

## **Factors Affecting Intention to use Cryptocurrencies with Special Reference to the University Students in Sri Lanka**

Chathurika, D.M.D.

*Department of Marketing Management, Sabaragamuwa University of Sri Lanka,  
[d.m.d.chathurika@gmail.com](mailto:d.m.d.chathurika@gmail.com)*

### **Abstract**

Innovation in financial economics and other technological development has increased the demand for digital currencies. Crypto currency refers to tokens or digital currency based on cryptographic technology used to perform a range of financial transactions such as payments or store of value on the block chain technology. The main objective of this study is to apply the Extended Technology Acceptance Model to predict behavioral intention to use crypto currency. The number of users in crypto currencies across countries is continuing to grow. However, the number of users in crypto currencies in Sri Lanka is limited. Therefore, this study analyzed what are the factors that influence on intention to use crypto currencies in Sri Lanka. A survey instrument was used to collect quantitative data for predicting the use of crypto currency from the 125 postgraduate students of MSc/diploma in information technology in the University of Moratuwa. A Stratified sampling method was used to distribute questionnaires. Regression and correlation analysis through SPSS software was conducted to achieve the research objective. The findings indicate that Perceived Usefulness, Perceived Ease of Use, Perceived Trust and Awareness positively impact the Intention to Use Crypto currency. Overall, the results of the study showed that the model has a good model fit and can be used to explain the theory. There are limited researches done for Sri Lankan context for crypto currencies by applying Technology Acceptance Model into Fintech. In Addition to that this study useful for understanding human behavior related to the Fintech in emerging markets.

**Keywords:** Block chain Crypto currency, Fintech, Technology Acceptance Model

### **INTRODUCTION**

Currency is a critical factor in the economy which helps to conduct reliable agreements between citizens around the world. The Central Bank of Sri Lanka has the sole right and authority to issue currency in Sri Lanka as stipulated in the Monetary Law Act No. 58 of 1949 (CBSL, 2020). So, people use money issued by the central bank to do their transactions. But the emergence of internet technologies greatly impacts on consumer's daily activities. Adoption and implementation of Internet, social networks, mobile and electronic payments, blockchain technology and digital currencies are a driving force and strategic asset for many organizations. Therefore, today many people move towards online platforms to accomplish their daily activities with technology innovations. Cryptocurrency refers to tokens or digital currency based on cryptographic technology used to perform a range of financial transactions such as payments or store of value on the blockchain technology. Central Bank defined the term "virtual currencies" is commonly used to refer to digitally

created representations of value that are issued by private developers and denominated in their own unit of account (CBSL, 2020). Several names for this context can be identified such as Cryptocurrencies, Digital Currencies and Virtual Currencies which represent the same meaning. However, the common name used in the academic literature is cryptocurrency. The first commercial transaction with the first cryptocurrency in 2010 marked the start of a revolution in transactions (Oliva, et al., 2019). Cryptocurrencies, such as Bitcoin, Ethereum, Litecoin, Ripple and hundreds of others, have emerged as an alternative form of money (Nuryyev, et al., 2018).

Plenty of opportunities can be identified related to cryptocurrencies such as fast, efficient, traceable, and secure transactions. In addition to that Almuraqab (2019) stated that cryptocurrency promotes new means of payment that claim various benefits, such as peer-to-peer transaction systems, full decentralization, lower transaction costs, higher levels of security, elimination of chargeback risks, better ease of use, and high levels of support for mobile devices. On the other hand, drawbacks also can be identified, such as inherent risk, uncertainty, the technological and financial difficulty of using them, and the uncertain social perception of owning them (Oliva, et al., 2019). However, blockchain and cryptocurrency are disruptive technologies which difficult to predict future impacts. Blockchain technology used to enhance the transparency and reliability of transactions done through cryptocurrencies. Blockchain technology is known as a secured platform for recording transactions (Albayati, et al., 2020).

The people are a critical component of the digital financial system and their preferences to use cryptocurrencies will decide its future (Shahzad, et al., 2008). The Digital literacy rate for generation Y is higher than the other generations (Clement, 2019). In addition to that according to Yu (2020), Millennials are particularly open to embracing new technology to create opportunities for themselves - blockchain, the tech behind cryptocurrency, is no different as the first generation to grow up with digital technology. Bhilawadikar, Suhas & Ema (2020) found that awareness and aspiration to invest in cryptocurrencies among millennials is increasing. Therefore, this study mainly concerns about university students who are belong to generation Y. Therefore the main purpose of this study is to understand what are the determinants influencing on University students intention to use cryptocurrencies in Sri Lanka by applying the Technology Acceptance Model.

