ORGINAL RESEARCH ARICLE

JBFS Volume 16 Number 1 (June) 2024

DOI: https://doi.org/

Factors Influencing Continuance Intention to Use E-Wallet among the Young Generation in Bangladesh

Jannatul Fardues Airin
Lecturer, Department of Marketing
University of Dhaka
Email: jannatul.fardues@du.ac.bd

Keywords
Perceived usefulness, perceived ease of use, perceived security, perceived social influence, perceived enjoyment, continuance usage intention, and e-wallet.

Manuscript number
JEL Classifications: C3, G3, G32

Received: 30 March, 2024

Accepted: 04 October, 2024

Published online: 30 December, 2024

Published in Print: 0 December, 2024

ISSN (Online) 3006-5720

ISSN (Print) 1990-5157

Abstract

This study was directed to explore the continuance usage intention of e-wallet among the young generation in Bangladesh. By extending the Technology Acceptance Model (TAM) with perceived security (PS), perceived social influence (PSI), and perceived enjoyment (PENJ), this study construct a model and examine which determinants motivate the young generation of Bangladesh to use the e-wallet continuously. Convenience sampling method was undertaken to collect data from 160 educated young people who use e-wallets in Bangladesh. From January to March, 2024, the required data were collected through online questionnaire. SPSS (Statistical Package for the Social Science) software (version 20.00) was used to analyze the data and test the hypotheses. The results demonstrated that perceived ease of use (PEOU), perceived security (PS), and perceived enjoyment (PENJ) are the influential factors of using e- wallet continuously. At length, the study findings provide some future directions for considering unexplained factors regarding long term e-wallet usage intention.

Cite as: Jannatul Fardues Airin. (2024) 'Factors Influencing Continuance Intention to Use E-Wallet among the Young Generation in Bangladesh,' Journal of Banking & Financial Services, 16(1), 45-59. https://doi.org/

1. Introduction

The rapid advancement of technology has changed the people's lifestyles and fulfilled the global demand for electronic transaction. The conventional payment system is now transforming into digital payment system due to the fast growth of the digital economy, high accessibility of the internet, and availability of the digital devices (De Luna et al., 2019).

Digital devices such as smartphones are used by the people for shopping, banking, reservations, and buying tickets (Akter et al., 2023). Nowadays, instant transaction through e-wallet is possible by using smartphones (Doan, 2014). E-wallet is a mobile application that permit user to make fast, convenient and safe transaction (Verkijika, 2018). Electronic transaction through e-wallet reduces the risk of carrying cash and physical wallet. In Bangladesh, fifteen banking institutions provide the mobile financial services around 50 million of their clients (Rahman, 2021). E-wallets services that are used in Bangladesh are bKash, Upay, Rocket, NexusPay, Nagad, iPay, MyCash, Ucash, and mCash (Akter et al., 2023).

The "young generation" refers to individuals in their late teens and twenties, including Generation Z (born from 1997 to 2012), and younger Millennials (born between 1981 and 1996) (Dimock, 2019). Millennials and Generation Z are found to

use more technology in their everyday lives and demonstrate a higher acceptance and adoption of new systems, such as e-wallet, more rapidly than any other generation (Adiani et al., 2021; Pertiwi et al., 2020; Wei et al., 2021). Young generations are growing up with the digital technology and internet. They are comfortable to use technology for searching information and gathering knowledge from the internet. They experience a cashless society. So, they can easily cope up with the modern technology. Nowadays, young generations use e-wallet for making transaction, receiving money, transferring funds, shopping online, buying ticket or books (Wong and Mohamed, 2021).

In order to examine the determinants of e-wallet usage intention, researcher focused on Dhaka city, which is the capital of Bangladesh. Several banks, universities, and corporations are centered in Dhaka city. As the usage of mobile financial services (MFS), debit cards, credit cards are increasing day by day, a new type of service, such as e-wallet, has recently been introduced to the financial market of Bangladesh. Since it is new service for the people of Bangladesh, the acceptance and adoption of this technology have drawn the attention of the corporate as well as the researchers. Therefore, the current study identifies the influential factors of e-wallet continuance usage intention among educated young generation in Bangladesh. This study extended the Technology Acceptance Model by incorporating the perceived security, perceived social influence, and perceived enjoyment to develop a new conceptual model. To

date, no such similar framework has been constructed to examine the determinants that motivate the educated young generation in Bangladesh to use the e-wallet continuously.

The study's main objective is to explore the usage intention of e-wallets among educated young generation in Bangladesh and identify the factors that motivate them to use the e-wallet continuously. To meet the specific objectives, this study has adopted five constructs such as perceived usefulness, perceived ease of use, perceived security, perceived social influence, and perceived enjoyment, to know their effects on the strong desire of using e-wallet continuously. Therefore, the specific objectives are: to explore the effect of perceived usefulness, perceived ease of use, perceived security, perceived social influence, and perceived enjoyment on the intention to use e-wallet continuously among young generation in Bangladesh; and to explain the association between these factors and the continuance usage intention of e-wallet.

Research Question

1. What is the demographics profile of the young generation that uses e-wallet?

2. What are the factors that influence the young generation of Bangladesh to use the e-wallet continuously?

The first section summarizes the existing literatures that are correlated with the e-wallet usage intention. The second section represents the methodology which explains how questionnaire is formed and data are collected. The final section represents the study results with discussion, and conclusion.

