly the younger generation, by applying the TAM model. Consequently, TAM can provide both immediate and long-term benefits for various business establishments and individuals, especially the younger generations. The advantages encompass enhanced productivity, heightened financial and temporal effectiveness, and enhanced convenience.

With the above context, this study aims to assess the use of e-wallet as payment method among young generations through student consumers, highlighting the use of Technology Acceptance Model. Specifically, the main objectives of this study are to determine the following:

1. How may the demographic profile of the younger generation be described?
2. How may the attitude of the respondents be assessed in using the e-wallet as a payment method in terms of the Technology Acceptance Model?
3. Is there any significant relationship between the selected demographic profile of the respondents and their assessment in the use of the e-wallet as a payment method in terms of the Technology Acceptance Model?

1.1. Review of Related Literature

The use of E-wallet as a Payment Method. Electronic wallets, a fintech invention, revolutionize financial transactions by facilitating electronic exchanges and obviating the need for physical currency (Hashim, Chan and Li, 2023). These digital platforms streamline online transactions, offering users unparalleled convenience without the necessity of visiting physical stores in person (Halimah and Riza, 2022). The daily transactions of purchasing supplies or paying for public transportation are becoming increasingly simplified by mobile payment systems (Halimah and Riza, 2022). E-wallets significantly influence consumer behavior by facilitating seamless online transactions and streamlining ride payments, thereby fulfilling a variety of everyday requirements. This change represents the growing trend toward a consumer experience that is centered on digital interactions.

The influence of e-wallets on consumer behavior is substantial. E-wallets function as digital currencies that enable convenient purchasing without the necessity of carrying physical cash, providing a cashless payment option for various transactions while multitasking, as per Lestari, Soleh, and Nasution (2023). Rajan (2012) also observed that digital wallets facilitate transactions at any time and location, which in turn affects consumer behavior in the context of product or service consumption. This convenience is echoed in their findings. Digital wallets serve as efficient non-cash payment solutions by employing application- or card-based systems, which facilitate transactions and improve user convenience (Rajan, 2012).

The influence of e-wallets on consumer behavior is substantial. E-wallets function as digital currencies that enable convenient purchasing without the necessity of carrying physical cash, providing a cashless payment option for various transactions while multitasking, as per Lestari, Soleh, and Nasution (2023). Rajan (2012) also observed that digital wallets facilitate transactions at any time and location, which in turn marks consumer behavior in the context of product or service consumption. This convenience is echoed in their findings. Digital wallets serve as efficient non-cash payment solutions by employing application- or card-based systems, which facilitate transactions and improve user convenience (Rajan, 2012).

A number of critical factors have contributed to the pervasive adoption of e-wallets. Ma'ruf et al. (2022) underscores the importance of the one-click payment feature, which considerably enhances user convenience and encourages a consumption pattern that prioritizes the convenience of purchasing products and services.

Furthermore, the safety and security characteristics of e-wallets are essential for establishing user trust and promoting adoption. E-wallets eliminate the necessity for physical cards or currency, thereby providing consumers with the convenience of smooth, secure, and effortless transactions.

Additionally, the literature indicates that the implementation of e-wallets may generate additional economic advantages. Halimah and Riza (2022) demonstrate the practicality of e-wallets in a variety of daily activities by utilizing them for routine transactions, including grocery shopping and public transportation payments. This incorporation into daily routines not only enhances individual convenience but also enables the development of a more efficient digital economy. Businesses that implement e-wallets experience enhanced performance, as well as increased financial and time efficiency.

In conclusion, e-wallets are transforming financial transactions by offering a secure, efficient, and convenient payment method. The integration of e-wallets into daily life is having an impact on the transformation of consumer behavior and the evolution of digital financial transactions. The advantages of e-wallets, including their prevalence among users, security features, and ease of use, are consistently

emphasized in the literature. These characteristics are essential for the widespread adoption of e-wallets and the enhancement of consumer experiences in the current market.

Technology Acceptance Model (TAM) and its contribution in the use of e-wallet. Within the context of this study, internal factors refer to the psychological or cognitive dimensions that have an impact on an individual's decision to utilize e-wallets. It is crucial to evaluate an individual's decision based on their perception of the use and convenience of technology in their everyday life.

According to the *Technology Acceptance Model (TAM) proposed by TheoryHub - Academic theories reviews for research and T&L* (n.d), researchers suggest that users' adoption of technology can be predicted by their behavioral intention. Their perception of the technology's ease of use and its usefulness in executing a task influences this intention. According to Surendran's research (2012), the Technology Acceptance Model (TAM) posits that an individual's inclination to adopt a technology is determined by their assessment of its utility (PU) and simplicity (PEOU). These factors are important in predicting the actual usage behavior of individuals. The Technology Acceptance Model (TAM) provides valuable insights into the factors that drive user adoption and sustained use in the context of digital payments.

