



Identify the relationship between consumer's trust and
cryptocurrency: the adoption of Bitcoin

SUGGESTIVE PLAN

Qualitative Research

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Abstract

The main purpose of this paper is to establish a research plan for the final thesis. The major goal is to understand consumer trust in using cryptocurrency in United Kingdom range from 2019 to 2023. By applying Theory of Planned Behaviour and Human-Computer Interaction theory, this research plan is conducted to examine users' adoption and intention of use Bitcoin and investigate factors influenced consumer trust. Mixed-method is conducted in this research plan and stakeholders are Internet users from 18 to 50 years old, especially works in financial field.

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1. Introduction

The advent of blockchain technology has been changing the structure of financial sector, especially banks. For the stock market, blockchain technology has brought significant results in many aspects. This technology significantly improves the efficiency of post-settlement payment, stock issue or voting enforcement of shareholders. Potential benefits include shortening of time, cost reduction and information transparency, thereby creating significant improvements in liquidity of securities as well as corporate governance activities. Furthermore, in recent years, the amount of capital invested in the field of financial technology (fintech) has increased dramatically. In KPMG's reports, in 2016 the total investment capital in this field was 24 billion USD, increasing to 31 billion USD in 2017 and the first 6 months of 2018 is 57.9 billion USD (KPMG, 2016; KPMG,2017; KPMG,2018). According to Szmigiera (2019), since the popularity of Bitcoin in 2009, there has been a significant increase in the number of blockchain wallets that reached more than 42 million blockchain wallet users in the last quarter of 2019. Likewise, in order to reach this massive number, the role of trust in consumer is considered to be vital in cryptocurrency field. Therefore, studying about factors that influence attitudes with respect to the practice and intention of consumers is vital as well as contributing to improve and overcome limitations of blockchain technology. Moreover, researching about consumer trust can help institutions applying cryptocurrency or in particularly, Bitcoin in understanding their consumer behaviour in order to set plan for designed goals.

In this research, author is using two models to identify the relationship between consumer trust and cryptocurrency – Bitcoin, which are Theory of Planned Behaviour and Human-Computer Interaction (HCI) theories on trust. To achieve this objective, a mixed method of qualitative and quantitative approach was selected along with face-to-face interviews and online survey to discover deeper understanding about consumer behaviour and trust when adopting Bitcoin.

2. Research Objectives

The objective of this research is to affirm the value of Theory of Planned Behaviour (TPB) and HCI theory trust model, to develop applicable model to study consumer trust and adoption of Bitcoin in United Kingdom. Moreover, author is identifying academic gap with a rational

approach on the proposed framework and the final results will contribute to the world research treasure of Bitcoin and be the foundation for further study in the future. Simultaneously, identifying and evaluating factors that influence consumer trust in adopting Bitcoin among United Kingdom.

3. Research Questions

From these research objectives mentioned above, author produces research questions in order to clarify and determine answers for this research problem.

1. *What are the drives for adoption and consume of Bitcoin?*
2. *What are the main factors that influence individuals' perception in adopting Bitcoin?*
3. *What are the purpose or incentives Bitcoin users using Bitcoin for?*
4. *What are the main trust challenges and how would it be diminish?*

4. Stakeholders

Stakeholders are mostly Internet users, who are both Bitcoin users and non-Bitcoin users. The age of stakeholders is range from 18 years old up to 50 years old. Stakeholders can be university students, professionals working in banks, financial institutions.

5. Literature review

5.1.The definition of Blockchain

Blockchain is considered as a new method of record keeping and has a function as a ledger. Instead of doing centralised mechanism, which means having one entity looking after the books, Blockchain is a decentralised system that contains numerous computers working to distribute the shared ledger through a consensus-based algorithm and allows data to be stored and transferred on a peer-to-peer basis. It is claimed that thanks to the miners, Blockchain performs in a decentralised and ongoing manners. Miners are who storing information and running algorithms, which authorises data per block. After verification, a block will be added to the Blockchain and shared within that network. Blocks are linked together in a way that if information in a block is wished to be changed, the whole blockchain would be changed.

Furthermore, Blockchain is the combination of “asymmetrical cryptography” and “distributed IT architecture” (Adam-Klfon and Moutaouakil, no time). The term asymmetrical cryptography refers to the utilization between public and private key system that allows “strangers” to trade encrypted data. A public key, which is available to all, is having control of this system and authorizes encrypted information to be transferred to third party. Afterwards, in order to access the encrypted information, third party would be required to have “paired private key” (Adam-Klfon and Moutaouakil, no time). In a banking context, the public key can be assumed as the details of bank account and private key is considered as a password. In other part of Blockchain, distributed IT architecture is a chain of independent computers connected to a single network and have the ability to communicate within the network. It is interesting to note that distributed system has no central node and if there is one server down, other users will not be affected (Adam-Klfon and Moutaouakil, no time).