2. Theoretical Background

2.1 Use of E-wallet

An electronic wallet is the most popular application that permits users to make digital transaction by consolidating their

online purchasing information (Uddin and Akhi, 2014). An electronic wallet, or e-wallet, is a type of card that may be used to conduct online transactions through a computer or other digital device (Karim et al., 2022). Nowadays, adoption of electronic wallet is more prominent as it provides flexibility, security, and easiness of making any e-commerce transaction (Karim et al., 2020).When people find fast and secure transaction, they are more inspired in making online expenditure using e-wallet (Akter et al., 2023). Desire of people (such as speeder, cheaper, and more available electronic banking services) can be fulfilled by electronic wallet (Nizam et al., 2019; Singh et al., 2020). Electronic wallet is growing popularity as it reduces the money-related transaction and inspires the cashless transaction worldwide (Cao et al., 2016). For this reason, it can be applied to riding sector,

delivering food, making payments (Rosnidah et al., 2019), buying high quality products, transferring money, reservation of aircrafts (Karim et al., 2022).

In the recent past studies, researchers have showed a deeper interest in investigating the factors that motivate the people to use the e-wallet in every transaction. Following Technology Acceptance Model (TAM), Qingqing and Fangming (2024) examined the Malaysian youth users' intention of e-wallet. They proved that Malaysian youth long term desire of using e-wallet is highly influenced by the perceived usefulness, ease of use, and security. Another study found by Abdul-Halim et al. (2022), used Technology Continuance Theory (TCT) to investigate the predictors that motivate the Malaysian users' to have e- wallet in every transaction. They discovered that Malaysian users' desire of using e-wallet is highly motivated by the perceived ease of use, and satisfaction. Puspitasari et al. (2021) combined Technology Acceptance Model (TAM), Diffusion of Innovations (DOI) Theory, and Expectation-Confirmation Theory (ECT) to explore the Indonesian users' e-wallet usage intention. They discovered that perceived usefulness, satisfaction, and habit affect among the Indonesian users to have an e-wallet during their transaction and continuously use it. Following the Modified Unified Theory and Use of Technology 2 (UTAUT2), Raihan and Rachmawati (2019) found that habit, social influence, trust, and hedonic motivation influence continuance intention on e-wallet among Indonesian users. Besides, Aprilia and Amalia (2023) combining Technology Continuance Theory (TCT) with perceived security, and showed that the users' strong desire to have the e-wallet is highly depend on the perceived usefulness, satisfaction, and attitude. In another study, Akter et al. (2023) integrated the Technology Acceptance Model (TAM) and Theory of Planned Behavior (TPB) to focus on the factors that Bangladeshi university students concerned on while they are using e-wallet. They found that Bangladeshi students used e-wallet in every transaction, when they perceive it useful and have positive attitude towards of using e-wallet.

2.2. Conceptual Framework

This study used Technology Acceptance Model (TAM) to identify the factors that Bangladeshi educated young generation concerned on, in terms of e-wallet continuance usage intention. Basically, two factors such as perceived usefulness (PU) and perceived ease of use (PEOU) were proposed by the TAM. TAM is adopted from the Theory of Reasoned

Action (TRA), which is constructed by Fishbein (1967). Prior studies integrated the TAM with perceived trust (Venkatesh et al., 1996), perceived security (Karim et al., 2020; Qingqing and Fangming, 2024), perceived enjoyment (Wong and Mohamed, 2021), and perceived risk (Kuppusamy and Xiang, 2024), perceived social influence (Malhotra and Galletta, 1999; Patel and Patel 2018, Khan and Abideen, 2023). This study extended the TAM with perceived security, perceived enjoyment, and perceived risk to examine the educated young users' intention to continuous use of e- wallet in Bangladesh. The extended TAM consisted of five variables such as perceived usefulness, perceived ease of use, perceived security, perceived social influence, and perceived enjoyment. These variables will influence the continuance usage intention on e-wallet.

