

Factors Influencing Adoption of Cryptocurrency-based Transaction from an Islamic Perspective

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Abstract

This paper presents a user study of ?perception of the cryptocurrency-based transaction from the Islamic views?. The motivation lies with the fact that some users of cryptocurrency-based transaction raised concern on the nature of transactions with Bitcoin. Specifically, some argued that Bitcoin can be easily used for illegal purposes. Therefore, ?Technological Acceptance Model? was adopted and quantitative research methodology was utilized, to formulate and test some hypothesis that will lead to an establishment of a model. Sample of 306 participants was used in the study. The result of the hypothesis testing indicates that ?Behavioral Intention to Use Cryptocurrency from the Islamic perspective? is influenced directly by Shari?ah Compliance, Perceived Ease of Use, Emotionality, Perceived Usefulness, and Financial Concern. As evident from the analysis, Emotionality is influenced directly by Financial concern and Shari?ah Compliance. Whereas, Behavioral Intention is influenced indirectly by Financial Concern. The sample is general and does not specify a specific group of study. This study has contributed to understanding the Islamic issues behind the implementation of Cryptocurrency. This study adopted.

Index terms— blockchain, cryptocurrency, bitcoin, behavioral intention, sharia compliance

1 Introduction

hari'ah represent the pathways Muslims perceived any affairs of "human being" and/or human-tohuman as well as human-to-environment should be performed. In many cases, human being activities are naturally Shari'ah-based for examples speaking only the truth and preventing yourself from a threat. Conventionally, performing these activities is described are the basis for common sense. Therefore, Shari'ah can simply represent the act of applying common sense. It is only when certain things are preformed out of the Sharia'ah pathways that the issue of Shari'ah compliance was raised, even though some of the events might be part of some common sense, but critical analysis brings about the implementation of Sharia'ah consequences. Cryptocurrency has emerged as a way of making a transaction with money easier and faster. This aid in preventing the complications faced during the other forms of transactions with money. Consequently, makes life better and improve the standard of human-to-human transactions with money. For the fact that Shari'ah represents a blueprint on Muslims affairs, this new way of a transaction with money (cryptocurrency) even though it's easier, is currently facing Shari'ah setbacks. Sharia compliance in a transaction with cryptocurrency-based requires the application of principles of the Islamic law of contract. This is one of the most important factors, cryptocurrency could rely on.

Currently, there are many research studies on investigative the permissibility, in a transaction with a cryptocurrency-based system (Habib and Adekunle, 2019). Nakamoto (2008) makes it clear that cryptocurrency is intended for peer-to-peer monetary transactions, eradicating a central authority. Practically, the transactions involved raises a lot of doubt. In some cases, it is described as a system with no value, it is not an asset or commodity and it's not like other currencies such as fiat money. Moreover, uncertainty issues arise where volatility and obscurity in the transaction with the cryptocurrencies become obvious. Another issue is if the Islamic Rules of Jurisprudence and Fundamentalism criteria are followed or not.

44 This current research followed a pattern of the previous approach on the implementation of the cryptocurrency-
45 based transaction and the speculation as either its right or wrong from an Islamic perspective. The research
46 particularly aims at addressing the situations surrounding the legitimization of cryptocurrency-based systems
47 from an Islamic perspective. It's a hypothesis-testing based research, where a model is proposed. The model
48 was developed from a conceptualization of the: "Sharia'ah Compliance", "Financial Concern", "Emotionality",
49 "Perceived Ease of Use", and "Perceived Usefulness" impact toward "Behavioural Intention" of the use of
50 cryptocurrency systems from an Islamic perspective. The research is a user study, where the Shariah point
51 of view on the cryptocurrency-based transaction and the uncertainty issues related to the area are studied. The
52 main contributions dwell on recognizing the permissibility effects for resolving the uncertain issues.

53 2 Related Work

54 When addressing the Islamic perspective, it means examining to what extent something contributes to the
55 attainment of maqasid al shariah. If a practice does not help realize the fundamental objectives of Islamic law,
56 it is found to be un-Islamic and if practice helps realize the fundamental objectives, it is found to be Islamic.
57 Shari'ah-compliance entails that a financial product or activity complies with the requirements of the Shari'ah.
58 Islamic finance derives its principles from the Shari'ah, which is based on the Qur'an and the Sunnah.

59 The key defining characteristics in the application of Shari'ah to financing structures are that transactions
60 should be based on tangible assets and should not involve interest (riba). Shari'ah principles also prohibit
61 uncertainty (gharar), speculation or excessive uncertainty (maysir) and gambling (qimar).

