

**DIGITAL PAYMENT AMONG NON-TECHY CONSUMERS****Cabigas, Francis L.<sup>1</sup>****Carin, Leslie Ann C.<sup>2</sup>****Condinato, Peter Paul.<sup>3</sup>****Dubduban, Rhea Ann V.<sup>4</sup>****Manguio, Jenalyn.<sup>5</sup>**

<sup>\*1 2 3 4 5</sup> College of Development Management Graduate Program, University of Southeastern  
Philippines, Mintal Campus, Davao City

**ABSTRACT**

As digital payments become a bigger part of everyday life, there's still a large group of people getting left behind, those who aren't comfortable with tech. This study looks at how folks who are not that tech-savvy, most especially in cities, use (or don't use) digital payment platforms. Using surveys and face-to-face interviews, we came up with why adoption is difficult. The study is non-experimental quantitative design utilizing Exploratory Factor Analysis (EFA) to uncover the primary motivational dimensions. Data were gathered from 150 Non-techy consumers using a structured questionnaire. The Kaiser-Meyer-Olkin (KMO) Measure of Sampling Adequacy and Bartlett's Test of Sphericity were conducted to assess the suitability of the data for factor analysis.

Survey results identified six key dimensions of digital payment among non-techy consumers: Perceived Lack of Benefit and Preference for Traditional Methods, Accessibility and Digital Divide, Trust and Security Concerns, Technological Anxiety and User Insecurity, Conditional Willingness to Adopt, and Comfort with Familiar Payment Methods. These dimensions provide a framework for understanding and enhancing everyone's access to the benefits of digital finance. Based on these insights, we've put together practical tips for policymakers, financial technology developers, and service providers to help close this digital gap.

**Keywords:**

E-payment for Non-tech-savvy, Digital payment adoption, Online payment challenges

**INTRODUCTION**

As digital payments become a bigger part of everyday life, there's still a large group of people getting left behind, those who aren't comfortable with tech. In recent years, Filipinos' financial transaction methods have improved rapidly. From in-person transactions to online banking systems and applications like PayMaya and Gcash. Payment and purchases have been made more convenient and faster, making it possible to be made while sitting at home. This advantage is emphasized especially during the time of COVID-19 pandemic, where not being in person is a must for safety. Due to this, the use of digital finance has accelerated even more, saving valuable time for most individuals.

According to the Bangko Sentral ng Pilipinas (2023), the percentage of all retail transactions that were performed digitally increased from 30.3% in 2021 to 42.1% in 2022. This indicates that customers now pay for over half of their purchases online. Even though the data reflects positivity, there is still a part of the population that is left behind. The elderly, low-income earners, and individuals who are not confident in using modern technology are the individuals who still struggle to adapt. There are more than 9 million senior citizens in the country (Philippine Statistics Authority 2021), and many of them aren't comfortable using modern devices, such as smartphones and computers. In rural areas, the lack of internet service and the scarcity of digital devices make it harder for people to get to know and use online payment methods.

These challenges show that simply having the technology isn't enough. People need support to use it confidently, especially older adults and small business owners who are used to doing things the traditional way. And that is the focus of this research. It aims to explore how non-tech-savvy Filipinos are experiencing the changes to digital payments. Discovering the reason for their non-transition and possibly providing practical ideas to help make digital tools more accessible for everyone.

# IJETRM

## International Journal of Engineering Technology Research & Management

Published By:

<https://www.ijetrm.com/>

### OBJECTIVES

The study was conducted to determine, explore and critically analyze the various dimensions that influence the usage of digital payment systems among non-techy consumers.

### METHODOLOGY

The respondents of this study have participated voluntarily from non-tech-savvy consumers (aged 30 and above with limited digital literacy) residing in selected urban and semi-urban areas in Davao City. A purposive sampling approach was employed to select 150 participants who met the inclusion criteria for the study. The respondents were asked to evaluate their perception and usage of digital payment with regard to using a five-point Likert scale (5=always, 1=never) to the statements from the questionnaire. The adapted questionnaire from the previous use, constructed from some earlier research (e.g., Hair et al, 2019; Venkatesh et al, 2022), was reviewed by three subject matter experts (digital finance and consumer behavior) for content validity professionally. The internal reliability of all constructs was established with each Cronbach's alpha being more than 0.70 for an acceptable reliability index (Taber, 2018). This sampling approach ensured that the respondents were capable of providing meaningful insights into the barriers and enablers of digital payment adoption.

Data analysis was conducted using SPSS, with Exploratory Factor Analysis (EFA) employed to determine the latent dimensions of digital payment adoption. Factor analysis is a statistical technique that combines a group of variables associated with one common underlying factor. According to Taherdoost, Sahibuddin, & Jalaliyoon (2022), exploratory factor analysis involves five implementation steps. These significant steps are the following: (1) Evaluation of Data Suitability for EFA, (2) Factor Extraction Method, (3) Factor Retention Method, (4) Selection of Rotational Method, and (5) Interpretation and Labeling.

For this research, the Kaiser-Meyer-Olkin (KMO) Measure of Sampling Adequacy and Bartlett's Test of Sphericity were run to determine whether respondent data were adequate and proper for factor analysis (Field, 2018). Moreover, a Scree Plot was utilized to aid in decision-making regarding the number of factors or components to extract and retain for analysis, which involves organizing, labeling, and interpreting the factors.

