

ANALYSIS AND ASSESMENT OF CRYPTOCURRENCY AND BLOCKCHAIN TECHNOLOGY IN FUTURE

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ABSTRACT

Cryptocurrency can be defined as the systems which allow secure payments against online transactions and are denominated in the form of virtual token. The potential of utilizing crypto currencies in developed countries are more dominant at present. However, in future, these potentials is expected to grow more in countries like Poland. It can be concluded from this chapter that; block chain technology is another language and platform agnostic technology which is developed with the help of major programming language. The concept of research onion is being used in order to accomplish the aim and objectives of this study.

The researcher has chosen the concept of research onion for its simple and robust design. In addition to it, implementing research onion had facilitated step-by-step integration of information gathered through data analysis. The study has been performed with the help of deductive approach in order to deduce the future scope of Cryptocurrency. Descriptive research design has helped in describing the collected information for this study. Both the qualitative and quantitative data collection method has been selected to enhance the quality and quantity of collected data.

INTRODUCTION

INTRODUCTION TO THIS CHAPTER

Cryptocurrencies can be defined as a form of digital currencies that utilizes encryption techniques in order to generate same units of the same kind. It can also be defined as the systems which allow secure payments against online transactions and are denominated in the form of virtual token (Darknetmarkets.org, 2019). The token represents ledger entries to the system itself. Furthermore, Crypto includes various encryption algorithms as well as cryptographic

techniques like elliptical curve encryption, hashing functions and public-private key pairs. The global network of computers uses the blockchain technology in order to jointly manage database which records transactions performed with the help of Bitcoin. The first chapter of introduction discusses background and rationale for the research. It has been found that Cryptocurrency and Blockchain Technology have a wide scope in the Decentralized World and based on it the aims and objectives of this study have been set.

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The aims and objectives have helped to carry forward the study in an effective manner.

BACKGROUND OF THE STUDY

Cryptocurrencies are the virtual or digital currencies which uses cryptography for security. In view of (Cointelegraph.com, 2019), it is difficult for someone to counterfeit the cryptocurrencies due to the sophisticated security system. Most of the cryptocurrencies follows decentralized system of blockchain technology. Cryptocurrencies are not issued by the central authorities due to which there is no interference of the Government (News.bitcoin.com, 2019). The first blockchain based Cryptocurrency was the Bitcoin, which is the most valuable and popular globally. In the year 2009, the first Bitcoin was launched by Satoshi Nakamoto. According to a recent survey, till the beginning of 2019 there are more than 17.93 million Bitcoins in the economy having market value of 63 billion dollars (Blockgeeks.com, 2019). The market value of bitcoins are liable for fluctuations on the basis of prevailing market conditions. In the present world, a lot of substitutes of Bitcoins have come up such as forks which are formed by splitting up the existing cryptocurrencies and altcoins. The main reason behind this popularity of cryptocurrencies is the promise of easy fund transfer among the parties which it holds (Zarantech.com, 2019). In addition, there is no third party intervention in the process of online fund transfer. Cryptocurrencies facilitates transfers with the help of private keys and public keys. Furthermore, fund transfer from one party to another can be done by paying minimal processing fees. 1Induction to this Chapter

Technology has transformed each and every facets of human society. Money is essential in order to fulfil our basic needs. Within a short period of time, the concepts of block chain algorithms have gained immense popularity. The concepts of Cryptocurrency are immensely popular in developed countries at present.

However, this part of the study would help readers in understanding core concepts regarding crypto currencies and its utility in real time world. In addition to it, this part would also review various literatures that were available to the researchers. The presented matter would be peer reviews of previous studies made by other researchers in same field. Significant amount of help was taken from the internet. However, the sanctity of the content had been judged before presenting it. With, advent of digital transactions the concept of Cryptocurrency has gained immense popularity. The algorithms used for engineering crypto currencies are also to be discussed over here.

BASIC CONCEPTS OF CRYPTO CURRENCY

Common people are only familiar with standard currencies like Dollars, Yen, Pounds or many more. These currencies are being legally issued by governments. Standard currencies are known as fiat currencies in technical terms. As commented by Casey et al. (2018), transactions made using physical money can be tracked by Government Authorities. However, in case of Crypto currency, no central authority is present controlling it. Hence, no governments can interfere in its path of transactions. Marx (2018) opined that an individual can freely spend crypto currencies freely without any interference. Developed by Satoshi Nakamoto, Bitcoin can be considered as one of the earliest examples of implementing crypto currency. In simple terms, Cryptocurrency can be considered as virtual currency that can be transferred with help of one central authority. Cryptocurrency wallet can be considered as an essential component of it.

