Extension of Technology Acceptance Model (Etam): Adoption of Cryptocurrency Online Trading Technology

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Abstract: The main idea of the study was to determine the influence of the antecedents (trialability and compexity) on the existing constructs of Technology Acceptance Model (TAM) and to test measurement invariance on the relationship between the latent constructs used in this extended version of Technology Acceptance Model (ETAM). A survey questionnaire was administered on Cyptocurrency mobile applicantions users and a total of 41 responses were collected. The research model was assessed using SEM-PLS approach. The structural model was then tested in order to establish validity & reliabelity. The invariance test was first performed on the measurement model and then on the structural model using SmartPLS 3.0. The predictor variables in ETAM were able to explain 44,9% of the variance in actual usage of Cryptocurrency mobile applications.

Keywords: Online TradingCyptocurrency, Actual Use, Extended Technology Acceptance Model.

INTRODUCTION

Nowadays technological advances are extraordinary including technological advances in the economic field. One of the spectacular advances in technology in the economic field is the creation of cryptocurrency or virtual money in cyberspace. Along with the increasing globalization of the world economy, the need for speed, convenience and security of financial transactions is increasing. So we need a payment system that is quite reliable and easy for banking customers. The payment system is a mechanism that includes arrangements used for the delivery of payments through value exchanges between individuals, financial institutions both domestically and globally. Bank Indonesia as the payment system authority authority divides 2 types of payment system instruments, namely cash and non-cash. Cash payment instruments in the form of banknotes as payment transaction instruments have so many limitations that they are no longer able to meet the needs of society today.

Over the past year, the exchange rate against cryptocurrency has skyrocketed. However, at the beginning of 2018, the exchange rate against virtual currencies actually dropped. The decline in cryptocurrency prices was due to tightening regulations carried out by a number of countries to regulate virtual currency trading. Even though Bank Indonesia (BI) had urged the public and merchants not to conduct transactions using digital currencies, but this did not mean that Indonesia could avoid the impact of the cryptocurrency. Bearing in mind that a number of large countries which legalize transactions using digital currencies have large economic links with Indonesia. Therefore,

Indonesia must be aware of the drop in virtual currency prices, because this has the potential to affect the domestic economy.

Cryptocurency has many kinds, including Ripple, Lisk, Ether, MaidSafeCoin, Litecoin, StorjCoinX, Ethereum, DogeCoin, Dash, Monero, Zcash, and Bitcoin (BTC). With virtual money, now, business transactions can be done online without involving intermediaries such as banks. Transactions are carried out instantaneously, across countries, across continents, faster, easier, cheaper, and more secure. Countries with the largest users of cryptocurrency in the world are Japan and South Korea. If the two countries experience a crisis due to virtual currencies, then Indonesia is also likely to be affected by the crisis. The reason is that Indonesia and the two countries have collaborated in various sectors. Transmission of the effects of the crisis caused by cryptocurrency is still long. Based on statistical data from Bitcoinity, the cryptocurrency market capitalization value is USD 153.36 billion as of February 4, 2018. While the JPX market cap market capitalization is USD 5.12 trillion, KRX is USD 1.33 trillion, and JCI is Rp 7,390.39 trillion.

Exchange (trading) is a sector that provides easy access for users who want to buy or sell cryptocurrency. The exchange sector is the first sector to emerge in the cryptocurrency industry and remains the largest sector in terms of number of companies, employees and users. Trading with crypto currencies can be done on sites or applications on smartphones that are issued by payment service providers, these sites and applications act as brokers for users who want to trade. In the cryptocurrency trading application, several companies provide different offers for application users to be able to try the company's technology products first before trading in the crypto market.

The continental continent of Asia is known to contribute 33% of the total world trading value, whereas more specifically if the data is classified into each country, the country of Indonesia contributes 0.02% or equivalent to 1,024,302.37 USD. With a total trading value of 2,072,907,482.59 USD in the overall trading value, it can be stated that the application or technology product of cryptocurrency trading has begun to penetrate the community, especially investors who choose cyptocurrency as their investment commodity so it needs to be further analyzed so far where these technology products can be accepted, applied and used by the community.

Communities need freedom in conducting financial transactions concerning payments without being faced with the payment system constraints of each different publisher. Of course, the hope is that people will not need to mess around with compatibility issues from different electronic money issuers. And besides that the use of bitcoin technology is expected to help solve the problems currently faced by Indonesian banks related to making electronic money standards. With the establishment of this electronic money standard is so that each issuer can be connected to one another by using the same standards and of course by paying attention to aspects of convenience, security, and speed. So that people do not need to worry if they will conduct financial transactions related to differences in types of electronic money with EDC (electronic data capture) devices owned by sellers.

One reliable theory used to explain the acceptance of individuals, organizations, and society of the use and application of technology products is the technology acceptance model or known as the Technology Acceptance Model (TAM). Theoretically, this model is one of the most effective approaches for receiving information technology by users.

