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# Factors influence on usage of e-wallets among millennials in the Sri Lankan context

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## ABSTRACT

**Purpose**: *Developments in financial technologies, new government efforts, and the worldwide unusual situation, it has resulted in a considerable increase in cashless transactions in recent years. The current empirical study sought to investigate the factors influencing behavioural intention of e-wallet usage.*

**Design/methodology/approach**: *The study's population comprised Millennials in Sri Lanka, and the convenience sample method has been employed. The current study employs a quantitative technique to collect the relevant data in the form of an online survey. There were 600 questionnaires distributed in total among the target population using a Google Form. Out of the total respondents, 558 with a response rate of 93%, 398 used e-wallets, and 162 were non-users. Data collected were analyzed using descriptive, correlation, and regression models.*

**Findings:** *According to the findings of the survey, the most compelling reason for using e-wallets is their Perceived Usefulness. It explored that there are significant strong relationships between the Perceived usefulness of e-wallet, Perceived ease of use, Privacy, and security of e-wallet study variables. Furthermore, the survey emphasized that the Behavior Intention to Use E-Wallets is the most important aspect that Millennials perceive when it comes to e-wallet usage.*

**Originality:** *This is one of the first studies in e-wallet literature, that explores the pivotal role of privacy and security in the usage of e-wallet services in the context of Sri Lanka where most studies considered the TAM model merely. In reality, this research will be useful to e-wallet providers who want to learn more about why consumers use e-wallets both during and following the COVID-19 epidemic. As a result, they're devising strategies to assist themselves to achieve their goal of replacing traditional methods of payment with e-wallets.*

**Implications**: *This study's findings have several ramifications for the advancement and improvement of e-wallet services in Sri Lanka. Based on its results, this study presents a few recommendations for the upcoming expansion of e-wallet service providers.*

**Keywords:** *Perceived usefulness of e-wallet, Perceived ease of use, Privacy and, security of e-wallet, Behavioural intention to use an e-wallet, e-wallet usage*

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## INTRODUCTION

The advent of technology has altered how consumers buy and pay for the goods they purchase. People, particularly millennials, are changing the way payments are made as internet penetration rises in Sri Lanka, along with a massive increase in smartphone usage. According to the Central Bank's (2020) report, almost Rs. 769 billion in cash is now in circulation. The cost of keeping the currency in circulation is roughly 1.5% of GDP. So, if they convert even 30% of their money to digital transactions, they can save at least a half-percentage point of GDP, which they could then utilise for welfare programs and other objectives.

Distinctive payment features of e-wallet technology enable the buyer to utilize their phone to make online transactions rather than using physical cash, all with a simple tap on the mobile phone. Due to the development in its usage, e-wallets are now the preferred kind of payment among customers, particularly among consumers of various age groups, the majority of whom are young people who are most acquainted with the latest technology wave (Yaokumah, Kumah & Okai, 2017). The word "e-wallet" refers to a type of virtual wallet that enables someone to link their debit or credit cards to a virtual wallet in order to perform any transactions (Digital Wallet, 2019). Besides debit or credit cards, the electronic system allows customers to keep their physical card details and bank account number in order to make specified payment operations (Ray, 2017). Since it saves both money and time, the transactions made with an e-wallet are more convenient and faster than the traditional banking system (Blockchains, 2018). E-wallets allow users to keep and track personal information related to their online transactions (Uddin and Akhi, 2014). In Sri Lanka, multiple companies are offering e-wallet services to users, including FriMi, Virtual Wallet, Genie, Ipay, mCash, eZ Cash and Upay to name a few well-known digital wallet service providers

Millennials, those born between 1980 and 2000, constitute the most recent generation entering into the labour sector. They are referred to as Millennials due to their proximity to the current millennium and their upbringing in the electronic era (Kaifi, Nafei, Khanfar, & Kaifi, 2012). Technologies and a wider embrace of non-traditional lifestyles and beliefs inspired this generation (Andert, 2011). Millennials adore making use of technology. The Millennial generation grew technologically dependent at a younger age than previous generations. It is expected that as Millennials increasingly enter the workforce, technology will become more interwoven in work operations (Kaifi et al., 2012).