5.2.Fundraising

It is worth noticing that Blockchain has transformed access to capital for new ventures. According to Galen et al. (2019), start-ups that base on Blockchain increased nearly \$4 billion via initial coin offering (ICO) or Token Generating Event. In this development, “a blockchain start-up” distributes tokens that known as new digital currency and trade them in a private or public market. Moreover, because future buyers have to pay for services distributed utilising these tokens, for example, information storage space, medical data, IT resources or “peer-to-peer home sharing”.

thus, each token represents value of “money” and acts as a method of payment for these actions (Galen et al., 2019). Additionally, the amount of tokens being published is fixed and if there is a demand for particular tokens, it will create a priceable market, called utility tokens. Moreover, there are several types of tokens such as security tokens, which symbolizes equity shares or digital collective tokens, which represents “scarce digital goods” (Galen et al., 2019). Further, the work of Ethereum network has simplified the chain of publishing tokens that helps developers reduce difficulties in coding their own tokens in less than 20 minutes. It equipped an easy method to set up tokens applying smart contract. Smart contract is defined as a part of software code that recorded into Blockchain and it assists applications in preparing “counterparty transactions” automatically (Galen et al., 2019).

5.3.Is Blockchain safe?

Recently, it has been a battle between the safety and trust among users and providers in applying Blockchain. As mentioned earlier, the concept of Blockchain is considered as digital ledger that is allocated and decentralized database. This ledger records and storing information in particular blocks, systematized in a sequential order and interconnected by cryptographic evidence. The formation of blockchain technology has benefited numerous industries, helping to boost security in environs that lack of trust. Nevertheless, Blockchain technology has some weaknesses due to its decentralized nature. In other words, comparing to classic consolidated databases, Blockchain presents restricted effectiveness and need to increase storage capacity.

In Blockchain, there is hardship in making amendment in data that is reserving in ratified blocks.

Subsequently, Blockchain is recognised as “an incredible” invention of technology in accumulating data, especially financial documents which is necessary for audit controlling as every movement is controlled and stored on public and allocated ledger.

Therefore, Blockchain technology can be applied for fraud avoidance purpose. It has the ability to protect the file of financial transactions within a business which helps preventing unexpected transactions conducted by employees.

Among the normal payment mechanism, beside the involvement of two individuals or parties, there might be a present of intermediary. Notwithstanding, Blockchain technology would shorten the system by providing “nodes performs verification of transactions” via mining. Because of this function, there is a confirm that Blockchain save costs and transaction fee as well as eradicating trust issue within an institution. Therefore, it is possible to say using Blockchain is safe for users and institutions.

5.4.What is Bitcoin?

Bitcoin was introduced by Satoshi Nakamoto in 2008 after the Great Crisis. The economy leads to distrust of the government’s legal currency. According to Ron and Shamir (2012), Bitcoin is a digital currency and is not issued by any government, banks or organisations. It is based on cryptographic protocols and dispersed networks of users for excavation, storage and transfer.

Hayes (2015) asserts Bitcoin is not a legal currency, it is classified as a digital version of money or known as digital money. Put simply, we can separate the term Bitcoin into two words: Bit and Coin. Based on IT (information technology) field, Bit stands for Binary Digit that is a measurement unit of information in computers like Byte, Kilobyte or Megabyte. Bits are considered to be the smallest units of measurement and Coin represents for copper money. Combining two words Bit and Coin, we get the phrase Bitcoin that roughly translated as money number operating on Blockchain technology. However, it is also because of its name, the word Coin is easily misleading to money with incorrect names such as virtual money or electronic money. Bitcoin is a cryptocurrency.

Steve Wozniak, co-founder of Apple, thinks that Bitcoin is an algorithm, however, it exposes to be easily come to life than any other algorithm (Kharpal, 2018). He asserted that Bitcoin was several times better than gold or USD (United States dollars). Bitcoin has a fixed supply because it is unchanged algorithms and it has limited quantity. There is a fact that government currencies can be diluted and declared death at any time. In addition, government may issue new currencies due to politic factors and gold can be mined anytime. Nevertheless, Bitcoin is mined in more scientific way through algorithms. Thanks to its finite characteristic, Bitcoin does not create an inflation. As there is a finite number of 21 million Bitcoins issued and they are not being controlled by any government or regulations, when there is an increase in demand for Bitcoin, no one can increase the amount of Bitcoin (Barone, 2019). Therefore, problems related to inflation are under controlled as well as there will be no devaluation.

There are some opinions that because there is a fixed amount of Bitcoin published, if it is fully exploited, Bitcoin will be terminated. In my opinion, this is not true. The reason behind is due to the limited quantity, users or miners would be charged a fee when they trade or mine Bitcoin. When the number of Bitcoin decreases, transaction fee will increase together with Bitcoin's value. At that time, Bitcoin will almost be traded on its value and value of a cryptocurrency can be increased.

Not to mention, the United Kingdom is one of countries that support Bitcoin. They think Bitcoin is full potential and it is a financial revolution that helps fight crime hacking and problems that banks or financial institutions are facing. The move in favour for Bitcoin has been clearly seen by a removal of tax policies related to Bitcoin since Mt.Gox announced its closure. Her Majesty Revenue and Customs (HMRC) declared they will not levy a 20 percent tax on Bitcoin transactions (HMRC, 2019). Taxes on deposits with Bitcoin were also repealed.