TAM was developed from TRA or Technology Reasoned Action and was introduced in various disciplines in the same year. However, there is an assumption that the traditional TAM or the original TAM model is not appropriate for information technology in the present, this is because the characteristics of communication and information technology have changed along with the times. New factors which are not integrated in the existing model, may play a major role in the decision to adopt a new technology, so the extension of new variables as antecedents is needed in the original TAM model.

THEORETICAL REVIEW

Digital Currency, Virtual Currency, and Cryptocurrency. Understanding Digital Currency according to the IMF Digital currency according to the IMF (International Monetary Fund) is a representation of digital values (Habermeier, 2016). Based on Figure 1 below, cryptocurrency is part of the virtual currency, which is where the virtual currency enters the concept of digital currency. In addition to virtual currency, digital currency also has electronic money. The difference between virtual currency and electronic money is the issuer, where the issuance of electronic money is regulated by the government and uses the country's currency.

Figure 1. Taxonomy of Virtual Currencies
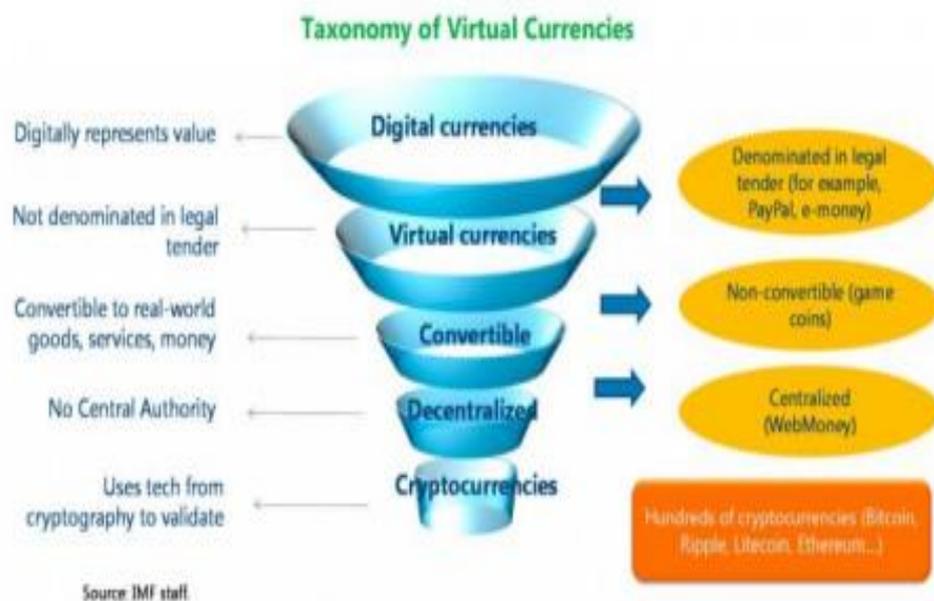
Source: (IMF, 2016)

According to the IMF Virtual currency is a digital representation of a value issued by a private developer with the determination of denominations in a separate unit. Virtual currency can be stored, accessed and transacted electronically, and can be used for various transaction needs as long as all parties agree to use it (Habermeier, 2016). The types of

virtual currency are divided into: **(1)** Convertible (interchangeable) Virtual currency that can be exchanged can also be separated into two types: (a) Centralized (centralized) Centralized virtual currency that can be exchanged is Web Money, a form of digital currency in which the server centralized and managed by one company. (b) Decentralized (decentralized) Decentralized virtual currency that can be exchanged is cryptocurrency (cryptographic currency) such as Bitcoin. **(2)** Non-convertible (non-interchangeable). Virtual currency that can not be exchanged is the currency in the game (game-coin). We can buy credit for weaponry upgrades for example, but the remaining credit cannot be cashed back.

According to Bank Indonesia Virtual currency is digital money issued by parties other than monetary authorities that are obtained by way of purchase, transfer of rewards or mining, that is, the process of producing a number of new virtual currencies, which involve complicated mathematical processes (Bank Indonesia, 2018).

As for some virtual currency characteristics, namely: (1) Without a regulator, so there is no legal certainty and ensure its security; (2) person to person transactions without official intermediary institutions, so no one handles complaints that arise; (3) the user's identity can be disguised so that it is prone to be used for illegal activities; and (4) there is no central entity in charge, so prices are determined by demand and supply.

Meanwhile, the risks of using a virtual currency that cause its users to be banned in Indonesia are: (1) the exchange rate is very volatile, vulnerable to the risk of bubbles (bubble); (2) potential to be used in money laundering and terrorism financing; and (3) vulnerable to a cyber.

