

Cryptocurrencies as Investment Instrument: A Social Commerce and Subscription-Based Service Perspective

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ABSTRACT

This research aims to create a better understanding of cryptocurrency adoption. The research framework is adapted from the Technology Acceptance Model (TAM) with additional constructs: social commerce, hedonic motivations, and utilitarian motivation. A quantitative research method was chosen for this study. A total of 54 respondents are collected using a snowball non-probability sampling method. The results show that Hedonic motivation and utilitarian motivation that represent subscription-based online services prove to have an impact on perceived usefulness. However, perceived usefulness fails to impact behavioral intention to use. Social commerce representing social interaction in the model has proven that it impacts behavioral intention to use with the mediation of perceived trust.

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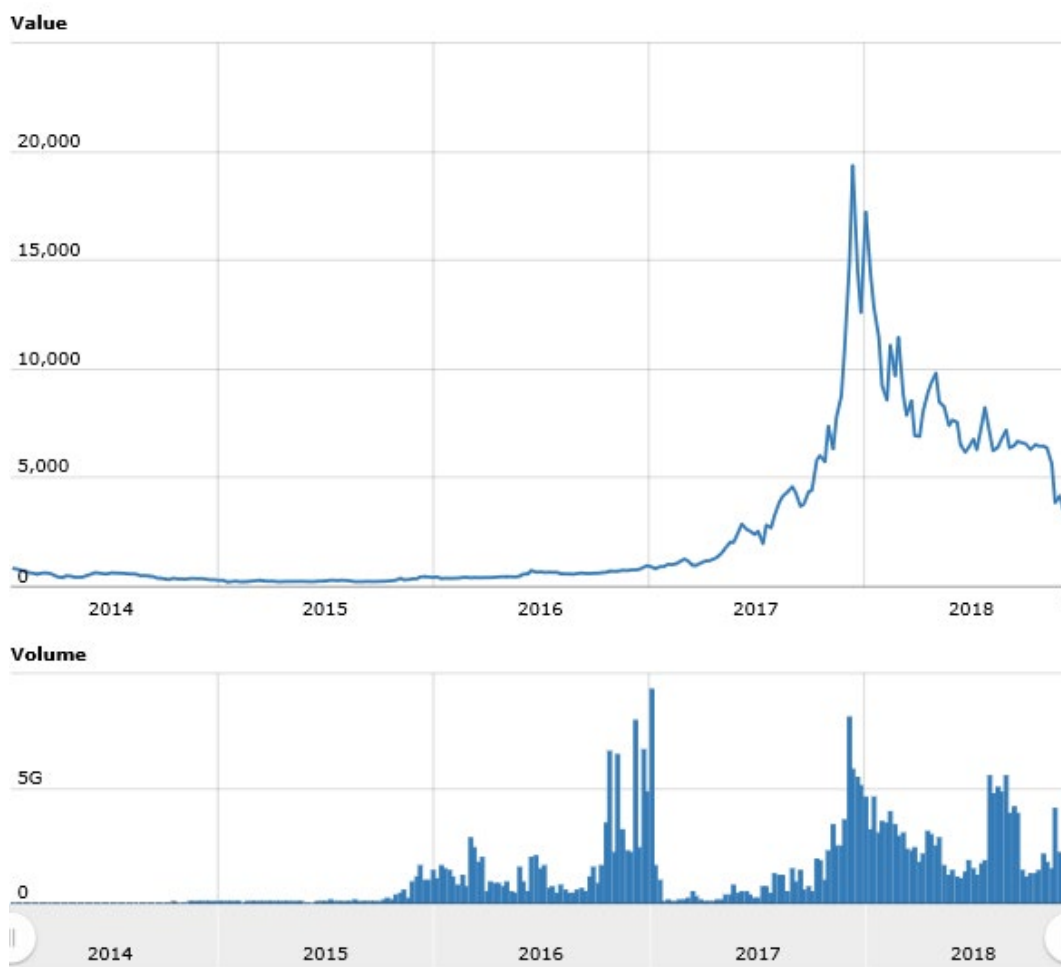
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1. Introduction

A cryptocurrency is a type of virtual currency based on cryptographic principles and decentralized management (Mendoza-Tello, Mora, Lytras, & Pujol-Lopez, 2018). Cryptocurrency, for example, bitcoin is an entirely digitally disseminated currency, launched by pseudonymous developer Satoshi Nakamoto through a white paper (Nakamoto, 2012). The system that he created (blockchain) allows for transactions between two parties without having mediated by a conventional banking institution.

In November 2017, bitcoin value reached \$6,000. Bitcoin value at that time has surged nearly 600% compared to early 2017 (World Coin Index, 2020). However, the quickly rising cost has driven some skepticism (La Monica, 2017). As such, Bitcoin's value has significantly lost its value, which fell below \$6,000 in 2018, as shown in Figure 1.

Figure 1. World Coin Index, 2020



Cai's (2018) study suggested that cryptocurrency's key feature of eliminating intermediaries (banking institutions such as a central bank) in trading an individual's wealth might be blamed. By eliminating a central bank's role, the likelihood volatility

increases because the unregulated market will rely on an individual's speculation of cryptocurrency value.

Currently, Bitcoin and any other cryptocurrencies are not regulated by law or backed by other legal entities and governments. It follows a free market system (Bouoiyour & Selmi, 2015). Nevertheless, the investors start to trade and discuss about Bitcoin's future value (Wokke & Rodenrijs, 2018).