### **Problem Statement**

Sri Lanka experienced the highest cryptocurrency mining encounters across the region in the last year and this was 1.7 times higher than the regional average (Microsoft, 2020). As well as selling or buying cryptocurrencies in Sri Lanka is not against the law (Anon., 2019). The number of users in cryptocurrencies across countries is continuing to grow. The adoption of cryptocurrency payment is

increasing rapidly, with companies such as Microsoft, PayPal, eBay, Dell, and Expedia (Nuryyev, et al., 2018). However, the number of users in cryptocurrencies in Sri Lanka is very limited. Therefore, this study analyzed what are the factors that influence on intention to use cryptocurrencies in Sri Lanka. Shahzad, GuoYi, Jian & Sha (2008) stated that ambiguity in peoples minds regarding these cryptocurrencies, will not allow the adoption of this latest technology. On the other hand, the importance of digital currencies cannot be underestimated, but cryptocurrencies are not generally recognized as a type of currency or as a pillar of the financial system and medium of the transaction (Almuraqab, 2019).

There is a need to investigate whether cryptocurrencies will be accepted and adopted as a trading instrument with or without traditional currencies and the conventional payment systems (Nuryyev, et al., 2018). A recent innovation for which acceptance and adoption behaviour is poorly understood-cryptocurrency payment in current literature (Nuryyev, et al., 2018). Several studies have looked at the influence of these variables on the acceptance of financial technologies, or fintech, but no consensus has been reached regarding their influence on the intention to use them (Oliva, et al., 2019). Moreover, there are very limited research done for Sri Lankan context. Therefore, this study analyzed what are the factors affecting on university students' intention to use of cryptocurrencies in Sri Lanka?

### **Research Question**

What are the factors affecting on university students' intention to use of cryptocurrencies in Sri Lanka?

### **Research Objective**

Identifying the factors affecting on university students' intention to use of cryptocurrencies in Sri Lanka.

## **LITERATURE REVIEW**

### **Technology Acceptance Model**

Several theories can be identified for the human behaviour and behaviour intention in the current literature which analyzes people's behavior such as Theory of Reasoned Action, Theory of Planned Behaviour. TRA became a base for Technology acceptance model (TAM) which aims to explain information technology and information systems adoption behaviour (Davis, 1989). TAM states that adoption behaviour is determined by the intention to utilize a particular system determined by the perceived usefulness and ease of use. TAM states that information technology users act rationally during their decision whether to use technology or not. User's intention to use new technology

depends on their beliefs of perceived usefulness (PU) and perceived ease of use (PEU) of the technology (Nuryyev, et al., 2018). The TAM is a comprehensive model to predict the intention of individuals to use innovative technology (Shahzad, et al., 2008).

TAM became the base for several models of innovation technology acceptance (Nuryyev, et al., 2018) such as TAM2 which includes social and organizational variables, Mobile Phone Technology Acceptance Model, Unified Theory of Acceptance and Use of Technology. According to Davis, and Venkatesh (1996) both perceived usefulness and perceived ease of use were found to have a direct influence on behaviour intention, thus eliminating the need for the attitude construct. Further Davis and his associates additionally found that attitude did not fully mediate the perceived usefulness and the perceived ease of use. Based on these complementary findings, a parsimonious Extended TAM was suggested, which removed the attitude construct from the model (Granic & Marangunic, 2015). Therefore, researcher has selected Extended Technology Acceptance Model (TAM2) as an underpinning theory for this study. By eliminating the attitude construct and introducing the behavioral intention construct, the results obtained for the direct influence of perceived usefulness on the actual system use could be explained (Davis & Venkatesh, 2000).

### **Blockchain Technology**

Blockchain is “a distributed database of records or a public ledger of all transactions or digital events that have been executed and shared among participants” (Crosby, 2016). In other words, the blockchain is a digital system of accounting records that records the details of all transactions according to a mathematical set of rules to prevent illegal sabotages (Heidari, et al., 2019). Creating transparency is the most important feature of this blockchain which facilitate for cryptocurrencies. Other features of blockchain technology are peer to peer, scalability, security (Heidari, et al., 2019).