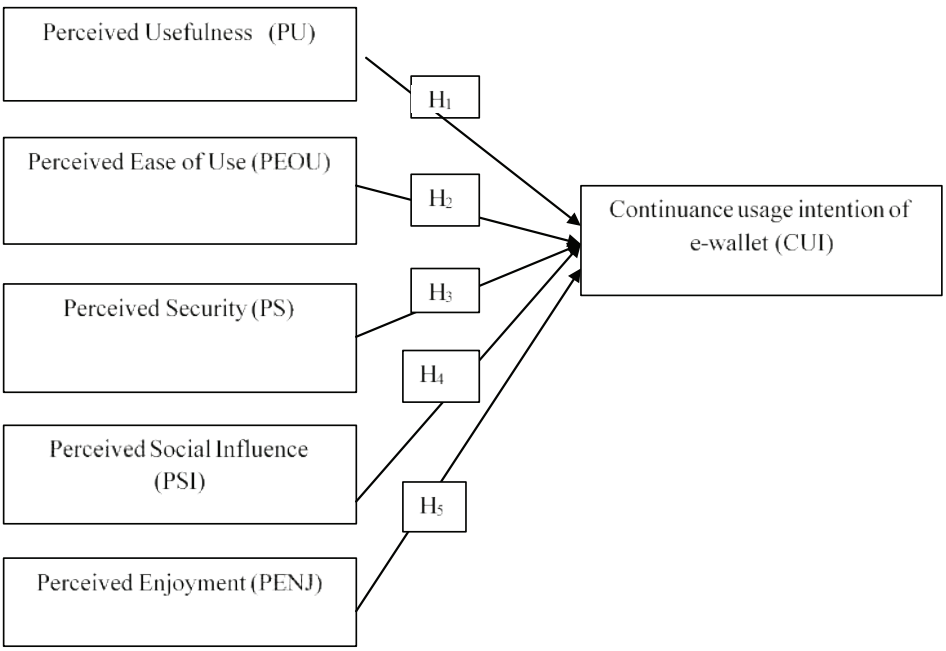

Figure 1: Conceptual Framework (Author's Constructed).

2.3. Literature Review and Hypotheses Setting

2.3.1 Perceived Usefulness (PU)

According to Technology Acceptance Model (TAM), perceived usefulness (PU) is defined as how much a person believe that using any specific technologies will improve his or her productivity in the job (Davis, 1989). In another study, Karim et al. (2020) found that perceived usefulness is how much an individual perceives that using any digital technology will enhance his or her experience. The use of information system increases the people experiences, effectiveness, performance, and productivity (Chi, 2018). As a result, people become more expertise and

productive by using the system. When individual find using any application is beneficial and helpful for their job, they are more likely to use this system again and again. Past studies have showed perceived usefulness is the strongest variables that influence the customers' to have an e-wallet in their transaction (Karim et al., 2020; Akter et al., 2023; Qingqing and Fangming, 2024; Wong and Mohamed, 2021; Nag and Gilitwala, 2019). This hypothesis is developed by considering the above statements:

H_1 Perceived usefulness significantly influences continuance usage intention of e-wallet.

2.3.2 Perceived Ease of Use (PEOU)

Perceived ease of use is defined as the degree to which using any technology will require less effort (Davis, 1989). When people perceive that using any system is free of mental and physical effort, they will have positive intention to use the services. It is desirable that using any applications is simpler, easier and requires less time to implement. Friendly infrastructure of the technology and ease of operate enhance the e-wallet users' intention (Al-Maroof and Al-Emran, 2018). Past studies discovered that perceived ease of use is highly influenced the users' long term desire to have the e-wallet in transaction (Akter et al., 2023; Olivia and Marchyta, 2022; Qingqing and Fangming, 2024; Karim et al., 2020; Wong and Mohamed, 2021; Nag and Gilitwala, 2019). This hypothesis is developed by considering the above statements:

H_2 Perceived ease of use significantly influences continuance usage intention of e-wallet.

2.3.3 Perceived Security (PR)

Perceived security is defined as the degree to which a person feels secure when he or she uses the particular application (Pantano and Pietro, 2012). Users are reluctant to make any electronic transaction because of insecurity (Milberg et al., 2000). Besides, advancement of new technology keep the customer away from disclosing their personal and billing information, as they are not experience this type of new technology before (Ahmed et al., 2010). Insecure transaction through e-wallet may give unauthorized access of customers billing information to the cybercriminals (Kaur et al., 2018). If the system providers ensure proper security and safety, customer may share their personal information when making transaction through e-wallet (Gitau et al., 2014). Past studies showed that perceived security influenced the continuance usage intention on e-wallet (Karim et al., 2020; Qingqing and Fangming, 2024; Darmiasih and Setiawan, 2021). When customers trust the system and feel secure to share their information, they are more likely to use the e-wallet (Wong and Mohamed, 2021). Recently, transaction through e-wallet gained popularity because it provides proper security to the user's personal information (Marimuthu and Roseline, 2020). This hypothesis is developed by considering the above statements:

H_3 Perceived security significantly influences continuance usage intention of e-wallet.

2.3.4 Perceived Social Influence (PSI)

For adopting any new technologies, people are highly influenced by their surroundings

or perceived social networks (Khan and Abideen, 2023). Perceived social influence is all about how much an individual gives priority of others decision when they use any new technologies (Venkatesh et al., 2003). Adopting behavior of the people is highly affected by the decisions, and actions of their family members, friends, peers, and social surroundings (Queiroz and Wamba, 2019). People in the modern world can scrutinize the information they get from their close ones. Due to the advancement of new technology, people now have the ability to observe the others behavior and to get the feedback easily through online social networks (Tenk et al., 2020). Nowadays, people are highly relying on the online comments, reviews, opinions, that are posted by the community in their social environment. Several past studies discovered that e-wallet continuous usage intention is highly influenced by social influence (Tampi et al., 2023; Khan and Abideen, 2023; Esawe, 2022). This hypothesis is formulated by considering the above statements:

H_4: Perceived social influence significantly influences continuance usage intention of e-wallet.