Researchers have discovered that people's personal views towards using e-wallets are greatly affected by their perception of how easy they are to use and how valuable they are. Harsanto, Matondang, and Wibowo (2023b) assert that the Technology Acceptance Model (TAM) deems these characteristics as pivotal criteria in evaluating an individual's inclination to embrace and maintain the utilization of novel technology. PEOU, or Perceived Ease of Use, refers to the degree to which consumers regard the utilization of an e-wallet as simple and uncomplicated. This encompasses characteristics such as the straightforwardness of the transaction procedure, the user-friendliness of the navigation, and the simplicity of the interface. In their study, Aydin and Burnaz (2016) discovered that individuals are more likely to embrace the use of an e-wallet if they perceive it to be user-friendly. This perception is based on the belief that a user-friendly e-wallet reduces the effort required to comprehend and navigate the system.

Nevertheless, PU refers to the extent to which researchers are convinced that the e-wallet will enhance users' financial management and transaction efficiency. The advantages of using this may include convenience, time savings, and additional features such as budget management tools and transaction history monitoring. As stated by Subaramaniam (2020), the readiness of users to adopt and regularly use e-wallets is enhanced when they perceive tangible advantages such as simplified financial transactions and reduced reliance on cash.

Positive evaluations of Perceived Ease of Use (PEOU) and Perceived Usefulness (PU) significantly increase the probability of e-wallet acceptance and utilization. Perceived risks and uncertainties of users are reduced by positive perceptions, leading to a more favorable attitude towards the technology (Aydin and Burnaz, 2016). For instance, individuals are more inclined to incorporate an e-wallet into their everyday activities if it exhibits user-friendly features and offers concrete advantages, such as ensuring secure and fast transactions. On the other hand, the adoption process can face significant obstacles due to negative perceptions of these factors.

When individuals face challenges in navigating an e-wallet or do not see a clear advantage, they tend to postpone the adoption of the technology. The perceptions of users can be further intensified by negative experiences, such as complicated registration processes or frequent technical difficulties, which can lead to resistance (Zhou, 2014).

Therefore, it is crucial for researchers to fully understand and address these internal factors, namely Perceived Ease of Use (PEOU) and Perceived Usefulness (PU), in order to improve consumer acceptance and adoption of e-wallets. Researchers emphasize the importance of developers and marketers focusing on the development of user-friendly, intuitive interfaces and effectively communicating the advantages of e-wallets to potential users. Research suggests that user attitudes towards e-wallets can be significantly enhanced by highlighting their practical benefits and enhancing their usability. This, in turn, can drive greater acceptance and usage of e-wallets among the general

population. Ultimately, this strategic approach fosters the development of a strong digital payment ecosystem by guaranteeing that consumers not only recognize the importance of e-wallets but also have a sense of trust and comfort in using them.

Perceived Ease-of-use of Technology Acceptance Model. Perceived ease of use (PEOU) is a crucial factor in technology adoption, which refers to an individual's level of confidence when interacting with technology, with a focus on minimal effort and convenience. According to Alsyouf (2023), PEOU refers to the extent to which a person perceives that using a particular technology will be relaxed and require little cognitive or physical effort. Researchers have found that individuals tend to feel more confident and expect a technology to be less challenging when they perceive it as user-friendly. This perception of user-friendliness has been shown to greatly enhance their willingness to use the technology.

In their study, Berakon et al. (2021) investigate the Technology Acceptance Model (TAM) and emphasize the importance of user-friendly design in shaping users' perceptions of the technology's benefits. According to research, individuals' evaluations of the usefulness of technology are improved when they perceive it to be easy to use and navigate. A user-friendly design not only enhances the accessibility of the technology but also highlights its benefits, thereby creating a favorable impression that motivates users to recognize and value the advantages of using the technology.

The importance of Perceived Ease of Use (PEOU) in influencing users' attitudes towards technology adoption is highlighted in both research studies. Research suggests that individuals are more likely to have a positive experience with a technology that is designed to be user-friendly. This is because a user-friendly interface reduces the perceived effort required to use the technology, leading to increased enjoyment. This simplicity not only reduces the barrier to entry but also improves users' perceptions of the technology's benefits. The acceptance and utilization rates of users tend to increase when they perceive the technology as less intimidating and more advantageous. Thus, it is crucial for researchers to prioritize the enhancement of Perceived Ease of Use (PEOU) by emphasizing intuitive design and transparent functionality in order to promote the adoption of technology.

Ultimately, users' attitudes and behaviors towards technology adoption are greatly impacted by their opinion of its ease of use. Developers can enhance user confidence and emphasize the advantages of a technology by reducing the effort necessary to operate it. The findings of Alsyouf (2023) and Aji et al. (2021) demonstrate that the dual impact of reducing perceived effort and enhancing perceived usefulness results in increased acceptance and utilization. For this reason, it is essential to prioritize user-friendly design and convenience of use in order to ensure the successful adoption of new technologies.