This action comes from the authorities received letters complaining on trading firms about tax reduction competition of Bitcoin transactions against other countries and it is likely that they will have to transfer business to another country. Great Britain can take advantage of Bitcoin as one leap in GDP (Gross Domestic Product), economic development and finance after withdrawing from the European Union (EU).

Further, in Japan, the Japanese government recognizes Bitcoin as a currency and it was accepted as a means of payment on April 1, 2017 (Business Insider Intelligence, 2017). This made all corporations and institutions operating in the field of digital currencies had switched to invest in Japan. According to Nguyen and Lam (2017), in early October 2017, the Japanese Financial Services Agency officially recognize 11 companies that are registered operating virtual currency floors. The registration requires these platforms to comply with many regulations such as having a stable computer system and checking user profiles to avoid money laundering. Subsequently, investors are fully protected from fraud thanks to these regulations as well as the advancement of financial technology.

5.5. Consumer trust in using Bitcoin

Trust is a strong selling point for users, who are using Bitcoin. In the journal “Blockchain for Social Impact” (Galen et al., 2019), authors pointed out there are three components required to establish trust: identification, ownership and authorization. Every users are permitting to access Blockchain easily as long as they have their identities proved along with protection of their ownership for digital assets and low-cost intermediary for verifying transactions. The security factor of Bitcoin attracts new users as well as maintaining trust among consumer. Furthermore, economic factor is also considered as one of the determinants determining people’s intention of using cryptocurrency. An economic prospect snaps users’ distrust in government, banks or financial institutions in legalising Bitcoin. Following the work of Polasik et al. (2015), there was a number of users concerned about the necessary of assuring an individual’s savings between the wave of uncertain economic climate that was influenced by both pricing factor and government’s policy about supervising activities from personal bank accounts. This issue led users to seek for “safer” source of acquiring money and it also urged an idea of adopting Bitcoin as a mean of savings in the situation of inflation and economic downturn. However, it is claimed that people are hesitate in adopting Bitcoin as a means of

trading or storing assets because lack of trust. Hence, these sections below would illustrate consumer trust in technology and identify gaps from previous researches.

5.5.1.Trust and Human-Computer Interaction (HCI) theory

Dasgupta (1988) considered trust to be the central factor of all financial transactions. Moreover, Coleman (1994) deeply analysed the issue of trust in social capital. He believes that trust is the key to make successful economic transactions. To prove that point, he gave an example about traders in the needle trade diamonds can transfer stocks between each other without any public assurances. He said they could only do it when there is trust and the appreciation of trust in the community. Sharing a similar context, this research would conduct further investigations on the trust issue among Bitcoin consumers. Based on HCI framework, this thesis would focus on two major aspects of consumer trust: the existence of trust between individuals and technology, the presence of trust from individuals interacting with technology.

5.5.2.The existence of trust between individuals and technology

From a high-tech view, trust from a particular person combines perceptions and evaluations of issues related to technology (Leppanen, 2010). Trust related to technology can be simply interpreted in three components: benefits or convenience of use, perception of users' skills and the likelihood of practicality. The benefits or convenience of use demonstrates the requirement for applying technological method can raise business achievement (Lewis et. al, 2006). Furthermore, the likelihood of practicality is outline by Davis (1989) in aspects of "user's initial presumption" about experiencing technology. Practicality is also considered as a collection of purpose and directions for system creators and software builders to develop applications and make devices which consume slightest "struggle" to use. For deeper understanding, taking the case of Nielsen (2000), Nielsen introduced instructions for augment consumer trust on the Internet through estimating usefulness instead of assessing risks posed by online transactions. Furthermore, Nielsen (2000) mentioned that the perception of users' skills illustrates individuals' perceptions about their ability to perform and encouragement to adapt not only technology but also computers.

It is claimed that online trust model is the description for model of trust between individuals and technology (Khairuddin, 2019). In Khairuddin (2019)'s research, author mentioned about Corritore et al. (2003) had proved there was three trust determinants: "user perceptions of technology's credibility, ease of use and risk". To measure these three determinants, Corritore et al. (2003) utilized truthfulness, experience, character and forecast that includes small dimensions like knowledge, honesty, one's expectation about technology's consistency and prior performance. This model established by Corritore et al. (2003) is "viral" as it has been widely adopted for web design in e-commerce or e-banking; however, in the field of Blockchain, this model is not commonly recognised. Khairuddin (2019) acknowledge that Corritore et al. (2003)'s model and Davis (1989)'s shares a same school of thought.