### **Intention to Use Cryptocurrencies**

Fishbein and Ajzen (1980) defined intention to use as “the strength of one’s intention to perform a specified behaviour”. Financial innovation adoption refers to the consumer’s psychological state about their intention to use cryptocurrency as a means of exchange and store of value (Mazambani & Mutambara, 2019). The intention of accepting cryptocurrency will eventually lead to the actual use behaviour (Yeong, et al., 2019). Many scholars found that antecedents of intention to use cryptocurrencies and selected factors are described in the next section.

### **Perceived Ease of Use**

Perceived ease of use (PEOU) is the degree to which a person believes in the ease of use of a technology or system (Davis, 1989). Shahzad, GuoYi, Jian & Sha (2008) stated that individual’s

decision regarding acceptance of Cryptocurrency as a source of money depends on its user-friendliness and timely access. Perceived ease of use in construct refers to the level to which the user expects and believes that using this service or technical system could be free of effort (Albayati, et al., 2020).

### **Perceived Usefulness**

Davis (1989) argued that perceived usefulness (PU) is the extent to which an individual believes that the use of a technology or system could be valuable for them and may improve their performance. Individual believes adopting the latest technology will improve his or her job performance, which directly or indirectly beneficial to career growth (Shahzad, et al., 2008).

### **Perceived Trust**

Trust is critical in the development and acceptance of any system or technology, as it creates a positive attitude between citizens (Pavlou & Fygenson, 2006) In addition to that with time, perceived trust (PT) enhances end user interaction with technology. Shahzad, GuoYi, Jian & Sha (2008) stated that Trust is a key factor in the development and adoption of various information systems by creating a positive attitude among society. Moreover Perceived trustworthiness has a significant contextual influence to enhance the adaptability of a system. Building a strong trust bridge helps consumers overcome perceptions of risk and insecurity and pushes them to feel safe in interacting with the often unknown, socially distant service provider over a new medium (Albayati, et al., 2020).

### **Awareness**

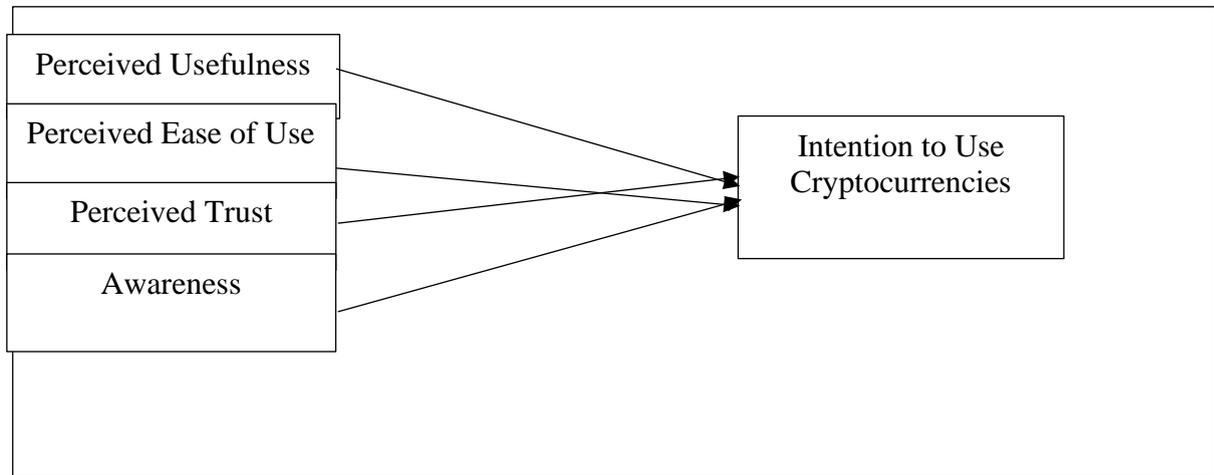
Furthermore, it is a critical factor in recognizing technology's features, benefits, and usage (Almuraqab, 2019) as well as people should be aware of a digital currency (benefits and usage) before they actually adopt it. The involvement of technology innovation in economic development can only be measured in actual wisdom if it is broadly diffused. Diffusion is also based on several factors of individual decision-making (Shahzad, et al., 2008). Awareness regarding technology and its benefits of use is a core factor in technology diffusion.

## **METHODOLOGY**

### **Conceptualization**

By using both the TAM2 model and previous research models (Shahzad, et al., 2008) the researcher was able to construct the following research framework.

