

Chapter - 11

THE IMPACT OF BLOCKCHAIN TECHNOLOGY IN BANKING

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ABSTRACT

A blockchain is an ordered, decentralised, immutable ledger that allows the recording of network transactions. Blockchain has emerged as a technology that can be applied in a variety of industries in recent years. It has been promised that it will be the technology that will enable transactions that are simple, effective, safe, and inexpensive. The primary goal of this thesis was to investigate the Blockchain's potential impact on the banking industry, as well as its challenges and limitations. The end result would be a good explanation of blockchain technology, how it works, and how it can be used. The implementation of a future bank and its challenges

A literature review was carried out in order to answer the research questions. The articles were chosen from evidence-based scientific databases including ABI Inform, Academic Search Elite, Emerald, Sage Premier, ScienceDirect, Springer Open, and Google Scholar. Six scholarly were chosen by screening relevant articles and applying inclusion and exclusion criteria. Data were extracted in a systematic manner and organised into five major categories. The findings indicate that blockchain technology has the potential to improve the efficiency of various sectors in the banking industry. It has the potential to improve and transform the cross-border payment system. Management, trade finance, capital markets, and financial reporting and compliance are all areas of expertise. It also creates the process of getting to know your customer is simple. As a result, blockchain implementation is expected to cause havoc in the banking and finance systems

Keywords: *Application, banking industry, blockchain technology, decentralized, financial industry, impact*

INTRODUCTION

The banking industry has served as a middleman to facilitate financial transactions since its inception. They've been giving the necessary trust for money to flow. Banking system has always been impact by technology. With the progress of technology and information,

The result of advancement in technological advancements is that banks working styles has been modernised. Banks are now internet-connected. SWIFT and other technological networks in smooth information flow. As a result, the banking industry is fully operational. They are reliant on technology to carry out their daily activities. As a result, blockchain could be beneficial. The major driving force behind the banking industry's recovery.

Banks are frequently chastised for being inefficient, costly, and opaque. Fintech and virtual bank like PayPal, Revolut, and N26 are making a mess in traditional banks

with their advance solutions. Blockchain technology helps in solving problems with providing cut throat ad revenue.

Perspective on the Fintech Industry Blockchain's popularity has skyrocketed in recent years. Central banks and governments have recently begun to look into its potential applications.

With so many options, With banks all across the world researching blockchain's potential, the future seems bright-Ising.

The industry established Bitcoin as the first realization of blockchain technology, as well as its pros and cons.

The aim of this experimental thesis is to look at the potential implications of blockchain in the banking business, as well as its limitations and barriers. This thesis provides a complete overview of blockchain technology, including its approach and its use in banks.

Characteristics and history In addition, the study looks into the issues that banks are dealing with. Today, and blockchain's potential role in resolving them. Finally, there is the thesis. It shows how banks test and develop blockchain in their operations.

LITERATURE REVIEW

A review of scholarly research literature. The basis of all types of research is literature reviews. Due to the growing number of multidisciplinary studies and the lack of integrated knowledge, book reviews as a form of business research are more important than ever before evidence in a particular field.

A literature review is a method of gathering and analysing data from previous studies in order to meet the research objectives. In all research areas, it is a helpful and well acknowledged methodology. A systematic examination of the literature yields a comprehensive overview. Picture of a location and its development over time A result obtained by merging various conclusions can be used to convincingly substantiate research questions. There are many ways to do research. The three most common strategies for conducting book reviews are a systematic, semi-systematic, and integrated approach. Depending on the topic, a researcher should select the appropriate methodology. Objectives and goals Based on the research question, textual reviews may be quantitative, qualitative, or mixed methods and research questions.

The conclusion of the book review is based on the conclusion of the initial work. Consequently, when selecting a current study, the researcher should monitor and follow

the guidelines for the literature review. Book reviews can be divided into two categories: data collection and keyword analysis search strings are used to collect data. The to achieve the best results, the boolean expressions “OR”, “AND” are utilised. Additionally, searches are carried out. To locate related topics, use the inclusion and exclusion criteria. The research papers are then written.

Each article is reviewed separately, and the most appropriate titles are selected. Finally, the conclusions are as follows: Data were analyzed, compiled, and research questions were addressed.

My Research Objective

- To study the Blockchain Technology Framework.
- Learn more about providing better facilities to the customer by the bank.
- Research blocks chain technology in the banking sector.
- Research the benefits and drawbacks of blockchain technology in the banking sector.

RESEARCH METHODOLOGY

Research Design

Descriptive Research: - A descriptive study is one that is conducted to describe characteristics of a population or phenomenon being studied. The descriptive research in this project is to identify the cause of the insight of various challenges and the global perspective of blockchain technology in the Banking Industry.

Data collection: - Secondary data The secondary research data collection method was used in this research paper, and the data was gathered from books, journals, newspapers, magazines, and online websites.

LIMITATION

The limitations of the study are those aspects of design or methodology that influenced the interpretation of the research findings.

1. The sample size may be insufficient to represent the entire population.
2. Relying solely on data provided by books and online websites through secondary research data.