Perceived Usefulness of Technology Acceptance Model. Perceived utility (PU), as described by Davis and Venkatesh (1996), is a critical factor in the acceptance and implementation of new technologies. Technology acceptance is the extent to which individuals believe that a specific technology will improve their job performance. People are more likely to see a technology as beneficial when they believe it can greatly enhance their productivity and effectiveness in their professional pursuits. The favorable perception of the technology directly influences users' attitudes towards it, resulting in a greater inclination to embrace and utilize it for work-related purposes.

In their study, Soodan et al. (2023) provide further details on this concept, explaining that PU involves assessing the advantages that a technology offers in facilitating the use of desired services. When individuals perceive a technology as advantageous, they anticipate that it will enhance efficiency, simplify tasks, and increase accessibility in accordance with their unique preferences and requirements. This evaluation is crucial as it guarantees that the capabilities of the technology align with the expectations of the users, thereby enhancing the perceived value and usefulness of the technology.

Anugerah and Indriani (2018) further emphasize that the advantages of technology are closely tied to factors such as productivity, efficiency, task completion, work requirements, and overall benefits. Research indicates that a technology is deemed useful when it enhances productivity by enabling tasks to be executed with greater efficiency and precision. It should also align with the specific needs of the workplace by offering relevant features. Additionally, it should provide overall benefits such as cost

savings and improved performance. This comprehensive perspective on usefulness highlights the multifaceted nature of PU and its significant impact on technology adoption.

Moreover, Ariff et al. (2014) highlight the connection among the perception of helpfulness and the probability of adopting e-payment systems. According to the research, people are more inclined to utilize e-payment services when they believe them to be advantageous. Based on our research, it can be deduced that the adoption of digital payment methods is significantly influenced by the perceived practical benefits, such as convenience, security, and speed. The users' inclination to embrace e-payment services is significantly increased when they are persuaded that these services would fulfill their needs and provide concrete advantages.

Users' views towards technology adoption are heavily influenced by their impression of its usefulness. Studies indicate that people are more inclined to embrace and utilize a technology when they are persuaded that it can enhance their performance and provide substantial benefits. The factors that contribute to this favorable perception are the technology's capacity to enhance productivity, efficiency, and task completion, as well as its compatibility with the work requirements and overall needs of users. Therefore, it is crucial to ensure that users perceive a technology as advantageous in order to facilitate its adoption and integration into their daily lives.

Synthesis. The literature explored above offers valuable insights into the use of e-wallets and consumer perspectives. Studying consumer attitude involves exploring how people make choices, interact with goods or services, and react to marketing campaigns. In the world of electronic wallets, grasping consumer attitudes is crucial for a multitude of reasons. It helps improve e-wallets to better cater to users, ensures their safety, fine-tunes advertising approaches, encourages creativity, and helps businesses stay ahead in the digital payment field.

Consumer attitude is crucial in a study that delves into “Examining Consumers Attitude towards E-Wallet Utilization as a Payment Method using Technology Acceptance Model: A Perspective from Young Generations in Nueva Ecija, Philippines”. It is crucial for businesses and institutions to comprehend consumer perceptions regarding e-wallets. It enables them to customize their services based on user expectations, build trust, improve marketing efficiency, enhance user experiences, and stay competitive in the rapidly changing digital payments industry.

The Technology Acceptance Model (TAM) is a valuable tool for understanding how consumers embrace and use technology, especially e-wallets. Using TAM to analyze e-wallet adoption and usage allows researchers to pinpoint important factors that impact consumers' attitudes, behaviors, and perceptions. This method provides important insights that can guide the creation of strategies to enhance e-wallet acceptance, tackle usability issues, and improve user experiences in the ever-evolving field of digital payments.

The literature reviewed supports this study by emphasizing the effectiveness of the Technology Acceptance Model (TAM) in explaining consumers' acceptance and use of e-wallets. It highlights TAM's success in understanding technological adoption, especially in the realm of e-wallets. Using this theoretical framework is crucial because it offers a structured method for examining consumer attitudes, behaviors, and perceptions related to e-wallet usage. Researchers can concentrate their studies on elements that impact consumers' choices when it comes to adopting e-wallets, using factors like perceived usefulness and perceived ease-of-use.

Moreover, the use of e-wallets is being evaluated to measure their influence on consumer perception. The research being discussed, titled “Examining Consumers Attitude towards E-Wallet Utilization as a Payment Method using Technology Acceptance Model: A Perspective from Young Generations in Nueva Ecija, Philippines” proposes an assessment into how consumers view and embrace particular aspects of e-wallets as their payment method.

2. Research Method

2.1. Research Design

The researchers utilized a correlational quantitative methodology in their investigation, wherein they collected quantifiable data from a specific group within the population for the purpose of statistical analysis. This method facilitated the investigation of connections between different variables. The study's objective was to evaluate the influence of e-wallet usage on consumer attitudes towards payment methods.

