



## Impact of Behavioural Intention on E-Wallet Usage During Covid-19 Period: A Study from Sri Lanka

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### **ABSTRACT**

In recent years, there is a noticeable increase in cashless transactions due to financial technology development. With the enhancement of fin-tech products like e-wallet, most consumers shift from cash-based transactions to cashless. In particular, locked down Citizens of the country had no other choice than to stay at home due to the COVID-19 pandemic in Sri Lanka. The social distancing and avoidance of physical touch were the significant measures to escape from the COVID-19 virus. The use of digital transactions and electronic cash transfers was encouraged in every nook and corner of the country. The present empirical study aimed to investigate the significant predictors of behavioral intention on e-wallet usage during the COVID-19 period. This study adopted a practical research design to the online survey method to gather e-wallet users' perceptions in the study area by applying an extended technology acceptance model (TAM). The present study follows the quantitative approach to gathering data from 500 respondents using a Google Form. And collected data were analyzed using the regression model. The results indicate that Attitude, perceived usefulness, perceived ease of use, perceived cost, perceived Risk, and COVID – 19 are the positive and significant predictors of e-wallet usage. In contrast, perceived usefulness, Subjective norms, and facilitating conditions do not significantly influence e-wallet usage. Further, e-wallets usage should be encouraged to avoid unnecessary visits to banks, implement social distancing, avoid physical touch while exchanging cash amid the COVID-19 pandemic in Sri Lanka and create a positive attitude among citizens of the country towards the adoption of a cashless economy. Finally, this study helps the digital marketplace's service providers understand the usefulness of using e-wallet for transaction purposes.

**Keywords:** *Behavioral Intention, COVID-19, E-Wallets, Financial Technology, Sri Lanka, TAM*

## 1. INTRODUCTION

Presently world internet turns the life easier for people. Payments made using smart devices. One of the 21st century's best inventions is electronic wallets (e-wallets), an integral part of the electronic payment system. The term "e-wallet" is a form of a digital wallet that allows an individual to link their debit or credit cards to a digital wallet to make any transactions (Digital Wallet, 2019). Apart from debit or credit cards, electronic cards enable consumers to store their physical card information and bank account number to perform specific actions towards payment (Ray, 2017). It points out that; payments done using an e-wallet is more convenient and faster than conventional banking system as it saves time and money (Blockchains, 2018). The cellular-based payment system widely uses for transactions and payments use mobile applications because consumers consider this method beneficial (Gokilavani, 2018).

The use of an e-wallet provides small-scale transactions which are easy to operate (Punwatkar, 2018). The enhancement of e-payment systems makes consumers shift from cash-based transactions to cashless (Yaokumah, Kumah & Okai, 2017). The most technological change witness and globalization have brought them different perceptions and attitudes than previous generations (Cobanoglu, 2015). Generation Z grew up with technology and the internet, and they regard it as I generation (Mohammed, 2018). Many people currently access smart technology because it contains new applications, ease of use, security, and privacy options (Wood, 2013). The behavioral intention to use the e-wallet payment method is a dependent variable, and its use by referred theories such as TAM, TPB, and UTAUT. And TAM, TPB, UTAUT are also used by researcher to identify determinants of behavioral intention to predict why people are willing to make a decision (Momani, A. & Jamous, M., 2017; Venkatesh, 2003). The social distancing and avoidance of physical touch were the significant measures to escape from the Coronavirus. Digital transactions and electronic cash transfers encourage in every nook and corner of the country.

Many country's Government support this e-wallets innovation, especially during the pandemic situation, and it might also influence intention to use e-wallets. The WHO's advice to the government should encourage its people to engage in e-wallets payments (Huang, 2020). In Sri Lanka, Before the crisis, the most popular payment methods were direct bank transfers (100%) and cash-on-delivery for payments (80%). Also, online payments using debit/credit cards are significantly low (17%) due to the high cost of payment gateways. In these kinds of situations, the public cannot access banks and ATMs without mobile ATM usage.

So the final result is that reduced access to money amongst consumers. And current crisis also highlights the low level of online banking usage within the Sri Lankan economy. According to the Central Bank of Sri Lanka's statistics, less than 15% of the country's banking customers access online banking

facilities. Currently, many banks attempt to promote their e-banking services. The electronic transaction usage increased during the COVID-19 period (Oliver-Balch 2020). Global Payment Gateways Processing Solutions Market forecasted the trend of payment gateways industry up to 2024, amid and aftermath of COVID-19 and global payment market expected to increase 23.45 USD billion in the year 2020 - 2024 due to growth of e-commerce and increase in the use of digital payment methods (Jesse Maida, 2020). The can use e-wallets in three types: open e-wallet, semi-closed e-wallet, and closed e-wallet, and some e-wallet applications need not have a bank account, and the user can utilize digital transaction via digital money by the application (Octal IT Solution, 2020). The growth of smartphone users worldwide will be a useful key driver to increase the number of e-wallet users shortly. Many players provide e-wallet services to the customers, such as Google Pay, eZ Cash, mCash, Upay, Virtual Wallet, Genie, and FriMi are few famous digital wallet service providers to customers in Sri Lanka. Further, e-wallets will help eradicate the physical touch during pandemic conditions and eliminate the bank branch's importance to transfer or remit the bank account's money during the lockdown period.