5.5.3.The presence of trust from individuals interacting with technology

Trust from individuals interacting with technology is usually correlated with social trust. Trust concerned with society is reviewed by numerous researchers from many different angles. A British sociologist, Anthony Giddens (1996) stated that "it can be said that trust is a means of stabilization human interaction. Being able to have trust in another person is possible to believe that person will have a bunch of reactions that we expected" Therefore, thanks to trust, the prediction of an action will increase from the part of interacting participants as well as from the observers. Social trust can also be conducted from the cognitive approach. For example, Castlfranchi and Falconecho (1999) stated that social trust can be viewed as an essential element of morale, attitude and social relationship. They considered trust as a "bet" on a relationship, thus, risks would certainly present. The author analyses deeply the form of social trust following rationalism and morality, reputation, position in an organisation and government (trust between three parties). Accordingly, it is possible to strengthen trust by acting on mental factors through commitment, contracts and government engaging factor. In 1991, two researchers Boon and Holmes explained a person's habit towards trust places intentions for "trustworthiness". This means first experience toward new framework, especially positive experience is necessary in forming collocation to trust. Moreover, Fisher et al. (2007) described "perceived trustworthiness" as a prediction about the performance from a particular party. Additionally, "perceived trustworthiness" had been proved to be a paramount conception, which correlates with various aspects of trust. In McKnight et al.

(1998)'s research, authors demonstrated these aspects of trust were honesty, capability, expectation and altruism.

It is worth-noticing that there were a few papers adopting HCI to identify trust of consumer towards cryptocurrency – Bitcoin. McCarthy et al. (2005), Sas and Khairuddin (2017), Khairuddin et al. (2016) and Khairuddin (2019) adapted HCI in order to measure consumer trust towards the use of Bitcoin. In McCarthy et al. (2005)'s paper, researchers presented “prevailing trust model” in HCI for technology trust among tech-users. This scheme analyses “contextual” and “intrinsic” properties that are two main properties ensuring trust in a transaction's partner. In McCarthy et al. (2005)'s study, researchers portrayed “contextual properties” as momentary and social embeddedness. For instance, parties are having potential to participate in forthcoming transactions and interested in the durability of their relationship called momentary embeddedness or temporal embeddedness. This was claimed to have ability in preventing risk of neglect because the present achievements arrive at a cost of future lost ones (Khairuddin, 2019). Further, “social embeddedness” describes the data transfer between trustors in connection with trustee's past accomplishment. Because of this phenomenon, trustees are striving to conform agreement or conditions with a goal to maintain reputation and building good image in the market.

Moreover, HCI theories on trust were developed in Sas and Khairuddin (2017)'s research by categorizing major characteristics of Bitcoin in accordance with its impacts on consumer's trust (i.e. decentralization, embeddedness, prestige and transactions' transparency. They produced interviews among 20 Malaysian Bitcoin consumers to identify motivation, knowledge and information about Bitcoin from users as well as to explore what are the challenges in trust that consumers are experiencing. Furthermore, before and during 2019, Khairuddin presented a similar method using HCI theories on trust and consumer's motive. The scholar derived that the monetary transformation, perception about real value of currency along with an increase in consumer power are three main motivations that motivated users' trust in Bitcoin.

5.6.Theory of Planned Behaviour

According to this model, in order to explain the cause of a behaviour, Ajzen (1991) suggested that behaviour must be derived from the intended return of an action. Theory of Planned

Behaviour indicates that individual behaviour is determined by behavioural intention which is influenced by attitude, subjective norms and perceived behaviour control of human.

5.6.1. Attitude

When mentioning about Theory of Planned Behaviour, most researchers focus initially on the element “attitude” of the theory as it has the strongest influence to one’s intention and behaviour. On the psychology perspective, Allport (1935) had illustrated that attitude is the most crucial component in studying social psychology. Moreover, there are various studies sharing the same idea with Allport (1935), scholars proved the important role of attitude used for illustrating behavioural phenomenon (Ajzen, 2002; Petty and Wegener, 1997). The consolidation of faiths and beliefs correlated with behaviour’s consequences and the analysis about consequences relates to attitude. In another words, if a person believes that no risk would occur when using Bitcoin, the intention to adopt or use cryptocurrency will be higher and vice versa. Basing on a study of Trafimow (1996) about the attitude to predict one’s intention, scholar pointed out in nearly 90 percent studies show attitude is confirmed to be the most important component in studying human’s intention.

5.6.2. Subjective Norms

Subjective norms are defined as a person’s perception about social difficulty to manage a behaviour and it also described a person’s decision in taking any actions (Ajzen, 1991). Subjective norms are determined as a vital factor impacts on human’s intention according to the study of Chang (1998). Moreover, Ajzen and Fishbein (1972) indicated that subjective norms normally attach with motivation to comply an action. Nevertheless, there are numerous studies claimed that subjective norms and intention does not have correlation or two variables only pose a weak relationship (Krueger et al., 2000; Armitage and Conner, 2001). Krueger et al. (2000) declared that a person’s intention to set up a business has no relationship with subjective norms. However, basing on the study of Ravis and Sheeran (2003), scholars confirmed that there was a positive correlation among two variables in predicting one’s behaviour. Therefore, this study would adapt subjective norms in studying the

consumer's intention in using cryptocurrency to identify their trust towards Bitcoin as well as to clarify the application of subjective norms.

5.6.3.Perceived behaviour control

Perceived behaviour control reflects how easy or difficult it is to perform a behaviour and whether its conduct is controlled or limited. In other words, it relates to the ability and sense of control of a person in a context and it is explained as self-efficacy in the definition of Ajzen (2002). Perceived behaviour control discusses the existence of important opportunities for identical behaviour and it is impacted by previous experiences conducting an action. In this case, the element perceived behaviour control might be determined by previous experience when transacting with Bitcoin.