Quantitative methodology, as described by Apuke (2017), is employed to determine the existence and magnitude of relationships among various variables within a population or sample. The researchers emphasize numerical data and statistical analysis to draw conclusions.

In order to analyze the collected data, we, as researchers, utilized a range of statistical techniques, such as frequency, percentage, weighted mean, and Pearson's correlation coefficient. The methods utilized in this study offer a comprehensive framework for comprehending the data and assessing the relationships among various variables.

The Pearson's correlation coefficient, in particular, played a crucial role in the analysis. The coefficient quantifies the degree of association between two variables, offering insights into the nature and intensity of their relationship. Through the calculation of this coefficient, we, as researchers, were able to ascertain the degree to which the utilization of e-wallets for payments impacted consumer attitudes.

2.2. Research Target/Subject

The study in question specifically targets consumers aged between 18 and 24 years old residing in Nueva Ecija with at least one time experience in the use of e-wallet as their payment in exchange of goods or services. This delineation of the age bracket is significant due to the predominance of e-wallet usage among individuals within this demographic. Consequently, the researchers opted to confine the respondent pool exclusively to this age group. The rationale behind this decision lies in the observed trend that the majority of e-wallet users fall within the 18-24 age bracket. By focusing exclusively on this demographic segment, the study aims to capture a representative sample of the population most likely to engage with e-wallet technologies in Nueva Ecija.

This targeted approach allows for a more focused investigation into the perceived use and perceived ease of use and usefulness of a specific consumer cohort regarding e-wallet usage. By concentrating on the 18-24 age group, the study aims to provide insights that are particularly relevant and applicable to this demographic segment, thus enhancing the overall validity and applicability of the research findings within the context of e-wallet adoption in Nueva Ecija. The table below provides a snapshot of the sample population distributed across all municipalities in the province.

The study focused on a specific demographic subset of e-wallet users, namely individuals aged between 18 and 24 years old residing in Nueva Ecija, Philippines. The total sample size consisted of 384 respondents, drawn from a population estimated to be 406,215 individuals within the specified age range and geographic location. The determination of the sample size followed a rigorous methodology, utilizing the Raosoft application to calculate a sample size with a 95% confidence level and a 5% margin of error, ensuring statistical robustness and reliability.

Table 1.
Distribution of respondents.

Municipalities	Population	Sample size
Aliaga	12,080	11
Bongabon	11,762	11
Cabanatuan	59,585	56
Cabiao	15,039	14
Carranglan	8,357	8
Cuyapo	11,734	11
Gabalton	6,271	6
Gapan	20,929	20
General Mamerto Natividad	8,002	8
General Tinio	9,409	9
Guimba	21,380	20
Jaen	13,948	13
Laur	6,673	6
Licab	5,497	5
Llanera	7,194	7
Lupao	7,825	7
Muñoz	15,042	14
Nampicuan	2,672	3
Palayan	7,936	8
Pantabangan	6,150	6
Peñaranda	5,663	5
Quezon	7,378	7
Rizal	11,698	11
San Antonio	14,569	14
San Isidro	9,317	9
San Jose	26,612	25
San Leonardo	12,199	12
Sta. Rosa	13,507	13
Sto. Domingo	10,836	10
Talavera	23,334	22
Talugtug	4,223	4
Zaragoza	9,394	9
Lupao	7,825	7
Muñoz	15,042	14
Nampicuan	2,672	3
Palayan	7,936	8
Pantabangan	6,150	6
Peñaranda	5,663	5
Quezon	7,378	7
Rizal	11,698	11
San Antonio	14,569	14
San Isidro	9,317	9
San Jose	26,612	25
San Leonardo	12,199	12
Sta. Rosa	13,507	13
Sto. Domingo	10,836	10
Talavera	23,334	22
Talugtug	4,223	4
Zaragoza	9,394	9
Total	406,215	384

2.3. Sample and Sampling Procedure

The study focused on a specific demographic subset of e-wallet users, namely individuals aged between 18 and 24 years old residing in Nueva Ecija, Philippines. The total sample size consisted of 384 respondents, drawn from a population estimated to be 406,215 individuals within the specified age range and geographic location. The determination of the sample size followed a rigorous methodology, utilizing the Raosoft application to calculate a sample size with a 95% confidence level and a 5% margin of error, ensuring statistical robustness and reliability.

The researchers employed purposive sampling in the study. Purposive sampling involves deliberately selecting individuals based on certain criteria such as their qualities, expertise, experiences, or other relevant factors (Ncsc,2022). Purposive sampling involves intentionally selecting participants who closely align with the specific goals and objectives of the research, hence enhancing the reliability and credibility of the study's data and findings. Campbell et al. (2020) explained that the incorporation of participant selection method should be seamlessly integrated into the overarching framework of any study, ensuring that the justification for sample selection is linked with the study's overarching objectives.