### **1.1. Research Gap**

Due to the social distancing and avoidance of physical touch, people move to a digital platform from the traditional transaction. It facilitates customers' encouragement to use digital cash transactions and payment methods to avoid unnecessary physical visits and physical touch to transfer or remit the cash. People start to search and access digital, mobile and electronic payment methods to tackle and escape from such pandemic issues. It provides a way to increase cashless transactions in the country. There is a need to understand the users' behavioral intention concerning digital cash transactions to overcome the barriers to effective adoption in the aftermath of COVID-19. The present study explores the solutions to overcome the obstacles in the behavioral intention of the e-wallet users for usage purposes during COVID-19. Many past studies show that privacy, speed, accessibility, security, content, design, ease of use, perceived usefulness, confrontation, and trust determine the e-wallet usage intentions. Unfortunately, only a few studies explore the influencers of e-wallet users' behavioral intentions. There is a gap to examine the influence of performance expectancy, effort expectancy, social impact, and perceived security on behavioral purposes. The COVID-19 lockdown and social distancing induce customers to use e-wallets rather than physical cash. Finally, the study prefers to fill the research gap, such as the impact of behavioral intention on e-wallet usage during the COVID-19 period.

### **1.2. Problem Statement**

Recent research expresses that physical distancing policy because of COVID-19 significantly affected countries' socio-economic conditions in different ways (Fernandes, 2020; Nicola, 2020). Such as finance (Goodell, 2020) and supply-chain (Akinremi, 2020). Even though studies regarding examining the COVID-19 pandemic impact on the way consumers conduct the payment remain scarce. Still, now

physical money performs as a medium for the virus when an infected person touches it. WHO explains to use digital money when possible (Brown, 2020). Before this outbreak, cashless payment through smartphones gained popularity (Andrieu, 2001) in several developing countries (Capgemini, 2019). Based on the Global Consumer Insight Survey 2020, a 31.80 million customers already engaged in a mobile connection. Mobile payment is an alternative form for e-wallets payments. In the past, the usage of e-wallets resulted in various findings. Aji (2020) identified consumers' intention to use e-wallet is significantly affected by knowledge about interest. And Mobile payment contains risk and uncertainty (Bagla, 2018; Leong, 2020). It is also associated with some criminal activities, such as theft, account take over, fraudulent actions, and data breaches (Marria, 2018).

The fact is that around 95% of all retail transactions in Sri Lanka are still cash-based (Echelon Media, 2020). Therefore, a broader improvement in the country's e-commerce ecosystem would result in long-term benefits to expand social media-based businesses' choice and coverage (Kithmina Hewage, 2020). According to Rohan Buultjens (2020), they identified a couple of challenges when implementing cashless transactions, such as disconnection. When a customer orders an item, it doesn't know how the payment works or when to make the payment. According to Jayantha Fernando (2020), pandemics create an opportunity to answer the solutions for these challenges, including those to do with adoption, trust, and security. The biggest challenge they faced is getting people started in a cashless system. And he stated that Covid-19 had helped fast-track this by forcing people to adapt to it.

Payment cards also play a significant role in the local retail industry. In the past, consumers enjoy mobile phone-based payment mechanisms and e-money systems facilities to settle utility bills and make mobile money transfers. And the insignificant percentage of what consumers expect from electronic payment platform providers. Some people stop transferring money because Sri Lankans want to move forward and enjoy a plethora of services from a reliable electronic payment solution (Daily FT, 2018). According to Central Bank report 2020, almost Rs769 billion cash in circulation. Keeping money in circulation is costing the economy nearly 1.5% of GDP. So if they convert even 30% of the money into digital transactions, they can save at least half a percent of GDP, which can use for social welfare and other purposes. People moving into digital forms of payment transactions also address a social issue, which directly benefits the economy (Echelon, 2020).

More than 80% of Sri Lankans have bank accounts. They use 23 million debit cards, 1.7 million credit cards, and nearly 40% have smartphones but digitizing the financial system and ensuring inclusiveness remains a challenge. To address this issue and bridge services, costs, and other gaps, the Central Bank of Sri Lanka declared 2020 the “Year of Digital Transactions.” (DailyFT, 2020). In Sri Lanka, banks provide a variety of e-wallet options for their customers. The biggest problem is that banks have to be aware of their products. But unfortunately, bank employees are unaware. Employees must know about

these products. So, employees need to download these apps and use them to identify the difficulties customers face.