One of the advances in information technology is the internet driving the transformation of the global economy into a digital base. Digitalisation taking place in Indonesia, especially in terms of banking and finance, enables the absorption of existing technology and innovation. Internet banking, mobile banking, SMS banking, and so on are a part banking innovations. One does not have to be physically in a bank or go to an ATM machine to make transactions. An ordinary cellphone without internet network can also enable these activities via sms banking. Even if the support of smart phone and internet technology is added, what has been transformed by SMS is increasingly enhanced through mobile banking or internet banking. The second stance that can accelerate the main objective of strengthening the economy is to strengthen the structure and sources of funding that can be supported from the government, private sector, and from abroad. Then the last move is to optimize opportunities while mitigating the risks that can arise from the development of digital technology including financial technology that has been mentioned previously (Marowadojo in Generous, 2018). Unlike the digital money in general, currencies and crypto assets appear along with other new technologies one of both are blockchain and crypto wallet.

Analysis of Electronic Payment Systems. The payment instrument is an important component in the payment system, therefore in the payment system a payment instrument is needed to support the system. The payment system cannot be separated from the association of legal instruments or payment instruments used. Law No. 7 of 2011 concerning Currency in article 1 paragraph (1) explains that Currency is money issued by the Unitary State of the Republic of Indonesia, hereinafter referred to as Rupiah. In Act No. 7 of 2011 concerning Currency article 11 states that Bank Indonesia is the only

institution authorized to conduct the issuance, circulation, and / or withdrawal and withdrawal of Rupiah to issue and circulate rupiah currency and to withdraw, withdraw and destroy the intended money from circulation.

Electronic payments have a great variety of terms such as: digital currency, digital money, digital cash, virtual currency, virtual money, virtual cash, e-money, e-cash, cryptocurrency. The lack of standardization of terms results in many errors in interpreting. However, basically basic conclusions can be drawn relating to understanding of the concept of electronic money, first electronic money that has the characteristics as access to accounts in banks or third-party service providers, electronic money services as known as access products. And electronic money that has characteristics as a store value, the type of electronic store value money is like currency or money used daily by the public. Balance information is stored directly on a chip card, so there is no need for online access to the service provider to authenticate data, authentication is only at the terminal terminal level.

electronic money is grouped into two parts, viz.

Electronic money product access. This type of electronic money has long been used, such as ATM / Debit / Credit cards, internet banking, sms banking. This type of electronic money requires users to open a savings account first and save a certain amount of funds in the savings account. Or save some money with a non-bank electronic money service provider (cellular service provider) for The conversion is made into an electronic value by identifying the cellular number of the potential user. In addition, the seller also needs to prepare a reading device (EDC) that is connected online, because it needs to be verified by the cardholder's customer data. All transaction information is not stored on the customer's card. Access to the information is stored in the provider database and customers are given access to find out the amount of balance they have through provider online portal.

Stored electronic money. What is meant by electronic money is the amount of currency owned by customers, the value of the money is deposited in one issuer (bank) in digital form using an electronic media. For electronic media information is stored in the form of chips. Form of electronic money saved relatively easier, because it does not require online access to perform data validation and balance checking. On one side of the transaction is faster, because it does not need an access terminal connected online to the bank server to perform authentication, but on the other hand this type of electronic money is very vulnerable to theft because it is not protected by passwords and other standard safeguards. In the discussion that follows in this study, the researcher will use the term electronic money in every mention that is refers to the type of electronic money saved.

Electronic payment systems have a great variety of terms such as: digital currency, digital money, digital cash, virtual currency, virtual money, virtual cash, e-money, e-cash, cryptocurrency. The lack of standardization of terms results in many errors in interpreting. However, basically basic conclusions can be drawn relating to understanding of the concept of electronic money, first electronic money that has the characteristics as access to accounts in banks or third-party service providers, electronic money services as known as access products. And electronic money that has characteristics as a store value, the type of electronic store value money is like currency or money used daily by the public. Balance information is stored directly on a chip card, so there is no need for online access to the service provider to authenticate data, authentication is only at the terminal terminal level.

The payment system that is implemented is a form of the task of Bank Indonesia to maintain rupiah stability as mandated in Law No. 23 of 1999 concerning Bank Indonesia. In general, the payment system has the goal of being able to encourage the national economy and be able to increase economic activity through more conducive business environment conditions and increase foreign power and image national economy so as to encourage foreign investors to enter Indonesia.

