Cryptocurrency SWOT and the Origination

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Abstract: *Cryptocurrency is attracting the attention of academic and non- academic researchers as an alternative architecture of currency. Because of the growing of cryptocurrency research, it is essential to value the existing research of cryptocurrency and identify potential future research areas. This paper provides an up to date review of IS research on cryptocurrency adoption. In this paper, we conduct a systematic literature review to gather the previous research related to cryptocurrency adoption. The goal of this research is to identify the current research stage and open challenges for future studies in cryptocurrency adoption. Moreover, the paper presents a systematic literature review (SLR) of 25 research articles published on the adoption of cryptocurrency from 2014 to 2017.*

Keywords: Blockchain, Monetary decentralization, Technology adoption, Systematic literature review

I. INTRODUCTION

As technology keeps on improving, consumers' demand for flexible, convenient, cost and time-efficient transaction continues to drive the evolution of payment platforms. One of the latest and most promising digital inventions in the financial landscape is the evolution of the decentralized digital-currencies known as cryptocurrency and its online payment protocols built on a peer-to-peer network known as Blockchain . Cryptocurrency is a virtual currency that is designed as an alternative to standard fiat currency, allowing consumers to execute digital payment for goods and service without the need for intermediaries. In other words, it is a new form of digital currency platform grounded on a computer cryptography and decentralized architecture , whose transactions records are stored on the blockchain public distributed ledger. Cryptocurrency exchanges for national fiat currencies over numerous of informal Internet-based exchanges. In short, cryptocurrency is a completely decentralized currency without a central issuer.. Based on specialized open-source software, a set amount of cryptocurrency is given to users in exchange for specific contributions to the operation of the cryptocurrency system.

II. REVIEW OF LITERATURE

Although digital currency concept has existed since 1980s, cryptocurrency was only utilized with the launching of Bitcoin as a decentralized cryptocurrency in 2009 using the Blockchain technology . Blockchain was designed with the aim of creating a decentralized environment where transaction and data are not controlled by a third-party. Blockchain is a distributed database platform which preserves an incessantly growing list of data records which are verified by the mining nodes. The data is stored in a public ledger, containing information about each and every completed transaction Blockchain is a decentralized solution that operates without the need for third-party organization

involvement. Blockchain shares all the information regarding each and every transaction ever conducted and makes it available to all nodes. This characteristic makes the Blockchain more transparent than traditional centralized transactions involving a third-party organization. Furthermore, as a degree of security for nodes to confirm the transaction made, notes in Blockchain are all anonymous. The whole process performed by each node is known as mining, every time a block is verified, and the miner receives a reward amount as for his /her participation in mining. Miners can be anyone as it is an open community of users interested in checking and validating new cryptocurrency transaction records. The first miner to successfully validate a new transaction obtains the reward.

III. METHODOLOGY

This paper's goal is to identify the current stage of cryptocurrency adoption and the models that have been used as well as the adoption challenges that need to be addressed in future studies. Firstly, we performed an SLR to gather used cases of the cryptocurrency adoption and to gather evidence from the literature regarding the current stage of adoption, the models used and future potential factors to be addressed to improve the adoption rate of the cryptocurrency among users. To accomplish the goal of our SLR, research questions were formulated as follows:

RQ1: What Research Topics have been Addressed in Cryptocurrency Adoption?
The SLR main research question is to highlight the existing research topics on cryptocurrency adoption. By gathering related papers from scientific databases, it would be possible to form a general understanding of cryptocurrency adoption research and identify the current research areas. Identifying the current research conducted on the adoption of cryptocurrency will significantly assist researchers in gaining a better understanding of the current stage of adoption, which will then carry the research on cryptocurrency adoption even further. RQ2: What models have been used to carry out cryptocurrency adoption research? Adoption models are mostly known for their relation to social aspects, system adoption, user attitudes and behavior towards new technology innovation. By reviewing all the relevant papers, it would be possible to create a summary of what have been done by previous researchers in this area as well as what models have been used to carry out the research. At the same time, reviewing the related models will make it easier to identify all the significant factors that influence the adoption of cryptocurrency. RQ3: What are the current gaps in cryptocurrency adoption? A systematic literature review provides an understanding of the existing research gaps. Identifying the research gaps will assist researchers in focusing their research on potential research areas. Highlighting the research gaps will provide an International Journal of Advanced Computer Research, Vol 9(44) 295 understanding of the research questions regarding the current cryptocurrency adoption.