The present COVID-19 epidemic too has highlighted the crucial role of digital financial services. Transmission of COVID-19 from person to person via banknotes and coins seems to be a plausible technique for widely disseminating the coronavirus in Sri Lanka. However, considering the magnitude of the pandemic and the virus's exceptional stability, the human-to-human transmission must be considered a possible mechanism of viral dissemination, and adequate measures ought to be taken (Pal & Bhadada, 2020). The World Health Organization (WHO) advised customers that electronic payment methods be used instead of cash and contact-based payments as it can be a possible source of infection (Auer, Cornelli &

Frost, 2021). The suggestions have been based on information from health specialists who proved that the SARS-CoV-2 virus may persist for two to four days on surfaces such as currency and banknotes (Pal, Bhadada & Cash, 2020). As a result, e-wallets might be viewed as a type of protective behaviour during the epidemic. Some even suggested that shifting users to virtual financial services, such as electronic wallets, may help minimize the virus's proliferation and intensity (Abu Daqar, Constantinovits, Arqawi & Daragmeh, 2021). Even though the outbreak of critical diseases and pandemics cannot be predicted or controlled as yet, the adoption of digital financial services like e-wallets is still at an initial stage among the millennials and they are reluctant to move entirely to cashless transactions. From this vantage point, policymakers acknowledged the need of promoting digital payments and avoiding contact-based payments.

In addition to providing speed and convenience, e-wallet payments provide consumers with a sense of security and confidence in transactions conducted anywhere and at any moment (Liebana-Cabanillas, Sánchez-Fernandez, & Muoz-Leiva, 2014). The use of an e-wallet enables small-scale, straightforward transactions (Punwatkar & Verghese, 2018). Security issues, such as the fear of financial losses, and a lack of flexibility for foreign transfers are the biggest barriers to widespread adoption. According to Al Nawayseh (2020), consumer intentions were found to be significantly impacted by perceived usefulness. Furthermore, Aji et al. (2020) found that, along with perceived utility and government backing, perceived COVID-19 vulnerability seemed to have a substantial impact on customer desire to utilize e-wallets during the outbreak. According to some of the findings of ongoing studies, there are variances in the outcomes of studies undertaken by various researchers.

Further, despite the ease with which intentions theories can be used to analyze popular technologies, little research on consumer intentions and user behaviour (UB) in the case of electronic wallets has been done. Mobile wallets research and their technological acceptability among the general public have emerged as a necessary and fascinating topic (Chawla & Joshi, 2019). Despite technological advancements, there have been a few challenges with its acceptance, such as past research studies showing that after the first purchase, continued use of technology has decreased from 70% to 55%. (Ledger & McCaffrey, 2018). To close the gap, further research is needed to look into the potential factors of technology adoption.

As a result, it is evident that there exists an empirical gap in this field of study. Against this backdrop, the present study aims to get an in-depth understanding of the factors influencing e-wallet adoption among Millennials in Sri Lanka in order to fill part of the gap.

The extended TAM model is including perceived usefulness (PU), perceived ease of use (PEU), privacy and security of e-wallet (PS), behavioral intention (BI), and actual system use (ASU). The primary goal of this research is to look at the elements that impact Millennials' adoption of e-wallets as a means of payment. To achieve the study's specific goal, three variables are chosen as predictors: perceived utility of e-wallet (PU), perceived ease of use (PEU), and privacy and security of e-wallet (PS) to examine the impact on behavioural intention to use an e-wallet (BI) and e-wallet use through exploring relationship and impact of variables. The rest of the paper

embodies the sections including literature review, conceptual framework, research methodology, results and findings, conclusion, implications and limitations, and future research directions.

## LITERATURE REVIEW

### E-Wallet

In some cases, the term "e-Wallet" refers to a digital wallet, also referred to as a "digital wallet." It's a payment system technology that converts conventional wallet functionalities into a virtual era by letting consumers conduct online transfers with a variety of payment mechanisms such as loyalty cards, debit cards, bank accounts, and credit cards (Yahid, Shahbahrami & Nobakht, 2013). An e-wallet is a programme that stores credit card details of the individuals and enables them to make online purchases.

An e-wallet is a kind of digital card that can be used to make purchases online through a smartphone or a computer. It works in the same way as a debit or credit card. An e-Wallet must be linked to the user's bank account in order to accept payments.

### E-Wallet use

Instead of using cash, cashless transactions involve the funds' transfers viacheque, credit or debit card, or digital techniques. Because online transactions using e-wallets provide comfort, privacy and security, and flexibility, e-wallets are recognized as one of the most popular means of transactions in present days (Uddin, et al., 2014). As the number of e-payment techniques increases, e-wallets have already established an identity for themselves by offering a wide variety of services such as transportation, food delivery, and bill payment (Rosnidah, 2019).

Customers use their mobile devices to scan the (QR) code to verify the payment, and this form of transaction is prevalent in physical establishments (Lu, 2018). To facilitate transactions, NFC-enabled devices (Near Field Communications) are being installed and placed close to payment terminals in physical establishments (Taylor, 2016). Mobile wallets are also well-known for their cutting-edge attributes such as personalization and real-time information exchange(Osakwe & Okeke, 2016). It is not only beneficial to purchasers; due to its quick transaction procedure, cheaper labour charges, and more effective cash flow management, traders are accepting digital wallets as a payment method (Hayashi & Bradford, 2014).