5.7.Gaps

However, there are gaps existed among the works of scholars about identifying the relationship between consumer behaviour or consumer trust towards cryptocurrency. From the work of , scholars did not point out which factors have significant impact on cryptocurrency adoption. In order to ascertain or detect for reasons why an user choose to adopt Bitcoin, it is crucial to begin a study with findings about determinants and awareness factors led one decided to use cryptocurrency as this is related to finance. Individuals are seemed to be reluctant to experience new financial innovation because the fear of losing money. Testing the ease of use and usefulness is considered as vital elements that have direct effect on individuals' perception and intention to accept new technology. Additionally, scholars did not utilize fully function of their technology adoption models. There is a deficiency of examining subjective norms and facilitating conditions impacting on users' adoption and trust in cryptocurrency. In this thesis, author wish to fulfil gaps in previous studies and conduct a larger sample size with an aim to obtain accurate results and deeper understanding about users' trust and perception in adopting new financial technology.

6. Hypothesis

H1: The intention to adopt Bitcoin will present higher with people are having more favourable attitudes towards Bitcoin.

H2: The intention to adopt Bitcoin will present higher with people are having higher subjective norms towards Bitcoin.

H3: The intention to adopt Bitcoin will present higher with people are having higher Perceived Behavioural Control.

H4: The application of Bitcoin is positively impacting on consumers' trust.

H5: The risk perception of consumers has negative effects towards consumers' trust.

7. Methodology

7.1. Research philosophy: Pragmatism

Research philosophy of a paper provides a broad view of researcher's important assumption about the study problem. The idea, belief and every aspect of one's research project is reflected through research philosophy; therefore, it is essential to cultivate the skill of reflexivity by frequently scrutinised the beliefs or hypotheses as it would be applied to the beliefs of others. Moreover, each philosophy is corresponding with particular research problem and assumption, which has exclusive contribution to the organisational world. Additionally, research philosophies can be diversified according to where their presumptions locate on the objectivism or subjectivism continua. For this research, the research philosophy will follow subjectivism as it requires nominalist ontology that involving public problems are organised via awareness and subsequent activities of public actors. The epistemology of subjectivism concentrated on the social actors' beliefs, stories, interpretations that transfer these public facts and declares to have a value-bound, pensive axiology.

The choice of research philosophy is affected by practical implications. Therefore, among five major philosophies: positivism, critical realism, interpretivism, postmodernism and pragmatism, author chose to adapt the pragmatism research philosophy. Pragmatism was first introduced in United States by Charles Pierce and his colleague, William James in 1870 (Putnam and Putnam, 2017). The philosophy aims to harmonise not only subjectivism and

objectivism, truth, reality and values as well as knowledge, which is stringent and precise. Moreover, in order to accomplish its objective, ideology, hypotheses and judgments are scrutinising in terms of the characters they play as equipment of thinking and activity and in terms of their realistic outcomes in particular contexts.

From the view of pragmatists, facts are considered as practical impacts of concepts and knowledge is considered for authorizing activities to be conducted smoothly. Therefore, this research would start with a problem along with an aim to discover solutions for future practise. Research problem is recognised as an essential determinant for this research design and strategy. Furthermore, following the study of Elkajaer and Simpson (2011), researcher values lead “the reflexive process of inquiry” that introduced by doubt and an awareness that something is incorrect, and reinvigorates ideology when the issue has been undertaken. Being a pragmatist means author is interested in feasible results than “abstract distinction”, which demonstrated their research might have noticeable fluctuation in term of “subjectivist” and “objectivist” would turn out to be.

In the current context, the research problem of the paper does not propose exactly which appropriate kind of method or knowledge should be adapted; thus, it endorses that the author’s perception is completely feasible to implement with various types of methods or knowledge. This demonstrates multiple methods are possibly be conducted within one study. Nevertheless, despite the fact that a single point of view cannot describe the entire picture of pragmatists’ research problem, not every pragmatist would apply multiple methods in their study as long as their method is well-founded, reliable and relevant to the research problem (Kelemen and Rumens, 2008)

7.2. Approach to theory development

There are three main approaches to theory development: deduction, induction and abduction. Deductive approach refers to a research introduces with theory and is developed with scholar’s findings of the academic literature and researcher outlines a strategy to test the theory. On the other hand, the method of obtaining data to discover a phenomenon was applied to establish a research before arriving to appropriate theory, it is called induction. Last but not least, if a research starts with collecting data to identify a research problem and

explain models with the aim to achieve a new or modify an existing theory, this approach would be abduction.

In this research, author applies induction as an approach to theory development because of its relevancy to author's desire.