Another significant issue is that even though many people have high-end smartphones when making payments, very few use them. Smartphone penetration in Sri Lanka is almost 40%, which is progressive for a developing country, increasing in the future. Therefore, when applications exist and are easy to use, people must be encouraged to adapt to this technology. The world is moving towards virtual banking, and there will be a reduction in conventional banking. In some countries, they have stopped expanding their bank branches, and everything done digitally (DailyFT, 2020). During this pandemic, many companies capture the older generations' people as their customers. Because most of them start using a cashless system, it will give us a boost when it comes to the adoption of this system (De Silva, 2020). Due to a lack of research on this topic and the growing importance, the present study contributes to the literature by examining the significant predictors of behavioral intention on e-wallet usage during the COVID-19 period in Sri Lanka.

### **1.3. Significance of the Study**

Most people have a favorable opinion about mobile payment services and tend to use this service when they can reach it. The management should focus more on above-the-line marketing activities to raise customer awareness about this new service through this study. And can focus on the usefulness, convenience of this service towards the user's retention with them. The application design should be simple, easy to use, which can ensure that all of the age group will easily use the application. Besides, the manager can try to reach as many merchants as possible to increase this service's convenience. E-commerce businesses in Sri Lanka can cooperate with many different business sectors from convenience stores, retail stores, supermarkets, public transportation, hospitals, airlines, and hospitality to enhance service and approach many more users. Encourage people to use less cash and use more of the applications and promote the products related to the pandemic situation so they can get more bonus points in the e-wallet payment system.

### **1.4. Research Objectives**

"To Empirically Examine, is there a direct relationship between Predictors of behavioral intentions (attitude, perceived usefulness, perceived ease of use, perceived cost, perceived risk, Subjective norms and Facilitating conditions) and the usage of an e-wallet."

## **2. LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT**

### **2.1. Behavioral Intention to Usage e-wallet**

An E-wallet is an application that allows an individual to make any e-commerce transactions by storing their credit card information. Payment through an e-wallet considers one of the most prominent transaction methods because electronic commerce via digital wallet has the advantage of the ease of use, flexibility, and protection (Uddin, 2014). As the number of e-payment systems increases, e-wallet has already gained fame by providing its vast number of services in the riding sector, food delivery, and bill payments (Rosnidah, 2019). The intention is a course of action that individual aims to achieve (Zhao, 2010). Behavioral intention is a person's subjective probability intended to attain within a period (Ajzen, 1988). An E-Wallet is a new form of payment system that is widely accepted. Many researchers identified a significant relationship between behavioral intention and advanced technology use (Barry and Jan 2018; Faqih and Jaradat, 2015; Jaradat, 2013). Consumers are altering their payment methods into contactless payment methods; e-payment channels, contactless cards, and e-wallets are safe methods that help avoid physical contact with surfaces (AP, 2020).

The global payment system has shown remarkable resilience in fighting disease. The general public continues to rely on payment systems and providers, and there is little reporting of critical infrastructure. Khosla (2020) concludes as the far-reaching spread of coronavirus has emerged as one of the biggest threats to the economy and financial markets worldwide. These days' small grocery stores, OTT, online gaming, e-learning, ATM outsourcing, and Broadband use also encourage digital payments. Behavioral intention positively and significantly affects actual use (Mun and Hwang, 2003. in 2003, Venkatesh developed an extended Technology Acceptance Model. The model's findings reveal that behavioral intention to use has a significant and positive influence on user behavior. And the growth in online shopping is also a key driver to push consumers toward digital payments (Velychko, 2020). This trend toward contactless payment becomes a trended behavior globally due to different calls to use e-payments to fulfill financial transaction requests (GlobalData, 2020). Contactless payments have been grown rapidly during the COVID-19 outbreak as there is a perception that it is a more hygienic payment method than other traditional payment methods (McKinsey, 2020). An E-wallet is a mobile payment in the electronic wallet category that can make non-cash transactions, does not use media such as cards to make payments, and can carry out electronic media transactions such as mobile devices (Olsen, 2011). Gringoli (2020) analysis at a glance:

- After spending has dropped, many payment companies are focusing first on improving their business.
- Due to the rapid transition of digital payments, challenges and opportunities are faced by many people. Regulators, for example, cut down on currency notes and encouraged non-contact settlement.

- Leading companies have begun to take steps to put them in a better position for future economic stability.
- Some are moving toward gaining the trust of buyers and sellers. Those who can afford to pay continue to make a case to gain market share. And some are developing their own credit risk assessment tools and effective financial solutions.