In recent research conducted by Lew et al. (2020), the digital payment wallet has proven to be a real game-changer. On the Asian continent, the online payment component had already been formed as a unique mode of payment (Schmidthuber et al., 2020), as a result of which there has been huge expansion and demand for

mobile wallets (Singh et al., 2020). Recent research found that advances in smart technology had already facilitated the adoption of the mobile wallet, or m-wallet, as a creative payment method to replace the conventional parts of the physical wallet (Leong et al., 2020).

## Extended Technology Acceptance Model (TAM)

Several explanations have been proposed to explain the reason for customers' intentions to use Information System technology. The TAM model has been extended and used in a wide range of technologies, including e-learning (Cheung and Vogel, 2013; Al-Maroof and Al-Emran, 2018), m-commerce (Barry & Jan, 2018), and short message service (Muk & Chung, 2015). TAM is a well-established scholarly extension for examining the acceptance level and usage intention of new technologies (Aydin & Burnaz, 2016). However, the original TAM factors may not accurately capture core beliefs that influence consumers' perceptions toward e-commerce. In order to strengthen the model, it is also recommended to include several more variables to test the TAM's suitability (Jaradat, 2013). Privacy and security were discovered to be among the extensive factors that were beneficial to behavioural intention to adopt the latest tech (Barry & Jan, 2018).

As a result, e-Wallet, as one of the latest innovations, can be used with TAM to investigate additional aspects that influence the decision to utilize e-Wallet (Kumar, Sivashanmugam, & Venkataraman, 2017). Premised upon this foregoing, privacy and security has been included as one of the expanded factors in this study (Barry & Jan, 2018) to investigate the behavioral intention to use an electronic wallet. The other two variables are perceived ease of use and perceived usefulness.

### Perceived Usefulness

Perceived usefulness is the extent to which an individual believes that using a specific information system will increase their productivity (Davis, 1989). Perceived usefulness is defined as an individual's belief that implementing a particular system would then enhance his or her ability to do the job. In the TAM framework, it is expected to predict the direct relationship between behavioural intention to use technology and perceived usefulness (Park, Rhoads, Hou & Lee, 2014). But the use of the TAM model helpedAl-Maroof and Al-Emran (2018) unearth a significant relationship between perceived usefulness and behavioural intention to adopt a specific technology.

Prior research has found a strong correlation between perceived usefulness and behavioral intention to use in the case of e-textbooks (Baker-Eveleth & Stone, 2015; Stone & Baker-Eveleth, 2013), cellular service providers (Abbas & Hamdy, 2015), online travel service (Li & Liu, 2014), and e-learning (Lin & Wang, 2012).

As per a prior study, perceived usefulness is the key variable in predicting customers' intentions to use e-wallets in Malaysia, and it too has an effect on the behavioural intention to utilize innovative technology. PU is a prominent significant

antecedent to continue using e-wallets in numerous ways, including e-wallets (Shaw & Sergueeva 2019). According to a recent study, PU has a favorable impact on users' attitudes and intentions when it comes to digital wallets (Chawla & Joshi, 2019). In this regard, previous research has recommended that PU has a beneficial impact on the intention to use online transaction systems (Routray, 2019; Pertiwi et al., 2020; Jin, 2020). Therefore, based on the literature reviewed above, the hypothesis below is proposed:

H1: Perceived usefulness of e-wallet positively influences behavioral intention to use an e-wallet.

### Perceived Ease of Use

Davis (1989), defined the term perceived ease of use as "the extent to which using a given system will be free of effort". Perceived ease of use may alternatively be stated as the views of people with regard to how much time and effort they will have to devote to using the technology (Raza, Umer, & Shah, 2017). In this study, PEU refers to the extent to which prospective customers recognize the target system to be simple to be used.

Venkatesh, Speier & Morris (2002) found a positive and substantial relationship between perceived ease of use and behavioral intention to use. Similarly, the perceived ease of use of an information system predicts behavioural intention to use it (Eze, Ten & Poong, 2011). Mun and Hwang (2003) discovered a connection between perceived ease of use and behavioural intention to use an information system.