7.3. Methodological choice: Mixed-method

To address the research question, a mixed methods approach combines both qualitative and quantitative approach is used. Based on Tashakkori and Teddlie (1988), mixed methods are generally applied under the pragmatism. In a survey or questionnaire conducted through mixed methods, its data collection includes both open and closed-ended questions. There are two techniques utilised for interpreting the collected questionnaire, first is analysing factor by Likert scaled items and second is constant comparative method for narrative reply to open-ended questions. Tashakkori and Teddlie (1998) also stated that there are several types of studies such as parallel studies, sequential studies, commensurate status schemes and schemes with multilevel use of accesses are frequently utilising mixed methods. In parallel studies, qualitative and quantitative research methods are combined together for interpreting research problem. However, researchers, who are using sequential studies would apply two phases of studies independently. If researchers start their sequential studies by qualitative research, quantitative research will be followed up and vice versa. For the designs with multilevel involves with distinctive methods at distinctive level of data aggregation (Tashakkori and Teddlie, 1998). In contrast, in order to examine a research problem using equivalent status design, it is required to conduct both qualitative and quantitative approach. Therefore, author will analyse data collected from mixed methods with precision and system by applying survey online for quantitative approach and face-to-face interview for qualitative approach.

7.3.1. Quantitative Research

With the aim to gain insight into research questions of the thesis, the author has established an online survey of Bitcoin users. The survey questions Bitcoin users as to: their use of the

cryptocurrency, self-perceived levels of knowledge and expertise, trust challenges and technology related questions.

7.3.2. Qualitative Research

In this thesis, beside the collection of data through online survey, primary data will also be conducted through face-to-face interview. In term of validity, record will be applied during interviews as well as a verbal script will be presented in each interview under the permission of stakeholders. Applying this method, author would conduct prior classification about internal and external factors that determine consumer' trust about cryptocurrency. Likewise, performing a face-to-face interview also helps author in collecting essential phases through stakeholder's respond together with key words that will be grouped into categories. Nevertheless, author will need to make amendment because the amount of data will different in each case.

7.3.3. Ethical access

The respondents are fully informed about the objective of this research and an ethical approval form will be provided. Private information about stakeholders are confidential and substituted names will be provided. The interviews will be taken along with a record for the determination of this research and it is sole accessed by the author.

7.4.Data

Data will be collected via online survey through quantitative method and via face-to-face interview via qualitative method.

Author would use inductive coding to code data after collecting the script from interviews. Inductive coding means the author have to establish codes following the qualitative data itself and codes will emanate from the interview of respondents. Furthermore, author would apply the Hierarchical frame to organize codes form on the correlation of codes. For instance, the top level code illustrates the main objective: consumer trust, the middle level code demonstrates whether consumer would adopt or not adopt Bitcoin and the last level specifies particular factors influence consumer trust.

8. Predicted Results

By applying the theoretical framework to demonstrate consumer on Bitcoin's trust, (Sas and Khairuddin, 2015), pursuant to their Study 1 and 2 (Sas and Khairuddin, 2017; Khairuddin and Sas, 2019), they have expressed that consumers' perspective on technological trust is significant. Specifically, the trust supposed to come from Blockchain's characteristics including low cost, embedded expertise, decentralized ledger, and ease of use. It also proved that users felt more comfortable with the unregulated aspects of the Bitcoin in particular and the Blockchain in general. Similarly, most of them wish to freely execute Bitcoins transaction among themselves, under no restriction from the authorities.

Nonetheless, the result also illustrated that users' fundamental trust threats normally related to social trust. For example, users are challenged by dishonest sellers, especially for those transactions taking place offline in which they are exchanged for products or other kinds of fiat money (Khairuddin, 2019). In addition, the report also showed that rather than technological ones, users' trust threats in peer-to-peer Bitcoin transactions are mainly come from social considerations. Thus, so as to mitigate those threats, it is crucial to better understanding the Blockchain's framework (Khairuddin, 2019).

In Study 1, interviews were conducted within 20 Bitcoin users with the main target is to identify their trust threatens and motivations. According to the report, the motivations were derived from the empowerment of the Blockchain's characteristics such as perceived real value of Bitcoin; decentralized, and unregulated of Bitcoin transactions, and whether Bitcoin's position in the monetary market revolutions (Khairuddin et al., 2016; Sas and Khairuddin, 2017). The report also suggested that trust threatens attached to Bitcoin users during the engagement time of a Bitcoin transaction including the challenges related to dishonest traders of the transaction, sometimes they are users' difficulties of delivering passwords and uncertainties because of hackers' malignant attacks (Sas and Khairuddin, 2017).

Other finding on Consumer Trust in Cryptocurrency believed that Blockchain could Enable Transactions. The typical Bitcoin's features that challenge the consumer's trust have been discussed widely in industry press, professional research and a lot of press in general. Firstly, the volatility of Bitcoin's value shall only captivate minority of risk lovers and resists majority

of risk adverse group. Secondly, taking consideration from the innovation history and the technology transformation cycle, the short lifespan of these transaction one more time recommend that users who tend to be less risk-takers-orientated will ignore Bitcoin and there are a few minority groups have adopted this. Furthermore, the findings also provided results in the same directions as the work of Sas and Khairuddin (2017). Specifically, it stated that the challenges of having a flawless system to facilitate the bottom line technology of Bitcoin is an obstacle that might emerge in the near future. The reports also showed the other factors that might affect the user's trust on Bitcoin's usage. Accordingly, beyond the technology vulnerability, it shall be the decentralized characteristic where the peer-to-peer transaction needs a plurality of honest users or nodes, or in the same meaning if there are less than 51% peer-to-peer connections, it is highly likely that the action to block malicious hackers could not be effective. However, once a majority (51%) is attained it might be, in some ways, could be utilized to the disadvantage of the rest of the Bitcoin users. In fact, there are just a few organizations could satisfy the 51% percentage by their own, in some cases, they have to collaborate as a consortium. Finally, the disruptive and lucrative anticipations of Bitcoin form it a promising objective for governments and hackers (Zarifis et al., 2014).