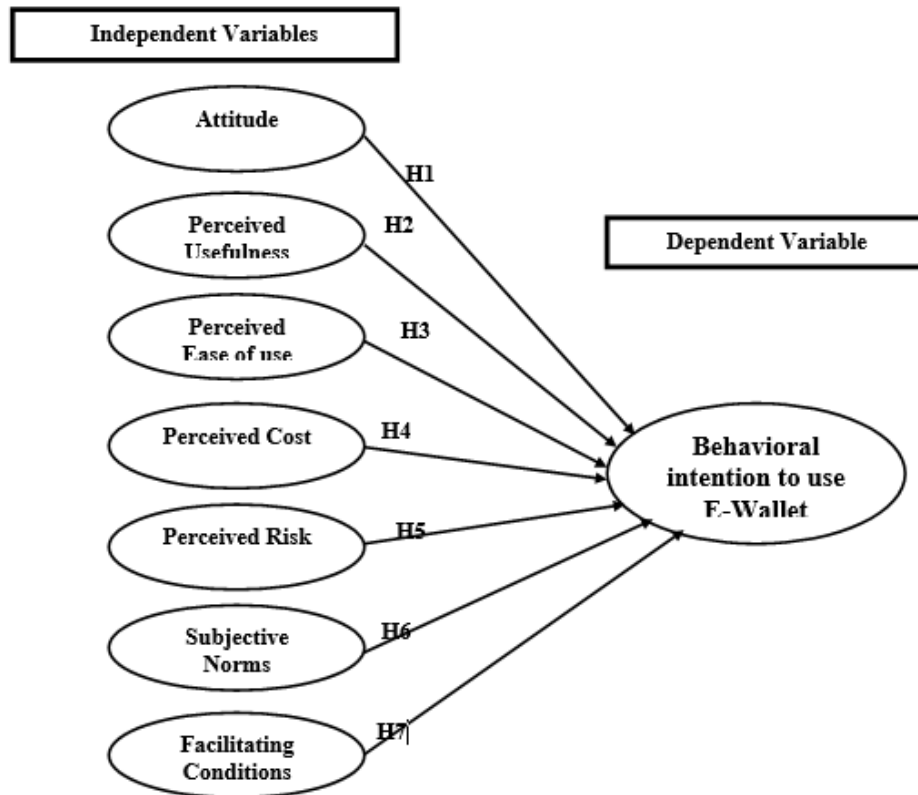
## **2.2. Underpinning Theory**

The Technology Acceptance Model (TAM) It developed by Davis (1989), and the Theory of Planned Behavior (TPB) was developed by Ajzen (1985). These theories use as a foundation of technology adoption studies within a different context (Oliveira, T. & Martins, 2015; Kohl, Eydgahi, 2017; Chhonker, 2017), where TAM is widely used for assessment of how people make decisions regarding new technology adoption (Chhonker, 2017). To study the acceptance and usage intention of new technology, TAM considers a well-recognized extension in academic research (Aydin, 2016). In 1991 Ajzen, developed the Theory of Planned Behavior (TPB) and explained one factor that determines the behavioral intention of the person's attitudes towards that behavior (Lai P.C., 2017). As supported by Kohl, S. & Eydgahi, A. (2017), both TAM and TPB will continue to serve as the fundamental theories for researchers seeking to study the factors influencing consumers' adoption intentions of various technologies.

In addition to TAM, the unified theory of acceptance and use of technology or UTAUT used to identify motivation use of technology developed by Venkatesh (2003). UTAUT theory developed through a comprehensive synthesis and an integration of the theory of reasoned action (TRA), the Technology Acceptance Model (TAM), motivational models (MM), the theory of planned behavior (TPB), combined TAM and TPB (C-TAMTPB), the model of the PC utilization (MPCU), innovation diffusion theory (IDT) and social cognitive theory (SCT). And it contains four predictors of users' behavioral intention, plus there are performance expectancy, effort expectancy, social influence, and facilitating conditions (Lai P.C., 2017). All in all, TAM, TRA, TPB, and the extension of TAM (TAM2 and TAM3), UTAUT, were used over the years by researchers to explain adoption technology systems (Lai P.C., 2017). Current research topics are relevant to TAM, TPB and UTAUT, therefore, we combine all three theories such as TAM, TPB, and UTAUT. We propose the model of consumer's behavioral intention to use e-Wallet payment system in Sri lanka. Much research developed and modified based on TAM, TPB and UTAUT model to get variables that correspond to the context of their research.

### 2.3. Development of Conceptual Framework

Figure 1: Conceptual Framework



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### 2.4. Antecedents

#### 2.4.1. Attitude

Attitude is a positive or negative feeling about performing the target behavior (Momani & Jamous, 2017). Theory of Planned Behavior (TPB) and theory of planned behavior (DTPB) have used attitude as an independent variable as a predictor to see the intention to use new technology (Momani, A. & Jamous, M. 2017). Other findings show that attitude is the main factor which influences customer to adopt to e-wallet payment method. (Teng, 2018). Therefore, we assume that mentality significantly affects behavioral intention to use the e-wallet payment method.