2.3.5 Perceived Enjoyment (PENJ)

Perceived enjoyment is defined as the degree to which an individual feels comfortable and ecstatic when they use any particular system (Jasin, 2022). Higher level of perceived enjoyment can reduce the anxiety of using the system (To and Trinh, 2021). When people perceive that using system is exciting, entertaining, and enjoying, they are more likely to use the system again and again (Kurkinen, 2014; Maria and Sugiyanto, 2023; Basuki et al., 2022). Several past studies showed that perceived enjoyment influenced the e-wallet continuous usage intention (Wong and Mohamed, 2021; Muchardie et al., 2021; Yapp et al., 2022). This hypothesis is formulated by considering the above statements:

H_5: Perceived enjoyment significantly influences continuance usage intention of e-wallet.

3. Methodology

3.1 Measures

The proposed dimensions of this study's were perceived usefulness (PU), perceived ease of use (PEOU), perceived security (PS), perceived social influences (PSI), perceived enjoyment (PENJ), and continuance usage intention (CUI). Multiple-item scales were used to measure all these dimensions. The eighteen items of six constructs were measured by the Five-point Likert scale. These items were adopted from past studies related to continuance usage intention of e-wallet. Items of perceived usefulness and perceived ease of use were obtained from Davis (1989), perceived security were generated from To and Trinh (2021), and Lim and Ting (2014), perceived social influence were adopted from Ramos-de-Luna et al. (2016), and Yang et al. (2021), perceived enjoyment were adopted from Lim and Ting (2014), and continuance usage intention were adopted from Yang et al. (2021).

3.2 Population

The study's target population was the educated young generation of Bangladesh who use e-wallet services such as bKash, Nagad, Rocket, Upay, MyCash, and others, to conduct their financial transactions.

3.3 Sampling

Non-probability sampling method was chosen, as the specific number of population and sampling frame was absence in this study. Various approaches can be used to determine the sample size such as formulas, or whole population, or sample size based on existing studies (Israel, 1992). This study had followed these authors studies (Nizam et al., 2019; Aprilia and Amalia, 2023; Olivia and Marchyta, 2022) to make an assumption about the appropriate sample size which range from 100-250. Convenience sampling method was selected to gather data from 180 educated young generations who use e-wallet services in Bangladesh. After screening the responses carefully, only 160 responses were found to be appropriate for analyzing the data. Therefore, the sample size of 160 is consistent with the other previous studies in the area of technology adoption. According to Hair et al. (2010), for the resource-constrained environments and multivariate analysis, sample sizes between 100 and 200 are sufficient for examining the effects in social and behavioral intention. Due to time and resource constraints, convenience sampling techniques was deemed to be appropriate for this study. Etikan et al., (2016) stated that the convenience sampling is often used when the purpose is to collect data quickly and efficiently from a specific population. Therefore, this technique allowed the researcher to collect data efficiently from the target group of young generation in Dhaka, Bangladesh.

3.4 Data collection

To meet the research objectives and test the hypotheses, both the primary and secondary sources were used to collect the required data. A self-administered online questionnaire was developed based on the previous studies (Davis, 1989; To and Trinh, 2021; Lim and Ting, 2014; Ramos-de-Luna et al., 2016; Yang et al., 2021). During the two months from January to March 2024, researcher gathered the required primary data through online questionnaire. The first part of the questionnaire was explained the demographics profiles of the participants, and the last part was devoted to all the construct items. Required secondary data were collected from previous studies, journals, websites, and books.

3.5 Data Analysis

This study utilizes (IBM SPSS 20) software for analyzing the collected data. Based on the theory and conceptual framework of this study, descriptive statistics and multiple regression models were used to analyze and interpret the data.

4. Analysis and Findings

Table 1 Demographics profile of the participants

Measures		Frequency	Valid Percentage	Cumulative (%)
Gender	Male	94	58.8	58.8
	Female	66	41.3	100.0
	Total	160	100.0	

Age	18-25 Years	29	18.1	18.1
	26-40 Years	99	61.9	80.0
	41-55 Years	32	20.0	100.0
	Total	160	100.0	
Education	Undergraduate	12	7.5	7.5
	Graduate	81	50.6	58.1
	Post Graduate	54	33.8	91.9
	Others	13	8.1	100.0
	Total	160	100.0	
Income	Below 10,000	6	3.8	3.8
	10,000-20,000	49	30.6	34.4
	20,000-30,000	54	33.8	68.1
	50,000 above	51	31.9	100.0
	Total	160	100.0	

Table 1 demonstrates that 58.8% of the male and 41.3% of the female used the e-wallet regularly for their daily transaction. Among them 61.9% of the participants are young adults, aged between 26-40 years, and 18.1% belongs to 18-25 years of age. Additionally, most of them are graduated and post graduated, holding percentage 50.6%, and 33.8% respectively. Finally, 33.8% respondents income are 20,000- 30,000, and the second largest groups, holding percentage 31.9%, income are 50,000 above.

Table 2 Descriptive Statistics

Factors	Mean	Std. Deviation	N
Continuance Usage Intention (CIU)	3.37	0.895	160
Perceived Usefulness (PU)	3.25	0.774	160
Perceived Ease of Use (PEOU)	3.48	0.883	160
Perceived Security (PS)	2.68	0.790	160
Perceived Social Influence (PSI)	4.04	0.732	160
Perceived Enjoyment (PENJ)	3.07	0.875	160

Table 2 summarizes descriptive statistics of the constructs, according to which perceived social influences has the highest mean (4.04), perceived ease of use has (3.48), perceived usefulness has (3.25), perceived enjoyment has (3.07), and perceived security has (2.68). Finally, continuance usage intention has a mean value (3.37), which is considered as the dependent variable for this study.