The researchers employed purposive sampling to identify suitable respondents who met the age criteria and had used an e-wallet at least once. By selecting participants with specific characteristics, the researchers can gain a deeper understanding of the factors influencing e-wallet usage within a particular age group.

2.4. Research Procedure

Following the approval of the research topic "Examining the Attitude of Consumers towards E-Wallet Utilization as a Payment Method using the Technology Acceptance Model: A Perspective from the Younger Generation in Nueva Ecija, Philippines," the researchers began collecting data by systematically gathering relevant information from reliable sources accessible on the internet. This data served as the foundational basis for crafting meticulously designed research questionnaires. Subsequently, these questionnaires underwent a rigorous validation process conducted by experts in the field of Business Administration, Information Technology, and Research, who provided invaluable feedback and suggestions aimed at refining the research tool.

Following expert validation, a trial run was conducted to ascertain the dependability and accuracy of the questionnaire, with particular emphasis on assessing its internal consistency through the evaluation of reliability coefficients. The successful outcome of reliability tests underscored the robustness of the research instrument.

Expert evaluation of the questionnaire further confirmed its validity, as indicated by a weighted mean of 4.088, reflecting a high level of validity. With positive outcomes from both reliability and validity assessments, the researchers proceeded with the study, particularly given the planned online administration of the survey questionnaire. Upon obtaining the necessary permissions, the researchers proceeded to obtain consent from potential respondents and commenced the survey administration process. Following the validation of the questionnaires, the researchers proceeded to conduct a pilot test to confirm the accuracy, reliability, and effectiveness of the research instruments. Here are the results for the reliability of each variable: The perceived ease of use score is 0.8800, and perceived usefulness is 0.7860, indicating that the instrument used has excellent internal consistency.

To address the multifaceted influences and concerns outlined in the problem statement, the researchers meticulously tailored and refined the questionnaires. The survey was structured into two distinct sections, encompassing demographic information, and the assessment of the use of e-wallet using TAM. The Likert scale was employed to gauge respondents' opinions on e-wallet usage, allowing for nuanced and quantifiable insights into consumer attitudes.

Prior to participation, respondents were duly informed of the voluntary nature of their involvement in the research and provided with the option to withdraw at any stage. Additionally, assurances regarding

the confidentiality of their responses were explicitly conveyed to uphold ethical standards and ensure participant confidentiality.

2.5. Instruments, and Data Collection Techniques

The researchers employed a survey questionnaire administered via face-to-face interviews, which allowed for statistical analysis of the findings using software. Survey research is the primary and essential tool for all quantitative outcome research approaches and studies.

Survey questionnaires consist of a series of inquiries designed to achieve the goals of the study. Respondents are encouraged to complete the surveys in order to determine the impact of internal and external factors on customers' attitudes towards e-wallets.

Part I includes the description of the demographic profile of the respondents. It was constructed by the researchers in a checklist form.

Part II consist of questions that assessed the respondents' perception of the two variables: Perceived Ease-of-Use and Perceived Usefulness, which is part of the Technology Acceptance Model. It was formulated in the modified 4-point Likert scale (4) Strongly Agree; (3) Agree; (2) Disagree; (1) Strongly Disagree. The questionnaire was adopted and modified from the study entitled "The Mediating Effect of Attitudes on E-Wallet Usage Among Users in Malaysia published by Hasnah Abdul Kadir et al., (2022)". The respondents were instructed to rate the statements and answer the questions with honesty.

2.6. Data Analysis Technique

The information gathered from the locale was encoded, totaled, and examined. The data collected were analyzed using statistical techniques such as percentage, frequency distribution, weighted mean, and Pearson R. Results were interpreted using the scale.

Table 2.
Scale for interpretation.

Scale	Mean range	Interpretation	Description
1	3.26-4.00	Strongly agree	Highly Practiced
2	2.51 - 3.25	Agree	Practiced
3	1.76 - 2.50	Disagree	Fairly practiced
4	1.00 -1.75	Strongly disagree	Not practiced

Table 2 present the scales applied by the researchers in the interpretation and description of data under Internal Factors such as perceived ease-of-use and perceived usefulness, and External Factors such as media influence and peer influence. To determine the favorable, the researchers used 4-point Likert scale.

Table 3.
Scale used for interpretation of Pearson r.

r- value (Size of correlation)	Interpretation
0.90 to 1.00 or (-0.90 to -1.00)	Very high positive (or negative) correlation
0.70 to 0.89 or (-0.70 to -0.89)	High positive (or negative) correlation
0.50 to 0.69 or (-0.50 to -0.69)	Moderate positive (or negative) correlation
0.30 to 0.49 or (-0.30 to -0.49)	Low positive (or negative) correlation
0.10 to 0.29 or (-0.10 to -0.29)	Very low positive (or negative) correlation
0.01 to 0.09 or (-0.01 to -0.09)	Weak positive (or negative) correlation
0.00	No correlation

Table 3 shows the scales used by the researchers in interpreting the Pearson r . The researchers aim to determine the significant relationship between internal and external factors and consumer attitude.