### REVIEW OF RELATED LITERATURE

This part contains the literature review which underpinned the study and is framed based on the study objectives on digital payment among non-techy consumers. The dimensions for the study are classified as (1) perceived lack of benefit and preference for traditional methods, (2) accessibility and digital divide, (3) trust and concerns, (4) technological anxiety and user insecurity, (5) conditional willingness to adopt, and (6) comfort with familiar payment methods based on the Kaiser-Meyer-Olkin Measure of Sample Adequacy and Bartlett's test of Sphericity.

**Perceived Lack of Benefit and Preference for Traditional Methods.** Non-techy consumers tend to view digital payments as not providing much value added over conventional methods. Such an impression arises from limited awareness about the convenience and efficiency digital payments can offer. For example, research by Al-Qudah et al. (2022) identified that consumers' perceived convenience has a great influence on the adoption of digital payments, and when they are aware of how convenient and speedy digital payment is, they tend to adopt it. Furthermore, trust and habit largely underpin the preference for traditional payment instruments. This sentiment is echoed in the European Central Bank's (2024) report, which highlights that nearly 20% of adults in the euro area do not possess common digital payment tools, indicating a strong reliance on cash.

Further, as per Guria et al. (2024), though digital payments have become rampant, the comfort of knowing and convenience of cash remain the paramount choice of payment among non-techno users, particularly in areas where digital literacy is low. Alvarez and Manibog (2022) unveil that while awareness on digital payments is very high in Southeast Asia, only 2 out of 10 Filipinos use it actively because of the concerns surrounding data privacy and the fact that they have a stronger belief in cash-based transactions.

**Accessibility and Digital Divide.** The digital divide is still a major obstacle to the adoption of digital payments for non-tech-savvy consumers. Limited internet penetration, low digital literacy, and socioeconomic differences make up this divide. Wu and Peng (2024) highlight that in rural areas, perceived ease of use and usefulness play a huge role in influencing the intention to adopt fintech apps, underscoring how crucial it is to address issues related to accessibility. In the Indian context, Sharma and Singh's (2024) study identifies the digital divide as a key impediment to the adoption of digital payments.

The study cites inadequate infrastructure, low levels of digital literacy, and restricted access to smartphones as the major barriers. In addition, the European Central Bank (2024) indicates that a large number of the population is

# iJETRM

## International Journal of Engineering Technology Research & Management

Published By:

<https://www.ijetrm.com/>

not covered by digital payment instruments, further entrenching the influence of the digital divide on payment habits. As indicated by Anthony (2023), low-tech consumers, for instance, the unbanked and the elderly, are usually excluded from digital systems by digital illiteracy and unavailability of infrastructure. Cacas et al. (2022) highlight that although mobile wallets such as GCash are gaining traction in the Philippines, poor digital infrastructure and education prevent widespread take-up among non-tech users.

**Trust and Security Concerns.** Security and trust issues are of utmost importance among non-technologically inclined consumers when deciding on digital payment adoption. Apaua and Lallie (2022) established that institutional trust and perceived security significantly affect users' intention to use mobile banking applications. The high incidence of cyber scams also heightens such anxieties. A study covered by Insurance Business America (2024) shows that 46% of those surveyed struggle to trust online payment platforms because they fear scams, and 37% are concerned about loss of funds if they got scammed.

The usability and design of e-payment apps also contribute to perceived security. Kishnani et al. (2024) provide that security and privacy are vital to users, and that usability can impact the perceptions of security and privacy of an application. Alvarez and Manibog (2022) also contribute that myths surrounding data privacy and security discourage Filipino consumers from embracing digital payment systems in spite of awareness.

**Technological Anxiety and User Insecurity.** Technological fear and consumer insecurity adversely limit the uptake of digital payments among non-techie customers. Sharma and Singh (2024) recognize psychological barriers, such as technophobia and mistrust, as major drivers limiting digital payment adoption in India. The intricacy of digital payment systems may be daunting to those with minimal technological knowledge. Wu and Peng (2024) point out that perceived ease of use is a significant influencer of fintech adoption in rural populations, and that the simplification of user interfaces can mitigate technological anxiety.

Moreover, Anthony (2023) reports that non-techy consumers often feel overwhelmed by the risk of making mistakes during online transactions due to lack of technical knowledge, leading to heightened anxiety. Turangan et al. (2022) also emphasize that rapid technological developments can lead to trust issues and anxiety related to privacy, data breaches, and the risk of identity theft in digital transactions.

**Conditional Willingness to Adopt.** Some non-tech-savvy consumers exhibit a conditional willingness to adopt digital payments, contingent upon factors such as perceived convenience, social influence, and trust. Ajao et al. (2023) found that performance expectancy, social influence, and trust are key drivers of mobile payment acceptance in Nigeria. The COVID-19 pandemic has also influenced consumer behavior, with increased openness to digital payments due to health concerns. McKinsey's (2023) survey indicates sustained growth in digital payment adoption post-pandemic, suggesting that external factors can shift consumer preferences.

Furthermore, Abdullah (2021) states that while many consumers favor digital payments for their ease, promotional perks, and social image, non-tech users often miss out due to systemic exclusion from digital transitions. Mandal (2021) suggests that some non-techy users are open to adoption if digital payments become more universally accepted and come with clearer security assurances or are recommended by trusted individuals.