62 Sifat and Mohamad (2018) explain that the objectives of the Shari'ah are fixed and unchangeable and applicable
63 in all times and places even though the discipline of Islamic economics and finance has grown in politico-economic
64 importance over the past three decades. According to Todorof (2018), the introduction of FinTech in Islamic
65 banking can increase its general competitiveness and inclusiveness by incorporating a greater number of products
66 and services, lowering their existing price and closing the credit gap that exists in many Muslim countries.
67 Nurhisam (2017) argues that when viewed from the perspective of Islamic law, the issuance of money as a
68 means of transaction in a country constitutes a matter protected by Islamic law. Evans (2015) observes that
69 cryptocurrency might be a more appropriate medium of exchange in Islamic banking and finance than the interest-
70 backed central bank fiat currency, especially in cross-border trade. Zubaidi and Abdullah (2017) caution that
71 the area of digital currencies and blockchain requires further research from a Shari'ah perspective to facilitate
72 a better understanding on the topic, yet acknowledge the possibility of introducing a Shari'ah-compliant digital
73 currency once all the issues on validity have been addressed and resolved. Similarly, Muedini (2018) argues that
74 cryptocurrencies are highly compatible with Islamic finance and can provide solutions to problems of government-
75 controlled currencies. Unlike traditional fiat, the supply of digital currencies is fixed, thereby eliminating the
76 issue of uncertainty and also inflation. In opposition, Kameel and Meera (2018) examine the implications of
77 Bitcoin in Islamic finance and question its acceptance as a medium of exchange based on its compliance with
78 Shari'ah and find that cryptocurrency contains a certain prohibited element of gambling and uncertainty. Oziev
79 and Yandiev (2018) assume a middle position by defining the status of cryptocurrency in the financial system by
80 determining the extent of its influence and comparing the characteristics of paper money and cryptocurrencies
81 before concluding that using cryptocurrency is permissible, albeit with strict reservations.

82 3 III.

83 4 Research Methodology

84 This study adopts a quantitative research methodology to yield a valid quantitative result that will be generalized.
85 Several experts in the area of quantitative research were consulted to review the 103 proposed items. Their review
86 and recommendations were very useful in developing the final items. The objective of this research is to investigate
87 cryptocurrency user acceptance based on the three theories of the technology acceptance model, the theory of
88 reasoned action, and deindividuation to identify the factors that indirectly influence cryptocurrency behaviour.
89 The results of the collected data analysis by the analysis techniques are presented. Firstly, the descriptive
90 statistics are presented including the respondents' cryptocurrency awareness background. Secondly, the findings
91 of the exploratory factor analysis are reported. Thirdly, the results of the assessment of the measurement model,
92 the structural model, and the hypotheses testing using partial least square structural equation modelling are
93 analyzed and explained in detail.

94 IV.

95 5 Measurement Model Estimates

96 The measurement model consists of the indicators and the paths that connect them to their latent variables
97 which they intend to measure as shown in Figure ??5: The assessment of the measurement model specifies
98 the relationship between the indicators and their latent variables (Henseler, Ringle, and Sinkovics, 2009). The
99 purpose of assessing the measurement model is to evaluate its validity and reliability and thus evaluate the inner
100 path model estimates (Henseler et al., 2009).

6 b) Convergent validity

Convergent reliability is assessed using the average variance extracted (AVE) comparable to the proportion of variance explained in factor analysis (values between 0 and 1). $AVE > 0.5$ (Fornell and Larcker, 1981). The analysis shows that the AVE for the constructs ranged from 0.583 to 0.815, exceeding the recommended threshold value of 0.5. These results demonstrate that the measurement model has adequate convergent validity and indicates that the measures used were robust.

7 c) Discriminant validity

Discriminant validity is the extent to which a given construct does not correlate with other constructs that are different from it (Joe F Hair, Sarstedt, Ringle, and Mena, 2012).

8 d) Discriminant validity at the construct level

For examining the discriminant validity at the construct level, (Fornell and Larcker, 1981) criterion is used. The discriminant validity is established when the square root of the construct AVE exceeds the correlations between the construct and all other constructs (Ahmad, 2012;Ismail, Hamid, and Idris, 2012) The AVE value for each construct is calculated using PLS algorithm test, while the square root of the AVE value is calculated manually. Table 3 (Henseler et al., 2009). The results in the table showed that all indicators loaded higher on their constructs compared to the other constructs. This confirmed that the discriminant validity at the indicator level was established. Therefore, the results of the cross-loadings demonstrated that the second assessment of the measurement model discriminant validity was satisfactory. Accordingly, the measurement model established its discriminant validity. In the conclusion of the measurement model, All the above results of the measurement model assessment substantiated that all the construct measures are reliable and valid. Consequently, based on these results, the measurement model was satisfactory for the next stage of analysis and evaluation, i.e. assessment of the structural model.

V.

9 Structural Model Estimates

The structural model consists of the constructs, also known as latent variables, and the paths that connect them. Assessment of the structural model specifies the relationship between the latent variables (Henseler et al., 2009). The purpose of the structural model assessment is to evaluate its validity (Skaik and Othman, 2015) and path estimates (Henseler et al., 2009). and thus tests the proposed hypotheses (Ahmad, 2012) The assessment process is conducted using the following analyses: coefficient of determination, path coefficients, effect size, and predictive relevance.

After assessing the measurement model, the analysis proceeded to determine the explanatory power of the model and to test the research hypothesis. This involved the performance assessment of the structural model. The structural model consisted of the constructs, also known as latent variables, and the paths that connect them as shown in Figure 2. Assessment of the structural model specifies the relationship between the latent variables (Henseler et al., 2009). The purpose of the structural model assessment is to evaluate its validity (Ahmad, 2012) and path estimates (Henseler et al., 2009). and thus test the proposed hypotheses (Ismail et al., 2012). The assessment process is conducted using the following analyses: coefficient of determination, path coefficients, effect size, and predictive relevance. The coefficient of determination refers to the amount of variance in the dependent variables that are explained or predicted by the independent variable (Ahmad, 2012). Thus, it evaluates the regression function's goodness of fit against the empirically obtained manifest variables (Götz et al., 2010). The larger the coefficient of determination (R²) value is, the larger the percentage of variance explained (Götz et al., 2010) with R² value usually varying between 0 and 1 . Using PLS algorithm test, the R² values of the dependent variables are displayed in Table 5.