PEU, on either side, is thought to be a deciding component of PU in digital transactions, therefore it should play a crucial part in client preparedness for continuously using e-wallets and maintaining a positive link with PU (Singh, Sinha & Liébana-Cabanillas, 2020). According to Barry and Jan (2018), perceived ease of use has a significant and positive impact on perceived usefulness and perceived ease of use on behavioural intention to use a specific technology. According to Venkatesh et al. (2002)'s research, PEOU and BI to use are significantly and positively connected. PEOU also expects BI to be used as an information system (Eze et al., 2011). According to recent research, user-friendliness has a significant impact on users' intentions to use mobile wallet services (Singh et al., 2020; Karim et al., 2020; Chawla & Joshi, 2020; Chopra & Ranjani, 2020; Saura et al., 2020). The following hypothesis is constructed based on the previous statements:

H2: Perceived ease of use positively influences behavioral intention to use an e-wallet.

### Privacy and Security

Privacy refers to an individual's capability to directly monitor personal information (Cliquet, Gonzalez, Huré & Picot-Coupey, 2015). According to (Soodan & Rana, 2020), privacy and security are two factors that influence e-wallet usage and are quite persuasive. A lack of security and privacy is among the issues

that deter customers from purchasing items unless they are secure (Milberg, Smith & Bruke, 2000).

Payment via an e-wallet lacking security mechanisms, on the contrary, could lead to unauthorized access to private information and a lucrative opportunity for cyberattackers to breach the data (Kaur, Li, Iqbal, Gonzalez & Stakhanova, 2018). Consumers can sometimes lose confidence in the information system provider and will be reluctant to undertake any e-payment transactions except if privacy and security features have been included (Gitau & Nzuki 2014). According to a KPMG (2010) report, customers' primary priorities when using online payment pathways are security and privacy.

PS influences behavioral intentions in a positive way (Flavián & Guinalu, 2006; Mukherjee & Nath, 2007). Mobile wallets raise more security concerns than conventional modes of payment because they store and transport financial and personal information. Security was already studied as a crucial predictor of online buying intention, and many scholarly investigations have revealed that security has a favorable impact on the desire to buy online (Yousafzai et al., 2003; Kim et al., 2008). Based on the facts stated above, the following hypothesis is formed:

H3: Privacy and security positively influences behavioral intention to use an e-wallet.

### Behavioral Intention to use e-wallet

Throughout the COVID-19 epidemic, contactless payments grew significantly due to the belief that they are a safer payment option than other traditional payment methods. Customers are opting for non-contact methods of payment such as e-wallets, contactless cards, and e-payment channels, that are more reliable than physical contact with surfaces. Consumers are being pushed into digital payments by the increase in internet shopping (Jesuthasan & Umakanth, 2021).

An individual's intention can be defined as the course of action he or she desires to undertake (Zhao & Othman, 2010). Multiple scholars found a favorable and significant link between behavioral intention (BI) and new technology adoption (Barry & Jan, 2018; Faqih & Jaradat, 2015; Jaradat, 2013). Behavioral intention (BI), as per Mun and Hwang (2003), has a significant and positive impact on actual usage (AU). Venkatesh, Morris, Davis, and Davis developed a more comprehensive Technology Acceptance Model in 2003. The model's findings demonstrate that behavioural intent to use does have a substantial and beneficial influence on user behaviour. An individual's propensity to undertake a specific activity on the notion of action is referred to as BI. Behavioural Intentions, as a concept has been studied as a dependent variable in TAM experiments and has a direct impact on technology’s AU (Shin, 2009; Yu & Huang, 2020). This study offers a model of customer behavioural intention to utilize an e-wallet payment mechanism in Sri Lanka. The following hypothesis is constructed based on the previous statements:

H4: Behavioral intention to use an e-wallet positively influences e-wallet usage.

### Conceptual Framework

Based on prior studies, Figure 1 depicts the conceptual framework by describing a few factors that were significant and had an association with the use of an e-wallet. The purpose of this study is to figure out the impact of study variables such as perceived usefulness of e-wallet, perceived ease of use and privacy, and e-wallet security on behavioral intention and further evaluate the sequential impact of behavioral intention to use e-wallet on e-wallet usage.