**Comfort with Familiar Payment Methods.** A strong preference for familiar payment methods, such as cash, persists among non-tech-savvy consumers. The European Central Bank (2024) reports that a significant portion of the population continues to rely on cash, highlighting the enduring comfort associated with traditional payment methods. This comfort is often rooted in habit, perceived control, and the tangibility of cash transactions. Sharma and Singh (2024) note that a cash-dominated society and lack of interoperability between payment systems contribute to the reluctance to adopt digital payments.

To encourage adoption among non-tech-savvy consumers, it's essential to design digital payment solutions that mimic the familiarity and simplicity of traditional methods, ensuring a seamless transition and minimizing disruption to established habits. Guria et al. (2024) affirm that despite technological innovations, many users still value cash-based systems for the control and trust they offer.

## RESULTS AND DISCUSSIONS

Presented in this section is the analysis and interpretation of the consolidated data.

# IJETRM

## International Journal of Engineering Technology Research & Management

Published By:

<https://www.ijetrm.com/>

**Table 1. KMO and Barlett's Test**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.864
Bartlett's Test of Sphericity    Approx. Chi-Square	3243.420
df	435
Sig.	.000

Further, Barlett's Test of Sphericity with a chi-square value of 3241.420, degrees of freedom (df) value of 435, and p-value of .000 ( $p < 0.05$ ) indicates that the correlation matrix is significantly different from the identity matrix, supporting the presence of underlying factors, hence, confirming that the sample used is suitable for the study and that factor analysis is appropriate as the treatment to utilize as the analytical tool. Overall, the results indicate that the sampling size employed in this study is sufficient to proceed to factor analysis.

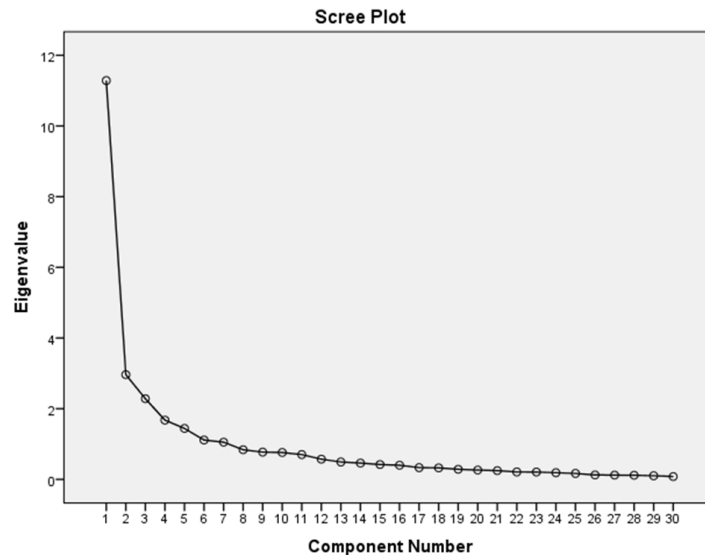
**Table 2. Total Variance Explained**

		Extractions Sums of Squared Loadings			Rotations Sums of Squared Loading		
	Eigenvalues	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
Factor 1	11.284	11.284	37.612	37.612	4.956	16.521	16.521
Factor 2	2.963	2.963	9.876	47.489	4.369	14.562	31.083
Factor 3	2.282	2.282	7.608	55.097	3.053	10.178	41.261
Factor 4	1.677	1.677	5.589	60.686	3.044	10.145	51.406
Factor 5	1.441	1.441	4.803	65.489	2.882	9.608	61.014
Factor 6	1.113	1.113	3.711	69.201	2.418	8.059	69.073

By examining the variance percentage in the Total Variance Explained Table, we can observe that the first factor explains 16.521% of the total variance, indicating that it accounts for a significant portion of the variability in the dataset. The second factor explains 14.562% of the variance, the third factor explains 10.178%, the fourth factor explains 10.145%, the fifth factor explains 9.608%, and the sixth factor explains 8.059%. Therefore, the first factor contributes the most to explaining the variance, while the sixth factor has the smallest impact.

The six identified factors collectively account for a total variance of 69.073%, as indicated in the table. This means that these four factors capture the majority of the underlying variation in the dataset, providing a meaningful representation of the data's structure.

The Rotated Component Matrix contains twenty-nine items categorized into six dimensions. The table indicates that one item was excluded from this categorization. One item was removed from the model due to its validity issues and low commonalities. As suggested by Hair et al. (2019), once all the significant loadings and cross-loading issues have been identified and the commonalities examined, the researcher may proceed to evaluate each variable for potential deletion based on its overall contribution to the study's objectives and commonality index. The scree plot was utilized to graphically determine the number of constructs influencing the digital payment adoption of non-techy consumers. As shown in Figure 1, the point above the debris or break, not including the break itself, indicates the number of factors that are to be retained. Examining the Scree plot and eigenvalues revealed a departure from linearity, which coincided with a 6-factor result. The Scree Test suggests that there are six factors in the analysed data.