This research aims to study the effects of social commerce and subscription-based online services in cryptocurrency adoption as an investment instrument. The social commerce and subscription-based online services have been offered by conventional banks such as BTPN in Indonesia. A BTPN's product, Jenius, has few key features that made it much more successful than competitors' products. For example, auto-debit saving that allows a consumer to transfer funds to his/her saving account regularly and automatically. Teja's (2017) research compares two products which were Jenius and Sakuku, which was more focused on creating a whole brand-new banking product for consumers. Generally, the research shows Jenius as a well-predominant new banking product that is perform better than Sakuku. The study shows that Sakuku, as the new products that were focused on product superiority, fail to achieve the minimum critical mass of early adopters relatively. However, Jenius, which added little convenience in their banking features, was successful in acquiring the millennials generation as early adopters (Teja, 2017).

The objective of our study is to examine the correlation coefficients of perceived utility and perceived trust for cryptocurrency adoption. Thus, we raise a research question whether people adopt cryptocurrencies as an investment through a socially-commerce and automated platform. This research is partly adapted Davis's 1989 Technology Acceptance Model and influenced by the past study in social commerce and subscription-based online services.

2. The Theoretical Foundation

The research measures adoption intention as a dependent variable driven by three independent variables that consist of hedonic motivations, utilitarian motivations, and social commerce. Their relationship is mediated by two mediating variables from the Davis (1989) technology acceptance model (TAM), namely, perceived usefulness and perceived trust.

2.1 Hedonic Motivations

Hirschman and Holbrook (1982) describe hedonic motivation as a concept that includes happiness, fantasy, awakening, sensuality, and enjoyment (Özen & Kodaz, 2016). It is a construct related to emotional experience (Martín-Consuegra, Díaz,

Gómez, & Molina, 2018). Batra and Ahtola (1991) added that hedonic motivations would lead to gratification from sensory attributes. Consumers who shop for leisure expect the hedonic value to be higher (Tambuwun, 2016). Hedonic motivation, according to Dabholkar and Bagozzi, contains the intrinsic value that is fun, playfulness, and enjoyment. (Dabholkar & Bagozzi, 2002).

Ozen and Kodaz (2016) explained that if a consumer is hedonic, he/she will benefit from the emotional and experiential aspects of shopping. Kim's (2016) study regarding smartwatch adoption intention, hedonic motivation, was used as an independent variable that will affect usage intention. In his research, he suggested that the physical attractiveness of smartwatches is an integral factor when making a purchase. Another research by Curran and Meuter (2007) indicate that enjoyment contributes to the customer's readiness to adopt certain online banking services. Celik (2008) also shows the role of playfulness in predicting both perceived utility and perceived ease of use.

From the previous research findings mentioned above, this study suggests that hedonic motivation positively affects the intention to invest in cryptocurrency through subscription-based services. It is important to note that hedonic motivation will be used as an independent variable and utilitarian motivation to represent subscription-based services. Both variables will be mediated by perceived usefulness. Therefore, the following hypotheses are:

Hypothesis I: Hedonic Motivation has an impact on perceived usefulness.

2.2 *Utilitarian Motivation*

Besides leaving the banking system for such ideological reasons, Bitcoin was regarded as useful from a purely utilitarian perspective due to its higher return as investment instrument (Folkinshteyn & Lennon, 2017). Utilitarian describes the non-sensory and functional options selected for instrumental reasons (Batra & Ahtola, 1991). It is a comprehensive evaluation of functional benefits and sacrifices (Martín-Consuegra, Díaz, Gómez, & Molina, 2018).

Utilitarian motivations for a certain type of behavior usually concern the efficient and timely completion of a task. (Cotte, Chowdhury, Ratneshwar, & Ricci, 2006). Lapa, in 2018 described a consumer with the utilitarian motivation is to focus more on relevant product attributes, information collection, and timely and efficient completion of the shopping task (Lapa, 2018). Wolfinbarger and Gilly (2001) found that the experience of increased freedom and control is particularly crucial for utilitarian-motivated consumers.

About cryptocurrencies, a study described that cryptocurrencies would offer utilitarian value to its user, such as cross-border transactions, without needing to use an intermediary service (Mendoza-Tello, Mora, Lytras, & Pujol-Lopez, 2018). Also, cryptocurrencies allow for almost instantaneous value transfers throughout the world at a fraction of the cost of traditional money transfers (Folkinshteyn & Lennon, 2017).

Perceived ease of use and perceived usefulness in the original TAM framework are used as the two primary utilitarian variables as determinants of user attitude and intention to use (Kim, 2016). TAM's utilitarian framework has been adopted by many researchers to predict the end-user acceptance of various technologies, especially information and communication technology (ICT). Therefore, this research proposes:

Hypothesis II: Utilitarian motivation has an impact on perceived usefulness

2.3 *Perceived Usefulness*

In the Original TAM (Davis, 1986), two main variables are used to describe adoption intention and to mediate adoption intention with external variables. Davis proposed that the attitude of individuals towards the use of an information system, whether or not they use the system, should be affected by the function of two determinants, perceived usefulness (PU) and perceived ease of use (PEOU). Davis defined perceived usefulness as the degree to which an individual believes that using a particular system would enhance their job performance (Davis, 1989). PU is also defined as a belief that the user expects that a specific application system can improve work efficiency (Chang, Yan, & Tseng, 2012). PU has a persistent effect on the intention of using technology in the future (Venkatesh & Bala, 2008).