IV. FINDINGS AND CONCLUSION

4.1 Search Procedure

Guidelines on SLR provided by Kitchenham

were adhered to when conducting this investigation. The following digital libraries were searched u
sing the terms "cryptocurrency adoption" and "acceptance": IEEE Xplore, ACM Digital Library, Sp
ringerLink, ScienceDirect, and Google Scholar. 37 papers in total were collected. to decide which o
f them should undergo a thorough analysis.

Then, two exclusion steps based on abstracts and titles respectively were carried out.

Then, studies that only addressed technical aspects of cryptocurrencies or nonadoption features of c
ryptocurrencies (such as security and legal challenges) were removed.

Finally, there were 25 papers altogether, from which the data required to respond to the study questi
ons were taken.

V. THE ACCEPTANCE OF CRYPTOCURRENCIES

5.1 Results of Classification

Twenty-
five articles were found in this section, and they were all written and published within the last four
years.

This classification will group the findings according to the study strategy used (qualitative, quantita
tive, mixed method and other).

These findings clearly show that interest in cryptocurrency adoption research has grown during the
course of the investigation.

The findings from the examined publications were summarised and arranged to address the research
topic (i.e.: RQ1 and RQ2).

The findings responding RQ1 and RQ2 are shown here in the form of discussion and summary tabl
es. Discussion of the results will follow in Section 4. For each study, we specifically include the foll
owing information: the category in which we placed the study.

5.2 Quantitative Research

The second category of this is quantitative research. classification. Authors in this category utilised
the They used a survey to conduct their investigation. The Consumer usage and acceptance ofBy
using the unified theory of cryptocurrencies embracing and utilising technology (UTAUT) to
construct His theories regarding the approval of consumers' usage been dealt with [14]. The writer
supported his using data from a survey of (100) people, the results suggest that performance
expectations and both effort expectations are regarded as important variables affecting
cryptocurrency acceptance Regarding upcoming projects, the author suggested expanding the
study's target demographic to include financial services, stockbrokers, and foreign exchange
internailers and exchanges**.**

Their studies emphasise assessing the adoption and consumer use of cryptocurrencies for
payment objectives . The study was conducted by the authors by surveying people with the goal of
learning the Consumers' preferred method of payment from the Federal Boston Reserve Bank. The

study started by supplying preliminary data, both economic and empirical findings that are representative of American consumers a working knowledge of bitcoin as well as other cryptocurrencies. Research demonstrates that consumers' knowledge, acceptance, and use of Various metrics are associated with cryptocurrency features that are economic and demographic. The According to findings, an average bitcoin owner is more a young, non-white boy most likely with a lower education who anticipates making money off of Unlike bitcoin, which has embraced various payment methods,and his principal duty .

5.3 Research and Discussion Gaps

There are typically two main research paradigms that serve as a guide for researchers: constructivism and positivism. The constructivist paradigm is the notion that scientists are free to develop subjective interpretations of people's experiences towards certain issues to comprehend a specific phenomena]. The method of qualitative research tends to be connected to this research paradigm. Direct communication between researchers and the participants in the researchers' ability to understand the significance of Concerning the topic is a phenomenon. Conversely, positivism is typically connected with quantitative studies assuming that there is one actual reality that can be learned through thorough empirical research.

5.4 Conclusion and Future Work

This paper addresses four research questions as mentioned above. The first question regarding to Redhwan Al-Amri et al. 304 topics that have been addressed in cryptocurrency, and that was answered by gathering related papers from scientific databases. The second question was regarding the models that have been used to carry out cryptocurrency adoption, and that was answered by reviewing the methodology used in all the relevant papers. The third and fourth questions were regarding the current gaps in cryptocurrency adoption, and the future directions for the adoption of cryptocurrency research, were answered by performing a systematic literature review.

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