**Figure 1. Scree Plot**

**Perceived Lack of Benefit and Preference for Traditional Methods.** Table 3 shows the seven items that fall under the first dimension, the perceived lack of benefit and preference for traditional methods, and their corresponding loading coefficients. As shown, the item *'I do not see a significant benefit in using a mobile wallet compared to my current payment method'* obtained the highest loading coefficient of 0.766. The item *'I would consider using a mobile wallet if more businesses and vendors accepted it'* obtained a loading coefficient of 0.754. The item *'I find cash transactions easier because they do not require an internet connection'* obtained a loading coefficient of 0.699. The item *'I find it difficult to resolve issues with digital payments compared to cash or card transactions'* obtained a loading coefficient of 0.690. The item *'I find it difficult to load money into my mobile wallet'* obtained a loading coefficient of 0.640. The item *'I am not aware of how mobile wallets work and their benefits.'* obtained a loading coefficient of 0.628. The item *'I prefer cash transactions because they feel more secure than mobile wallets'* obtained a loading coefficient of 0.597.

This aspect captures the overall attitude among non-techy consumers that finds little to no value added in moving from their habitual, conventional payment behaviors to mobile wallets. Several would opt for cash payments because of convenience, security, and lack of technology dependency, e.g., internet connectivity. The heavy load on concerns such as lack of perceived utility and low acceptance of mobile wallets by traders indicates that non-techy consumers are still in doubt and remain unconvinced about the usability and need for electronic payment systems in day-to-day life.

For example, research by Al-Qudah et al. (2022) identified that consumers' perceived convenience has a great influence on the adoption of digital payments, and when they are aware of how convenient and speedy digital payment is, they tend to adopt it. Furthermore, trust and habit largely underpin the preference for traditional payment instruments. This sentiment is echoed in the European Central Bank's (2024) report, which highlights that nearly 20% of adults in the euro area do not possess common digital payment tools, indicating a strong reliance on cash.

**Table 3. Rotated matrix with Group of Attributes under Perceived Lack of Benefit and Preference for Traditional Methods**

Item	Attributes	Factor Score	Dimension
17	I do not see a significant benefit in using a mobile wallet compared to my current payment method.	0.766	<b>Perceived Lack of Benefit and</b>
20	I would consider using a mobile wallet if more businesses and vendors accepted it.	0.754	

14	I find cash transactions easier because they do not require an internet connection.	0.699	<b>Preference for Traditional Methods</b>
10	I find it difficult to resolve issues with digital payments compared to cash or card transactions.	0.690	
22	I find it difficult to load money into my mobile wallet.	0.643	
25	I am not aware of how mobile wallets work and their benefits.	0.628	
11	I prefer cash transactions because they feel more secure than mobile wallets.	0.597	

**Accessibility and Digital Divide.** Table 4 shows the four items that fall under the second dimension, the accessibility and digital divide, and their corresponding loading coefficients. As shown, the item '*I avoid mobile wallets because I do not have a reliable internet connection*' obtained the highest loading coefficient of 0.829. The item '*I do not have anyone to teach me how to use mobile wallets*' obtained a loading coefficient of 0.694%. The item '*I believe that the instructions for using mobile wallets are not easy to understand*' obtained a loading coefficient of 0.693. The item '*I do not use mobile wallets because I do not have a smartphone that supports them*' obtained a loading coefficient of 0.666.

Accessibility and digital divide factors underline the infrastructural and social limitations that prevent non-techy individuals from adopting mobile wallets. Barriers like poor internet connectivity, lack of support systems to educate how to use it, and inaccessibility of smartphones reveal that adoption of digital payments is not merely a question of willingness but also one of capability. This verifies that systemic digital exclusion still keeps some consumer groups outside the boundaries of the digital economy.

This factor remains a significant barrier to digital payment adoption among non-tech-savvy consumers. Factors such as limited internet access, lack of digital literacy, and socioeconomic disparities contribute to this divide. Wu and Peng (2024) emphasize that in rural communities, perceived usefulness and ease of use significantly affect the intention to adopt fintech applications, highlighting the importance of addressing accessibility issues. In the Indian context, a study by Sharma and Singh (2024) identifies the digital divide as a critical factor inhibiting digital payment adoption. Furthermore, the European Central Bank (2024) reports that a significant portion of the population lacks access to digital payment tools, reinforcing the impact of the digital divide on payment behaviors. According to Anthony (2023), non-techy consumers, such as the elderly and the unbanked, are often marginalized from digital systems due to digital illiteracy and a lack of access to infrastructure. Cacas et al. (2022) emphasize that while mobile wallets like GCash are on the rise in the Philippines, uneven digital infrastructure and education hamper widespread adoption among non-tech users.

**Table 4. Rotated matrix with Group of Attributes under Accessibility and Digital Divide**

Item	Attributes	Factor Score	Dimension
23	I avoid mobile wallets because I do not have a reliable internet connection.	0.829	<b>Accessibility and Digital Divide</b>
26	I do not have anyone to teach me how to use mobile wallets.	0.694	
24	I believe that the instructions for using mobile wallets are not easy to understand.	0.693	
21	I do not use mobile wallets because I do not have a smartphone that supports them.	0.666	

**Trust and Security Concern.** Table 5 shows the six items that fall under the third dimension, the trust and security concerns, and their corresponding loading coefficients. As shown, the item '*I am concerned about losing access to my money if I forget my password or lose my phone*' obtained the highest loading coefficient of 0.688. The item '*I feel there is a high risk of being scammed when using mobile wallets*' obtained a loading coefficient of 0.675%. The item '*I think digital payments lack personal interaction, making them less trustworthy*' obtained a loading

coefficient of 0.572. The item *'I believe mobile wallet transactions are not safe from fraud and hacking'* obtained a loading coefficient of 0.520. The item *'I do not trust mobile wallets because I have heard of people losing money using them'* obtained a loading coefficient of 0.515. The item *'I am afraid that my mobile wallet balance might run out without me noticing'* obtained a loading coefficient of 0.502.