Many researchers have adopted the PU role as a mediating variable as a determining factor in adoption intention. It has been shown to have significant effects on the behavioral intention of the individual (Wong, Elkaseh, & Fung, 2016). Massey et al. (2001) suggested that different populations can have different ideas about the perceived ease of use and usefulness of advanced technology.

Davis (1986) theorizes that PU influenced customer attitudes positively. He argues that while the behavior is not always directly linked to the expected benefits of positive system performance due to such behavior. There is also evidence that when system performance is positive, there is a higher correlation to such behavior (Wokke & Rodenrijs, 2018).

Therefore, this study proposes:

Hypothesis III: Perceived usefulness has an impact on behavioral intention to use.

Deng et al. (2018) mention that trust is a classic variable of belief. In TAM theory, people's attitudes towards a certain technology can be significantly influenced by perceived usefulness. From this point, the authors argue that an individual is likely to adopt a certain technology if it was perceived as useful. For this reason, this study hypothesizes:

Hypothesis IV: Perceived usefulness has an impact on perceived trust.

2.4 Social Commerce

Social commerce is an internet-based commercial application using social media and web 2.0 technologies that promote social interaction and user-generated content to help consumers decide and acquire products and services in online markets and communities. (Huang & Beyounecef, 2013). The more straightforward definition was "the concept of word-of-mouth applied to e-commerce" (Dennis, Jayawardhena, & Wright, 2009). Social commerce is a relatively new phenomenon, with a growing adoption (Barnes, 2014). Social commerce could be the future of e-commerce (Hajli, 2012).

Research shows that the roots of social commerce can be traced back to the end of the 1990s (Curty & Zhang, 2013). E-Commerce giants such as Amazon and eBay have introduced several features on their website that allow customers to write reviews on products or rate sellers' performance, which is then made publicly possible (Saundage & Lee, 2011). Cooke and Buckley (2008) suggested that the emergence of social commerce (s-commerce) is now influencing the adoption of e-commerce. By combining business, information, technology, and social aspects, social commerce involves several disciplines, including marketing, informatics, sociology, and psychology (Huang & Beyounecef, 2013).

When shopping online, consumers find it challenging to validate the information provided by the seller but can rely on their colleagues who visited the same store for an indirect indication. It shows that persuasiveness can be extremely useful when it comes to other people, even if they are random strangers (Cialdini, 2001). The other study also suggests that the indirect peer-persuasion from individuals can outweigh their private information to shape their convictions and conduct (Chen, Wang, & Xie, 2010).

Many conceptual frameworks in the current e-commerce literature are mainly affected by two main streams: Technology Acceptance Model (TAM) and the Theory of Planned Behavior (TPB) (Hajli, 2012). One of the variables that is often combined with TAM model in a research model is perceived trust (Folkinshteyn & Lennon, 2017). Trust is a crucial aspect of many economic transactions, according to Fukuyama. (Fukuyama, 1995). People tend to adopt trust to reduce social complexity (Luhmann,

1979). Social complexity in online transactions can be traced to the opportunistic behavior of e-vendors, in which effective regulations cannot keep up. Trust is, therefore, often regarded as the foundation of e-commerce (Keen, Ballance, Chan, & Schrupp, 1999).

Based on the description, this study proposes:

Hypothesis V: Social Commerce has an impact on perceived trust.

Furthermore, social commerce has also been attributed to impacting the perceived usefulness of an adoption or buying decision. Hajli & et al. (2017) argued that online forums, communities, ratings, and reviews have an impact on perceived usefulness. They argue that potential user is more likely to adopt or to buy because of the platform's social commerce side. Therefore this study proposes:

Hypothesis VI: Social Commerce has an impact on perceived usefulness.

2.5 *Perceived Trust*

Perceived trust is defined as the believability of a source or message determined by trustworthiness and expertise. It is a belief, influenced by the opinion of the individual on critical system features (Kini & Choobineh, 1998). Gefen et al. (2003) defined trust as an individual willingness to depend on other entities based on the beliefs in ability, benevolence, and integrity of those certain entities. Al-Jabri also explained that trust is the user's relative confidence in the mobile technology service itself. Having trust means that the user will recognize the service as trustworthy (Al-Jabri, 2015).

Trust is recognized as a critical success factor in electronic and mobile technology (Carter & Bélanger, 2005). In electronic commerce, trust plays an essential role in purchasing a consumer because a purchase decision must be taken in the face of uncertainty. (Hong, 2015). Trust also plays a role as an essential determinant and customer's adoption intention in financial services such as internet banking (Flavian, Guinaliu, & Torres, 2006)

In cryptocurrency context, the risk-taking willingness is based on the conviction, expectation, competence, and integrity of electronic payments (transactions) made with cryptocurrencies. Mendoza-Tello et al. (2018) argue that robust cryptographic methods supported by the P2P system and the blockchain innovation provide trust. Furthermore, Cryptocurrencies are reliable because they provide a transparent, impersonal verification method without intermediaries and maintain credibility in the system that motivates non- users to adopt cryptocurrency (Mendoza-Tello, Mora, Lytras, & Pujol-Lopez, 2018).