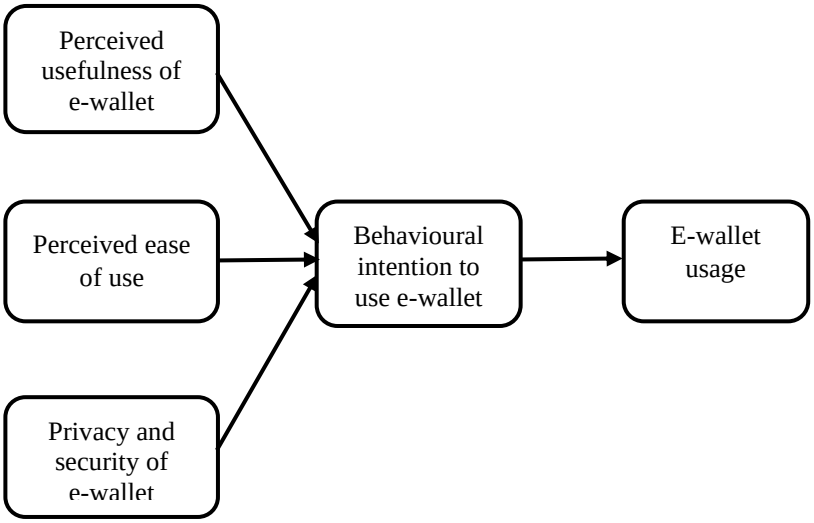


**Figure 1: Conceptual Framework**

*Source: Karim, Haque, Ulfy, Hossain, & Anis, 2020*

## METHODOLOGY

### Survey Development

The primary goal of this study is to determine the factors that influence millennials' adoption of electronic wallets in Sri Lanka. The questionnaire method was employed to collect primary data for the current study. A two-part web-based questionnaire was created to test the hypotheses of the research. The beginning part focused on the participants' demographic information. The model constructs were measured with the help of 23 elements in the second portion.

Perceived usefulness of e-wallet, perceived ease of use, privacy and security of e-wallet, behavioral intention to use an e-wallet, and e-wallet use are among the five concepts included in the study model. The research questionnaire for this study is

built on Extended TAM theory elements and is primarily modified from the study of Barry and Jan (2018). To adapt to the current study, each variable's elements were slightly modified.

To express the statement of agreement, a five-point Likert scale (1=strongly disagree to 5=strongly agree) was used to measure all of the observed variables.

## Reliability and Validity

The Statistical Package for Social Science (SPSS) version 22.0 was used to analyze the study's data. Cronbach's Alpha (á) Reliability was used to determine the measurement's internal consistency at first. Cronbach's alpha ought to be more than 0.70, as per Hair, Black, Babin, and Anderson (2010).

As a result, the measurement's validity was determined in order to assure the instrument's stability and consistency in measuring the idea and assisting in determining the "quality" of measures (Sekaran, 2013). According to Hair, Black, Babin, & Anderson (2010), convergent validity is proven when standardized regression estimates of the final measurement model's items are larger than 0.5. Furthermore, AVE is greater than 0.5 for all structures. AVE, according to Malhotra and Dash is more conservative (2011), hence convergent validity can be assessed just by CR. As a result, the study confirms the constructs' convergent validity based on the CR. Furthermore, by examining the validity and reliability of test results, it can be concluded that the measurements used in this study are sound.

The findings of the reliability and validity tests for this study are shown in Table 1.

**Table 1: Validity Analysis**

| Items | CR | AVE | Cronbach's Alpha Value |
|---|---|---|---|
| E-wallet use | 0.789 | 0.587 | 0.855 |
| Behavioral Intention to use e-wallet | 0.744 | 0.656 | 0.837 |
| Perceived Usefulness | 0.832 | 0.536 | 0.883 |
| Perceived Ease of Use | 0.873 | 0.611 | 0.851 |
| Privacy and Security | 0.801 | 0.602 | 0.848 |

*(Source: Survey Data)*

## Data Collection

The participants were millennials, the people born between 1981 and 1994/6, who are frequent users of digital wallets and are between the ages of 25 and 40. Because the population was not finite, convenience sampling was used. Convenience sampling is used since there is the absence of statistics available regarding the people who are the active users of e-wallets and it is not possible to identify them. Further this research entails the whole Sri Lankan context as well. Therefore, questionnaires were issued among the millennials who were able to be chosen by the researcher subjectively based on the convenience of the approach and become part of the research. A screening question was included to guarantee that only respondents who utilized e-wallets replied to the survey. The language utilized

was simple English, and a pilot study was done to ensure that the respondents understood the questions.

Because of the lower cost of administration, online or web-based surveys have grown increasingly popular. Given the prevailing status of the Covid-19 epidemic and the fact that the current study covers respondents from throughout Sri Lanka, an online survey is the best alternative for data collecting. Since there are infinite surveys, survey answers, unlimited respondents, and data gathered automatically in google spreadsheets, it is completely free. One of the most popular online survey tools is Google forms. As a result, the present study's data was gathered using an online survey (sending Google form links through social media platforms).

The information was gathered from people all around Sri Lanka. Those who have used an e-wallet are the target respondents of the study. A total of 600 questionnaires were given out to the intended respondents. Only 558 of the total issued questionnaires were completed by respondents and included for data analysis. Out of the total respondents, 162 respondents are not users of e-wallets. As a result, the majority of the analysis was carried out by just utilizing these 396 responses (e-wallet users). The survey only included people who have used e-wallets.