Table 3 Correlation Matrix

		Continuance Usage Intention	Perceived Usefulness	Perceived Ease of Use	Perceived Security	Perceived Social Influence	Perceived Enjoyment
Pearson Correlation	Continuance Usage Intention	1.000	0.311	0.358	0.395	0.149	0.436
	Perceived Usefulness	0.311	1.000	0.155	0.503	0.073	0.193
	Perceived ease of Use	0.358	0.155	1.000	0.076	0.168	0.219
	Perceived Security	0.395	0.503	0.076	1.000	0.183	0.361
	Perceived Social Influence	0.149	0.073	0.168	0.183	1.000	-0.087
	Perceived Enjoyment	0.436	0.193	0.219	0.361	-0.087	1.000
Sig (1-tailed)	Continuance Usage Intention	.	0.000	0.000	0.000	0.030	0.000
	Perceived Usefulness	0.000	.	0.025	0.000	0.180	0.007
	Perceived Ease of Use	0.000	0.025	.	0.169	0.017	0.003
	Perceived Security	0.000	0.000	0.169	.	0.010	0.000
	Perceived Social Influence	0.030	0.180	0.017	0.010	.	0.136
	Perceived Enjoyment	0.000	0.007	0.003	0.000	0.136	.

Pearson Correlation matrix is conducted to examine the strength of connection between the constructs. Table 3 demonstrates the positive and strong connection between the constructs.

Table 4 Multicollinerity Test

Constructs	Tolerance	VIF
Perceived Usefulness (PU)	0.731	1.367
Perceived Ease of Use (PEOU)	0.896	1.116
Perceived Security (PS)	0.636	1.573
Perceived Social Influence (PSI)	0.900	1.111
Perceived Enjoyment (PENJ)	0.797	1.255

Multicollinearity test is applied to measure the association between all the constructs, except for continuance usage intention. The level of tolerance and VIF is considered as an appropriate tool to detect the multicollinearity. Acceptable range of VIF is below 5 and tolerance is above 0.10 (Hair et al., 2019). Table 4 demonstrates that the value of VIF and tolerance level falls within the acceptable range.

Table 5 Regression

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.585	0.343	0.321	0.737

This analysis is conducted to investigate whether users' desire to have an e-wallet in their every transaction is depend on the other constructs: perceived usefulness,

perceived ease of use, perceived security, perceived social influence, and perceived enjoyment. However, the R value is 0.585 which means that there is a 58.5% chance for all the determinants to influence the educated young users' intention to continuous use of e-wallet in Bangladesh. An R square of 0.343 means 34.3% changes in the usage intention of e-wallet continuously is accounted for by all the determinants taken in this study. Finally, the score of adjusted R square 0.321 indicates the educated young generation of e-wallet usage intention is defined 32.1% by the variations of the other predictor variable.

Table 6 ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	43.673	5	8.735	16.063	0.000
	Residual	83.743	154	0.544		
	Total	127.416	159			

Table 6 demonstrates the F value is 16.063 and significance level is 0.000, which indicates that continuance usage intention of e-wallet is strongly related with the predictors that are taken in this study.

Table 7 Coefficient Analysis

Model	Constructs	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	0.118	0.455		0.260	0.796
	Perceived Usefulness (PU)	0.127	0.088	0.110	1.435	0.153
	Perceived Ease of Use (PEOU)	0.249	0.070	0.246	3.557	0.000
	Perceived Security (PS)	0.223	0.093	0.197	2.400	0.018
	Perceived Social Influence (PSI)	0.110	0.084	0.090	1.304	0.194
	Perceived Enjoyment (PENJ)	0.305	0.075	0.298	4.070	0.000

The value of constant indicates the predicted value of continuance usage intention of e-wallet is 0.118, when all other predictors are zero. Table 6 illustrates the t value of perceived usefulness is 1.435 which is less than the critical t value (1.96), and p value is 0.153. Thus, implies that continuance usage intention of e-wallet is not influenced by the perceived usefulness. Again, the t statistics of the perceived ease of use and perceived security is 3.557, and 2.400, p value is 0.000, and 0.018 respectively, which means that these variables influence the continuance usage intention of e-wallet among the young generation of Bangladesh. On the contrary, the t statistics of perceived social influence 1.304 implies that the e-wallet usage intention is not significantly influenced by the perceived social influence. Finally, the t statistics of perceived enjoyment 4.070 indicates the positive association between the perceived enjoyment and intention to continuous use of e-wallet among the young generation in Bangladesh.

5. Discussion

By applying the extended Technology Acceptance Model (TAM), this study's core idea is to predict the determinants that influence among the young generation in Bangladesh to use the e-wallet continuously in their daily transaction. By testing the hypotheses and analyzing the data, this study discovered that perceived ease of use (PEOU), perceived security (PS), and perceived enjoyment (PENJ) influence the educated young generation in Bangladesh to use the e-wallet continuously.