Following the previous research, this research proposes:

Hypothesis VII: Perceived trust has an impact on behavioral intention to use cryptocurrencies.

2.6 Behavioural Intention to Use

Intention to use or behavioral intention to use is defined as the interest of the user in the future use of the system or technology. (Venkatesh et al., 2003). It is used as an important factor determining whether users will use the system effectively (Shroff, Deneen, & Ng, 2016).

In this study, behavioral intention is used to measure the degree to which a person believes that cryptocurrencies as an investment instrument will be beneficial for the user.

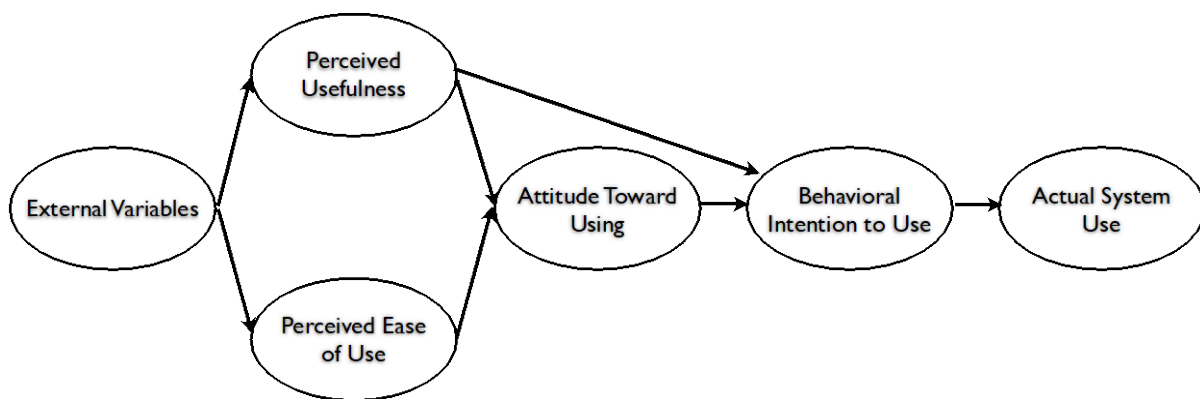
3. Research Method

This section describes the research methods and processes used and carried out in this study. The section contains a list of hypotheses, theoretical framework, operational definition of variables, and sampling plan.

3.1 Research Model

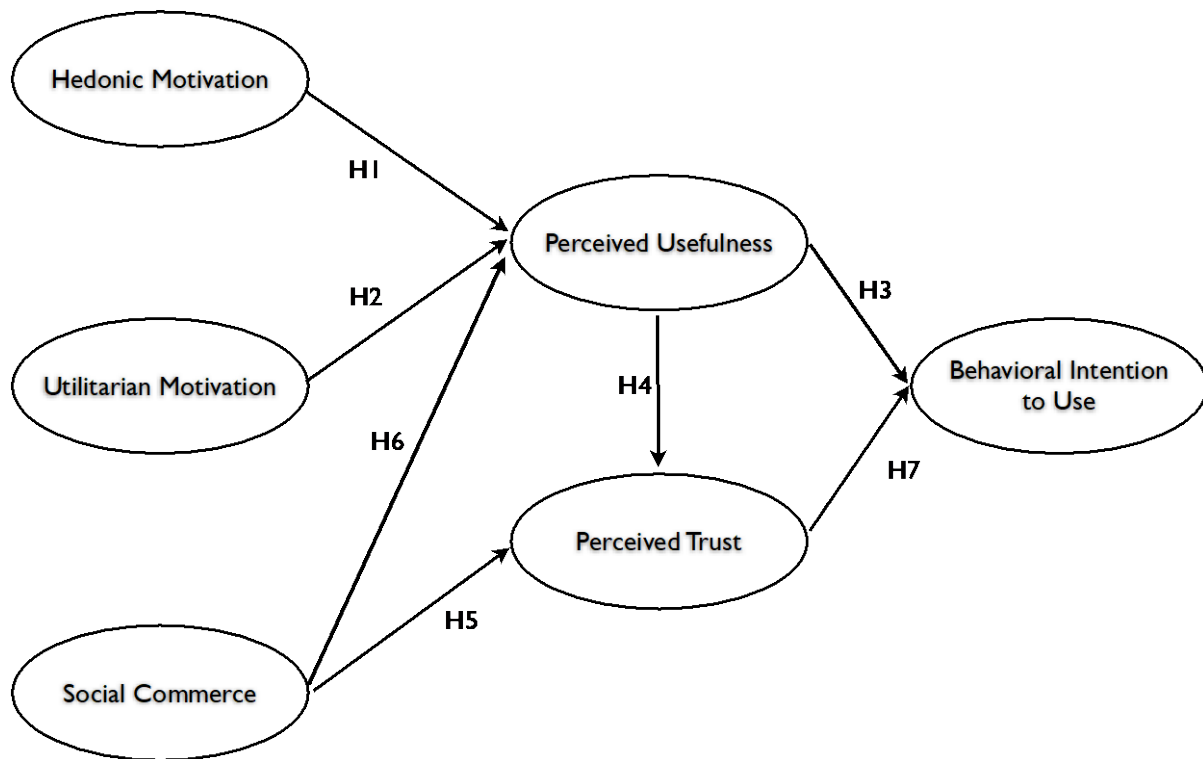
This study uses Davis’s (1989) Technology Acceptance Model as a theoretical underpinning. The original TAM uses behavioral intention to adopt as a dependent variable, and 2 of the main determinant variables would be perceived ease of use (PEOU) and perceived usefulness (PU). However, this study will not fully use Davis’s TAM model.