## DATA ANALYSIS AND FINDINGS

### Demographic Profile

The demographic data was gathered and analyzed using descriptive analysis. The study's demographic data is shown in Table II. The sample shows the 396 responses received from millennials in Sri Lanka who have used e-wallets. Table II indicates that male respondents accounted for 74.2 percent of the overall sample with 294 respondents, while female respondents accounted for just 25.8 percent with 102 respondents. Furthermore, the majority of respondents are aged between 25 and 30, accounting for 53.3 percent of the entire sample, followed by those between the ages of 31 and 35 (27.3 percent), and those between the ages of 36 and 40 (19.4 percent).

Furthermore, the number of graduates from the survey was determined to be 158, accounting for 39.8% of the whole sample, while undergraduates accounted for 108 (27.3%) of the overall sample. Finally, eZ Cash was discovered to have the greatest number of users with 91, accounting for 23%, followed by Mcash users who account for 19.9%, iPay at 19.7%, Virtual Wallet at 9.8%, Genie at 6.3%, Upay at 5.3%, FriMi at 5.1%, and others at 10.9%.

**Table 2: Analysis of Demographic Information**

| Measure | Items | Frequency | Percentage (%) |
|---|---|---|---|
| Gender | Male | 294 | 74.2 |
| | Female | 102 | 25.8 |
| | Total | 396 | 100 |
| Age Group | 25-30 | 211 | 53.3 |
| | 31-35 | 108 | 27.3 |
| | 36-40 | 77 | 19.4 |
| | Total | 396 | 100 |
| Highest Education Level | Ordinary level | 09 | 2.3 |
| | Advanced level | 56 | 14.1 |
| | Diploma | 36 | 9.1 |
| | Undergraduates | 108 | 27.3 |
| | Graduates | 158 | 39.8 |
| | Postgraduate | 27 | 6.8 |
| | Others | 02 | 0.5 |
| | Total | 396 | 100 |
| Type of Gateway | eZ Cash | 91 | 23.0 |
| | Mcash | 79 | 19.9 |
| | iPay | 78 | 19.7 |
| | FriMi | 20 | 5.1 |
| | Virtual Wallet | 39 | 9.8 |
| | Upay | 21 | 5.3 |
| | Genie | 25 | 6.3 |
| | Others | 43 | 10.9 |
| | Total | 396 | 100 |

*Source: (Survey Data)*

## Descriptive Statistics

The essential properties of the data, such as the mean, were described using descriptive statistics. The mean describes the central tendency of the data acquired in this study.

**Table 3: Descriptive statistics of Variables**

| Variables | N | Mean | Std. Deviation | Decision |
|---|---|---|---|---|
| E-wallet use | 396 | 3.14 | 0.918 | Moderate |
| Behavioral Intention to use e-wallet | 396 | 4.17 | 0.956 | High |
| Perceived Usefulness | 396 | 4.33 | 0.937 | Very High |
| Perceived Ease of Use | 396 | 3.95 | 0.991 | High |
| Privacy and Security | 396 | 3.31 | 0.967 | Moderate |

(Note: Mean value range: .40 < X < 4.20: High, and 4.20 < X < 5.00: Very High 2.60 < X ≤ 3.40: Moderate, 1 ≤ X ≤ 1.80: Very Low, 1.80 < X ≤ 2.60: Low, 3: Source: Masri & Jaaron, 2017)

Table 3 outlines the elements that influence Millennials' decision to use e-wallets. Mean scores in table 3 show that "Perceived Usefulness" (x= 4.33) is found to be at the very highest level, followed by "Perceived Ease of Use" (x= 3.95) and "Privacy and Security" (x= 3.31). "Behavioral Intention to Use an E-Wallet" (x = 4.17), in contrast, and "E-Wallet Use" (x = 3.14) are at a high and moderate level, respectively.

## Correlation Analysis

Further, the Pearson correlation coefficient has been utilized in inferential analysis to examine the level of association between independent and dependent variables, which revealed the magnitude and nature of the linear relationship. R formulae return a number between -1 and 1 when measuring the strength of a relationship between pair of variables, with 1 indicating a strong positive link, -1 indicating a strong negative relationship, and 0 indicating zero association whatsoever. Nonetheless, Gogtay & Thatte (2017) identified a strong association with three R-value indications; Strong (0.50-1.0), Medium (0.30-0.49), and Weak (0.10-0.29). Table 4 displays the Pearson Correlation finding.