10 b) Path coefficients

Each path connecting two latent variables in the structural model represents a hypothesized relationship. Estimating the path coefficient explains the strength of the relationship between the latent variables and supports or refutes the hypothesis (Ahmad, 2012).

The recommended values for estimating the magnitude of the path coefficients are 0.02, 0.15, and 0.35 indicating small, medium, and large relationships respectively (Cohen, 1988). In PLS-SEM, the PLS algorithm test is conducted to evaluate the path coefficient sign and magnitude.

According to Hair Jr et al., (2017) , the significant t-statistic values for a two-tailed test are 1.65 (p-value 0.1), 1.96 (p-value 0.05), and 2.59 (p-value 0.01). Accordingly, the bootstrapping test using 5,000 resamples was performed. Table 5.6 shows the path coefficients and t-statistics. All path coefficient estimates ranged from 0.081 to 0.612 establishing small, medium and large relationships between the hypothesized constructs. Moreover, the t-statistics values ranged from 1.081 to 16.329 demonstrating significant levels. According to Kock (2015), a path coefficient value below the recommended minimum value indicates it is too weak to be considered relevant from a practical point of view, which may occur with large sample sizes.

11 Hypotheses Testing

The research hypotheses are tested using the results obtained from the path coefficient assessment in the structural model. To test the hypotheses, both path estimates and t-statistics with their p-values are used to support the hypothesis. Path coefficients provide us with an overview of results including standard errors, bootstrap mean values, t-values and p-values through bootstrapping. Path coefficient values of 0.02, 0.15, and 0.35 indicate small, medium, and large relationships respectively (Cohen, 1988). Meanwhile, significant t-values for a two-tailed test are 1.65, 1.96, and 2.59 at p-values 0.1, 0.05, and 0.01 respectively. Based on the analysis, it shows that Behavioral Intention to Use Cryptocurrency from the Islamic perspective is influenced directly by Shari'ah Compliance ($\beta = 0.126$, t -value = 2.022, p -value = 0.043), Perceived Ease of Use ($\beta = 0.274$, t -value = 3.643, p -value < 0.001), Emotionality ($\beta = 0.307$, t -value = 4.677, p -value < 0.01). Therefore, H1, H2b and H4 are accepted.

On the other hand, Perceived Usefulness ($\beta = 0.081$, t -value = 1.081, p -value = 0.28) and Financial Concern ($\beta = 0.11$, t -value = 1.812, p -value = 0.07) presented non-significant positive effect on BI. Therefore, H3 and H2 are not accepted.

As evident from the analysis, Emotionality is influenced directly by Financial concern ($\beta = 0.19$, t -value = 3.152 at P level < 0.002) and Shari'ah Compliance ($\beta = 0.612$, t -value = 16.329, p -value < 0.001). Therefore, H2b and H1a are accepted.

Meanwhile, Behavioral Intention is influenced indirectly by Financial Concern ($\beta = 0.058$, t -value = 2.75, p -value = 0.006) and Shari'ah Compliance ($\beta = 0.187$, t -value = 4.463, p -value = 0.043). Therefore, H5 and H6 are supported VII.

12 Assessment of Mediating Relationship

A variable is considered a mediator if the influence of the independent variable on the dependent variable decreases when the mediator is introduced simultaneously with the independent variable as a predictor of the dependent variable (Baron and Kenny, 1986). In this research, the model is characterized by its complexity for containing one mediator, Emotionality. In each case, some independent variables affect the mediating variable, which in turn affects the dependent variable. This leads to forming a chain of relations among the independent, mediating and dependent variables (Baron and Kenny, 1986).

Mediation assessment provides accurate information whether a mediating variable mediates the relation between two other variables. Mediation variable mediates the relation between two other variables (MacKinnon and Fairchild, 2009). Moreover, the results showed that the addition of the mediating variable Emotionality has increased the coefficient values of Sharia Compliance, Financial Concern on Behavioral Intention. Table 14 shows the results indicating that while Emotionality partially mediated between Financial Concern and Shari'ah Compliance on Behavioral Intention to Use Cryptocurrency from the Islamic Perspective. ??017) recommend another criterion to be considered when addressing the mediators' effect. The sum of direct and indirect effects is referred to as the total effect. The interpretation of total effects is particularly useful in studies aimed at exploring the differential impact of several driver constructs on a criterion construct via one or more mediating variables.

Table 10 shows the total effects of the structural inner model path relationships as generated by SmartPLS using the PLS algorithm test.

13 VIII. Principle finding and Discussion

The research was designed using a quantitative research approach through employing an online survey, a web-based questionnaire was developed based on the research objectives and questions. Follow up reminders were sent to ensure attaining the required sample size. The sample was collected from 307 and from the population those who targeted are with some knowledge of cryptocurrency.

The data were analyzed by using the partial least square structural equation modelling technique. The analysis process involved an assessment of the measurement model to evaluate the reliability and validity of the items used, assessment of the structural model to evaluate its validity, the path coefficient estimates, and test the research hypotheses and assessment of the mediating factors. The results of the research provided empirical support for the conceptualized research model, with 7 hypotheses out of 9 being supported.