In the payment system covers payment instruments, banking procedures in relation to payments and also the interbank funds transfer system used in the payment process. The payment system can be interpreted as an event in the transfer of some money from one party to another which is caused due to an economic transaction. So that it can be linked to payment instruments such as checks, Bilyet Giro, money orders, electronic funds transfer, ATM cards, debit cards, credit cards, and e-money or electronic money such as cryptocurrency

Online Cryptocurrency Trading Application. Before the digital era emerged like this now, means of payment in the form of physical good gold, silver or currency that has been widely used today. The role of money itself has 3 functions, namely as a means of payment, units, a store of value. Based on a journal written by Joey Conwayentitled Beginners Guide to Cryptocurrencies, in the range of 1982, David Chaum from the University of California for the first time publishing about making ideas a payment method based cryptography that can maintain data confidentiality the owner. And in 1990, David Chaum create a company called DigiCash, with its main product that is making a payment instruments using smart cards and electronic cash (ecash). Types of digital payments (virtual currency) consists of 2 types, which are first virtual currency in money digital like money used in applications video games, Telkomsel cash, XL cash, Indosat My wallet, and some digital payment instruments the other. This type of virtual currency is centralized, regulated and managed by a institutions and companies (Conway, 2014). The second is virtual currency using cryptographic technology or known as cryptocurrency where for each data transaction will be encoded using certain cryptographic algorithms.

For now, bitcoin is the only one the first cryptocurrency that has been many applied and used widely, even there are so many types of popping up now cryptocurrency is another development frombitcoin protokokol. Mobile applications are application software designed for smartphones, tablet computers or other mobile devices. Applications that are made will make sense or are desirable if the purpose is to have interactive interactions with users, or the reason for providing applications is the need to work more like a computer program than a website. Online cryptocurrency trading applications from third parties have a similar purpose, the difference is in the functional aspect where online trading applications provide information in the form of cryptocurrency movements in the crypto currency market, sell signals, buy signals, and hold.

Electronic money has many advantages, especially in terms of speed of access, to make transactions the time required is not more than 2-5 seconds under normal conditions. This condition certainly makes it easy for people who are accustomed to using currency, bearing in mind to make every purchase transaction, it is necessary to provide money with small fractions which of course will be very difficult. The security factor of this type of

electronic money only relies on standard data encryption to protect information stored on the chip and securing the card holder from falling into the hands of others.

Exchange can be done by buying and selling Bitcoin, making Bitcoin transfers to other people, making deposits in the form of Bitcoin, and making deposits in Rupiah. 41 Examples of Bitcoin exchangers in Indonesia are PT Bitcoin Indonesia. Usually exchangers charge fees for services rendered. For example PT Bitcoin Indonesia determines the cost of buying and selling Bitcoin by 0.3%, the fee for withdrawing Rupiah deposits by 1%, and the fee for withdrawing Bitcoin deposits by 0,0005BTC. While for deposit services, Rupiah or Bitcoin, there is no charge. Exchangers also benefit from the selling rate spread with the buying rate. Besides going through an exchanger, it can also be done through a vending machine. Vending machines are like ATMs, serving Bitcoin exchange with conventional currencies.

Technology Acceptance Model Extension. Expanding (expanding) the TAM model can be done by adding or extending a number of external variables that further explain or be the cause (antecedent) of the perceived usefulness (PU) and ease of use of perceived (perceived ease of use) or PEOU on the TAM. The external variables used can be categorized for example as individual variables, organization, culture, and task characteristics. Several studies have also succeeded in finding that external variables that are extensions with precision in the initial TAM model can explain variance better in the relationships between variables that already exist. Next with the results obtained in analyzing the acceptance (acceptance) of each object of research.

Technology Acceptance Model. Theoretically, the five main variables of traditional TAM are included in the research extension model, namely the perceived ease of use, perceived usefulness, attitude towards use, behavioral intention, and actual use of the IT. Meanwhile, the hypotheses that can be made from the initial TAM model are as follows:

H1: The ease of use of perception affects the usefulness of the cryptocurrency online trading application

H2: The ease of use of perception affects the attitude of using cryptocurrency online trading applications

H3: The perceived usefulness influences the attitude of using online cryptocurrency trading applications

H4: The attitude of use affects the behavioral intentions of online cryptocurrency trading applications

H5: Behavioral intention influences the actual use of online cryptocurrency trading applications

Innovation Diffusion Theory (Compelxity & Trialability). Theory of Diffusion of Innovation or Innovation Diffusion Theory has been widely used as a theoretical framework that represents a study. IDT can be applied in various fields of disciplines and is not limited to studies that adopt individual innovation, but IDT is also used to predict the adoption of information technology. IDT itself can be defined as the process of delivering or spreading an innovation through interpersonal channels or channels over time in a community.

This theory has 5 characteristics of innovation that are considered significant to explain an innovation that can be accepted in society or can be symbolized as a perception of the community, namely relative advantage, compatibility, complexity, complexity, and ability to test (trialability), and observation (observability). However, in extending it to the research model there are only 2 variables that have a match as a measure of the cryptocurrency online trading application research object, namely the complexity variable and trialability.

By definition, the ability of a trial (trialability) can be interpreted as the level where an innovation is still on a small scale. New ideas that can be tried on a small scale are usually adopted faster than innovations that cannot be tried first. While complexity is the level at which an innovation is considered relatively difficult to understand and use. If there are difficulties to understand and use, then this will be an obstacle to the process of adoption of a rapid innovation.