Technology has transformed each and every facts of human society. Money is essential in order to fulfil our basic needs. However, volume of money that is being spent has been increasing considerably. In most of the cases, it is not feasible to carry hard cash for daily transactions. With help of appropriate technology, the process

of digital transactions had developed accordingly. Technological advancements have also changed the way of monetary transactions. Hence, it can be inferred that Cryptocurrency is an essential means of virtual transactions. However, Belle (2017) stated that the technology associated with engineering crypto currencies is new and is still under development phase. Accessing Crypto currencies are completely secure as it is encrypted. As a decentralized currency, transaction with anyone and at any time is possible with crypto currencies. As viewed by MacDonald et al. (2016), since inception of bitcoins in 2009, more than 3000 types of crypto currencies have been developed accordingly. The technology associated with building crypto currencies has "Blockchain Algorithm" at its core.

A "Block chain" can be classified equivalent to a public ledger that can be used to record every transaction in Cryptocurrency networks. The technology supporting crypto currencies are based on innovations on computer based cryptographic technology, peer-to-peer technology and simple economics. Transactions are usually secure as engineers have developed proper encryption techniques accordingly. The process through which, every Cryptocurrency is implemented can be referred to as "Mining".

LITERATURE REVIEW

Performing this research includes some gaps which includes the difference in opinion of scholars. Some scholars supported bitcoins on the basis of the decentralized Blockchain technology facility which prevented overloading of the network with content delivery files. On the other hand, some confessed that legality issue associated with bitcoins are creating controversial grounds in the Cryptocurrency market. In this way deriving conclusions on future scope of bitcoins become difficult. In case of some countries such as India, the central bank does not legalize the bitcoins as legal currency due to which investors' fears to invest in bitcoins.

On the contrary, Poland have legalized the use of cryptocurrencies in the normal course of fund transfer. The difference in opinion became the gap of this literature which made it difficult to identify whether to support bitcoins or not. Critical analysis has been performed to collect and analyses data on the future of bitcoins. In addition, the need of more information was felt for this research. Block chain algorithms can be considered as one of the best algorithms to create Crypto currencies. With popularization of digital transactions, the concepts of Bitcoin mining with Block chain have already created disruption in the financial markets. Despite of several drawbacks, arguments for using crypto currencies in transactions still holds a strong position. The potential of utilizing crypto currencies in developed countries are more dominant at present. However, in future, these potentials is expected to grow more in countries like Poland. It can be concluded from this chapter that; block chain technology is another language and platform agnostic technology which is developed with the help of major programming language. In the absence of sufficient knowledge of advanced languages programming of block chain technology cannot be done. On the basis of identified disadvantages, it can be said that Block chain can replace cloud in future as it allows the users to innovate entire industry. In the study, the key reason behind the increase in prices of the bit coins includes the usage of high-level language and technology used in generating the coins.

RESEARCH METHODOLOGY

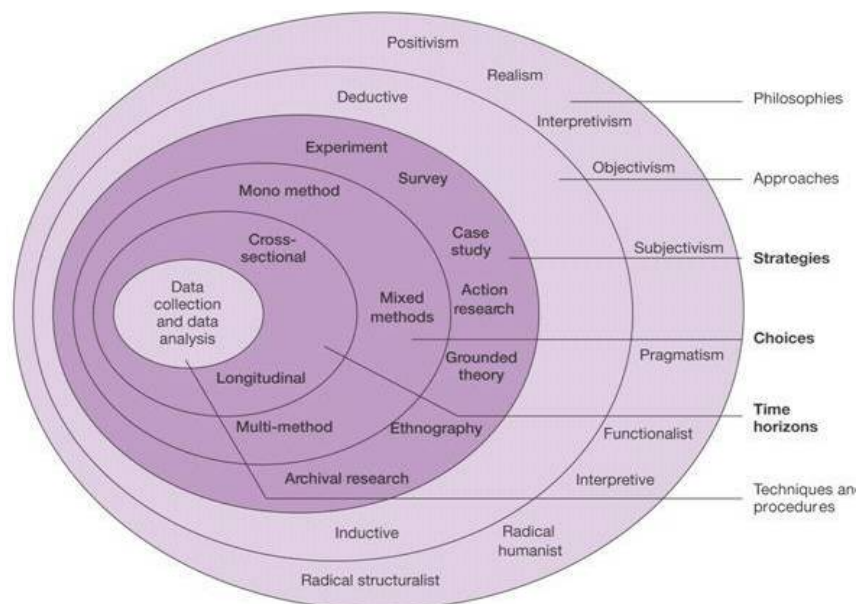
INTRODUCTION TO THIS CHAPTER

This part of the study would enable readers to have an insight on the processes that was used to complete this study. The concept of research onion is being used in order to accomplish the aim and objectives of this study. The researcher has chosen the concept of research onion for its simple and robust design. In addition to it,

implementing research onion had facilitated step-by-step integration of information gathered through data analysis. Therefore, in simple terms,

it can be inferred that logical approach is the key of this part of this part.