The results revealed that Behavioral Intention to use cryptocurrency from the Islamic perspective was positively associated with Shari'ah Compliance, Financial Concern, Perceived Ease of Use, and Emotionality, which collectively explained 50.9% of the Behavioral Intention to use cryptocurrency from the Islamic perspective. Meanwhile, the results found that Financial Concern and Perceived Usefulness did not have a significant positive impact on Behavioral Intention but have been an indirect effect on BI through Emotionality. Overall, the model was able to explain 50.9% of the variance in Behavioral Intention to use cryptocurrency from the Islamic perspective. In this study, Shari'ah Compliance has been found to positively influence Behavioral Intention to use cryptocurrency from the Islamic perspective ($\beta = 0.126$, t -value = 2.022, p -value = 0.043) and Emotionality ($\beta = 0.612$, t -value = 16.329, p -value < 0.001). This result indicates that for one unit increase in Shari'ah compliance and Emotionality, BI will increase by 0.126 and 0.612 respectively. This result is consistent with previous studies (Abdullah and Wahab, 2015; Lu et al., 2016; Ribadu and Wan Ab. Rahman, 2017). For example, Abdullah and

217 Wahab (2015) stated that religious obligation was the strongest predictor of the intention to use Islamic personal
218 financing.

219 In this study, Sharia Compliance refers to denotes obedience to Shariah law. Any cryptocurrency system
220 is required to operate in conformity with the principles of the Islamic law of contract and must be devoid of
221 fundamentally prohibited elements as a prerequisite.

222 Sharia Compliance has become one of the most important factors to make users adopt cryptocurrency in their
223 daily life operations. A lot of thought on this issue. As previously found from the literature from researchers
224 and scholars that, cryptocurrency and bitcoin are not permissible meaning it is prohibited in Islamic law while
225 Other scholars look it as permissible.

226 Cryptocurrency is a digital payment currency and peer-to-peer (P2P) technology to create and manage
227 monetary transactions as without to central authority as reported by (Nakamoto, 2008). This indicates that
228 cryptocurrency such as bitcoin is just replacement of the normal fiat money. However, most of the people look
229 cryptocurrency as a new form of money that raises a lot of thought on it. Some people wondering that has no
230 value, not an asset, commodity and it's not like other currencies such as dollars and ringgit. This indicates that
231 Gold and Silver are the basis of money in Islam; when they are not available, it is accepted to use banknotes or
232 even a stamped skin' as said by Imam Malik in Mudawwana he said that "if a skin people consider it as currency
233 and they accepted it, it could be accepted as currency even a skin" The difference between Cryptocurrency and
234 the banknotes is that; Cryptocurrency is not from the government but rather it is from hidden individuals so, it
235 has no insurance or guarantee when particular risk happened.

236 From the sharia point of view, uncertainty issues Such as, volatility, obscurity, ambiguity, the status of
237 cryptocurrencies (commodity, financial asset, Currency) and not regulated by the government which surround
238 the Cryptocurrency have let some peoples to doubt or not involve on the cryptocurrency transactions. The
239 Uncertainty factors (Gharar) behind the cryptocurrency is one of the major factors that if its resolve, then
240 will influence people to intend to use cryptocurrency. Also, from the Islamic Rules of Jurisprudence and
241 Fundamentalism, One out of the five main rules "Harm must be eliminated". Because the value of cryptocurrency
242 can be speculative, it is unclear what a person is buying and what the result of the entire bitcoin venture is going
243 to be. No authorities to blame if attackers get access to your Wallet or lose your wallet private key. Therefore,
244 these kinds of issues can be considered as uncertainty "gharar" and from shariah, harm must be removed according
245 to rules of sharia. This specified that from the Shariah point of view the major purpose of cryptocurrency its
246 uncertainty and also there is "addarar" harm This indicate the issues of uncertainty is very important when
247 it comes to the sharia. Scholars need to look carefully before making it permissible or impermissible for after
248 resolving and removing uncertain factors, then more people will engage and use cryptocurrency.

249 From the finding of this Paper, Financial Concern ($\beta = 0.19$, t -value= 3.152, p -value = 0.002) presented a
250 positive influence on Emotionality. This indicates that as financial concern increases by one unit, Emotionality
251 will increase by 0.19. This result is consistent with the previous studies (Abramova and Böhme, 2016;Ryu, 2018).
252 For instance, Ryu (2018) stated that financial risk had a positive impact on perceived risk meaning that losses
253 in cryptocurrency transactions were common due to its price volatility and security issues. Therefore, increased
254 security in such financial transactions would positively influence behavioural intention to use cryptocurrency. On
255 the other hand, Financial Concern did not present a significant direct influence on behavioral intention to use
256 cryptocurrency from the Islamic perspective ($\beta = 0.11$, t value = 1.812, p -value = 0.07).

257 Within this study, Perceived Ease of Use was proved to have a significant positive influence on Behavioral
258 Intention to use cryptocurrency from the Islamic perspective ($\beta = 0.274$, t -value= 3.643, p -value < 0.001). This
259 indicates that as perceived ease of use increases by one unit, BI will increase by 0.274. This finding is aligned with
260 previous studies (Abramova and Böhme, 2016; Durodolu, 2016; Shahzad, Guoyi, Jian, and Shahbaz, 2018; Shiau
261 and Chau, 2016). According to the analysis, there is a lack of user-friendliness when using Cryptocurrencies.
262 From the viewpoint of sending or receiving cryptocurrencies is still cumbersome and holding cryptocurrencies
263 is lead to many risks such as volatility and attacked. Users need to be able to have more confidence in the
264 availability of their funds. Therefore, they need to undertake additional measures to protect their computers and
265 mobile devices To boost their influence on cryptocurrency.