Then the resulting hypothesis is as follows:

H6: The ability of the trial effect on the ease of use of the cryptocurrency online trading application

H7: The ability of the trial effect on behavioral intentions of online cryptocurrency trading applications

H8: Complexity influences the ease of use of online cryptocurrency trading applications

H9: Complexity affects the perceived usefulness of online cryptocurrency trading applications

By extending the two variables in the diffusion theory of innovation (IDT) into the technology acceptance model (TAM), the relationships that exist in this study can be modeled in figure 1 below:

Figure 2. Research Model
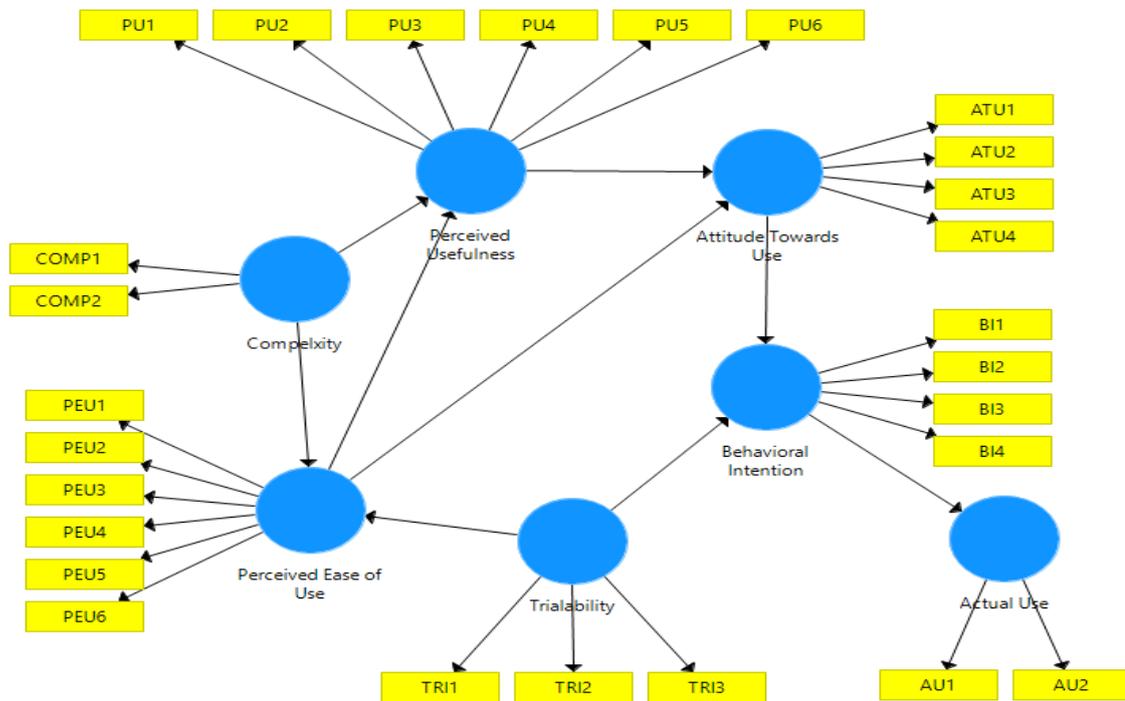
Source: (data processed, 2019)

METHODOLOGY

This research was conducted without national (regional) boundaries through internet media in cyptocurrency forums on social media, in April and May 2019. The type of data in this study uses primary data types ie data obtained directly from its source by distributing electronic questionnaires (Google Form). Users of the information system referred to in this study are users or application users who have used a cryptocurrency trading application, amounting to 41 people.

The research instrument is a tool at the time of research using data collection. The research instrument used in this study was a questionnaire or questionnaire. This questionnaire is divided into two parts, namely: the first part contains the identities and economic characteristics of respondents, the second part contains a number of questions that have been structured based on existing references using a Likert scale regarding users' perceptions of acceptance or adoption of online cryptocurrency trading applications.

Evaluate the Outer Model. Validity is a measure that shows the level of validity or validity of an instrument. The instrument is said to be valid if the instrument can do what it should do and measure what must be measured. Validity test in this study uses convergent validity parameters to see the loading factor value and AVE (account variance extrated) value.

While reliability is defined as an index that shows the extent to which a measuring device can be trusted or reliable. In other words, reliability shows the consistency and

stability of a measurement scale using the Composite Reliability value on the results of the PLS-Algorithm analysis.

Inner Model Evaluation. The inner model can be evaluated through parameters such as hypothesis testing with a t-statistic value> 1.96 (two tailed significance at 5%) and p-value <0.5. Whereas the other test is the value of R-Square and Q-square as parameters of whether or not the research model (Goodness of Fit Model) is made with existing theories.

THE RESULTS OF STATISTICAL TESTS AND DISCUSSION

The results of this study were processed using the Smart PLS Program version 3.0 where the process contained 3 different parts in processing the outer and inner evaluation models namely, PLS-Algorithm, Bootstrapping, and Blindfolding.