Figure 2. Original TAM by Davis (1989)



After being discussed in the previous chapters, therefore, the external variables would be social commerce – to describe social interaction between users alongside subscription-based online services that are represented by utilitarian and hedonic motivation. There are also mediating variables such as perceived usefulness used to mediate utilitarian and hedonic motivation, and perceived trust to mediate social commerce. Therefore, this research model is given below:

Figure 3. Research Model



3.2 Operational definition of variables

The current study uses construct measurement from hedonic motivation, utilitarian motivation, social commerce, perceived usefulness, perceived trust, and behavioral intention to adopt. The indicators for the latent variables are adjusted from previous relevant studies (social commerce, subscription-based online services, and technology acceptance model (TAM)) mentioned in APPENDIX A.

3.3 Research Instrument

3.3.1 Questionnaire Design

This research will use primary data that are gathered through a questionnaire as the research instrument. Questionnaires are distributed to the respondents that have experience in using financial technology mobile application. The snowball non-

probability sampling method is used in the process. Specifically, we use screening question for respondents that based on a steady income, self-efficacy in using the technology-based method of payments such as GoPay or OVO, and understanding about cryptocurrencies investment. All of the respondents ought to use GoPay or OVO to measure their self-efficacy in online-payment. A steady income is also a must due to the low probability of using pocket-money for investment. Further screening questions regarding cryptocurrency investment knowledge were used. The first part of the questionnaire contains demography and screening questions. Respondents were asked about their gender, date of birth, email addresses, and screening questions, which the respondent must answer yes to continue to be considered valid respondent. The questionnaire also contains 28 questions that represent six variables that are used in this research. A 6 Point Likert Scale is used to measure each construct. It compromises strongly agree (represented by 6 in the scale) and strongly disagrees (represented by the number 1 of the scale).

3.3.2 Reliability

Reliability is the degree to which an assessment tool or a research instrument such as a questionnaire can produce stable and consistent results. For this research, Cronbach Alpha is used. It is measured with numbers between 0 and 1. In order to be accepted, the Cronbach Alpha value must be higher than 0.6. (Hair et al., 2016).

3.3.3 Validity

Validity is the degree that any estimation approach or instrument prevails regarding depicting and evaluating what it is intended to measure. It intends to guarantee that the best possible inquiries are chosen that will gauge the factors accurately.

This research will use the factor analysis to measure the construct validity. It is regarded as one of the simplest methods to prove the validity of a research instrument. It used principal component analysis to analyze the construct.

3.4 Sampling Plan

3.4.1 Population

The population is defined in this research as an individual who currently lived in Indonesia. Other demography factors were not included since this research is testing cryptocurrency as an investment in general terms. This research, however, only takes respondents who can use a mobile-payment method such as GoPay and OVO, people who are already working and earning a steady income weekly or monthly, and understand cryptocurrencies investment. The users who are accustomed to using mobile payment are more likely to use an investment feature since the current financial technology application nowadays is also equipped with an investment feature that has a similar user experience. Furthermore, a steady income is chosen in

this research since it is more likely for someone with income to invest. We limit the eligible steady income for above \$400 per month to ensure the respondents have enough funds to be invested.

3.4.2 Sampling Technique

Techniques for sampling can be divided into two types, probability, and non-probability. Probability sampling is a sampling technique in which the subjects of the population get an equal opportunity to be selected as a representative sample. Non-probability sampling is a method of sampling where it is not known which individual from the population will be selected as a sample. This research will use the non-probability, snowball sampling technique. It is chosen due to the generic adoption of emerging technology, and it is by far the most popular method of sampling. The research instrument was spread through social-messaging-app called "LINE" to the respondents. Respondents were directed to fill the research instrument on google forms, and after enough valid respondents, the questionnaire was closed to begin data processing.

3.4.3 Data Analysis Plan

All of the data that was obtained were processed and analyzed through Partial Least Square – Structural Equation Modeling (PLS-SEM) in SmartPLS 3. It was chosen due to its convenience in a low number of respondents and more straightforward data analysis, while it was also used in previous research that became the foundation of this research (Hair et al., 2016).

4. Data Analysis

All of the data were obtained by spreading online questionnaires and were processed using the Partial Least Squares algorithm used in previous research (Mendoza-Tello et al., 2018). The software being used was SmartPLS 3.0, and it was chosen because it was much more convenient to use with a small number of respondents, and PLS in SmartPLS 3.0 was also used by previous research that became the foundation of this study. Three hundred subsamples that are created from 54 respondents' data were used in this study.

4.1 Respondents' Profile

After spreading the questionnaire to more than 1000 peoples, 232 people fill the questionnaire. Out of 232 people, only 54 of the respondents pass the screening question of having a steady income by working, has ever used mobile payment such as GoPay or OVO, and understand cryptocurrency investment. The number of respondents is sufficient for Partial Least Square – Structural Equation Modeling (PLS-SEM) method with a maximum of three direct paths to endogenous variables (Hair et al., 2016). 51% out of 54 respondents were male. Respondents' age was classified into

three categories, which were 17-35 (90,74%), 35-60 (9,26% %), and none over 60 years old.