**Table 4: Results of Correlation Analysis**

| Path | Pearson Correlation co-efficient | Decision |
|---|---|---|
| Perceived Usefulness ⟶ Behavioral Intention to use e-wallet | 0.701** | Significant strong positive |
| Perceived Ease of Use ⟶ Behavioral Intention to use e-wallet | 0.623** | Significant strong positive |
| Privacy and Security ⟶ Behavioral Intention to use e-wallet | 0.428* | Significant medium positive |
| Behavioral Intention to use e-wallet ⟶ E-wallet use | 0.599* | Significant strong positive |

**. Correlation is significant at the 0.01 level (2-tailed).
*Correlation is significant at the 0.05 level (2-tailed).

Pearson's Correlation is used to determine the link between two continuous variables, such as e-wallet usage as a dependent variable and Behavioral Intention to Use an e-wallet as an independent variable, with a high positive relationship (r=0.599). Behavioral intention to use an e-wallet, on the other hand, is a dependent variable, with each of the variables (perceived usefulness of an e-wallet, ease of use, and privacy and security) acting as independent variables. There is a significant positive relationship between the Perceived Usefulness of e-wallets and Behavioral

Intention to Use e-wallets (r=0.701) followed by Ease of Use also shares a significant positive association with the Behavioral Intention to Use e-wallet (r=0.623), whereas the significant medium positive association between Privacy and Security and Behavioral Intention to Use e-wallet (r=0.428) exists.

## Regression Analysis

Simple regression analysis was performed to examine the impact of each factor on e-wallet usage among millennials.

**Table 5: Summary of Regression Analysis**

| Hypotheses | Path | β | T-stats | p-Value | R Square | Decision |
|---|---|---|---|---|---|---|
| $H_1$ | Perceived Usefulness ⟶ Behavioral Intention to use e-wallet | 0.503 | 6.125 | 0.000 | 44.07 | Accepted |
| $H_2$ | Perceived Ease of Use ⟶ Behavioral Intention to use e-wallet | 0.438 | 5.581 | 0.021 | 53.51 | Accepted |
| $H_3$ | Privacy and Security ⟶ Behavioral Intention to use e-wallet | 0.611 | 14.001 | 0.000 | 69.25 | Accepted |
| $H_4$ | Behavioral Intention to use e-wallet ⟶ E-wallet usage | 0.708 | 13.887 | 0.008 | 72.96 | Accepted |

Perceived Usefulness, Perceived Ease of Use, Privacy, and Security all had a strong favorable impact on Behavioral intention, as expected. As can be observed from the results (Table 5), Privacy and Security seemed to have the largest impact on Behavioral Intention to use an e-wallet (0.611, p 0.000), while Perceived Ease of Use seemed to have the least influence (0.438, p 0.021). Behavioral intention to use an e-wallet also had a beneficial impact on e-wallet usage (0.708, p 0.008).

Privacy and Security, which is recorded as the highest value among the three components of prediction, was also shown to explain roughly 69.25 percent of the variability of Behavioral Intention to use e-wallet, as expected. Furthermore, Behavioral Intention to Use an e-wallet account for 72.96 percent of the variability in e-wallet usage.

## DISCUSSIONS

The findings of the H1 analysis indicates that Perceived Usefulness had a strong positive influence on Behavioral Intention to use e-wallet. The current study's findings were corroborated by prior studies. According to Chansaenroj and Techakittiroj (2015), perceived usefulness affects behavioral intention to use an e-

wallet as a payment mechanism. PU has a significant influence on BI since using an e-wallet conserves time while also making payments easier. As a result, the findings of this study agree with those of a prior study (Baker-Eveleth, et al., 2015). According to the findings of the H2, Perceived Ease of Use had a strong positive influence on Behavioral Intention to use e-wallets. This finding was backed up by further investigations. Previous research by Al-Maroof and Al-Emran (2018) found that, undergraduate students view utilizing web service technology as straightforward and user-friendly and that this view has a positive influence on perceived usefulness and behavioural intention. According to Reddy and Rao (2019), the PEOU has a favourable and powerful influence on intentions and is the primary motivation for users to continue using a mobile wallet app. Finding related to H3 shows that Privacy and Security had a strong positive effect on Behavioral Intention to use e-wallet. According to Marimuthu and Roseline (2020), the e-wallet has gained in popularity due to its simplicity of use, but there is still a lack of knowledge and awareness among the general population, as well as a lack of trust. It was discovered that privacy and security were related to behavioral intention. Due to a lack of privacy and security, consumers may feel unsafe if they use an e-wallet application for transactions (Barry, et al., 2018). The findings related to H4 verify that there is a strong positive impact of Behavioral Intention to use e-wallet on E-wallet use. Barry and Jan (2018) discovered that behavioral intention (BI) and emerging technology use have a favorable and substantial association.