This collection of characteristics describes the apprehension based on fear and distrust of non-techy consumers towards mobile payment platforms. Fear of scams, fraud, losing access to money, and impersonal nature of digital transactions leads to distrust for mobile wallets. All these fears are exacerbated through anecdotal evidence and lack of cybersecurity awareness among the respondents, creating a defensive approach for accepting digital financial technologies.

Apaua and Lallie (2022) found that perceived security and institutional trust significantly influence users' intentions to adopt mobile banking applications. The prevalence of cyber scams further exacerbates these concerns. A survey reported by Insurance Business America (2024) indicates that 46% of respondents have difficulty trusting digital payment platforms due to the risk of scams, and 37% worry about the inability to recover funds if victimized. Additionally, the design and usability of e-payment applications play a role in perceived security. Kishnani et al. (2024) suggest that both security and privacy are important for users, and that the usability of an application can influence perceptions of its security and privacy. Alvarez and Manibog (2022) further add that misconceptions about data security and privacy deter Filipino consumers from adopting digital payment systems despite awareness.

**Table 5. Rotated matrix with Group of Attributes under Trust and Security Concerns**

Item	Attributes	Factor Score	Dimension
7	I am concerned about losing access to my money if I forget my password or lose my phone.	0.688	Trust and Security Concerns
6	I feel there is a high risk of being scammed when using mobile wallets.	0.675	
15	I think digital payments lack personal interaction, making them less trustworthy.	0.572	
5	I believe mobile wallet transactions are not safe from fraud and hacking.	0.520	
9	I do not trust mobile wallets because I have heard of people losing money using them.	0.515	
19	I am afraid that my mobile wallet balance might run out without me noticing.	0.502	

**Technological Anxiety and User Insecurity.** Table 6 shows the four items that fall under the fourth dimension, the Technological Anxiety and User Insecurity, and their corresponding loading coefficients. As shown, the item *'I worry that I might press the wrong button and lose money while using a mobile wallet.'* obtained the highest loading coefficient of 0.887. The item *'I am afraid of making mistakes when transferring money through mobile wallets'* obtained a loading coefficient of 0.692. The item *'I feel uncomfortable using digital payments due to my lack of technical knowledge'* obtained a loading coefficient of 0.658. The item *'I find mobile wallets difficult to set up and use'* obtained a loading coefficient of 0.547.

This dimension reveals how discomfort and fear of making errors while using technology influence non-techy consumers' reluctance to engage with mobile wallets. The high loading coefficients on worries like pressing the wrong button or having insufficient knowledge point to a deep-seated anxiety toward the digital interface itself. For these individuals, lack of confidence in navigating tech platforms becomes a substantial barrier to adoption.

Sharma and Singh (2024) identify psychological barriers, including technophobia and a lack of trust, as key factors inhibiting digital payment adoption in India. The complexity of digital payment systems can be intimidating for individuals with limited technological proficiency. Wu and Peng (2024) highlight that perceived ease of use is a crucial determinant of fintech adoption in rural communities, suggesting that simplifying user interfaces can alleviate technological anxiety. Moreover, Anthony (2023) reports that non-techy consumers often feel overwhelmed by the risk of making mistakes during online transactions due to lack of technical knowledge, leading to heightened anxiety. Turangan et al. (2022) also emphasize that rapid technological developments can lead to trust issues and anxiety related to privacy, data breaches, and the risk of identity theft in digital transactions.

**Table 6. Rotated matrix with Group of Attributes under Technological Anxiety and User Insecurity**

Item	Attributes	Factor Score	Dimension
3	I worry that I might press the wrong button and lose money while using a mobile wallet.	0.887	<b>Technological Anxiety and User Insecurity</b>
4	I am afraid of making mistakes when transferring money through mobile wallets.	0.692	
2	I feel uncomfortable using digital payments due to my lack of technical knowledge.	0.658	
1	I find mobile wallets difficult to set up and use.	0.547	

**Conditional Willingness to Adopt.** Table 7 shows the four items that fall under the fifth dimension, the conditional willingness to adopt, and their corresponding loading coefficients. As shown, the item ‘*I would consider using a mobile wallet if more businesses and vendors accepted it*’ obtained the highest loading coefficient of 0.901. The item ‘*I would be more likely to use a mobile wallet if it had better fraud protection*’ obtained a loading coefficient of 0.862. The item ‘*I would consider using a mobile wallet if I received proper guidance on how to use it*’ obtained a loading coefficient of 0.822. The item ‘*I would be more comfortable using mobile wallets if someone I trust recommended them.*’ obtained a loading coefficient of 0.677.