The current study discovered that perceived usefulness (PU) is not an influential factor in continuance usage intention (CIU) of e-wallet. The study's result disagree with the past studies such as Wong and Mohamed (2021); Yang et al. (2021); Akter et al. (2023); To and Trinh (2021); Handayani and Ariyanti (2024). The findings of these studies asserted that when customer perceive using e-wallet is useful, beneficial, and helpful for them, they have strong desire to have e-wallet in every transaction. The young generations of Bangladesh seem to be less affected by the perceived usefulness regarding their desire to use of e-wallet. E-wallet providers must have to provide deeper understanding and knowledge to the young generation of Bangladesh that having e-wallet will enhance their effectiveness and also be beneficial and useful for them. They also develop their e-wallet services with high usability, and more benefit to attract the young generation of Bangladesh. When the young generation increase their capability of using different latest application, then they will perceive using e-wallet as beneficial and comfortable for them.

This study found the e-wallet continuous usage intention is highly affected by the second factor such as perceived ease of use (PEOU). The study's result supported the past studies such as Yang et al. (2021); Karim et al. (2020), who discovered that easiness to learn, easiness to use, and less requiring mental effort encourage the clients to use the e-wallet continuously. If the people feel that having e-wallet is less time consuming, and convenient for them, they will continuously use the e-wallet. E-wallet providers of Bangladesh must emphasize on the latest digital application so that users can perform their daily transaction effectively and efficiently.

Additionally, the present study also proved that perceived security (PS) is an influential factor of continuance usage intention (CIU). The study result consistent with the past studies such as Wong and Mohamed (2021), and Qingqing and Fanming (2023); Karim et al. (2020), who stated that feeling secure and confidence in the transaction increases the likelihood of using e-wallet. If the young generation perceives that the e-wallet providers' services are reliable and secure, they will increase their intention to continuous use of e-wallet in their daily transaction. Insecurity can increases the anxiety of negative effect of making transaction through e-wallet. E-wallet providers must enhance the security and educate the users about safety elements of e-wallet so that users can boost up their confidence in using e-wallet.

On the contrary, the study result failed to prove the effect of perceived social influence (PSI) in predicting continuance usage intention (CIU). The study result inconsistent with the result found by Yang et al. (2021), who asserted that family, friends, peers, and social surrounding

decisions encourage the customers' to use new technology and also affect consumers' emotional mindsets. The findings of this current study discovered that the young generation of Bangladesh seems to be less affected by the suggestions and opinions of others regarding their desire to have an e-wallet. E-wallet providers must have to develop their services in a way that influence family, friends, peers, and social surroundings. As a result, they spreading positive news about the latest applications and it attract users' decision to use the new apps.

Interestingly, the present study found perceived enjoyment (PENJ) is the most influential factors of e- wallet continuous usage intention (CIU). The study's result supported the past studies conducted by To and Trinh (2021), and Wong and Mohamed (2021), showing that perceived enjoyment (PENJ) influenced the users' desire to have an e-wallet in every transaction. These studies proved that people will favor the new application and continuously interact with them, when they find using e-wallet is pleasurable, fun, and entertaining. This study found that educated young generation in Bangladesh feel enjoyable, fun, and entertaining during their transaction on e-wallet, and that encourage them to interact with this new application continuously.

6. Implications of the study

This study used Technology Acceptance Model (TAM) by incorporating various factors associated with user intention to use e-wallet, to constructs a new conceptual framework. Based on TAM, this study focused on five factors (Perceived usefulness, perceived ease of use, perceived security, perceived social influence, and perceived enjoyment) and carefully examined their association with the continuance usage intention. To analyze user intention toward e-wallet, this study focused on educated young generation of Dhaka city in Bangladesh. Therefore, it could be possible to conduct further research in different parts of Bangladesh with different sample size. Finally, the outcomes of this study can also serve as a foundation for future studies on e-wallet usage behavior in developing nations, helping to collect more information and extensive knowledge on the subject. Additionally, the study outcomes offer valuable guidance to the app developers by findings the areas where they should pay attention to enhance their services. App developers need to overcome the doubts regarding the benefits of e-wallet usage by consistently promoting its advantages, as the study results showed the weak link between perceived usefulness, perceived social influence, and continuance usage intention. App developers must focus on organizing campaigns to make the young user understand the benefits of using e-wallet, as many find it challenging due to lack of proper knowledge about the system.

7. Conclusion

This study was directed to develop a model and investigate the behavior among educated young generation in Bangladesh regarding the continuous intention to use e-wallet services. This study incorporates perceived security (PS), perceived social influence (PSI), and perceived enjoyment (PENJ) with Technology Acceptance Model to construct a framework. The study results demonstrate that the perceived ease of use (PEOU), perceived security (PS), and perceived enjoyment (PENJ) are the influential factors of the e-wallet continuous usage intention. This study

may provide some important information for e-wallet services providers. By using this information e-wallet providers can develop their existing services and also build a digital economy.

This study has some limitations such as time limitation, area limitation, and limitation in taking sample size, limitation in taking variable, difficulties in questionnaire distribution, and difficulties in finding respondents. In future study, researchers are suggested to include more variables such as perceived cost, risk, familiarity, and habit to conduct their research regarding the e-wallet usage intention. Besides, it is also recommended that researchers can increase their sample size. Additionally, future research can conduct their study in different countries, and cities in order to gain deeper understanding and depth knowledge of users' intention behavior of e-wallet services.