## THEORETICAL IMPLICATIONS

Significant theoretical contributions are made by this study.This research was carried out to examine the behaviour of young adults in terms of their intention to use an e-wallet. Previously, perceived usefulness, perceived ease of use, and behavioural intention were used to predict actual usage behaviour. Because privacy and security are becoming significant concerns among youngsters when it comes to using internet devices, this study used privacy and security variables to investigate the effects on behavioural change. One of the necessary precondition aspects that e-wallet vendors should emphasize in order to elicit a positive intention among customers is privacy and security. Customers will be wary of using e-wallet technology if their privacy and security are not adequately protected (Wei et al., 2009).

This study attempted to provide additional insights from the standpoint of consumer privacy and security. In this regard, the study attempted to investigate these factors, which had previously been almost unexplored in the context of mobile wallet usage and discovered that they had a significant influence on consumers' intention to use while considering the other prominent factors that could affect the usage.

## PRACTICAL IMPLICATIONS

One of the government's objectives is for Sri Lanka to become a cashless economy, which can only be realized if actions and activities are done to match technology with changing trends. Companies have a wide range of

opportunities, and the proposed framework attempted to confirm the new wave of the Sri Lankan economy and its gradual transition to a cashless economy.

The number of millennials who intend to use e-wallets has risen to an all-time high. The Behavioral Intention would provide you with an idea of how to adapt to the new digital economy paradigm. Because simply downloading an e-wallet does not guarantee its use, the framework aims to detect the actual use behavior of millennials' intention to utilize the wallets. Furthermore, the approach will facilitate the process for product/service developers, marketers, and other stakeholders to construct and reach the ideal user. This will result in a variety of helpful ramifications in terms of deciding what type of technology to employ and attributes to include when producing a product/service, the likelihood of product/service adoption, use and reuse, profit, market share, price, and so on.

The model aims to identify many parameters that anticipate the millennials' behavioral intentions toward using E-wallets, in addition to their actual use of such e-wallets. The conceptual framework in this study has theoretically contributed to technology acceptance research by providing a revised TAM that seems to be especially useful for research on unique innovation-based services. This uncovers a few variables that have a significant influence on people's expectations of using e-wallet technology in this context. There are several previous research on the adoption of technology that measures Behavioral intention; however, there are very few studies that have sought to investigate millennials' Behavioral intentions to embrace and use e-wallets in the Sri Lankan setting. The actual usage behavior is determined by perceived usefulness, perceived simplicity of use, and behavioral intention in prior studies. This research used privacy and security variables to investigate the effects on behavioral change, as privacy and security have emerged as a key problem amongst newer generations when it comes to using digital technology. Privacy and security are two important aspects that e-wallet companies should highlight in order to gain user trust. Customers may be wary of using e-wallet technology if their privacy and security are not appropriately safeguarded. The present study also adds to the improvement of the fundamental TAM model by adding to and strengthening existing literature on technology adoption and use. As a result, developers should make a special effort to ensure that e-wallets are recognized and used as the safest and most convenient technology/service available to consumers.

## LIMITATIONS AND FUTURE RESEARCH DIRECTIONS

Technology has proven to be one of the most important factors in determining the degree to which a country and its citizens may be assessed on the basis of their achievements and efficiency thus far, as well as the potential of such people and countries in the future. Even though the current study provides many useful insights and knowledge of the drivers of e-wallet usage, it cannot be said to be without drawbacks, such as the time period, the sample size, and study region for conducting the study, and the few variables used to study e-wallet adaptation. This,

without a question, opens up a lot of possibilities for future research. There are still many improvements to be made, as well as chances for future research.

To begin with, due to the researcher's limited time, this study concentrated on millennials in Sri Lanka, which may not accurately represent all e-wallet users because results may differ from generation to generation. Because the use of digital payment systems has grown so rapidly, it is advised that the study be expanded to include people of all ages.

This research has looked at merely the dependencies between the variables under study. Therefore, future studies can concentrate on the mediational effect of behavioral intention between the predictors and actual usage behaviour. Further, future research can concentrate on including other variables as well. Demographics are apparently being studied to determine whether they have an influence on the adoption of e-wallets for a better understanding.

Additionally, since this research was carried out in Sri Lanka, it offers a lot of opportunities for transferring the concept to other countries where there are additional variables, as indicated above, as culture impacts how individuals adapt and respond to certain aspects in general.

Furthermore, the current study only analyzes the viewpoint of the buyer. Future lessons could also include expert interviews with e-payment service providers or companies, enabling the study to gain a better understanding of the management perspective.

Other tools for data processing besides SPSS, such as LISREL, PLS, and others, should be investigated further.

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## COMPETING INTERESTS

The authors declared no competing interests.

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