3. Failure to employ a random sampling technique severely limits the ability to draw broader conclusions from the results.
4. Geographical knowledge is lacking.
5. Limitation of Manpower
6. Individuals' perspectives are not directly communicated.
7. There isn't enough time to research the bigger picture.

FINDINGS

As a result, there is still much research to be done in this area. As technology is in their stages. During my research, I discovered that Some important issues are ignored. Therefore, I see the importance of doing research on these topics. This thesis covers three proposals for future research.

Blockchain Similarly, the research question could be "How can central banks use blockchain technology?" Blockchain As a result, the research question may be "How cn central banks adopt blockchain technology?" Technologies? " - As a result, any idea related to block chain technology can be a useful topic to learn. Lastly, Blockchain control research will be an interesting topic to explore.

CONCLUSION AND RECOMMENDATION

This result suggests that block chain technology is on the verge of causing a major shift in banking industry. This technology seems to have the potential to reduce banks' concerns about inefficiency by eliminating foreign companies, increasing efficiency, and reducing costs. Technology seems to have the potential to reduce bank inefficiency. The five most promising fields Cross-border payments, trade financing, and knowing your assets are all areas where block chain will have an impact. Customers, capital markets, regulation and compliance are Some of the topics discussed. Banks can conduct cross-border transactions with block chain, you can take action faster and more cost-effectively than you can with conventional services like Swift.Re-evaluating customers benefit from the use of a third party as the work is very efficient and demonstrates beyond. Trading is a financial support that can be done efficiently and inexpensively if the agreements were written with the help of software. Wise contracts are a type of contract that can be used and can help track trade deliveries and cost reductions. Smart contracts can also be used to register, verify, and distribute customer identity across a network of block chain organizations. This will save banks a lot of time and money, and help regulators in their efforts to combat money laundering and other

terrorist-related crimes. Payment for currency market operations can be made in real time with great efficiency and transparency. Additionally, blockchain can help banks automatically perform financial reporting and other processes. Compliance-related activities Data stored in blocks cannot be changed, so it can be trusted by user administrators. Apart from all these benefits, the blockchain has some disadvantages. When it comes to blockchain, the main idea is hard to use and takes a long time. Major banks have begun experimenting with blockchain technology. Since 2015, we have not been able to stop the channel. The and the results show that it will have a significant impact on Border payments, trade finance, know your customers, capital markets, and regulation. In short, blockchain technology's potential block to change banking operations is hug. In short, blockchain technology's potential block to change banking operations is huge.

BIBLIOGRAPHY

1. Attaran, M. & Gunasekaran, A. 2019. *Applications of Blockchain Technology in Business: Challenges and Opportunities*. Cham, Switzerland: Springer International Publishing.
2. Baraniuk, C. 2019. *Bitcoin' s energy consumption equals that of Switzerland*. Available: <https://www.bbc.com/news/technology-48853230> . Accessed on July 6, 2020.
3. Brown, C. 2020. *More than a third of the world's largest banks use Ripple*. Available:<https://www.crypto-news-flash.com/mehr-als-ein-drittel-der-groessten-banken-der-welt-nutzen-ripple/>. Accessed on July 5, 2020.
4. Casey, M., Crane, J., Gensler, G., Johnson, S. & Narula, N. 2019. *The Impact of Blockchain Technology on Finance: A Catalyst for Change*. London: Centre for Economic Policy Re Search.
5. CoinDesk, 2020. *Figure showing the price of bitcoin*. Available:<https://www.coindesk.com/price/bitcoin>. Accessed on June 2, 2020.
6. Collomb, A. & Sok, K. 2016. *Blockchain / distributed ledger technology (DLT): What impact On the financial sector? Communications & Strategies*, no. 103, pp. 93-111,212,214.l Retrieved From <https://search.proquest.com/docview/1841718518?accountid=10007>.
7. Accessed on May 6, 2020.
8. Deloitte. 2016. *Blockchain, Enigma. Paradox. Opportunity*. Available: <https://www2.deloitte.com/content/dam/Deloitte/uk/Documents/Innovation/deloitte-uk-blockchain-full-report.pdf>. Accessed on May 15, 2020.

9. *Dragonchain*. 2019. *What different types of blockchains are there?* Available: [https://dragon-Chain.com/blog/differences-between-public-private-blockchains/](https://dragon-chain.com/blog/differences-between-public-private-blockchains/). Accessed on July 15, 2020.
10. Edwards, J. 2020. *Bitcoin's Price History*. Investopedia. Available: <https://www.investopedia.com/articles/forex/121815/bitcoins-price-history.asp>. Accessed on July 16, 2020.
11. *European Central Bank*. 2018. *The ECB and anti-money laundering*. Available: https://www.bankingsupervision.europa.eu/press/publications/newsletter/2018/html/ssm.nl180516_2.en.html. Accessed on June 20, 2020
12. Fink, A. 2014. *Conducting Research Literature Reviews: From the Internet to Paper*. Fourth Edition. Thousand Oaks, CA: SAGE. Freuden, D. 2018. *Hybrid blockchains: the best of both public and private*. Bravenewcoin. Available: <https://bravenewcoin.com/insights/hybrid-blockchains-the-best-of-both-public-And-private>. Accessed on July 15, 2020.