266 On the other hand, Perceived Usefulness presented a non-significant positive effect on BI ($\beta = 0.081$, t -value=
267 1.081, p -value = 0.28). This finding becomes different with (Han and Moon, 2011) These indicate that the
268 participants are more concern with other highly associated variables compared to Usefulness.

269 From the goal of this study is to examine whether shariah compliance and financial concern can indirectly
270 influence behavioral intention to use cryptocurrency from an Islamic perspective. From the results reported that
271 Emotionality mediates the relationships between Sharia Compliance and Financial concern. More specifically,
272 Emotionality fully mediated with financial concern while sharia compliance has been partially mediated. The
273 finding reveal that Behavioural intention is influenced indirectly through emotionality by Financial Concern
274 ($\beta = 0.058$, t -value= 2.75 at P level < 0.006) and Sharia Compliance ($\beta = 0.187$, t -value= 4.463 at P level < 0.043).
275 this result is consistent with the studies of Ryu, (2018) that investigated the mediation between financial concern
276 and legal concern, were legal risk had a highly negative effect on the Fintech continuance intention.

277 From this study Emotionality ($\beta = 0.307$, t -value= 4.677, p -value < 0.001) was identified to have a significant
278 positive influence on Behavioral Intention to use cryptocurrency from the Islamic perspective. This indicates
279 that as emotionality increases by one unit, BI will increase by 0.307. This result is consistent with the studies of

280 Lu, Fan and Zhou (2016). In that study, they found the perception of others having a positive impact on trust
281 in online sellers.

282 From the goal of this study is to examine whether shari'ah compliance and financial concern can indirectly
283 influence behavioral intention to use cryptocurrency from an Islamic perspective. The outcome reveals that
284 Emotionality fully mediated with financial concern while sharia compliance has been partially mediated this
285 lead Emotionality to have a positive influence on behavioral intention to use cryptocurrency from the Islamic
286 perspective. These indicate that there is a big role of Fatwa centres Such as Muftis, Majma'al Fiqh to come out
287 with good solutions according to the Islamic principles that will fit cryptocurrency and eliminate all harm related
288 to it. A lot of fatwas are based on assumptions, not strong bases. Even though, their fatwas will play a strong
289 influence on users to adopt cryptocurrency because their opinions will influence users to make a transaction with
290 cryptocurrency. A lot of Fatwa based on assumption No strong bases that addressed the issue of cryptocurrencies.
291 Similarly goes to the financial expert their role through emotionality to give a clear advertisement for people to
292 show them which is the exactly good cryptocurrency to make them aware of how to deal with such currencies.
293 The more they simplified the rules and remove this all uncertainties related to cryptocurrency the more will
294 influence people behavior to adopt cryptocurrency from the Islamic perspective. Therefore, Good opinions of
295 sharia expert and Financial expert will strongly influence user's behavior intentions to adopt cryptocurrency.

296 This study gains some support from three main theories, Technology Acceptance Model (TAM), Theory of
297 Reason Action (TRA), and de-individuation Theory. Financial Concern is one of the major construct used
298 in this study, which was adopted from Ryu (2018) The result of that study which examined the relationship
299 between financial concern and Fintech continuous intention Indicated that Financial Risk positively associated
300 with Perceived Risk. this is not consistent with the outcome of this study.

301 Perceive Ease of use, is one of the major construct used in this study, which was adopted from Abramova
302 and Böhme, (2016). The result of that study which examined the relationship between Perceived Ease of use
303 and with user engagement in bitcoin. Specified that perceived ease of PEU factor influences user engagement in
304 bitcoin transactions positively. Hence, this is consistent with the outcome of this study.

305 Perceived Usefulness, is one of the major construct used in this study, which was adopted from Han and
306 Moon (2011). The result of that study which examined the relationship between Perceived usefulness and with
307 continuous intention to use Internet Protocol Television (IPTV). Specified that perceived ease of PEU factor
308 influences user engagement in bitcoin transactions positively. Hence, this is not consistent with the outcome of
309 this study.

310 Emotionality is one of the major construct used in this study, which was adopted from De-individuation theory
311 by Prentice-Dunn and Rogers, ??1983). He theorized that, through his studies on the impact of a "crowd," a
312 loss of personal responsibility in crowds leads to an inclination to behave primitively and hedonistically by the
313 entire group. This resulting mentality, The idea of a "group mind" is comparable to the shared autism theory,
314 which holds that individuals within a group may develop shared beliefs that have no basis in reality.

315 14 IX.