*H1: There is a significant impact of Attitude on intention to use an e-wallet*

#### 2.4.2. Perceived Usefulness

The volume that a person believes that using a particular system would enhance their job performance (Davis, D. 1989 p.320). Most of the time, perceived usefulness is a fundamental and distinct construct



influential in using information technology (Davis, D. 1989). Chansaenroj, P. & Techakittiroj, R. (2015), where the perceived usefulness has a significant influence on behavioral intention to use the e-wallet payment method. To prove that perceived usefulness has a considerable impact on behavioral intention, use e-wallet payment method researcher-developed following hypothesis.

*H2: There is a significant impact of Perceived usefulness on intention to use an e-wallet*

#### **2.4.3.Perceived Ease of use**

Perceived ease of use is as “the degree to which a person relies on that accessing a particular system may free of effort” (Davis,1989 p.320)’. According to the previous findings, perceived ease of use affects the behavior intention in the USA, China, India, and Germany (Shankar, A. & Datta, 2018; Zhang, 2018; Pousttchi, K. & Wiedemann, D. 2007). We also like to use this to see the relationship to the intention to use the e-wallet payment method. Therefore, Researcher come up with our third hypothesis H3

*H3: There is a significant impact of Perceived ease of use on intention to use an e-wallet*

#### **2.4.4.Perceived Cost**

Perceived cost refers to "overall expenses related with the adoption of particular advanced technology platform" (Pathirana & Azem, S. 2017, p.70). Cheong and park (2005) found the perceived cost to be an influential factor in predicting behavioral intention to use mobile commerce. and in South Korea (Phonthanukitithaworn, Moreover, according to Phonthanukitithaworn, 2015 many researchers found that perceived cost can use as the extended construct of TAM. (2015). Phan (2020) mentioned perceived cost and concluded that this factor did not influence mobile payment service's consumer intention. Based on these different viewpoints the important to identify whether perceived cost impact on use e-wallet payment method. So researcher-developed perceived cost as hypothesis H4 is as followed:

*H4: There is a significant impact of Perceived cost on intention to use an e-wallet*

#### **2.4.5.Perceived Risk**

Perceived risk means a feeling of uncertainty regarding possible negative consequences of using a product or service (Bauer, 1967 as cited by Phonthanukitithaworn, 2015). Chansaenroj & Techakittiroj (2015) shows that perceived risk influences behavioral intention to use the e-wallet payment method. But according to some research about the perceived risk mentioned, perceived risk has no significant effect on behavioral intention to use the e-wallet payment method (Phonthanukitithaworn, 2015). Therefore, the researcher developed that perceived risk significantly impacts behavioral intention to use an e-wallet payment method in hypothesis H5.

*H5: There is a significant impact of Perceived Risk on intention to use an e-wallet*

#### **2.4.6. Subjective Norms**

Subjective norm is considered one of the most used independent variables across the studies from TAM and UTAUT (Williams, 2015). Compared to China, subjective norms influence behavior intention and are more potent than the USA (Zhang, 2018). In Qatar, the personal standard also affects the choice to use e-wallet payments-especially female users and the younger generation (Khan, 2015). Like South Korea, the subjective standard also involves using e-wallet payments (Lin, 2019). In the research of Liang (2016), she found that personal standard significantly influences consumer intention of e-wallet payment usage. However, in the study of Phan (2020), they indicated that emotion has the least influence. Therefore, the subjective norm is essential to use as an independent variable in our hypothesis H6.

*H6: There is a significant impact of Subjective Norms on intention to use an e-wallet*

#### **2.4.7. Facilitating Conditions**

Facilitating conditions, where it referred to "the volume to which a person relies on that an organizational and infrastructure exists to support the use of the system" (Venkatesh, 2003, pp. 453). There is a direct relationship from facilitating conditions to behavioral intention over and above the existing relationship between facilitating conditions and technology use (Venkatesh, 2012). the effect of facilitating conditions on behavioral intention to be moderated by age, gender, and experience (Venkatesh, 2012). Moreover, gender and expertise have a collective impact on the linkage between facilitating condition and intention to use (Venkatesh, 2012).

*H7: There is a significant impact of Facilitating Conditions on intention to use an e-wallet*

### **3. METHODOLOGY**

#### **3.1. The Study Sample & Survey Implementation**

A survey method uses to collect data from the users of E-Wallet in the sample. This study sample comprised 500 users of the E-Wallet payment method in Sri Lanka. Further, the data were collected from February to March 2021 through convenience sampling methods. Finally, each completed survey was checked immediately and entered for data analysis. Totally 500 surveys were distributed to users, out of which 480 were completed and returned. Of these, 20 surveys had missing data; hence they were discarded. A total of 480 usable surveys were considered for further analysis.