Interestingly, despite their hesitation, non-techy consumers show signs of conditional openness to digital payments. This means they are not entirely resistant but require specific reassurances—such as stronger fraud protection, proper guidance, wider vendor acceptance, and trusted recommendations. Their readiness is thus dependent on improvements in the system and the support they receive, indicating potential areas for intervention to promote inclusive digital finance.

Ajao et al. (2023) found that performance expectancy, social influence, and trust are key drivers of mobile payment acceptance in Nigeria. The COVID-19 pandemic has also influenced consumer behavior, with increased openness to digital payments due to health concerns. McKinsey's (2023) survey indicates sustained growth in digital payment adoption post-pandemic, suggesting that external factors can shift consumer preferences.

Furthermore, Abdullah (2021) states that while many consumers favor digital payments for their ease, promotional perks, and social image, non-tech users often miss out due to systemic exclusion from digital transitions. Mandal (2021) suggests that some non-techy users are open to adoption if digital payments become more universally accepted and come with clearer security assurances or are recommended by trusted individuals.

**Table 7. Rotated matrix with Group of Attributes under Conditional Willingness to Adopt**

Item	Attributes	Factor Score	Dimension
29	I would consider using a mobile wallet if more businesses and vendors accepted it.	0.901	
28	I would be more likely to use a mobile wallet if it had better fraud protection.	0.862	

27	I would consider using a mobile wallet if I received proper guidance on how to use it.	0.822	<b>Conditional Willingness to Adopt</b>
30	I would be more comfortable using mobile wallets if someone I trust recommended them.	0.677	

**Comfort with Familiar Payment Methods .** Table 8 shows the three items that fall under the sixth dimension, the comfort with familiar payment methods, and their corresponding loading coefficients. As shown, the item ‘*I am more comfortable using cash or credit/debit cards for payments*’ obtained the highest loading coefficient of 0.712. The item ‘*I worry that I will not receive a refund if a transaction goes wrong*’ obtained a loading coefficient of 0.639. The item ‘*I feel uncomfortable relying on my phone for payments*’ obtained a loading coefficient of 0.548. This dimension emphasizes the attachment of non-techy consumers to traditional modes of payment like cash or debit/credit cards. It reflects a comfort zone where users feel in control, confident, and less at risk. The fear of relying on mobile phones and concerns about refund issues indicate that even the idea of transitioning to mobile wallets challenges their sense of financial security. For many, familiar methods are not just habits but trusted safeguards developed over time.

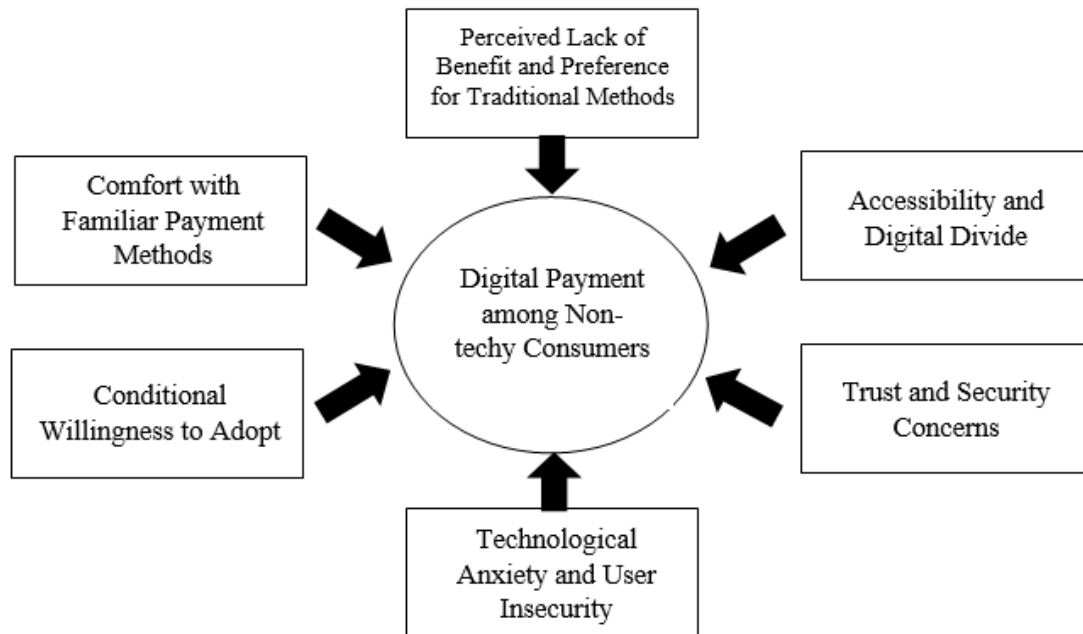
The European Central Bank (2024) reports that a significant portion of the population continues to rely on cash, highlighting the enduring comfort associated with traditional payment methods. This comfort is often rooted in habit, perceived control, and the tangibility of cash transactions. Sharma and Singh (2024) note that a cash-dominated society and lack of interoperability between payment systems contribute to the reluctance to adopt digital payments. Guria et al. (2024) affirm that despite technological innovations, many users still value cash-based systems for the control and trust they offer.