Reference

Abdul-Halim, N.A., Vafaei-Zadeh, A., Hanifah, H., Teoh, A.P. and Nawaser, K., 2022. Understanding the determinants of e-wallet continuance usage intention in Malaysia. *Quality & quantity*, *56*(5), pp.3413- 3439.

Adiani, W., Aprianingsih, A. and Purwanegara, M.S., 2021. Cashless Society in Progress: capturing

different generations' perspectives toward external influence in e-wallet usage. *Journal of Economics, Business, and Accountancy| Ventura*, *24*(2), p.205.

Ahmad, K., Khan, M.I. and Jan, M.T., 2010. Online banking acceptance in malaysia: a students' behaviour perspective. *Malaysian Management Review*, *45*(2), pp.1-14.

Akter, M.S., Bhuiyan, M.R.I., Tabassum, S., Alam, S.A., Milon, M.N.U. and Hoque, M.R., 2023. Factors affecting continuance intention to use E-wallet among university students in Bangladesh. *International Journal of Engineering Trends and Technology*, *71*(6), pp.274-288.

Al-Maroof, R.A.S. and Al-Emran, M., 2018. Students acceptance of google classroom: An exploratory study using PLS-SEM approach. *International Journal of Emerging Technologies in Learning (Online)*, *13*(6), p.112.

Aprilia, C. and Amalia, R., 2023. Perceived security and technology continuance theory: An analysis of mobile wallet users' continuance intention. *Global Business Review*, p.09721509221145831.

Cao, T.K., Dang, P.L. and Nguyen, H.A., 2016. Predicting consumer intention to use mobile payment services: Empirical evidence from Vietnam. *International Journal of Marketing Studies*, *8*(1), pp.117- 124.

Chi, T., 2018. Understanding Chinese consumer adoption of apparel mobile commerce: An extended TAM approach. *Journal of Retailing and Consumer Services*, *44*, pp.274-284.

Darmiasih, M. and Setiawan, P.Y., 2021. Continuance usage intention and its antecedents on using OVO e-wallet application in Denpasar. *International research journal of management, IT and social sciences*, *8*(1), pp.35-46.

Davis, F.D., 1989. Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS quarterly*, pp.319-340.

De Luna, I.R., Liébana-Cabanillas, F., Sánchez-Fernández, J. and Muñoz-Leiva, F., 2019. Mobile payment is not all the same: The adoption of mobile payment systems depending on the technology applied. *Technological Forecasting and Social Change*, *146*, pp.931-944.

Dimock, M., 2019. Defining generations: Where Millennials end and Generation Z begins. *Pew Research Center*, *17*(1), pp.1-7.

Doan, N., 2014. Consumer adoption in mobile wallet: a study of consumers in Finland.

Etikan, I., Musa, S.A. and Alkassim, R.S.,

2016. Comparison of convenience sampling and purposive sampling. American Journal of Theoretical and Applied Statistics, 5(1), pp.1-4.

Fishbein, M.E., 1967. Readings in attitude theory and measurement.

Gitau, L. and Nzuki, D., 2014. Analysis of determinants of m-commerce adoption by online consumers. *International Journal of Business, Humanities and Technology*, *4*(3), pp.88-94.

Hair, J.F., Black, W.C., Babin, B.J., Anderson, R.E. and Tatham, R.L., 2010. Multivariate data analysis.

7th ed. Upper Saddle River, NJ: Pearson.

Hair, J.F., Risher, J.J., Sarstedt, M. and Ringle, C.M., 2019. When to use and how to report the results of PLS-SEM. *European business review*, *31*(1), pp.2-24.

Handayani, N. and Ariyanti, M., 2024. Factors affecting continuance intention in e-wallet use in Indonesia after COVID-19. *Indonesian Journal of Multidisciplinary Science*, *3*(4), pp.284-296.

Israel, G.D., 1992. Determining sample size.

Karim, M.W., Chowdhury, M.A.M. and Haque, A.A., 2022. A study of customer satisfaction towards E- wallet payment system in Bangladesh. *American Journal of Economics and Business Innovation*, *1*(1), pp.1-10.

Karim, M.W., Haque, A., Ulfy, M.A., Hossain, M.A. and Anis, M.Z., 2020. Factors influencing the use of E-wallet as a payment method among Malaysian young adults. *Journal of International Business and Management*, *3*(2), pp.1-12.

Kaur, R., Li, Y., Iqbal, J., Gonzalez, H. and Stakhanova, N., 2018, July. A security assessment of HCE- NFC enabled e-wallet banking android apps. In *2018 IEEE 42nd Annual Computer Software and Applications Conference (COMPSAC)* (Vol. 2, pp. 492-497). IEEE.

Khan, W.A. and Abideen, Z.U., 2023. Effects of behavioural intention on usage behaviour of digital wallet: the mediating role of perceived risk and moderating role of perceived service quality and perceived trust. *Future Business Journal*, *9*(1), p.73.

Kuppusamy, J. and Xiang, E.L.J., 2024, January. Factors that influence the intention to use E-wallet among Generation Z in Malaysia. In *4th International Conference on Communication, Language, Education and Social Sciences (CLESS 2023)* (pp. 33-43). Atlantis Press.