Figure 3 Conceptual Framework



### Research Philosophy

Epistemology research paradigm has been selected for the study as the epistemology view is positive in which we can only get knowledge about reality by following the scientific method of testing hypotheses (Saunders et al., 2009).

### Research Approach

The principle purpose of this study is to investigate the factors that affecting on intention to use cryptocurrencies in Sri Lanka. Quantitative method was chosen by the researcher as it ideally suited with the nature and purpose of this study explaining the causal relationship between variables, establishing controls for testing hypotheses

### Research Design

Explanatory research design is used to measure the relationship of independent and dependent variable and the researcher verifies insights and tests clearly defined hypotheses in order to investigate the factors impact on intention to use cryptocurrencies in Sri Lanka.

### Population and Sampling

Out of the Generation Y people, University students have been found to be frequent users of technology. Hence the researcher has selected post graduate university students as a population who has the highest digital literacy rate in Sri Lanka. Oliva, Borondo, & Clavero (2019) mentioned that in order to survey people likely to have a reasonable understanding of these technologies, therefore they focused on college-educated adults. Researcher has selected postgraduate students of MSc/diploma in information technology in University of Moratuwa because they are the people who

have the highest technological knowledge and purchasing power than conventional university students. It has 197 students and it is impractical and impossible to use entire population to obtain information for this research therefore a section of the entire population would be selected to perform the research more effectively. Researcher divided total population based on degree program wise through a stratified sampling method. Morgan table was used to determine the sample size of the total respondents (Krejcie & Morgan, 1970). Population is between 190-200 then sample size calculated as 125.

### **Questionnaire Design**

Questionnaire survey has been used in this study. Questionnaires are defined as the series of questions aim to gather prompt and accurate information from respondents. Thus, in order to perform a good research, a good questionnaire must be designed. For this study questionnaire consist of three sections. Section 1 consist of filtering questions and section 2 consist questions that are reveal respondents' demographic variable and section 3 of questions regarding independent variable and dependent variable. The respondent will rate the questions by using seven-point Likert-type scale ranging from 1- strongly disagree to 7- strongly agree.

### **DATA ANALYSIS AND PRESENTATION**

The stratified sampling method is used to distribute questionnaires and the researcher distributed 125 questionnaires and 123 questionnaires were received. Therefore, the response rate was 98%. SPSS software is used to analyze the data collected from self-administrative questionnaires.

### **Sample Profile of the Study**

Out of 123 respondents, 68 (52.8%) males and 55 (47.2%) females and 114(93.2%) are Sinhalese, 1(1%) are Tamils, 2(1.4%) are Muslims, and 8(4.4%) are Christians. Furthermore, according to the filtered question, out of the sample 98% of the respondents have intention to use digital currencies.

### **Validity and Reliability**

According to Sekaran (2003) suggestion, to exist the reliability in the instrument, value of the Cronbach's Alpha coefficient should be equal or greater than 0.7.

Table 1: Reliability Analysis

Variable	Cronbach's Alpha value	Comment
Perceived Ease of Use	0.752	Accepted
Perceived Usefulness	0.842	Accepted
Perceived Trust	0.740	Accepted
Awareness	0.825	Accepted
Intention to Use Cryptocurrencies	0.910	Accepted

Source: (Survey Data 2020)

Table 1 showed the results of reliability analysis regarding the variables of this study. It concluded that Cronbach's Alpha value of all the variables were greater than 0.7. Since all the values were greater than 0.7, the questionnaire can be considered as a reliable one.

The statements in the questionnaire were presented to three academic professionals in the field in order to ensure the content validity. Further Construct validity of the research instrument can be measured using KMO measure of sample adequacy (Sekaran, 2003). In order to test the validity of the measures the KMO and Bartlett 's test was used. Kaiser (1974) recommends of 0.5 as the minimum value to ensure the validity (Hutcheson & Sofroniou, 1999 as cited in Field 2009).

Table 2: Validity Analysis

Variable	KMO Measure of Sampling Adequacy	Bartlett's Test of Sphericity	Comment
Perceived Ease of Use	0.690	0.000	Accepted
Perceived Usefulness	0.814	0.000	Accepted
Perceived Trust	0.661	0.000	Accepted
Awareness	0.751	0.000	Accepted
Intention to Use Cryptocurrencies	0.849	0.000	Accepted

Source: (Survey Data 2020)

The study uses KMO Measure of Sampling Adequacy to measure the internal reliability of the questionnaire which was used for the study.