**Table 8. Rotated matrix with Group of Attributes under Comfort with Familiar Payment Methods**

Item	Attributes	Factor Score	Dimension
13	I am more comfortable using cash or credit/debit cards for payments.	0.712	<b>Comfort with Familiar Payment Methods</b>
8	I worry that I will not receive a refund if a transaction goes wrong.	0.639	
16	I feel uncomfortable relying on my phone for payments.	0.548	

### Framework Developed Based on Findings

This study focused on measuring and analyzing the underlying factors that influence the adoption to digital payment methods of non-techy consumers. Figure 2 illustrates the framework developed based on the findings in this study. As shown, it has six dimensions of non-adoption to digital payment methods of non-techy consumers, which are Perceived Lack of Benefit and Preference for Traditional Methods, Accessibility and Digital Divide, Trust and Security Concerns, Technological Anxiety and User Insecurity, Conditional Willingness to Adopt, and Comfort with Familiar Payment Methods.



**Figure 2. The Dimensions that Influence the Adoption of Digital Payment Among Non-techy Consumers**

### CONCLUSION

The study Digital Payment Among Non-Techy Consumers reveals key viewpoints into the underlying factors influencing the adoption of mobile wallets among non-techy consumers. Through exploratory factor analysis, it identified six dimensions: perceived lack of benefit and preference for traditional methods, accessibility and digital divide, trust and security concerns, technological anxiety and user insecurity, conditional willingness to adopt, and comfort with familiar payment methods, which account for 69.073% of the total variance in the dataset and it is considered to be significant. This states that the largest portion of factors are included in this study; however, the 30.927% is implied to other factors not included in this study.

### RECOMMENDATION

To promote the use of mobile wallets among older adults and low-tech mobile users, it is essential to conduct digital literacy programs and training sessions that demonstrate the usage and advantages of using mobile wallets. Integrating mobile education into the Alternative Learning System (ALS) can also help in developing their knowledge, especially for those people who are outside the formal education system. Coordination with schools, barangays, and local government units (LGUs) for free community-based mobile technology training sessions so people will be delighted to join since it's free. To ensure that it would be accessible, mobile wallet providers should be encouraged to optimize their mobile applications for low-end smartphones and low-bandwidth connections. The providers are encouraged to offer cashback, discounts, or reward points for first-time users. Encouraging more business owners and vendors to accept mobile wallets as primary transactions would help. Lastly, showcase success stories of business owners who have benefited from mobile wallets for sharing inspirational stories to convince low-tech mobile users to adopt mobile wallets.

### ACKNOWLEDGEMENT

The researchers acknowledge their families and friends for inspiring them to complete this study. The researchers would also like to thank Dr. Gaudencio G. Abellanosa, the research adviser, for his steadfast support and advice during this research. Non-techy consumers who participated in the survey for this research are also recognized for their contribution and consent, without which this research would not have been possible.

**REFERENCES**

- [1] Abdullah, S., Alpandi, R., Alwi, S., Salleh, M., & Ya'acob, F. (2021). Fintech as financial inclusion: Factors affecting behavioral intention to accept mobile e-wallet during COVID-19 outbreak. *\*Turkish Journal of Computer and Mathematics Education\**.
- [2] Ajao, Q., Oludamilare, O., & Sadeeq, L. (2023). Drivers of mobile payment acceptance: The impact of network externalities in Nigeria. *\*arXiv\**. <https://arxiv.org/abs/2305.15436>
- [3] Al-Qudah, K. A., Al-Okaily, M., & Al-Okaily, A. (2022). Determinants of digital payment adoption among Generation Z: An empirical study. *\*Journal of Risk and Financial Management*, 17\*(11), 521. <https://www.mdpi.com/1911-8074/17/11/521>
- [4] Alvarez, T. S., & Manibog, T. M. (2022). Perceived benefits, problems, and challenges towards cashless financial transactions. *\*Journal of Risk and Financial Management*, 7\*(3), 9. <https://www.researchgate.net/publication/362015674>
- [5] Anthony, A. (2023, August 20). No app, no entry: How the digital world is failing the non-tech-savvy. *\*The Guardian\**. <https://www.theguardian.com/technology/2023/aug/20/no-app-no-entry-how-the-digital-world-is-failing-the-non-tech-savvy>
- [6] Apaua, R., & Lallie, H. S. (2022). Measuring user perceived security of mobile banking applications. *\*arXiv\**. <https://arxiv.org/abs/2201.03052>
- [7] Bangko Sentral ng Pilipinas. (2023). *\*Report on e-payments measurement 2023\**. [https://www.bsp.gov.ph/PaymentAndSettlement/2023\\_Report\\_on\\_E-payments\\_Measurement.pdf](https://www.bsp.gov.ph/PaymentAndSettlement/2023_Report_on_E-payments_Measurement.pdf)
- [8] Cacas, A., et al. (2022). Influencing factors on mobile wallet adoption in the Philippines: Generation X's behavioral intention to use GCash services. *\*Journal of Business and Management Studies*, 4\*(1), 149–156. <https://doi.org/10.32996/jbms.2022.4.1.18>
- [9] Casu, O., & Lazo, E. (2017). Towards a new transformation of e-payments paradigm: A case study on Moldovan public services. *\*KTH Industrial Engineering and Management\**. <https://kth.diva-portal.org/smash/get/diva2:1193669/FULLTEXT01.pdf>
- [10] Eswaran, K. (2019). Consumer perception towards digital payment mode with special reference to digital wallets. *\*A Blind Review & Refereed Quarterly International Journal*, 5\*(22), 13–16. <http://www.iaraindia.com>
- [11] European Central Bank. (2024). Is there a digital divide in payments? Understanding why cash remains important for so many. [https://www.ecb.europa.eu/press/economic-bulletin/articles/2024/html/ecb.ebart202402\\_02~d821c613a7.cs.html](https://www.ecb.europa.eu/press/economic-bulletin/articles/2024/html/ecb.ebart202402_02~d821c613a7.cs.html)
- [12] Field, A. (2018). *\*Discovering statistics using IBM SPSS statistics\** (5th ed.). Sage Publications.
- [13] Guria, K., Choudhary, B., & Kandulna, S. (2024). An analysis of the consumer preferences on cash and digital payments. *\*International Journal for Multidisciplinary Research\**, 6. <https://www.ijfmr.com/papers/2024/6/31967.pdf>
- [14] Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2019). *\*Multivariate data analysis\** (8th ed.). Cengage Learning.
- [15] Insurance Business America. (2024). Most consumers reduce use of digital payments because of cyber scam fears – survey. <https://www.insurancebusinessmag.com/us/news/cyber/most-consumers-reduce-use-of-digital-payments-because-of-cyber-scam-fears--survey-507901.aspx>
- [16] Kishnani, U., Cardenas, I., Castillo, J., Conry, R., Rodwin, L., Ruiz, R., Walther, M., & Das, S. (2024). Towards perceived security, perceived privacy, and the universal design of e-payment applications. *\*arXiv\**. <https://arxiv.org/abs/2407.05446>
- [17] Mandal, A., & Dua, G. M. (2021). Digital financial literacy: The road to digital payment. In *\*Digital disruption & transformation—A multidisciplinary perspective\** (pp. 1–9). India: Kaav Publications.
- [18] McKinsey & Company. (2023). Consumer digital payments: Already mainstream, increasingly embedded, still evolving. <https://www.mckinsey.com/industries/financial-services/our>