Aside from the said scale, the researchers used the following statistical tools to classify, tabulate, and analyze the data following: In describing the demographic profile of the respondents, the researchers used frequency and percentage; to assess the attitude of the respondents in using the e-wallet as a payment method in terms of the Technology Acceptance Model the researchers employed weighted mean and ranking; lastly, in describing the significance correlation between the selected demographic profile of the respondents and their assessment in the use of the e-wallet as a payment method in terms of the Technology Acceptance Model, the researchers used Pearson r correlation.

3. Results and Discussion

3.1. Description of the Demographic Profile of the Respondents

This part of the study described the demographic profile of the respondents in terms of age, sex, source of fund, location, and year level.

Table 4.
Demographic profile.

Variables	Frequency (f)	Percentage (%)
Age		
18	41	11
19	40	10
20	61	16
21	94	24
22	87	23
23	28	7
24	33	9
Sex		
Male	173	45
Female	211	55
Source of Fund**		
Allowance	262	68
Scholarship	48	13
Job/Side Hustle	120	31
Others	0	0
Location		
Aliaga	11	3
Bongabon	11	3
Cabanatuan	56	15
Cabiao	14	4
Carranglan	8	2
Cuyapo	11	3
Gabaldon	6	2
Gapan	20	5
General Mamerto Natividad	8	2
General Tinio	9	2
Guimba	20	5
Jaen	13	3
Laur	6	2
Licab	5	1

Variables	Frequency (f)	Percentage (%)
Llanera	7	2
Lupao	7	2
Muñoz	14	4
Nampicuan	3	1
Palayan	8	2
Pantabangan	6	2
Peñaranda	5	1
Quezon	7	2
Rizal	11	3
San Anton	14	4
San Isidro	9	2
San Jose	25	7
San Leonardo	12	3
Sta. Rosa	13	3
Sto. Domingo	10	3
Talavera	22	6
Talugtug	4	1
Zaragoza	9	2

Note: **multiple responses, n= 384

Table 4 presents a comprehensive overview of the demographic characteristics of the study participants, encompassing variables such as age, sex, funding sources, geographical location, and academic year level. Upon careful examination of the data, several notable patterns emerge, shedding light on the demographic composition of the sample.

The findings indicate that the most prevalent age group among the participants was 21 years old, comprising 24% of the total sample, whereas individuals aged 23 years old represented the least common age cohort, comprising only 7% of the respondents. The age distribution data indicated a prevalence of younger adults within the inquired sample size. This corresponds to the specific demographic that e-wallet users are aimed at, indicating that younger generations are more inclined to embrace and make use of e-wallets. This tendency aligns with more general patterns of technology adoption, in which younger generations typically take the lead in accepting new digital solutions.

In terms of sex distribution, females constituted the majority, comprising 55% of the participant pool with a total of 211 individuals, whereas males accounted for 45%, totaling 173 participants. The findings on sex demonstrate significant patterns, which suggested varying preferences or behaviors in relation to e-wallet usage among different demographic categories. A greater percentage of female respondents may indicate a gender-related tendency towards the usage of e-wallets. This may be indicative of women's historically prominent roles in overseeing household finances and their inclination towards the convenience provided by e-wallets for managing bill payments and financial transactions.

Regarding sources of funds, a significant proportion of participants indicated receiving allowances (68%), while a smaller percentage relied on scholarships (13%). The data indicated that personal money was the primary source of funds, rather than help from institutions. This emphasizes the independence in financial matters and the ability to make discretionary purchases of the individuals polled. The data suggests that individuals predominantly utilize e-wallets for personal expenses, indicating a shift towards personal financial management and autonomy.

Geographically, participants predominantly hail from Cabanatuan, comprising 15% of the total sample, while only a minimal proportion (1%) originate from Nampicuan. The geographic distribution of e-wallet users suggested disparities in the rates of adoption among various areas within the province. These variances seem to be influenced by factors such as the availability of internet connection and the extent to which smartphones are used. The high prevalence of e-wallet usage in Cabanatuan can be

linked to the superior internet infrastructure and greater smartphone penetration rates in the area, which have created a more conducive atmosphere for digital payment solutions.

The survey's findings offer essential background for comprehending the patterns of e-wallet usage among the population of Nueva Ecija. These insights provide a deeper understanding of the fundamental factors and forces that influence consumer behavior, including factors such as age, sex, financial source and location. Analyzing these aspects can provide insights for developing strategies to increase the use of e-wallets and customize digital financial services to cater to the specific requirements of various demographic segments in the province.

Table 5.
Perceived ease-of-use.