4.2 Descriptive Analysis

Overall means has exceeded the neutral line of 3, which means that most of the respondents agree with the statement. Frequency table also supported the statement that most of the respondent agrees with the questionnaire items since the most answer lies on the greater end of the scale (3-6) as presented in Table 1.

Table 1. Descriptive Statistics

Variable	Mean	Median	Mode	Std. Deviatio	Frequency			Total
					1 - 2	3 - 4	5 - 6	
HE	4.385							
HE1	4.352	4	5	1141	2	26	26	54
HE2	4.611	5	5	0.989	1	19	34	54
HE3	4.241	4	5	1088	4	26	24	54
HE4	4.370	5	5	1127	3	22	29	54
HE5	4.352	5	5	1108	3	22	29	54
UT	4.486							
UT1	4.556	5	4	1117	3	23	28	54
UT2	4.741	5	5	0.906	0	19	35	54
UT3	4.556	5	5	1181	3	21	30	54
UT4	4.556	5	5	0.975	1	21	32	54
UT5	4.019	4	3	1408	8	24	22	54
PU	4.000							
PU1	4.000	4	4	1388	8	24	22	54
PU2	4.093	4	5	1323	8	22	24	54
PU3	4.352	5	5	1307	6	19	29	54
PU4	3.556	4	3	1117	9	33	12	54
SC	4.565							
SC1	3.796	4	4	1112	7	33	14	54
SC2	4.611	5	5	1008	3	16	35	54
SC3	5.019	5	5	0.952	1	10	43	54
SC4	4.833	5	5	1032	2	14	38	54
PT	3.966							
PT1	4.037	4	4	1276	8	27	19	54
PT2	3.944	4	5	1339	9	23	22	54
PT3	3.870	4	5	1402	10	22	22	54
PT4	3.944	4	4	1471	10	25	19	54
PT5	4.037	4	4	1503	11	20	23	54
BITU	3.838							
BITU1	4.093	4	4	1494	8	24	22	54
BITU2	3.704	4	5	1486	14	20	20	54
BITU3	3.870	4	4	1564	12	21	21	54
BITU4	3.685	4	5	1537	13	22	19	54

4.3 *Validity and Reliability Analysis*

4.3.1 *Validity Analysis*

Validity analysis comprises several sub-tests: face validity, criterion, content, and construct validity (Taherdoost, 2016). Face validity is a subjective judgment of subjects towards a specific construct. Criterion Validity or concrete validity is a measure of the relationship between measurement and its outcome. Content validity refers to the degree of an item in an instrument to reflect the content in which the content will be generalized. While construct validity refers to whether or not a construct is a functioning and operating reality has been well-translated.

Construct validity itself consists of 2 sub-test, the discriminant and convergent validity. The discriminant validity refers to the ability of a latent variable to explain more variances in the observed variables. Its purpose is to prove that constructs that is not supposed to be related is also not related based in the survey data. On the other hand, in order to test whether a supposed related construct is also related based on the survey data, convergent validity should be used.

Factor analysis was employed in this study using principal component analysis (PCA) to measure construct validity. All loadings value was more than 0.5 with BITU3 at .970, making it the highest value and SC4 at .742, the lowest factor loadings. It passed a part of discriminant validity in which the cut-off value is 0.5. With that, this study construct can be considered as valid.

Table 2. Outer Loadings of Variables

	BITU	HE	PT	PU	SC	UT
BITU1	0.898					
BITU2	0.939					
BITU3	0.970					
BITU4	0.965					
HE1		0.897				
HE2		0.841				
HE3		0.892				
HE4		0.875				
HE5		0.872				
PT1			0.875			
PT2			0.951			
PT3			0.939			
PT4			0.921			
PT5			0.933			
PU1				0.913		
PU2				0.933		
PU3				0.949		
PU4				0.893		
SC1					0.797	
SC2					0.765	
SC3					0.764	
SC4					0.742	
UT1						0.858
UT2						0.798
UT3						0.774
UT4						0.814
UT5						0.788

According to Hair et al. (2016), convergent validity can be shown with the average variance extracted (AVE). A cut-off value for AVE is 0.5, and all of the AVE was well above 0.5. Furthermore, therefore, considered to pass convergent validity. The highest AVE was .891 by BITU and SC being the lowest with .553.

Cross loadings are also a requirement for discriminant validity in which the cross-loadings ought to be the highest in their construct compared to other variables. So the discriminant validity was achieved.

4.3.2 Reliability Analysis

Table 3: Cronbach's Alpha, Composite Reliability and AVE

	Cronbach's Alpha	rho_A	Composite Reliability	Average Variance Extracted (AVE)
BITU	0.959	0.960	0.970	0.891
HE	0.924	0.932	0.943	0.767
PT	0.957	0.958	0.967	0.854
PU	0.941	0.943	0.958	0.851
SC	0.746	0.807	0.831	0.553
UT	0.850	0.881	0.891	0.622

Reliability analysis is a mandatory measurement in research that is noted with Cronbach's alpha. For an exploratory study, it is suggested to have a Cronbach's alpha that is higher or more than 0.70 (Taherdoost, 2016). It can be seen that values mostly above .90 in which it is considered excellent reliability, and SC, in particular, considered to have acceptable reliability since it still in the range of $.70 > .80$ (Taherdoost, 2016).