316 15 Conclusion

317 This study evaluates the issues concerning cryptocurrency-typed (Bitcoin) implementation from an Islamic
318 perspective. A hypothesis has been formulated and evaluated by quantitative research methodology. Smart PLS
319 is used to investigate the determinants that influence the continuous knowledge-sharing intention of the members
320 within business online communities. This tool is utilized in this study as an analytical tool. Hence hypothesis
321 testing was carried out. The findings reveal that Behavioral Intention to Use Cryptocurrency from the Islamic
322 perspective is influenced by many factors namely: Shari'ah Compliance, Perceived Ease of Use, Emotionality,
323 Perceived Usefulness, and Financial Concern. However, Emotionality towards Islamic belief is influenced
324 directly by Financial concern and Shari'ah Compliance in the implantation of cryptocurrency. Furthermore,
325 Behavioral Intention is influenced by Financial Concern. This study has contributed to understanding the
326 Islamic issues behind the implementation of cryptocurrency. The impact of this study will resolve some claims
327 that cryptocurrency and Bitcoin are harams based on the fact that the issuer of Bitcoin is unknown and has
328 neither an official government nor a central authority behind it. ¹

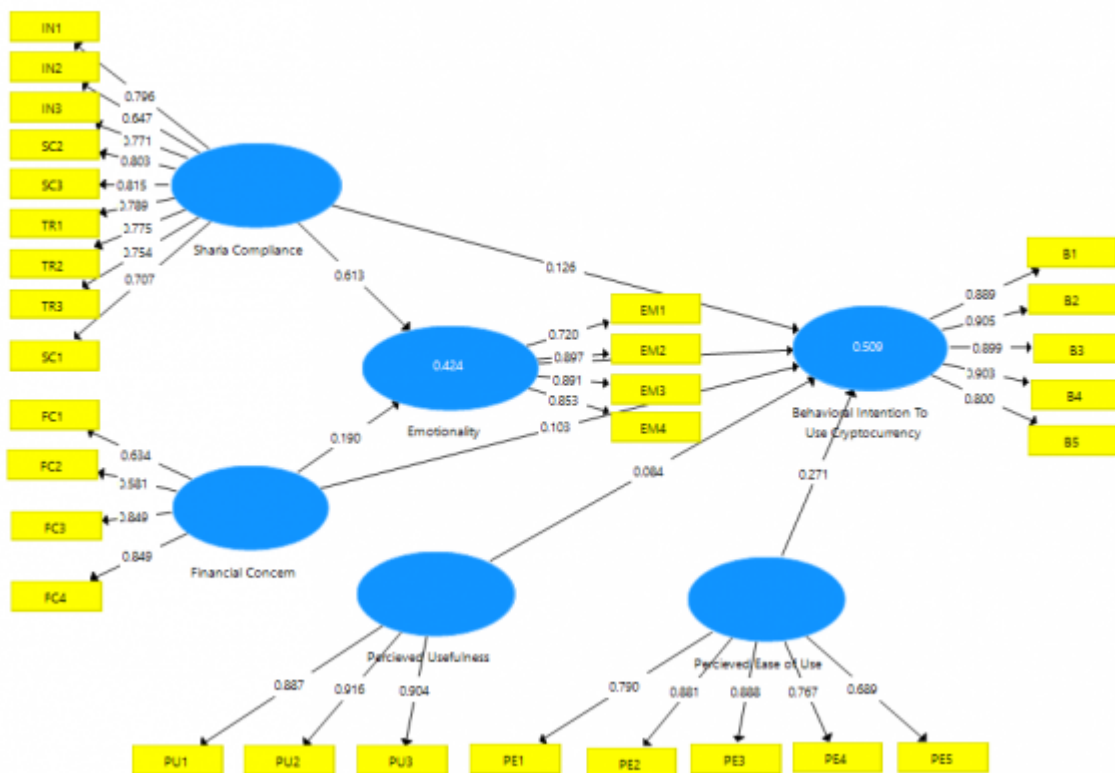
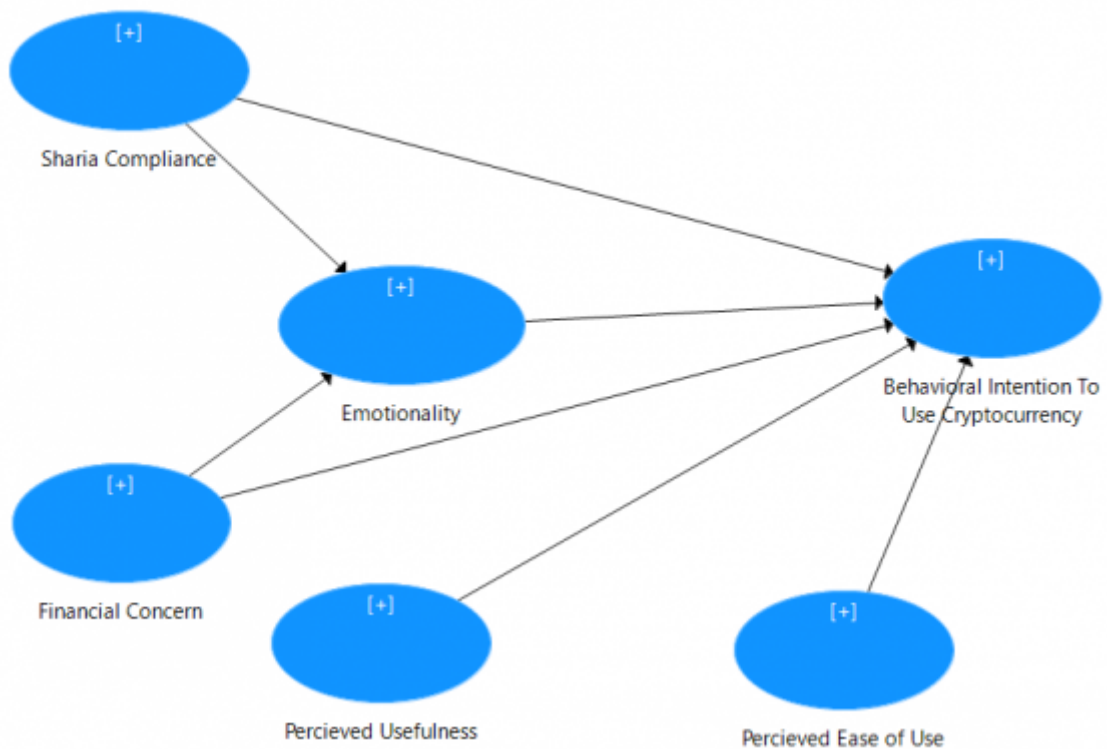