Outer Model Evaluation Results
Convergent Validity. Convergent validity is related to the principle that the gauges or manifest variables of a construct must be highly correlated. Test of convergent validity with the SmartPLS program version 3.0 can be seen from the Rule of Thumb where the loading factor value> 0.6-0.7 (exploratory) for each construct indicator, and the AVE value> 0.5. The results of convergent validity in this study are summarized in the following table:

Table 1. Research instruments

No.	Variabels	Indicators Code	Loading Factor	AVE	Explanation
1.	Perceived Ease of Use	PEU1	0.770	0.546	Valid
		PEU2	0.844		
		PEU3	0.625		
		PEU4	0.745		
		PEU5	0.614		
		PEU6	0.807		
2.	Perceived Usefulness	PU1	0.819	0.593	Valid
		PU2	0.875		
		PU3	0.696		
		PU4	0.704		
		PU5	0.770		
		PU6	0.742		
3.	Attitude Towards Using	ATU1	0.725	0.550	Valid
		ATU2	0.650		
		ATU3	0.800		
		ATU4	0.783		
4.	Behavioral Intention	BI1	0.733	0.603	Valid
		BI2	0.803		
		BI3	0.748		
		BI4	0.818		
5.	Actual Use	AU1	0.894	0.744	Valid
		AU2	0.830		

6.	Trialability	TRI1	0.756	0.562	Valid
		TRI2	0.827		
		TRI3	0.655		
7.	Complexity	COMP1	0.882	0.814	Valid
		COMP2	0.922		

Source: (data processed, 2019)

Based on the table above, it can be concluded that all indicators that make up the constellation or variable have valid values.

Reliability. This study uses Composite Reliability as a reliable parameter of the constructs used. The minimum cut-off value of Composite Reliability is 0.7. The results of the Composite Reliability value of each construct can be seen in the table below:

Table 2. Results of Composite Reliability values

No.	Constructs	C.R	Explanation
1.	Perceived Ease of Use	0.877	Reliabel
2.	Perceived Usefulness	0.897	Reliabel
3.	Attitude Towards Use	0.829	Reliabel
4.	Behavioral Intention	0.858	Reliabel
5.	Actual Use	0.853	Reliabel
6.	Trialability	0.792	Reliabel
7.	Complexity	0.898	Reliabel

Source: (data processed, 2019)

Based on the table above, the value of C.R (Composite Reliability) of all constructs is> 0.7, so it can be stated that all constructs used in this study are reliable based on composite reliability values.

Inner Model Evaluation Results
Goodness of Fit Research Model Results. Goodness of Fit or model compatibility test is an indication of the comparison between the specified model and the covariance matrix between indicators or observed variables. The parameters used to assess Goodness of Fit can be seen from the value of R-Squres in each endogenous construct, as well as overall with Q-Square (predictive relevance) [21]. The results of the R-Squares variable values, along with the Q-Square values generated in this study can be seen in the following table:

Table 3. Results of the Goodness of Fit Research Model

No	Constructs	R^2	Explanation	Q^2	Explanation
1	Actual Use	0.642	Moderat	0.449	Predictive Relevance
2	Attitude Towards Use	0.357	Weak	0.377	Predictive Relevance
3	Behavioral Intention	0.711	Strong	0.169	Predictive Relevance
4	Perceived Ease of Use	0.475	Moderat	0.228	Predictive Relevance
5	Perceived Usefulness	0.604	Moderat	0.320	Predictive Relevance

Source: (data processed, 2019)

Based on the above table it can be concluded that:

The R-Square value for perceived ease of use construct is 0.503 which is indicated moderate (moderate) which means the construct or variable that affects the construct of ease of use of perception can explain this construct by 50.3% while the rest is explained by other factors outside research. The value of R-Square for perceived usefulness construct (perceived usefulness) is 0.604 which is indicated moderate (moderate) which means the construct or variable that affects the construct of perceived usefulness can explain this construct by 60.4% while the rest is explained by other factors outside the research.

The R-Square value for the attitude towards use construct is 0.357 which is indicated to be weak which means the construct or variables that influence the construct attitude towards use can explain this construct by 35.7% while the rest is explained by other factors outside the research. R-Square value for behavioral interest construct (behavioral intention) is 0.711 which is indicated strongly, which means the construct or variables that influence the construct of behavioral interest can explain this construct by 71.1% while the rest is explained by other factors outside the research.

R-Square value for the actual use construct (actual use) is 0.642 which is indicated moderate (moderate), which means the construct or variable that affects the construct of actual use can explain this construct by 64.2% while the rest is explained by other factors outside the research. Next, the Q-Square value presented in the table above shows that all constructs in this research model produce Q-Square values> 0, so it can be concluded that the overall model has predictive relevance.