#### **3.2. Measure and Instrument Development**

A self-administered questionnaire uses to collect the data. This analysis's survey questionnaire is formulated based on TAM, TPB & UTAUT theory items and adapted mainly (Barry and Jan 2018;

Davis, Bagozzi, and Warshaw, 1989; Sadi and Noordin, 2011, Venkatesh, 2012). All the measurement items were measured using a five-point Likert scale (i.e., 1= strongly disagree to 5= strongly agree) to express the questionnaire's agreed statement using the English language only. Data was collected via an online survey (i.e., sending Google form link to WhatsApp, Viber, email). For this study's purpose, 20 sets of questionnaires were distributed to the university students to conduct a Pilot Study to get comments and feedback. The questionnaire was further modified to improve clarity and comprehensibility based on the comments and feedback received from the respondents. Furthermore, the researcher conducted a regression as a data analysis technique. The data analysis for this study conduct through Statistical Package for Social Science (SPSS) version 20.0 was used to analyze the data. Initially, the study was calculated Cronbach's Alpha ( $\alpha$ ) Reliability to measure the measurement's internal consistency. Hair (2010) recommends that the value of Cronbach's alpha should exceed 0.70. And the Kaiser-Meyer-Olkin (KMO) Measure for all constructs is reported to be above 0.5, fulfilling the sample adequacy (Heppner and Heppner, 2004).

#### 4. ANALYSIS AND RESULT DISCUSSION

Cronbach's Alpha coefficients of each construct are presented in Table 1 as all the values of Cronbach's Alpha for each construct are above 0.8. It mentions the factors in this study considered to be very strong (Malhotra & Peterson, 2009), and the measures used here are consistent enough for the study. And the Overall Cronbach alpha value 0.895, which is indicating the right internal consistency among the construct and the variables that are considered very strong (Hair, 2010). And Validity test is used to assess the construct for this research study accurately. Table 3 indicates that the Kaiser-Meyer- Olkin measure of sampling adequacy is 0.903. it shows sufficient inter-correlations, while Bartlett's Test of Sphericity is significant (Chi-square = 1510.215,  $p < 0.01$ ). Both results are indicating that the constructs are valid (Heppner, 2004).

Table 1: Reliability Test

Items	Cronbach's Alpha Value
Attitude	0.880
Perceived usefulness	0.891
Perceived ease of use	0.872
Perceived cost	0.810
Perceived risk	0.886
Subjective norms	0.840
Facilitating conditions	0.850
e-wallet usage (Behavioral intention)	0.862

Furthermore, the Validity test is used to assess the construct for this research study accurately. Table 3 indicates that the Kaiser-Meyer- Olkin measure of sampling adequacy is 0.903. It shows sufficient inter-

correlations, while Bartlett's Test of Sphericity is significant (Chi-square = 921.250,  $p < 0.01$ ). Both results are indicating that the constructs are valid (Heppner and Heppner, 2004).

Table 2: KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.965
	Approx. Chi-Square	921.250
Bartlett's Test of Sphericity	df	45
	Sig.	.000

The Pearson correlation coefficient presents to explain the relationship as well as the statistical significance between the factors. Among those factors, such as Attitude, perceived usefulness, perceived ease of use, perceived cost, perceived risk, Subjective norms, Covid – 19, and Facilitating conditions have a significant and positive relationship to use an e-wallet as the results in Table 4 suggest the Test of Collinearity. Two primary methods were used to determine the presence of multi-collinearity among independent variables in this study. These methodologies involved calculating a Tolerance test and variance inflation factor (VIF) (Ahsan, 2009). The maximum acceptable VIF value would be 5.0; a VIF value higher than 5.0 indicates a problem with multi-collinearity (Hair, 2003). Thus, Table 4 revealed that none of the tolerance levels is less than 1, and VIF values are entirely below 5. It can see clearly that the VIF range between 1.837 and 2.425 values is below five. Another hand, the tolerance values range between 0.412 and 0.544. Thus, the measures selected for assessing independent variable in this study does not reach levels indicate of Multi Collinearity.

Table 3: Test of Collinearity

Variable's Number	Variables	Tolerance	VIF
1.	Attitude	.414	1.094
2.	Perceived usefulness	.435	1.052
3.	Perceived ease of use	.530	1.082
4.	Perceived cost	.516	1.083
5.	Perceived risk	.467	1.040
6.	Subjective norms	.412	1.076
7.	Facilitating conditions	.465	1.100
8.	Behavioral intentions	.510	1.072

Table 4 presents the demographic profile of the respondents. The sample user's demographic profiles were representative of all the E-wallet users in Sri Lanka.