### Testing Parametric Assumptions

Some assumptions have to be fulfilled to perform parametric tests (Pearson Correlation and regression analysis) to analysis data such as normal distribution of the data set, independency, outliers, and multi-co-linearity need to test before performing regression analysis. In order to test parametric assumption researcher used normality and multi collinearity test, Independency.

Table 29: Test of Normality

Variable	Skewness	Kurtosis
Intention to use Cryptocurrencies	-0.971	-0.579

Source: (Survey Data 2020)

To fulfil the normality of the data set, values of Skewness and Kurtosis should be near to Zero (Field, 2009). Further according to Sekaran (2003) if statistic value of Skewness and statistic value of Kurtosis are between +2 and -2 normality is not too extreme. According to Table 3 data related to intention to use cryptocurrencies were normally distributed.

Table 30: Multi Collinearity

Variable	Tolerance Value	VIF
Perceived Ease of Use	0.690	1.449
Perceived Usefulness	0.330	3.030
Perceived Trust	0.499	3.350
Awareness	0.978	1.023
Intention to Use Cryptocurrencies	0.889	1.125

Source: (Survey Data 2020)

According to Table 4, the tolerance of each independent variable is greater than 0.2 and VIF is below 5. Results proved that there was no interrelationship among variables. It means variables were independent.

### Correlation Analysis

According to (Saunders at el, 2009) the strength of the linear relationship between two numerical variables can be measured through Correlation coefficient. Coefficient denoted by the letter  $|r|$  and the value of  $|r|$  can place in between +1 and -1. A high correlation value between an independent variable and the dependent variable indicates a possible relationship between the two.

Table 31: Correlation Test

Variable	Pearson Correlation	Sig. (2 tailed)
Perceived Ease of Use	.620	.000
Perceived Usefulness	.618	.000
Perceived Trust	.746	.000
Awareness	.689	.000

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

Source: (Survey Data 2020)

Correlation coefficient matrix shows the Pearson product moment correlation coefficient between all pair of variables in the study. Pearson correlation coefficients are between 0.75 and 1.00, there is a high degree of positive correlation between each pair of variables and if the coefficients are between 0.5 and 0.75, there is a moderate degree of positive correlation. According to the table 5 the r values for all the variables are between 0.5 to 0.75. Hence, all the four variables positively associate with the intention to use cryptocurrencies.

### Regression Analysis

According to the Saunders (2009) multiple regression analysis was used when the researcher uses two or more independent variables. Therefore, it is most relevant for this study. Because the study used four independent variables. The regression coefficient, which was deputized by R-square, can be represented by any value between 0 and 1 (Saunders at el ,2009). Calculating coefficient of multiple determinations and the regression equation by using two or more variables is called as multiple linear regression analysis. As there are more than two independent variables, the researcher used the multiple regression analysis for the study. Hence the researcher used 95% confidence level to verify the acceptance of each hypothesis in two tail manner.

Table 32: Model Summery

Model	R	R Square	Adjusted R Square	Durbin Watson
<b>1</b>	.746	.556	.552	1.744

Source: (Survey Data, 2020)

According to the table 6, the 55% of variation in Intention to use cryptocurrencies is determined by the four independent variables (perceived Ease of Use, Perceived Usefulness, Perceived Trust and Awareness) and it can be concluded that the regression model is good fitted.

Table 33: ANOVA Table

Model	Sum of Square	Df	Mean Square	F	Sig.
Regression	161.820	3	53.940	121.253	.000

Source: (Survey Data 2020)

ANOVA explains whether the overall model is significantly good and predicts the dependent variable (Field, 2009). Accordingly, the researcher developed null and alternative hypotheses to test ANOVA.

(H0) Null hypothesis is fitted model is not significant and (H1) alternative hypothesis is fitted model is significant. The p-value from the ANOVA Table 7 is less than 0.05, which means that at least one of the four variables perceived Ease of Use, Perceived Usefulness, Perceived Trust and Awareness can be used to model Intention to Use cryptocurrencies.