4.4 Inferential Analysis

4.4.1 Model Fit

Model fit in SmartPLS 3.0 is measured by using Standard Root Mean Residual (SRMR). It highlights the difference between the observed correlation and the model in its correlation matrix. Researchers benefit from SRMR by allowing researchers to assess the average extent of discrepancies between observed and expected correlation as one criterion for model fitting. SRMR value of this study reached the number of 0.088, which just right by the guideline; the SRMR value is between 0.05 and 0.08 (Hair et al., 2016).

Table 4. Model Fit

	Saturated Model	Estimated Model
SRMR	0.088	0.093
d_ ULS	2.904	3.263
d_ G	3.059	3.098
Chi-Square	733.017	734.246
NFI	0.612	0.611

4.4.2 Multiple R-square

R2 (R-square) was used to evaluate this model. It was used to show the proportion of the variance in the dependent variables and are shown as representatives of the structural model’s explanatory power. 87% of behavioral intention to use (BITU) was explained by perceived usefulness (PU) and perceived trust (PT). Perceived usefulness itself was explained by hedonic motivations (HE), utilitarian motivations (UT), and social commerce (SC) with a value of 67%. Perceived trust was explained by perceived usefulness (PU) and social commerce (SC) with 82%

Table 5. R-Square

	R Square	R Square Adjusted
BITU	0.871	0.866
PT	0.824	0.817
PU	0.679	0.660

4.5 Hypothesis Testing

With a minimum t-value at 1.96 at a p-value of less than 0.1 (p<0.1), Table 6 presents the result of each hypothesis.

Table 6. t-values and p-values

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values
HE -> PU	-0.182	-0.151	0.184	0.984	0.325
UT -> PU	0.719	0.703	0.167	4,319	0.000

PU -> BITU	0.047	0.067	0.151	0.311	0.756
PU -> PT	0.758	0.746	0.073	10,333	0.000
SC -> PT	0.188	0.195	0.064	2,917	0.004
SC -> PU	0.210	0.216	0.119	1,767	0.077
PT -> BITU	0.854	0.832	0.129	6,624	0.000

Hypothesis 1 (Hedonic motivation affecting perceived usefulness) is not supported with a p-value of 0.325. Hypothesis 2 (Utilitarian motivation affecting perceived usefulness) is supported with a p-value of 0.000. Hypothesis 3 (Perceived usefulness affecting behavioral intention to use) is not supported with a p-value of 0.756. Hypothesis 4 (Perceived usefulness affecting perceived trust) is supported with a p-value of 0.000. Hypothesis 5 (Social commerce affecting perceived trust) is supported with a p-value of 0.004. Hypothesis 6 (Social commerce affecting perceived usefulness) is supported with a p-value of 0.077. Hypothesis 7 (Perceived trust affecting behavioral intention to use) is supported with a p-value of 0.000.

4.6 Discussion

The first Hypothesis, which is Hedonic Motivation influence towards Perceived Usefulness, is rejected with a p-value of 0.325 in which it fails the criteria of p-value less than 0.1 ($p < 0.1$) and is rejected. A previous study (Ramkumar & Woo, 2018) demonstrates that consumers seeking hedonic benefits and are individually self-sufficiency in online transactions would have a positive and important result for the subscription product.

The second hypothesis, which still represents subscription-based online services, is supported in this study in which utilitarian motivation was able to significantly affect perceived usefulness with a p-value at 0.000. From the previous research, (Ramkumar & Woo, 2018) concludes that consumer who is self-suffice in online transaction and is seeking utilitarian motivation in subscription-based online service would have a positive and significant attitude towards subscription products. Therefore, the second hypothesis is accepted.

The third hypothesis in which perceived usefulness was supposed to have a positive impact on behavioral intention to use was not able to be supported since it has a p-value of 0.756. Therefore this hypothesis is not accepted. A previous study (Mendoza-

Tello, Mora, Lytras, & Pujol-Lopez, 2018) on cryptocurrency as a payment method concludes that perceived usefulness does positively affect behavioral intention to adopt.

The fourth hypothesis in which perceived usefulness influences perceived trust is supported with a p-value at 0.000, and it has a positive relationship, therefore accepted. Perceived usefulness in a previous study has shown that it could become a determinant variable to Perceived Trust (Mendoza-Tello et al., 2018). This particular result has added to the list of research that proved that perceived usefulness is a determinant factor for perceived trust.

The fifth hypothesis in which it argues that social commerce influencing perceived trust, is supported since it has a p-value of 0.004. Mendoza-Tello et al. (2018) study resulted in Social Commerce having a positive impact on perceived trust. Therefore, this result is accepted and is in line with the previous study (Mendoza-Tello et al., 2018).

The sixth hypothesis argues that social commerce has an impact on perceived usefulness. The hypotheses were supported with a p-value that is not within constraints of less than 0.1. The p-value for the sixth hypothesis is at 0.077, which means that the hypothesis is supported.

The seventh hypothesis argues that perceived trust has an impact on behavioral intention to adopt. The hypothesis was supported by a p-value that is well within constraints (0.000). Align with the previous study in cryptocurrency payment (Mendoza-Tello et al., 2018), perceive trust has a positive correlation but no evidence to support it with a coefficient of 0.209.

Conclusion

This section answers and summarizes all the hypotheses. Future recommendations are also provided after the summary.