Lim, W.M. and Ting, D.H., 2014. Consumer acceptance and continuance of online group buying. *Journal of Computer Information Systems*, *54*(3), pp.87-96.

Marimuthu, M. and Roseline, A., 2020. A study on consumer perception towards e-wallet. *Our Heritage*, *68*(17), pp.283-288.

Milberg, S.J., Smith, H.J. and Burke, S.J., 2000. Information privacy: Corporate management and national regulation. *Organization science*, *11*(1), pp.35-57.

Nag, A.K. and Gilitwala, B., 2019. E-Wallet-factors affecting its intention to use. *International Journal of Recent Technology and Engineering*, *8*(4), pp.3411-3415.

Nizam, F., Hwang, H.J. and Valaei, N., 2019. Measuring the effectiveness of E-wallet in Malaysia. *Big Data, Cloud Computing, Data Science & Engineering 3*, pp.59-69.

Olivia, M. and Marchyta, N.K., 2022. *The influence of perceived ease of use and perceived usefulness on E-wallet continuance intention: intervening role of customer satisfaction* (Doctoral dissertation, Petra Christian University).

Pantano, E. and Di Pietro, L., 2012. Understanding consumer's acceptance of technology-based innovations in retailing. *Journal of technology management & innovation*, *7*(4), pp.1-19.

Pertiwi, D., Suprapto, W. and Pratama, E., 2020. Perceived usage of e-wallet among the Y generation in Surabaya based on technology acceptance model. *Jurnal Teknik Industri: Jurnal Keilmuan dan Aplikasi Teknik Industri*,

22(1), pp.17-24.

Puspitasari, I., Wiambodo, A.N.R. and Soeparman, P., 2021, February. The impact of expectation confirmation, technology compatibility, and customer's acceptance on e-wallet continuance intention. In *AIP conference proceedings* (Vol. 2329, No. 1). AIP Publishing.

Qingqing, Y.A.N.G. and Fangming, S.H.I., 2024. A Technology Acceptance Model (TAM) towards use Intention of E-wallet Among Youth in Malaysia. *UCJC Business and Society Review (formerly known as Universia Business Review)*, *21*(80).

Rahman, M.F., 2021. The future of mobile financial services in Bangladesh. The Daily Star.

Raihan, T. and Rachmawati, I., 2019. Analyzing Factors Influencing Continuance Intention Of E-wallet Adoption Using Utaut 2 Model (a Case Study Of Dana In Indonesia). *eProceedings of Management*, *6*(2).

Ramos-de-Luna, I., Montoro-Ríos, F. and Liébana-Cabanillas, F., 2016. Determinants of the intention to use NFC technology as a payment system: an acceptance model approach. *Information Systems and e- business Management*, *14*, pp.293-314.

Rosnidah, I., Muna, A., Musyaffi, A.M. and Siregar, N.F., 2019, March. Critical factor of mobile payment acceptance in millenial generation: Study on the UTAUT model. In *International Symposium on Social Sciences, Education, and Humanities (ISSEH 2018)* (pp. 123-127). Atlantis Press.

Singh, N., Sinha, N. and Liébana-Cabanillas, F.J., 2020. Determining factors in the adoption and recommendation of mobile wallet services in India: Analysis of the effect of innovativeness, stress to use and social influence. *International Journal of Information Management*, *50*, pp.191-205.

Tampi, J.L.A., Tulung, J.E. and Arie, F.V., 2023. Determinants affecting the intention to use e-wallet during COVID-19 in Manado. *Jurnal EMBA: Jurnal Riset Ekonomi, Manajemen, Bisnis dan Akuntansi*, *11*(1), pp.1094-1105.

Uddin, M.S. and Akhi, A.Y., 2014. E-wallet system for Bangladesh an electronic payment system. *International Journal of Modeling and Optimization*, *4*, pp.216-219.

Venkatesh, V. and Davis, F.D., 1996. A model of the antecedents of perceived ease of use: Development and test. *Decision sciences*, *27*(3), pp.451-481.

Verkijika, S.F., 2018. Factors influencing the adoption of mobile commerce applications in Cameroon. *Telematics and Informatics*, *35*(6), pp.1665-1674.

Wei, M.F., Luh, Y.H., Huang, Y.H. and Chang, Y.C., 2021. Young generation's mobile payment adoption behavior: Analysis based on an extended UTAUT model. *Journal of theoretical and applied electronic commerce research*, *16*(4), pp.618-637.

Wong, C.Y. and Mohamed, M.I.P., 2021. Understanding the factors that influence consumer continuous intention to use E-wallet In Malaysia. *Research in Management of Technology and Business*, *2*(1), pp.561-576.

Yang, M., Mamun, A.A., Mohiuddin, M., Nawi, N.C. and Zainol, N.R., 2021. Cashless transactions: A study on intention and adoption of e-wallets. *Sustainability*, *13*(2), p.831.

Zhong, Y. and Moon, H.C., 2022. Investigating customer behavior of using contactless payment in China:

A comparative study of facial recognition payment and mobile QR-code payment. *Sustainability*, *14*(12), p.7150.