Hypothesis Test Results. Based on the data processing done by the SmartPLS program version 3.0 through the bootstrapping resampling method, there is a static value that can be used to answer the hypothesis in this study.

Hypothesis testing is done by looking at the t-statistic value and the p-value of the tested data. The research hypothesis can be accepted if the t-statistic value> 1.96 t-table (two tailed at the 5% significance level) or if the p-value <0.05.

The results of testing the hypothesis in this study can be seen in the image below:

Figure 3. Hypothesis Testing Results on the Inner Model
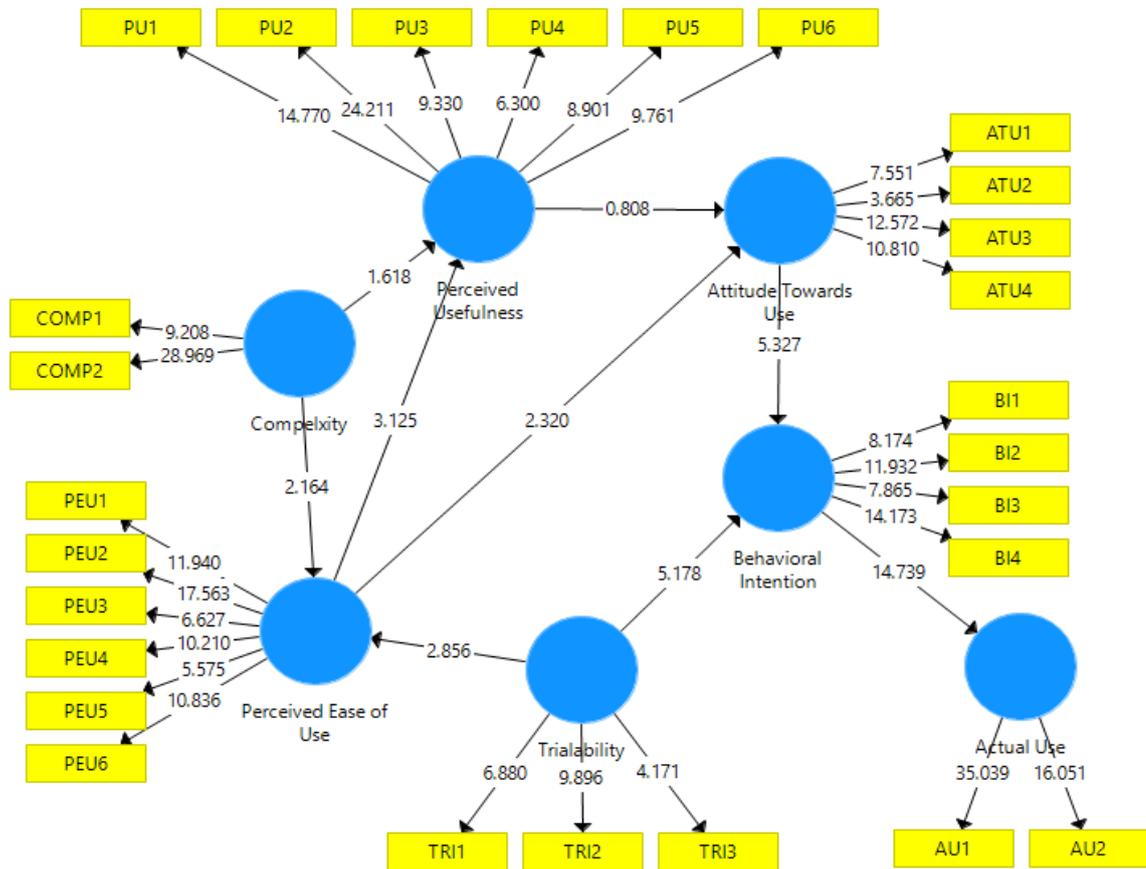
Source: (data processed, 2019)

Based on the picture above, it can be concluded that there are 2 pathways that are insignificant or found to have an effect that has no effect, namely the perceived usefulness construct (attitude towards use) and the complexity construct towards perceived usefulness (perceived usefulness)). Details of the following hypothesis test analysis can be seen in the table below:

Table 4. Hypothesis Test Results

No.	Relation	t-statistics	p-values	Explanation
1.	PEU➔PU	3.125	0.002	H1 Accepted
2.	PEU➔ATU	2.320	0.021	H2 Accepted
3.	PU➔ATU	0.808	0.419	H3 Rejected
4.	ATU➔BI	5.327	0.000	H4 Accepted
5.	BI➔AU	14.739	0.000	H5 Accepted
6.	TRI➔PEU	2.856	0.004	H6 Accepted
7.	TRI➔BI	5.178	0.000	H7 Accepted
8.	COMP➔PEU	2.164	0.031	H8 Accepted

9.	COMP➜PU	1.618	0.106	H9 Rejected

Source: (data processed, 2019)