Table 34 : Coefficient Table

Model	Unstandardized Coefficient		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
<b>(Constant)</b>	3.989	0.142		28.028	0.000
<b>Perceived Ease of Use</b>	0.129	0.027	0.143	8.450	0.000
<b>Perceived Usefulness</b>	0.154	0.028	0.162	5.950	0.002
<b>Perceived Trust</b>	0.177	0.020	0.196	8.750	0.000
<b>Awareness</b>	0.164	0.021	0.173	7.377	0.000

\*\*Significance level 0.01

Source: (Survey Data 2020)

Regression Equation

According to SPSS output regressions equation can be written as follows.

$$Y_1 = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + e$$

Y<sub>1</sub> = Intention to Use Cryptocurrencies

β<sub>0</sub> = Intercept

X<sub>1</sub> = Perceived Ease of Use

X<sub>2</sub> = Perceived Usefulness

X<sub>3</sub> = Perceived Trust

X<sub>4</sub> = Awareness

(EM) e = Error

$$Y \text{ Intention to Use Cryptocurrencies} = 3.989 + 0.129(\text{Perceived Ease of Use}) + 0.154 (\text{Perceived Usefulness}) + 0.177(\text{Perceived Trust}) + 0.164(\text{Awareness}) + e$$

The determination of Intention to Use Cryptocurrencies can be explained through this regression equation line. According to regression equation Constant or the β<sub>0</sub> is 3.989 for Intention to Use Cryptocurrencies. This emphasize that, it is expected to get 3.989 Intention to Use Cryptocurrencies, when there is no effect of any variables. As far as, 0.129 is the regression coefficient of Perceived Ease of Use. Which means that, Intention to Use Cryptocurrencies can be increased by 0.129 units,

if Perceived Ease of Use increasing by 1 unit while keeping other factors as constants. In the same manner Intention to Use Cryptocurrencies can be increased by 0.154 units, if Perceived Usefulness increase by 1 unit while keeping other factors as constants as the regression coefficient of Perceived Usefulness takes 0.154. Intention to Use Cryptocurrencies can be increased by 0.177 units, if Perceived Trust increase by 1 unit while keeping other factors as constant as the regression coefficient of Perceived Trust takes 0.177. Intention to Use Cryptocurrencies can be increased by 0.164 units, if Awareness increase by 1 unit while keeping other factors as constant as the regression coefficient of Awareness takes 0.164.

When considering the above regression analysis output, the researcher tested the hypothesis to identify the impact between variables. Following hypothesis are accepted according to survey results.

H1: There is an affect of perceived Ease of use on intention to use cryptocurrencies among University students in Sri Lanka.

H2: There is an affect of Perceived usefulness on intention to use cryptocurrencies among University students in Sri Lanka.

H3: There is an affect influence of Perceived Trust on intention to use cryptocurrencies among University students in Sri Lanka.

H4: There is an affect of Awareness on intention to use cryptocurrencies among University students in Sri Lanka

## **DISCUSSION**

The current study was conducted to understand and investigate the determinants influencing on university students' intention to use of cryptocurrencies in Sri Lanka. Researcher distributed 125 questionnaire and able to collect only 123 questionnaires and there was an 98% response rate. Collected data analyzed by using Minitab 16 and SPSS 21 softwares and results are interpreted at the beginning of this chapter. Based on the results obtained, the researcher could identify the relationships between the variables interested along with their nature of impacts. The current study identified four type of beliefs dimension (Perceived Usefulness, Perceived Ease of Use, Perceived Trust and Awareness) are significantly impacts on intention to use cryptocurrencies with the p value of 0.000. Those are discussed in below in light with previous research findings.

Almuraqab (2019) found that Perceived Trust is the most significant factor ( $\beta = 0.35$ ) which impact on Intention to use cryptocurrencies. According to the Shahzad, GuoYi, Jian, & Sha, (2008) the perceived trustworthiness has ( $b = 0.330$ ) a significant impact on intention to use cryptocurrencies. Respondents emphasized the significance of perceiving the digital currency to be a trustworthy

technology, which would enhance future acceptance (Almuraqab, 2019). Furthermore, Nuryyev, Spyridou, Yeh & Achyldurdyeva, (2018) found that Perceived Trust as a significant factor which determined the intention to use cryptocurrencies with the p value of 0.000.

As a second important factor Almuraqab (2019) found Perceived Usefulness with the  $\beta$  value of 0.33 in his study. For better financial and monetary exchanges, it is important to perceive these digital currencies as useful. Almuraqab (2019) found that there is low impact on Perceived Ease of Use towards intention to use cryptocurrencies in UAE context. Both the perceived usefulness and perceived ease of use have a statistically significant effect on behavioural intention to use cryptocurrency payments in the hotels in Taiwan (Nuryyev, et al., 2018). A study conducted by Shahzad, GuoYi, Jian, & Sha (2008) also found that Perceived usefulness and perceived trust; similarly have a significant positive association with the intention to use of Bitcoin and values of the Beta coefficient are ( $b = 0.236$ ) & ( $b = 0.330$ ) respectively.