9. Conclusion

To conclude, the biggest obstacle problem Bitcoin is facing to gain trust from Bitcoin user mainly come from the security and social trust threats. Besides, ineffective regulated control system cross-border leading to difficult management. In spite of the fact that Bitcoin is ease of use, low cost and decentralized ledger, Bitcoin's future prospects remain bleak. Accepting the use of bitcoin as a payment instrument will take time as another surprising report showed that there were only 03 private accounts of the application of Bitcoin as a currency for purchasing goods or services, regardless of the increasing number of sellers who accept Bitcoins (Khairuddin, 2019). Therefore, building an effective payment system along with a superior worldwide legal system will help stimulate trust from bitcoin users and the development of Blockchain as a whole. In my opinion, the most recent Facebook's digital money introduction under the name of Libra has been deferring the release date due to failing to meet the standards set by the House of Common in the USA may indicate that the crypto market is not yet ready to be effectively used in the near future as it designed. Furthermore,

the lack of a government support is also one of the reasons leading to the decline of the confidence of Bitcoin users. In addition, the scandal of SilkRoad website in the past would be another reason where a large number of people believe that Bitcoin were using for money-laundering and black market. To sum up, Bitcoin will still be volatile in the market and the consumer's trust on Bitcoin in the future is quite vague. Thus, Bitcoin is a clever idea, but it is perhaps too clever for its own good.

Reflective Essay

1. Introduction

It has been claimed that reflective essay is a form of essay that writers use to test their experience in life. By writing about their experiences, writers will discover things that change and develop themselves with those experiences. According to Rolfe et al., 2001; Johns and Freshwater, 1998) reflective essay is considered as an action or an approach that is contradictory an evidence-based approach, which has ability to confront facts and realities around practitioner. Further, applying reflective practice authorizes researchers to access knowledge obtained from practices. Researchers are enabled to gain deeper understanding about the meaning of experiences by the delivery of “consciousness tacit knowledge” (Jasper, 2004). A number of academic papers and researches are explored to be established and studied basing on the method of reflective writing or practice that mostly developed by scholars and students. Observing the essential of this practice, author would like to form a reflective essay about the approaches of qualitative and quantitative research in the study. The goal is to identify the status quo and issues of author in undertaking both types of analysis in order to enhance deeper knowledge about qualitative and quantitative analysis. In academic research, quantitative and qualitative methods play an important role in doing research by helping researchers collecting data accurately. However, these two methods are contradictory in terms of definition and how they work.

2. Broad view

For qualitative research, data collection is primarily in words and it is an approach that explores to explore and analyse traits among people from an anthropologist’s perspective. While for quantitative research, primary data is numerical and it concerns with solving relationships in theory and research from an interpretative point of view. In qualitative research, writers use an inductive form and constructing theory. Qualitative research methods also apply interpretative prospect without proves, only clarifications and constructivist philosophies are applied in research. This means that researchers rely on theories to build their own research path that is appropriate to their research objective. On the other hand, quantitative research is mainly related to quarantine theory by using

empirical evidence-based model. Quantitative method can be determined in normal practice and in an objective aspect as it is a method “dealing” with numbers and high objectivity, thus, quantitative method has high fidelity.

Generally, there are several quantitative researches have the tendency to be deductive, affirmative or exploratory. However, not only quantitative research but also qualitative research is classified as exploratory and being applied to ratify deductive hypotheses. There is a concern that several researchers do not endorse the nature and the application of both methods, misunderstanding about each research approach’s usefulness (each method can be used for particular problems). In fact, both research methods can be applied to every kind of research problems. Nevertheless, each research methods contain identical characteristics.

2.1. Qualitative method

Under the perspective of qualitative researchers, they made epistemological assumptions different from quantitative researchers. Qualitative researchers normally perceive an issue in a context and quantification are observed as inadequate in nature. They only observe small part of fact that cannot be modified or multiplied without “wasting” the core value of the whole issue. Moreover, qualitative researchers consider that a best way to truly enhance a phenomenon is to experience it. For example, if researchers would like to study about a culture, it is necessary for them to participate in or study about that culture. In my case, to be able to understand about consumer experience in using cryptocurrency, I need to experience it myself in order to be flexible in designing questionnaire for respondents. I found this is important as keeping the questionnaires “stretchy”, I would need to familiar myself with the “range” of information collected during the interview. Beside considering epistemological conclusion, some qualitative-oriented researchers consider ontological assumptions. In their opinion, studying a phenomenon is viewing it in a multidimensional way, instead of focusing on a single fact from one’s perception. The reason is each person will experience a problem in an identical way; therefore, taking this method into consideration helps avoid erroneous conclusions about a phenomenon that is viewed superficially.