Table 7. Summary of Hypothesis Testing

Hypotheses		Answer
H1	HE → PU	Not Supported
H2	UT → PU	Supported
H3	PU → BITU	Not Supported
H4	PU → PT	Supported
H5	SC → PT	Supported
H6	SC → PU	Supported
H7	PT → BITU	Supported

The results show that Hedonic motivation and utilitarian motivation that represent subscription-based online services prove to have an impact on perceived usefulness. However, perceived usefulness fails to impact behavioral intention to use. Social commerce representing social interaction in the model has proven that it impacts behavioral intention to use with the mediation of perceived trust.

5.1 Future Recommendations

The innovation of cryptocurrency has sparked much interest. Cryptocurrency has been one of the critical topics in business and especially investment due to its nature that is entirely different from any other currency. With that, it is essential to enhance research in cryptocurrency adoption and its implication to fully understand it and help decision-makers such as the regulator either to make it legal or illegal. Then, similar to the nature of cryptocurrency, it will be better to gain a larger number of respondents not confined to a single country. It is also better to gain data from all across the demography distributed evenly to have a much better and convincing result.

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APPENDIX A.

Var. Code	Construct Measurement	
HM	Hedonic Motivation (Ramkumar and Woo, 2018)	Hedonic Motivation (Adjusted Measurement)
HM1	I find such subscription-based online services stimulating	I find such subscription-based online services stimulating
HM2	I could share my experiences with such subscription-based online services others	I could share my experiences with such subscription-based online services others
HM3	When shopping at such subscription-based online services, I would feel in control	When Investment Instruments at such subscription-based online services, I would feel in control
HM4	At such subscription-based online services, I would have control over my shopping process	At such subscription-based online services, I would have control over my Investment Instrument process
HM5	Such subscription-based online services would allow me to control my shopping trip	Such subscription-based online services would allow me to control my Investment Instrument routine
UT	Utilitarian Motivation (Ramkumar and Woo, 2018)	Utilitarian Motivation (Adjusted Measurement)
UT1	I could invest my money by shopping at such subscription-based online services	I could invest my money using such subscription-based online services
UT2	Such subscription-based online service could offer me competitive prices	Such subscription-based online service could offer me benefit
UT3	I could shop at such subscription-based online services whenever I want	I could invest at such subscription-based online services whenever I want
UT4	Such a subscription-based online service would be convenient for me	Such a subscription-based online service would be convenient for me

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UT5	I could order products that are tailored for my needs at such subscription-based online services	I could invest in crypto that is tailored for my needs at such subscription-based online services
PU	Perceived Usefulness (Mendoza-Tello et al., 2018)	Perceived Usefulness (Adjusted Measurement)
PU1	using cryptocurrencies in electronic payments improves the effectiveness, profitability, and investment of my money	using cryptocurrencies as Investment Asset improves the effectiveness, profitability, and investment of my money
PU2	using cryptocurrencies in electronic payments allows me to increase my productivity	using cryptocurrencies as investment assets allows me to increase my productivity
PU3	I find that the use of cryptocurrencies in electronic payments is useful because it allows me to quickly and inexpensively send money to anyone in the world	I find that the use of cryptocurrencies as an investment method is useful because it allows me to quickly and inexpensively invest money anywhere in the world
PU4	using cryptocurrencies, I improve my economic performance because I have total control over my money	using cryptocurrencies, I improve my economic performance because I have total control over my money
SC	Social Commerce (Hajli, M., 2012).	Social Commerce (Adjusted Measurement).
SC1	I Trust my friends on online forums and communities	I Trust my friends on online forums and communities
SC2	I use online forums and communities to acquire information about a product.	I use online forums and communities to acquire information about a product.
SC3	I usually use people's ratings and reviews about products on the internet.	I usually use people's ratings and reviews about products on the internet.
SC4	I usually use people's recommendations to buy a product on the internet.	I usually use people's recommendations to buy a product on the internet.

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PT	Perceived Trust (Mendoza-Tello et al., 2018)	Perceived Trust (Adjusted Measurement)
PT1	I believe that electronic payments made with cryptocurrencies are integral	I believe that investment made with cryptocurrencies are integral
PT2	I believe that electronic payments made with cryptocurrencies are trustworthy because they guarantee the privacy of the data collected in a transaction	I believe that investment made with cryptocurrencies are trustworthy
PT3	I believe that electronic payments made with cryptocurrencies are reliable because they avoid fraud and reduce the risk in the transaction	I believe that investment made with cryptocurrencies are reliable
PT4	I do not doubt the honesty of IB	I do not doubt the honesty of cryptocurrency
PT5	I feel assured that legal and technological structures adequately protect me from problems on IB	I feel assured that legal and technological structures adequately protect me from problems on cryptocurrency
BITU	Behavioral Intention to Use (Mendoza-Tello et al., 2018)	Behavioral Intention to Use (Adjusted Measurement)
BITU1	in the future, I intend to continue using wearable healthcare device	in the future, I intend to use cryptocurrencies as an investment instrument
BITU2	in my daily life, I will always try to use healthcare wearable device	in my daily life, I will always try to use cryptocurrencies as an investing instrument
BITU3	I am interested in using the healthcare wearable device	I am interested in investing with Cryptocurrency
BITU4	I plan to adopt the wearable healthcare device in the future	I plan to invest with Cryptocurrency

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