Figure 1: SFactors



1

Figure 2: Fig. 1 :

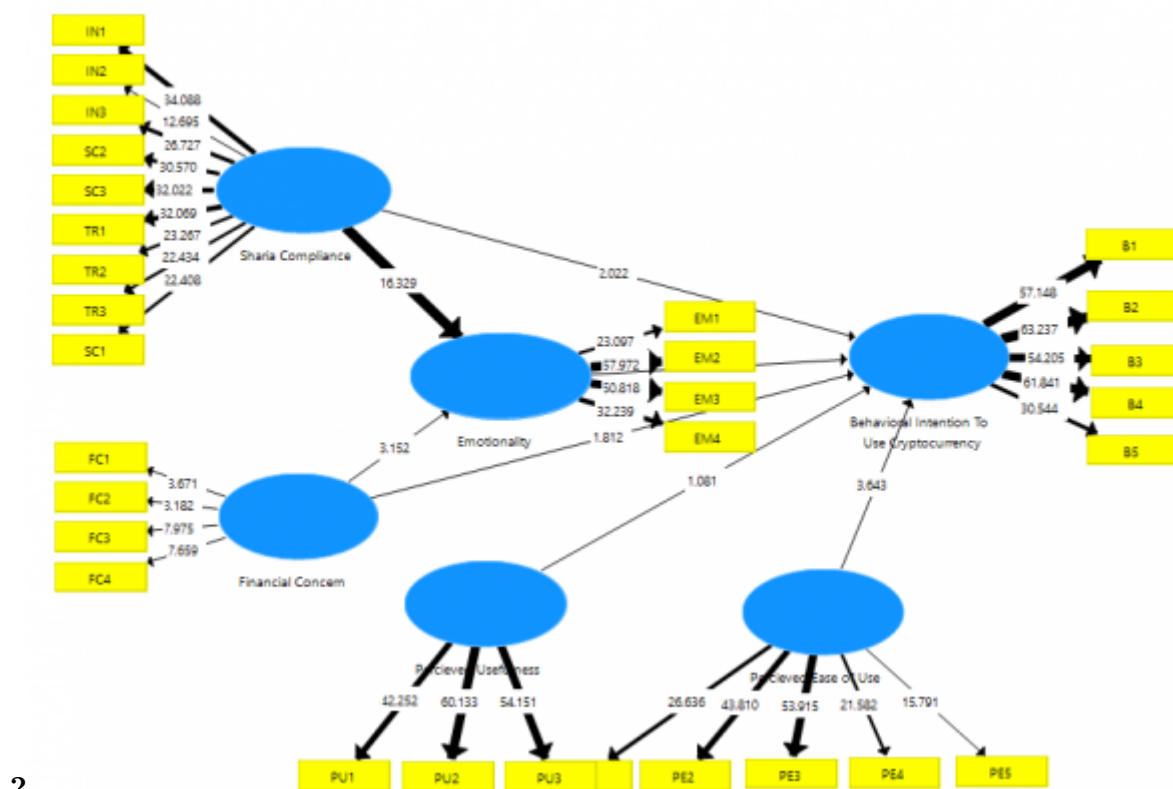


Figure 3: Fig. 2 :

1

Construct	CR	Cronbach's alpha
Shari'ah Compliance	0.926	0.910
Financial Concern	0.824	0.756
Emotionality	0.907	0.862
Perceived Ease of Use	0.902	0.863
Perceived Usefulness	0.93	0.887
Behavioral Intention	0.945	0.927

As shown in the table, the CR values ranged from 0.824 to 0.945, while Cronbach's alpha values ranged from 0.838 to 0.927. All values were above the recommended threshold value of 0.70. Also, comparing the CR values with the Cronbach's alpha values indicates that the CR was indeed a stronger measuring criterion for assessing the internal consistency reliability. Based on the results of Cronbach's alpha and CR, the indicators used to measure the constructs in this research had satisfactory internal consistency reliability.

Figure 4: Table 1 :

2

Construct	AVE b
Sharia Compliance	0.583
Financial Concern	0.545
Emotionality	0.711
Perceived Ease Of Use	0.65
Perceived Usefulness	0.815
Behavioral Intention	0.775

Figure 5: Table 2 :

Figure 6:

3

	BI	EM	FC	PEOU	PU	SC
Behavioral Intention	0.88					
Emotionality	0.633	0.843				
Financial Concern	0.227	0.222	0.738			
Perceived Ease of Use	0.624	0.614	0.147	0.806		
Perceived Usefulness	0.58	0.668	0.106	0.709	0.903	
Sharia Compliance	0.571	0.623	0.052	0.698	0.686	0.763

**

Figure 7: Table 3 :