2.1.1. Strengths of Qualitative research

First, through qualitative research, researchers have the opportunity to interview, scrutinize and meet respondents. This method would help me to understand social and cultural factors

impact on consumer's perspective and attention to adopt Bitcoin. By having an interview face-to-face, I might have the possibility to gain truthful answers from respondents without the needs of accessing other data channels to obtain information. Primary data will be obtained on the author's subjective point of view. Secondly, qualitative researchers generally prefer to provide descriptive details compare to quantitative researchers, because the role of context is important for understanding social and behavioural factors. In this research, activities related to cryptocurrency exist in the context of United Kingdom, where policies correlated with trading and using cryptocurrencies are supported. However, adopting Bitcoin remains as a new term for several people living in Britain as individuals got used to the traditional financial system. On the other hand, this might not be considered as a cultural factor because stakeholders are professionals, students who have already familiar themselves with making digital transactions and perceiving new technology. Hence, by providing an identical context can help author to identify proves and information related to government policy and other trust concerns to avoid misunderstanding and mislead-assumptions. Thirdly, qualitative approach provides flexibility to author in processing data from respondents and exploring attention in using Bitcoin as well as trust issues related to cryptocurrency. The author does not need to follow a particular formula to establish a theory system for the study, instead, solely basing on data conducted from respondents is acceptable. Lastly, for a qualitative researcher, the concepts and theories are conducted from obtained data. Future findings conducted from this research will be implemented by realistic information to boost the importance of external and contextual factors in studying users' trust in cryptocurrency.

2.1.2. Weakness of Qualitative research

Adopting qualitative research frequently contains subjective results. In general, users who are trading with Bitcoin rarely reveal that they are "Bitcoin-ers". Therefore, deriving assumptions bases exclusively on the respond from respondents might not express a full picture of the problem addressed. Moreover, respondents' perspective and opinion does not follow a particular system, thus, the progress of processing data will be leaned on subjective view. Another limitation of conducting qualitative research is lack of transparency. The fact that respondents were anonymous because of the sensitive nature of problem and author cannot describe the choosing stakeholders process in a detailed way is not mentioned in this case. The lack of transparency exists in the way choosing sample. In qualitative research, choosing

sample is decided by writers or researchers, thus, it might have the subjective characteristic based on author's perspective. Moreover, no one can verify information provided by respondents are true that leads to lack of transparency in processing conducted data.

2.2. Quantitative research

One of advantage in quantitative research is researchers can be flexible in digging up the data immediately during the interview and it is not necessarily depending on any formula based primarily on the information provided by respondents. Comparing to qualitative research, researchers can save costs and time establishing research via quantitative method. In the context of my research, quantitative research can deliver data to illustrate the allocation of characteristics and traits of the whole phenomenon. Further, it has ability to test whether there is correlation among dependent and independent variables to identify the trend of a relationship. It is interesting to note that in quantitative research, researchers do not involve or participate in a research problem or phenomenon as qualitative researchers. Therefore, the collected data is not biased or subjective biased. Addressing data in quantitative is instantaneous as data is running via software like SPSS or eViews which can minimize technical errors that may rise in data processing.

Nevertheless, using quantitative research might bring limitations to users. When studying about human, especially about human behaviour like in my research, quantitative approach cannot fulfil the whole picture about one's reaction or trust when using cryptocurrency. Furthermore, data collected from quantitative research will be presented by survey, each respondent will answer privately, author will not have the chance to interact with stakeholders to truly understand about their thoughts. The collected data could be affected by external factors, thus, it might not valid and subjective. Moreover, using a scale to achieve data might not express honestly about stakeholders' thought as each stakeholder has different explanations. Further, contextual errors may affect the content of survey. Quantitative research assumes that human behaviour and attitudes do not modify according to the context. Nevertheless, the respondents' response may vary rely upon distinctive contexts.

3. Conclusion

In conclusion, each research method has different characteristics and identical strengths and weaknesses. In my point of view, quantitative method is easier to use as it saves time in accessing data comparing to qualitative method. My decision is to adapt mixed-method combining qualitative and quantitative method to increase the success of this research. Qualitative method can support quantitative method by identifying subjects are appropriate with research method, while quantitative method can support qualitative method by generalising findings to a larger sample or identifying groups that need in-depth study. Likewise, quantitative research can help explaining the relationship between variables that are found in qualitative research.

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Appendix

Interview Questions

1. Are you an Internet user?
2. Have you ever made an online transaction? If yes, how do you proceed it?
3. Have you ever heard of cryptocurrency?
4. Are you a Bitcoin consumer? If yes, can you share your experience?
5. How often do you use Bitcoin?
6. What do you use Bitcoin for? (i.e. payment, trading, ...)
7. Do you find it useful and easy?
8. Are there any issues related to trust?
9. Do you think using Bitcoin is more secure than usual online payment method?
10. Do you recommend others to use Bitcoin? Why?