RESEARCH OPINION



(Source: Adopted From a Study of Saunders et al. 2009)

Figure 1. Research Opinion

DATA COLLECTION METHODS

As commented by Tang et al.(2019), this can be considered as an essential component of conducting a research. In order to collect relevant information's, the researcher had decided to visit "PKO Bank Polski". It is one of Poland's largest banks and had recently planned to invest in trading with crypto currencies. However, as per the demands of research design, both survey (Quantitative) and Interviews (Qualitative) have been conducted. In case of surveys, participants were handed over a set of ten close-ended questions and they were to answer it accordingly. In case of the interview sessions, the managers were asked five open-ended questions. Both these data collection methods were structured such that analysis of data can be made easy.

collected with the help of primary data collection method using the techniques of survey and interview. In addition, sampling facilitates the process of data collection (Research-methodology.net, 2019). Sampling includes the process of selection of population and sample in order to perform surveys and interviews. The process of selecting sampling method affects the reliability, validity and analysis of research findings. This study has been performed using the simple random sampling which involves selection of random samples from a specific population. In the views of Bryman and Bell (2017), simple random sampling is the easiest and simplest method of sampling where the samples are selected randomly without any prior determination.

SAMPLE SIZE AND SAMPLING METHOD

Success of a research depends upon the selection of appropriate data collection techniques (Saunders and Thornhill, 2018). Data has been

DATA ANALYSIS METHODS

Statistical analysis of the quantitative collected data have been performed in this study using tables and graphs. Tables has been used to reflect the response of participants on the particular

questions that were asked to them. Narrative analysis have furthermore, been used in order to evaluate the response of the participants of both the interview and the survey. The most important advantage of using narrative analysis is the effective description of collected information. Analysis of data helped in deriving conclusions on the future scope of crypto currencies and block chain technology. Without analysis of data the outcome of this study cannot be generated. In addition, the success of the study depends upon effective analysis of collected data. Analysis of data includes reflection of experiences and knowledge's which have been acquired while conducting this research.

ETHICAL CONSIDERATION

Regardless of selecting research methods, one is obliged to maintain the ethical aspect of the study. In other words, ethical consideration of the research needs to be maintained. The research has been conducted with consideration to the below mentioned points:

- The participants of the research were not harmed in any way and neither they were forced to participate in the process.
- The dignity of the participants has been respected and prioritised.
- Consent from the participants were taken before conducting the study.
- The identity of participants have been kept private according to the terms and conditions of the participants.
- Data collected from the participants has been kept confidential and private under the Data Protection Act 2018 (c.5).
- The data collected in this study has been used for academic purpose only. The data will not be used in fulfilling any commercial purpose.
- Data collected for this research has not been manipulated or exaggerated in order to provide false opinion.

- Transparency and honesty was maintained while communicating with the participants in order to reflect true opinion.
- The participants have been given the authority to leave the survey session in between as per their convenience

RESEARCH LIMITATIONS

It is normal to face some limitations while performing a research. However, it is important to minimise the limitations in order to achieve a successful study on the subject matter (Research-methodology.net, 2019). While collecting data for the study shortage of funds have been witnessed. Funds are required in the process for collecting information or relevant data from multiple sources, which was however, not possible in this study. Along with this, the allocated time for completing this research was short which restricted the amount of information collected. In addition, the study witnessed limited amount of resources in the form of articles and journals. These resources were not available over the internet and the limited access restricted use of detailed and accurate data on the topic.

ANALYSIS & RESULTS

From this chapter of the study, it can be summarized that data will be collected with the help of survey and interview under primary data collection method. The study have been performed with the help of deductive approach in order to deduce the future scope of Cryptocurrency . Descriptive research design has helped in describing the collected information for this study. Both the qualitative and quantitative data collection method have been selected to enhance the quality and quantity of collected data. In addition, the elected sample size for this study includes 100 employees of an organization that uses blockchain users and 5 managers. Questionnaires have been prepared for the participants on the basis of which questions have been asked. The study have been performed with

special preference to ethical considerations. In addition, for the success of this study efforts have been made in order to reduce the research limitations

CONCLUSION

Technology has transformed each and every facets of human society. Money is essential in order to fulfil our basic needs. Crypto currencies are the virtual or digital currencies which uses cryptography for security. Developed by Satoshi Nakamoto, Bitcoin can be considered as one of the earliest examples of implementing crypto currency. It is difficult for someone to counterfeit the crypto currencies due to the sophisticated security system. Most of the crypto currencies follow decentralised system of block chain technology. Online fund transfer has become a controversial subject in the modern times. Online fund theft has taken place which became a reason behind business losses. The increase in online theft has driven people to doubt upon online fund transfer systems. It can be observed that the concepts of bitcoins seem to reside mainly in developed countries in the world. Many countries have unstable currencies as because exchange rates of these currencies are fluctuating.

However, implementing the process of Block chain in financial institutions is expected to solve issues regarding Currency exchange rates. In addition to this, the base price of all consumables is expected to stay constant with the implementation of Block chain technologies. Despite of several drawbacks, arguments for using cryptocurrencies.

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