4

	BI	EM	FC	PE	PU	SC
B1	0.889	0.565	0.224	0.523	0.474	0.504
B2	0.905	0.516	0.221	0.524	0.487	0.487
B3	0.899	0.542	0.210	0.500	0.473	0.434
B4	0.903	0.562	0.221	0.519	0.497	0.465
B5	0.800	0.586	0.129	0.653	0.6	0.598
EM1	0.573	0.720	0.025	0.66	0.695	0.688
EM2	0.518	0.897	0.226	0.48	0.536	0.492
EM3	0.488	0.891	0.258	0.432	0.493	0.442
EM4	0.524	0.853	0.267	0.444	0.473	0.417
FC1	0.045	0.042	0.634	0.063	0.02	0.07
FC2	0.014	0.155	0.581	0.091	0.063	0.028
FC3	0.207	0.176	0.849	0.126	0.047	0.011
FC4	0.243	0.207	0.849	0.127	0.143	0.093
PE1	0.445	0.425	0.121	0.790	0.53	0.494
PE2	0.513	0.496	0.111	0.881	0.577	0.596
PE3	0.571	0.501	0.054	0.888	0.586	0.63
PE4	0.556	0.604	0.17	0.767	0.632	0.618
PE5	0.399	0.427	0.149	0.689	0.523	0.44
PU1	0.484	0.577	0.141	0.639	0.887	0.59
PU3	0.534	0.616	0.054	0.634	0.904	0.655
PU2	0.550	0.615	0.096	0.649	0.916	0.612
SC1	0.391	0.441	0.000	0.447	0.511	0.707
SC2	0.400	0.474	0.056	0.487	0.528	0.803
SC3	0.410	0.482	0.065	0.504	0.531	0.815
TR1	0.462	0.491	0.006	0.544	0.524	0.789
TR2	0.513	0.521	0.011	0.531	0.526	0.775
TR3	0.379	0.506	0.104	0.523	0.538	0.754
IN1	0.511	0.491	0.059	0.615	0.51	0.796
IN2	0.366	0.321	0.075	0.502	0.429	0.647
IN3	0.461	0.515	0.004	0.627	0.603	0.771

Figure 8: Table 4 :

5

Construct	R ²	Power
Behavioral Intention to Use Cryptocurrency	0.509	Large
Emotionality	0.424	Large

[Note: Based on the results above, Behavioral Intention to Use Cryptocurrency is 50.9% predicted by Emotionality. Meanwhile, Emotionality itself is 42.4% predicted by Shari'ah Compliance and Financial Concern. Finally, the results show that the R² values for both Behavioral Intention to Use Cryptocurrency and Emotionality are large.]

Figure 9: Table 5 :

6

Independent Variable	Dependent Variable	Path Co-efficient	T-value	Path magnitude
Emotionality	Behavioral Intention	0.307	4.677	Large
Financial Concern	Behavioral Intention	0.11	1.812	Medium
Financial Concern	Emotionality	0.19	3.152	Medium
Perceived Ease of Use	Behavioral Intention	0.274	3.643	Medium
Perceived Usefulness	Behavioral Intention	0.081	1.081	Small
Shari'ah Compliance	Behavioral Intention	0.126	2.022	Medium
Shari'ah Compliance	Emotionality	0.612	16.329	Large

Figure 10: Table 6 :

8

No.	Hypothesis	Std beta	T Statistic	P Values	Result
H1	Shari'ah Compliance -> Behavioral Intention to Use Cryptocurrency	0.126	2.022	0.043	Supported
H1a	Shari'ah Compliance -> Emotionality	0.612	16.329	0.000	Supported
H2	Financial Concern -> Behavioral Intention to Use Cryptocurrency	0.11	1.812	0.07	Unsupported
H2b	Financial Concern -> Emotionality	0.19	3.152	0.002	Supported
H3	Perceived Usefulness -> Behavioral Intention to Use Cryptocurrency	0.081	1.081	0.28	Unsupported
H4	Perceived Ease of Use -> Behavioral Intention to Use Cryptocurrency	0.274	3.643	0.000	Supported
H5	Financial Concern -> Emotionality -> Behavioral Intention to Use Cryptocurrency	0.058	2.75	0.006	Supported
H6	Shari'ah Compliance -> Emotionality -> Behavioral Intention to Use Cryptocurrency	0.187	4.463	0.000	Supported
H7	Emotionality -> Behavioral Intention to Use Cryptocurrency	0.307	4.677	0.000	Supported

Figure 11: Table 8 :

9

IV	DV β and T-Values Without Mediator	β and T-Values with Mediator	Mediating Effect
Financial Concern ->	BI β 0.11 / t: 1.812	β 0.058/ 2.75***	t: Full
Sharia Compliance ->	BI β 0.126 / t: 2.022**	β 0.187 / t: 4.463***	partial

b) Total effect

In addition to measuring the mediating effect of the mediators, Hair Jr et al., (

Figure 12: Table 9 :

10

Path	Value	Effect Size
Emotionality -> Behavioral Intention	0.307	Large
Financial Concern -> Behavioral Intention	0.11	Small
Financial Concern -> Emotionality	0.19	Medium
Perceived Ease of Use -> Behavioral Intention	0.274	Large
Perceived Usefulness -> Behavioral Intention	0.081	Small
Shari'ah Compliance -> Behavioral Intention	0.126	Medium
Shari'ah Compliance -> Emotionality	0.612	Large

Figure 13: Table 10 :

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