Table: 4 Demographic profile of the respondents

Item	No	%
<b>01. Sex</b>		
• Male	330	54.0
• Female	270	46.0
<b>02. Educational level</b>		
• Ordinary level	237	47.4
• Advanced level	162	32.4
• Diploma	35	7.0
• Undergraduates	25	5.0
• Graduates	41	8.2
<b>03. Year of usage</b>		
Less than 1 Year	200	40.0
1 – 3 years	140	28.0
3 – 5 years	90	18.0
More than 5 years	70	14.0
<b>04. Type of Gateway</b>		
Genie	54	10.8
eZ Cash	160	32.0
Mcash	148	29.6
FriMi	25	5.0
Virtual Wallet	45	9.0
Upay	35	7.0
iPay	33	6.6

Based on the above descriptive analysis table, male (54%) respondents have participated in this study than female (46%). Moreover, most of the respondents are contain ordinary level qualifications (47.4%). Furthermore, most of the respondents use this e-wallet for less than one year (40%). And also, more people have been using the eZ cash payment gateway for their transactions (32%).

Table 5: Descriptive statistics and correlation matrix for study variables.

	F1	F2	F3	F4	F5	F6	F7	F8
F1 Pearson Correlation Sig. (2-tailed)	1							
F2 Pearson Correlation Sig. (2-tailed)	.635** .000	1						
F3 Pearson Correlation Sig. (2-tailed)	.158 .272	.071 .626	1					
F4 Pearson Correlation Sig. (2-tailed)	.499** .000	.459** .001	.383** .006	1				
F5 Pearson Correlation Sig. (2-tailed)	.149 .302	.097 .504	.218 .128	.087 .547	1			

F6	Pearson Correlation	.075	.215	.034	.150	.184	1		
	Sig. (2-tailed)	.605	.134	.816	.297	.201			
F7	Pearson Correlation	.076	-.058	-.131	.173	.038	-.113	1	
	Sig. (2-tailed)	.598	.689	.366	.230	.796	.433		
F8	Pearson Correlation	.757**	.074**	.425**	.650**	.710**	.012**	.053**	1
	Sig. (2-tailed)	<b>.002</b>	<b>.870</b>	<b>.001</b>	<b>.000</b>	<b>.000</b>	<b>.425</b>	<b>.238</b>	

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

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

- F1- Attitude
- F2- Perceived usefulness
- F3- Perceived ease of use
- F4- Perceived cost
- F5- Perceived risk
- F6- Subjective norms
- F7- Facilitating conditions
- F8- e-wallet usage

Based on table no – 05, the researcher identified the significant association between behavioral intention for the usage of e-wallet and its antecedents. In a nutshell, four variables contain a close association with their dependent variable among all seven predictors. For example, factors 1 (Attitude), 3 (Perceived ease of use) 4 (Perceived cost) and 5(Perceived risk) has a significant association with e-wallet usage intention. And other factors such as 2 (Perceived usefulness), 6 (Subjective norms) and 7 (Facilitating conditions) do not contain much association with the usage intention of the e-wallet.

#### 4.1. Hypothesis Testing

Table: 06 Regression Analyses and Hypothesis Testing

Constructs	Coefficients Beta	t	Sig.	Conclusion
Attitude	0.318	5.721	.000	<b>H1: Accepted</b>
Perceived usefulness	-0.011	-.275	.870	<b>H2: Rejected</b>
Perceived ease of use	0.123	2.312	.001	<b>H3: Accepted</b>
Perceived cost	0.152	3.751	.000	<b>H4: Accepted</b>
Perceived risk	0.175	3.475	.000	<b>H5: Accepted</b>
Subjective norms	0.164	2.452	.000	<b>H6: Rejected</b>
Facilitating conditions	-0.210	-1.421	.238	<b>H7: Rejected</b>

Table: 07 Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.773 <sup>a</sup>	.882	.777	.233

Table: 08 ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	6.409	480	.916	40.85	.000
	Residual	67.086	480	.280		
	Total	73.495	480			

*R Square* = .882

*Adjusted R Square* = .777

*R* = .773

*F Value* = 40.85

*Sig. F* = .000

*Durbin-Watson* = 1.820

The multiple regression analysis used to test hypotheses, and this multiple regression analysis is to predict the single dependent variable by a set of independent variables (Heppner, 2004). The purpose of regression analysis is to determine the significant impact or influence of independent variables on the dependent variable (Ndubisi, 2006). Table 6 indicates the results of the regression analysis and hypotheses testing. Based on the output of Table6, the value of the adjusted R square is 0.777. Hence, the work suggested that this model explained 77.7 percent of the behavioral intention variance to usage e-wallet. Consequently, is influenced by the factors of Attitude, perceived usefulness, perceived ease of use, perceived cost, Perceived risk, Subjective norms and Facilitating conditions. Furthermore, the other 22.3% of the model explained by other factors can influence consumer's behavioral intentions to use an e-wallet. Finally, Attitude, perceived usefulness, perceived ease of use, perceived cost and Perceived Risk, had significant positive influences on user's intention e-wallet usage. Hence *H1, H3, H4 and H5* were accepted. Thus, *H2, H6 and H7*, and *H9* (Perceived usefulness, Subjective norms, and facilitating conditions) were not accepted.