Statement	Weighted Mean
1. I find it easy to download e-wallet applications on smartphones.	3.48
2. I find it convenient to make purchases using an e-wallet.	3.31
3. I can use the e-wallet application effortless at any time I prefer.	3.26
4. In general, utilizing e-wallet is effortless.	3.27
5. It is easy for me to get into my e-wallet by signing in.	3.32
6. I find it simple to add money or funds in my e-wallet account.	3.28
7. I find the instructions for using e-wallet easy to understand.	3.29
Average Weighted Mean	3.31

Note: Legends for weighted mean: 1:00-1.75 Strongly disagree; 1.76 – 2.50 Disagree; 2.51- 3.25 Agree;3.26 -4.00 Strongly agree

3.2. Assessment of the Attitude of the Respondents in using the E-Wallet as a Payment Method in terms of the Technology Acceptance Model

3.2.1. Perceived Ease-of-Use

When it comes to ease of use, the data shows a weighted mean of 3.31, indicating a strong consensus with the label "highly practiced." In particular, the statement "I find it easy to download e-wallet applications on smartphones" received the highest weighted mean of 3.48, indicating a strong agreement with the ease of downloading e-wallet applications. However, the e-wallet application, with its effortless use at any preferred time, scored a low mean of 3.26, indicating strong agreement and a perception of high proficiency.

The study's findings highlight the general recognition among younger generations of the convenience provided by e-wallets, especially in terms of their perceived ease-of-use on different devices. The respondents indicated satisfaction with the smooth procedure of obtaining and using e-wallet applications, highlighting the ease of downloading the applications with just a few clicks on their smartphones or other compatible devices.

These views align with the wider body of literature on e-wallets, which emphasizes their increasing popularity as a favored method of payment due to their inherent convenience, variety, and safety. According to Uddin and Akhi (2014), the widespread use of e-wallets is closely connected to their capacity to provide users with a smooth and safe transaction process, along with other advantages like flexibility and rewards. E-wallet technology is constantly expanding, improving its functionality and establishing itself as a crucial component in the ever-changing digital payment industry.

As technology continues to progress, e-wallets are positioned to play a more important role in influencing how consumers make payments. Their ability to offer improved convenience and security to users is in line with the changing expectations of contemporary consumers who emphasize efficiency and safety in their financial operations. Furthermore, the capacity for e-wallets to provide other functionalities and advantages, such as loyalty programs and customized awards, strengthens their attractiveness as a favored payment option among discerning consumers. Given the ongoing advancements in technology and the corresponding changes in customer tastes, e-wallets are poised to

maintain their leading position in digital payment technologies. Its capacity to effortlessly incorporate into consumers' everyday routines and provide a diverse array of advantages highlights their potential to transform the manner in which younger generations handle their finances and carry out transactions in an increasingly digitalized society.

Table 6.
Perceived usefulness

Statement	Weighted mean
1. I can complete payments more quickly with e-wallet.	3.30
2. Using e-wallet is a superior alternative to cash payments.	3.22
3. I can monitor my expenses more effectively with e-wallets than with cash.	3.21
4. Using e-wallet is more efficient option compared to using cash.	3.10
5. E-wallet help to reduce my need to carry physical cash.	3.24
6. I can better plan my spending by using e-wallet.	3.16
7. I can save more money by using e-wallet.	3.11
Average Weighted Mean	3.06

Note: Legends for weighted mean: 1:00-1.75 Strongly disagree; 1.76 – 2.50 Disagree; 2.51- 3.25 Agree;3.26 -4.00 Strongly agree

When it comes to perceived usefulness, the data shows a weighted mean of 3.06, suggesting alignment with the term "practiced." In particular, the statement "I can complete payments more quickly with an e-wallet" received the highest weighted mean of 3.30, indicating strong agreement with the idea of faster payment completion. On the other hand, the assertion that utilizing an e-wallet is a more effective choice than using cash received the lowest average score of 3.10, suggesting alignment with the characterization of "practiced."

The result for the perceived usefulness as one of the components of the Technology Adoption Model emphasize the widespread satisfaction among participants regarding the convenience provided by e-wallets for performing transactions from any location. Respondents highlighted the convenience and effectiveness of utilizing e-wallets for bill payments and other financial transactions, emphasizing the independence it provides them from the limitations of physical distance or dependence on external help.

This result corresponds to the findings of Yang et.al (2021), who emphasizes the revolutionary influence of e-wallets in streamlining purchasing and selling transactions using smartphone applications. By effectively combining e-wallet features with mobile technology, the purchasing process is streamlined to achieve exceptional efficiency and convenience. The widespread presence of smartphones equipped with e-wallet applications allows users to easily access their digital wallets, enabling them to quickly and securely initiate transactions at their convenience, regardless of time or location.

The incorporation of e-wallets into mobile devices has introduced a new era of digital transactions, distinguished by increased convenience, speed, and improved security measures. E-wallets provide consumers with a centralized platform to manage their financial transactions, offering a user experience that is fluid and straightforward. This surpasses the limits of physical wallets or traditional banking systems.