Based on table 5 above, it can be concluded that: **(1)** The perceived ease of use construct significantly influences the perceived usefulness construct of online trading cryptocurrency applications. The t-statistic value obtained was 3.125 or> 1.96 t-table (two tailed with a significance level <0.05), so that based on the reference rules of thumb the value of this relationship was declared significant or H1 was accepted. The results of this study are in line with similar studies with different research objects as in the study of (Davis *et al.,* 1989) **(2)** The perceived ease of use construct significantly influences the attitude towards use of online cryptocurrency trading applications. The t-statistic value obtained was 2,320 or> 1.96 t-table (two tailed with a significance level <0.05), so based on the reference rules of thumb the value of this relationship was declared significant or H2 was accepted. The results of this study are in line with similar studies with different research objects as in the study of (Davis *et al.,* 1989). **(3)** The perceived usefulness construct does not significantly influence the construct towards the use of cryptocurrency online trading applications. The t-statistic value obtained was 0.808 or <1.96 t-table (two tailed with a significance level> 0.05), so based on the rules of thumb reference the value of this relationship was declared insignificant or H3 was rejected. The results of this study are not in line with similar studies with different research objects such as the study of (Davis *et al.,* 1989). **(4)** The attitude towards use attitude significantly influences the behavioral intention construct of online trading cryptocurrency trading applications. The t-statistic value obtained was 5,327 or> 1.96 t-table (two tailed with a significance level <0.05), so based on the reference rules of thumb the value of this relationship was stated as significant or H4 was accepted. The results of this study are in line with similar studies with different research objects as in the study of (Davis *et al.,* 1989). **(5)** Behavioral intention construct significantly influences the actual use of online cryptocurrency trading application. The t-statistic value obtained was 14.739 or> 1.96 t-table (two tailed with a significance level <0.05), so based on the reference rules of thumb the value of this relationship was declared significant or H5 was accepted. The results of this study are in line with similar studies with different research objects as in the study of (Davis *et al.,* 1989). **(6)** The trialability construct significantly influences the perceived ease of use construct of online trading cryptocurrency applications. The t-statistic value obtained was 2.856 or> 1.96 t-table (two tailed with a significance level <0.05), so based on the reference rules of thumb the value of this relationship was declared significant or H6 was accepted. The results of this study are in line with similar studies with different research objects such as those of (Choe and Noh, 2018). **(7)** The trialability construct significantly influences the behavioral intention construct of online trading cryptocurrency trading applications. The t-statistic value obtained was 3.125 or> 1.96 t-table (two tailed with a significance level <0.05), so based on the reference rules of thumb the value of this relationship was declared significant or H7 was accepted. The results of this study are in line with similar studies with different research objects such as the research of (Lee *et al.,* 2011). **(8)** The complexity complexity significantly influences the perceived ease of use construct of online trading cryptocurrency applications. The t-statistic value obtained was

2.164 or> 1.96 t-table (two tailed with a significance level <0.05), so based on the reference rules of thumb the value of this relationship was declared significant or H8 was accepted. The results of this study are in line with similar studies with different research objects as in (Rogers, 1995). **(9)** The complexity complexity does not significantly influence the perceived usefulness construct of cryptocurrency online trading applications. The t-statistic value obtained was 1,618 or> 1.96 t-table (two tailed with a significance level> 0.05), so based on the rules of thumb reference the value of this relationship was declared significant or H9 was rejected. The results of this study are not in line with similar studies with different research objects as in (Rogers, 1995).

CONCLUSIONS

This research was conducted on 41 respondents who are users of online cryptocurrency trading applications. Based on the results of research using the PLS-SEM (Partial Least Square-Structural Equation Model) analysis with the tests that have been carried out, the conclusions that can be drawn from this study are as follows:

The perceived ease of use construct significantly influences the perceived usefulness construct of online trading cryptocurrency applications. The perceived ease of use construct significantly influences the attitude towards use of online cryptocurrency trading applications. The perceived usefulness construct does not significantly influence the attitude towards use of online cryptocurrency trading applications. The attitude towards use attitude significantly influences the behavioral intention construct of online trading cryptocurrency trading applications. The construct of behavioral intention significantly influences the actual use construct of online trading cryptocurrency trading applications.

The trialability construct significantly influences the perceived ease of use construct of online trading cryptocurrency applications. The construct of trial ability significantly influences the behavioral intention construct of online trading cryptocurrency trading applications. The complexity complexity significantly influences the perceived ease of use construct of online cryptocurrency trading applications. The complexity complexity does not significantly influence the perceived usefulness construct of cryptocurrency online trading applications.

This study uses data collection techniques using online questionnaires. Data collection techniques using questionnaires have weaknesses including the possibility that the answer given by the respondent is not the actual answer, resulting in data elimination which narrows the number of representative samples. It is expected that subsequent studies can use complete data, so that the results of the research to be obtained can be more accurate.

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