## 5. DISCUSSION AND CONCLUSION

The development of technology in the modern era has been many sophisticated technologies that can help people carry out various daily activities. Internet network that allows its users to find out information and increase their knowledge. With an e-wallet, the users can make payments quickly and practically. An E-wallet defines as a convenient shopping tool without the need to carry cash (non-cash) that while doing other activities (Pranowo, 2016). During the Covid-19 pandemic is in Sri Lanka in March 2020, the central and local governments issued policies. These policies consider social distancing, working from home, eliminating worship activities, asking people to stay at home, and reducing economic activities outside the house to the procedure for physical distancing and large-scale social restrictions. Doing many transactions switches to digital payments to avoid physical contact between sellers and buyers.

E-wallets are also a digital payment that is suitable for use during the current Covid-19 pandemic. It can help users make payments without making direct physical contact with the seller and no need to carry cash to transmit the pandemic covid-19. By using e-wallets, users can create various transactions easily and practically. And offline stores and online stores using their smart-phones have the same functions as credit or debit cards that can make payments for food products in restaurants, online shopping (such as buying clothes, bags, and shoes), plane and train tickets, etc. As a result of the digital platform, consumers can easily download The e-wallet application on their smart-phone and easily make payments via smart-phone by scanning a barcode from the destination merchant who has applied the amount using an e-wallet. The explanation before shows that there are many e-wallet users, especially during the current Covid-19 pandemic. Many people often make transactions digitally to prevent the spread of the covid-19 pandemic and because everyone has many daily needs and always meets with making transactions.

Since 2016, the world witnessed the highest volumes of 530 billion dollar non-cash transactions in the last two decades. The dominant of this growth is the emerging Asian market, which accounted for 32% globally. Through this exponential growth, the emerging market expects to contribute as half of the global non-cash transactions market in the future ("World Payments Report 2019", 2020). The development of the dynamic cashless revolution in such an attractive market as the emerging market (Capgemini Research Institute, 2019) promoted us to research the usage of e-Walt in this area. Using and how a user decides to choose cashless payment methods may vary between countries and regions and under different factors.

Therefore, the researcher uses this chance to integrate current elements to the changes in behaviors and trends that affect people in Sri Lanka. In a typical consumer behavior theory, cultural trends, social trends, lifestyle, and motivation play a significant role in consumer buying behavior (Yuvaraj, S. 2016). To be precise, Sri Lanka context, there is a lack of studies in this area. Moreover, there are many significant factors to understand the behavioral intention to use cashless payment methods. Many research papers referred to the factors influencing the usage of cashless payment methods. However, they used different independent variables to determine what influences cashless payment based on their chosen theory; some could be a mixture of many ideas altogether. It is crucial that we will be using factors only what is necessary and know what is not relevant.

The research results could help many firms predict the customer's behavior and understand who to target and what strategies to perform. The Covid - 19 impacts not only human life but also a global business. The World Health Organization (WHO) estimates the case fatality rate to be around 2% (WHO, 2020), but Covid-19's overall burden remains uncertain. According to Gupta (2020), many countries usually declare their emergency to convey a sense of urgency about the situation. Then, depends on the extent



of the problem, the government will apply the most optimal solution to avoid viral transmissions. And the most common answer is known as restricting physical contact between individuals. Social distancing researchers prefer to test the impact of behavioral intention on the cashless payment method in Sri Lanka. For example, cashless payment method shares in Sri Lanka are still not significant. There is a possibility that the Sri Lankan may change their cash-based habits into cashless payment usage during this pandemic to ensure hygiene issues. Therefore, this research will largely contribute to the e-wallet payment industry in general.

### **5.1. Limitations and Directions for Future Research**

The present study only contains some limited variables. Many factors influence e-wallet usage, so the present study suggested further including few more variables to examine electronic wallets' usage intention. Distinct features such as trust and reliability are recommended to apply in the research on behavioral intention to use the electronic wallet. The study was only conducted in the Sri Lankan context. Future research can be replicated using the same concept but different context to study the behavioral intention to use an e-wallet. The behavioral intention cannot wholly reflect the action in reality. Therefore, the future study needs to indicate the proportion of people willing to use mobile payment compared to the assumed behavioral intention.

The present study only considers the customer's perspective. Additionally, future lessons can consider having professional interviews with mobile payment companies or providers, allowing the research to understand the management perspective. Future studies are highly recommended to include the Qualitative research method into their homework to measure the respondent answers in numbers and words.

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