The values of the Beta coefficient in path analysis done by Shahzad, GuoYi, Jian, & Sha (2008) revealed a positive association between awareness and intention to use Bitcoin with ( $b = 0.229$ ) at the 0.001 level of significance. Alaeddin & Altounjy (2018) stated that due to the technical nature of the cryptocurrency, the increase in the level of technology awareness assumed to be important. Finally, the results generated from this study aligned with the studies conducted in Shahzad, GuoYi, Jian, & Sha (2008), Almuraqab (2019) as well.

## **CONCLUSION**

The main objective of this study is to identify the determinants influencing on university students' intention to use of cryptocurrencies in Sri Lanka. In order to achieve the research objective researcher developed four hypotheses based on the TAM model and past literature and collect data by using a structured questionnaire from sample and data were analyzed by using SPSS 16. Software.

Firstly, the researcher ensures the reliability and validity of the measures based on the Cronbach 's alpha value and the Kaiser-Meyer-Olkin measure of sampling adequacy tests. Further correlation test and regression analysis were performed to achieve the research objectives of the current study along with the parametric assumptions and results indicated that there is a positive correlation among each pair of variables and all the variables (Perceived Ease of Use, Perceived Usefulness, Perceived Trust and Awareness) significantly influence on Intention to Use Cryptocurrencies. According to the multiple regression results, Perceived Trust is the highest impacted variable for Intention to use Cryptocurrencies. Moreover, other variables also significantly impact on Intention to Use Cryptocurrencies.

### **Managerial Implications**

This research delivers valuable insights regarding the significance of understanding university students' acceptance of digital currencies as a method of exchange in developing countries in general. Entrepreneurs who are looking for startup digital currency business can use the findings of this research to make their business decision. In addition, this research is valuable for government organizations and policymakers especially central bank of Sri Lanka to understand peoples' intention to use cryptocurrencies as a method of exchange, which supports the creation of a framework. Propose to build a digital financial system within government control, will possibly increase the level of trust because Perceived Trust positively impacts on Intention to use cryptocurrencies. Conducting general awareness program about cryptocurrencies also will increase the usage of cryptocurrencies because Awareness positively impacts on intention to use cryptocurrencies. Moreover, owners of the cryptocurrencies can make appropriate changes for their systems and process in order to increase perceived ease of use and perceived usefulness since these two variables are positively impacts on intention to use cryptocurrencies.

### **Theoretical Contribution**

This study provides a strong theoretical base concerning the importance of university students' intention to use cryptocurrencies by applying TAM model into the Sri Lankan context. This study also makes a great contribution to the existing literature since this is rather new concept. Moreover, the study provides empirical evidence of the relationships among perceived trust, perceived ease of use, perceived usefulness, awareness and intention to use cryptocurrencies.

### **Limitations**

The study was limited in terms of Government University students in Sri Lanka. Therefore, findings cannot be generalized to other contexts. In addition to that researcher used only four variables due to time constraint. There may be other variables which determine the intention to use cryptocurrencies in Sri Lankan context.

### **REFERENCES**

- Ajzen, I. & Fishbein, M., 1980. Understanding attitudes and predicting social behavior.. *Englewood Cliffs, NJ: Prentice-Hall*.
- Alaeddin , O. & Altounjy, R., 2018. Trust, Technology Awareness and Satisfaction Effect into the Intention to Use Cryptocurrency among Generation Z in Malaysia. *Internationa Journal of Engineering and Technology*, pp. 7 (4.29) (2018) 8-10.