# IJETRM

## International Journal of Engineering Technology Research & Management

Published By:

<https://www.ijetrm.com/>

insights/banking-matters/consumer-digital-payments-already-mainstream-increasingly-embedded-still-evolving

- [19] Pawal, M. (2023, March 25). From chaos to consistency: Unlocking the potential of digital payments. \*Finextra\*. <https://www.finextra.com/blogposting/23948/from-chaos-to-consistency-unlocking-the-potential-of-digital-payments>
- [20] Philippine Statistics Authority. (2021). Age and sex distribution in Real (2020 Census of Population and Housing). <https://rso04a.psa.gov.ph/content/age-and-sex-distribution-real-2020-census-population-and-housing>
- [21] Pleno, A. B. (2024). E-payment system readiness of micro business owners. \*Journal of Social Entrepreneurship Theory and Practice\*, 3\*(2). <https://doi.org/10.31098/jsetp.v3i2.2800>
- [22] Rathore, H. S. (2016). Adoption of digital wallet by consumers. \*BVIMSR's Journal of Management Research\*, 8\*(1), 69–75. <https://bvimsr.org/wp-content/uploads/2020/04/10.-Dr-Hem-Shweta-Rathore.pdf>
- [23] Sahi, A. M., Abd Wahab, S., & Ibrahim, R. (2021). The evolving research of customer adoption of digital payment: Learning from content and statistical analysis of the literature. \*Journal of Open Innovation: Technology, Market, and Complexity\*, 7\*(4), 230. <https://doi.org/10.3390/joitmc7040230>
- [24] Schumacker, R. E., & Lomax, R. G. (2016). \*A beginner's guide to structural equation modeling\* (4th ed.). Routledge.
- [25] Sharma, S., & Singh, R. (2024). Determinants inhibiting digital payment system adoption: An Indian perspective. \*Qualitative Research in Financial Markets\*. <https://doi.org/10.1108/QRFM-09-2023-0223>
- [26] Taber, K. S. (2018). The use of Cronbach's alpha when developing and reporting research instruments in science education. \*Research in Science Education\*, 48\*, 1273–1296. <https://doi.org/10.1007/s11165-016-9602-2>
- [27] Taherdoost, H., Sahibuddin, S., & Jalaliyoon, N. (2022). Exploratory factor analysis: Concepts and implementation. \*International Journal of Academic Research in Management\*, 11\*(2), 19–33.
- [28] Turangan, J., Wijaya, A., & Ruslim, H. (2022). The effect of technology anxiety and social influence in multi-benefits on mobile payment services. \*Advances in Social Science, Education and Humanities Research\*, Atlantis Press. <https://www.atlantis-press.com/article/125972978.pdf>
- [29] Vandak, S., & Goodell, G. (2024, January 15). Cash and card acceptance in retail payments: Motivations and factors. \*Semantics Scholar\*. <https://doi.org/10.48550/arXiv.2401.07682>
- [30] Venkatesh, V., Thong, J. Y. L., & Xu, X. (2022). Unified theory of acceptance and use of technology: A review and research agenda. \*MIS Quarterly\*, 46\*(1), 1–44. <https://doi.org/10.3390/su14010010>
- [31] Zahid, N. (2024). The size of transactions, types of products, and the choice between electronic payments and cash usage. \*Financial Engineering\*, 2\*, 227–232. <https://doi.org/10.37394/232032.2024.2.21>