In addition, e-wallets offer more than just the ability to make transactions. They also provide instant access to transaction history, targeted offers, and loyalty points. The inclusion of these additional functions enhances the importance of e-wallets in contemporary business, establishing them as essential tools for allowing smooth and safe digital transactions in an ever more interconnected global society.

To summarize, the study results support the widely accepted notion that e-wallets are essential instruments for contemporary transactions, providing unmatched ease, effectiveness, and safety. E-wallets have transformed the way people handle their accounts and make transactions by utilizing

mobile technologies. This has paved the path for a future where digital payments are commonplace rather than rare.

Table 7.

Significant correlation between the selected demographic profile and the assessment using TAM.

Pearson R Correlation	R - value	P value	Interpretation	Decision
Age	-0.29	0.00001	Very low negative correlation	Reject null hypothesis
Sex	-0.14	0.005995	Very low negative correlation	Reject null hypothesis

3.3. Correlation Between the Selected Demographic Profile of the Respondents and their Assessment in the Use of the E-Wallet as a Payment Method in Terms of the Technology Acceptance Model

Correlation between Age and the use of E-Wallet. The data clearly shows that 48 participants, making up 13% of the total, highlighted information privacy as the most common issue with e-wallets, whereas 34 respondents, accounting for 9%, faced the fewest problems with unauthorized application updates.

Based from the findings for the correlation between age and the use of e-wallet, it showed that the majority of respondents are mainly concerned with the security and confidentiality of their information. According to survey respondents, the issue stems from apprehensions about illegal access, prospective data breaches, or the improper use of sensitive personal information.

Vitug (2023) has identified that the widespread use of e-wallets has encountered challenges stemming from concerns related to privacy and security. A significant number of people often express apprehensions about the security of their personal information when utilizing digital wallet services. Apprehensions over identity theft and financial crime may hinder individuals from fully embracing new technologies. Individuals may also have concerns over the security measures associated with login credentials and authentication methods. Issues such as password strength, the risk of password theft, and illegal access to e-wallet accounts can cause people to be hesitant about using e-wallet technology.

Correlation between sex and the use of E-Wallet. The researchers determined an R value of -0.14 through Pearson's correlation, suggesting a very weak negative correlation between sex and the assessment using TAM related to e-wallet usage. Nevertheless, the correlation is not very robust, indicating that the impact of gender on these internal factors is quite limited.

Results showed for correlation between sex and the use of e-wallet that sex has minimal influence on individuals' decision to adopt e-wallets. The internal elements connected to e-wallet adoption are not primarily determined by an individual's sexuality. According to the respondents, individuals of all sexes generally favor utilizing electronic wallets due to its perceived convenience and usefulness.

Kasirye and Masum (2021) conducted a recent study suggesting that sexual orientation does not have an impact on the perceived usefulness and compatibility of mobile technology. Mobile technology, such as smartphones and applications, often provides inclusive features that are advantageous to all individuals, irrespective of their sexuality. As societies advance technologically, there is an increasing expectation for both men and women to acquire comparable levels of expertise in mobile technology. This leads to a convergence in their perspectives regarding the usefulness and compatibility of such devices.

4. Conclusion

With the above findings, the researchers were able to reach the following conclusions: The majority of the respondents were age 21 years old, mostly females, mainly from Cabanatuan. In terms ease of use, majority of the respondents strongly agreed that they found it easy to download e-wallet application on smartphones, on the other hand, in terms of perceived usefulness, majority of the respondents agreed that that they can complete payments more quickly with e-wallet.

Based on the findings, the researchers are able to provide the following recommendations:

To improve the e-wallet application's usability, the e-wallet companies should consider gathering user feedback through surveys or usability testing. Identify the pain points mentioned by users and prioritize optimizing those areas for a smoother experience. Also, explore adding user-friendly features, enhancing app responsiveness, and ensuring compatibility with different devices and operating systems.

To enhance the efficiency of e-wallets, it is recommended that the e-wallet companies educate the users on the functionalities, legalities, and other features of the e-wallet users. This may result in ensuring broad accessibility, improving customer support, and promoting acceptance among businesses, these actions directly align with the objective of positioning e-wallets as a more efficient alternative to cash.

To reinforce confidence in e-wallet news, e-wallet providers should inquire about people's concerns, review past errors, and collaborate with experts and fact-checkers. Educate on information verification processes, commit to regular updates, and promptly rectify inaccuracies. Ensure transparency regarding sources, solicit feedback, and partner with fact-checkers to ensure the accuracy of news. These measures aim to enhance the reliability of e-wallet information.

Businesses should adopt e-wallets for cost savings, streamlined operations, and increased customer satisfaction. E-wallets offer efficiency, convenience, and improved financial transactions, ultimately benefiting overall business performance.

The researchers also recommend to provide series of trainings about the use of e-wallet including its legal mandate so that, the users and the providers will comply with the mandatory requirements of the law.

Lastly, this study can be used by future researchers as basis for new research topic about the use of e-wallet. This study may serve as a good starting point to create new discoveries and solutions for the community.

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