- Albayati, H., Kim , S. K. & Rho , J. J., 2020. Accepting financial transactions using blockchain technology and cryptocurrency: A customer perspective approach. *Everest - Technology in Society*, p. Technology in Society 62 (2020) 101320.
- Almuraqab, N. A. S., 2019. Predicting determinants of the intention to use digital currency in the UAE: An empirical study. *wileyonlinelibrary*, p. E J Info Sys Dev Countries. 2020;86:e12125.
- Anon., 2019. *The Cryptonomist*. [Online] Available at: <https://en.cryptonomist.ch/2020/06/21/cryptocurrencies-in-sri-lanka/>
- Bhilawadikar, Suhas, V. & Ema, G., 2020. *Investment attitude of millennials towards cryptocurrencies*. [Online] Available at: <https://www.ingentaconnect.com/content/westburn/sb/pre-prints/content-wp-sb-15929907056652>
- CBSL, 2020. [Online] Available at: <https://www.cbsl.gov.lk/en/news/public-awareness-on-virtual-currencies-in-sri-lanka>
- Crosby, M., 2016. Blockchain technology beyond bitcoin. *Applied innovation review*, pp. 2- p 19.
- Davis, F., 1989. Perceived usefulness, perceived ease of use, and user acceptance of information technology.. *MIS Quarterly*, pp. 13(3), 319–340.
- Davis, F. D. & Venkatesh, V., 2000. *A theoretical extension of the technology acceptance model: four longitudinal field studies*. *Management* , s.l.: 46(2), 186–204 .
- Field, A., 2009. *DISCOVERING STATISTICS USING SPSS THIRD EDITION*. [Online] Available at: <https://www.studocu.com/in/document/indian-institutes-of-management/corporate-finance/other/discovering-statistics/6530573/view>
- Granic, A. & Marangunic, N., 2015. *Technology acceptance model: a literature review from 1986 to 2013*, s.l.: Faculty of Science, University of Split, Split, Croatia Univ Access Inf Soc (2015) 14:81–95 DOI 10.1007/s10209-014-0348-1.
- Heidari, H. et al., 2019. Evaluating the Factors Affecting Behavioral Intention in Using Blockchain Technology. *Journal of Money and Economy*, pp. Vol. 13, No. 2, Spring 2017 PP 195-219.
- Mazambani, L. & Mutambara, E., 2019. Predicting FinTech innovation adoption in South Africa: the case of cryptocurrency. *African Journal of Economic and Management studies*, pp. 2040-0705 DOI 10.1108/AJEMS-04-2019-0152.
- Microsoft, 2020. *Microsoft Security Endpoint Threat Report 2019*, Sri Lanka: s.n.
- Nuryyev, G., Spyridou, A., Yeh, S. & Achyldurdyeva, J., 2018. FACTORS INFLUENCING THE INTENTION TO USE CRYPTOCURRENCY PAYMENTS: AN EXAMINATION OF BLOCKCHAIN ECONOMY. *Munich Personal RePEc Archive and TOURMAN 2018 Conference Proceedings, Rhodes: Greece*, pp. pp. 303-310..
- Oliva, M. A., Borondo, P. J. & Clavero, G. M., 2019. Variables Influencing Cryptocurrency Use: A Technology Acceptance Model in Spain. *Frontiers in Psychology* , p. 10.3389/fpsyg.2019.00475.
- Pavlou , P. A. & Fygenson, M., 2006. (2006). Understanding and predicting electronic commerce adoption: An extension of the theory of planned behavior.. *MIS Quarterly*, pp. 30(1), 115–143. <https://doi.org/10.2307/25148720>.
- Saunders, M. L. P. & T. A., 2009. *Research Methods for business students*.. *Pearson education limited*.
- Sekaran, U., 2003. *RESEARCH METHODS FOR BUSINESS A Skill-Building Approach Fourth Edition*.. [Online] Available at: [Retrievedfromhttps://iaear.weebly.com/uploads/2/6/2/5/26257106/research\\_methods\\_entire\\_book\\_umasekaram-pdf-130527124352-phpapp02.pdf](https://iaear.weebly.com/uploads/2/6/2/5/26257106/research_methods_entire_book_umasekaram-pdf-130527124352-phpapp02.pdf)
- Shahzad, F., GuoYi, X., Jian, W. & Sha, M., 2008. An empirical investigation on the adoption of cryptocurrencies among the people of mainland China. *Technology in Society* , p. 10.1016/j.techsoc.2018.05.006.

- Yeong, Y. C., Su, S. K. & Kalid, K. . S., 2019. Cryptocurrency Acceptance: A Case of Malaysia. *International conference on Recents Advancements in Engineering and Technology (ICRAET-18)*, p. DOI: 10.35940/ijeat.E1004.0585C19.
- Yu, S., 2020. *How Millennials Are Using Cryptocurrency To Build The Future*. [Online] Available at: <https://www.forbes.com/sites/laurencebradford/2018/02/26/how-millennials-are-using-cryptocurrency-to-build-the-future/#31a07e0d5c3a>