(IJISE) 2021, Vol. No. 13, Jan-Jun **e-ISSN: 2454-6402, p-ISSN: 2454-812X**

# Leveraging the Use of Blockchain in the Trade of Finance and its Impact on the Financial Decision-Making Models

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**ABSTRACT**

*Blockchain has made a big difference in cryptocurrency, investing, and banking in the last few years. The field of banking and finance has also been shaped by its recent use in trade finance. Blockchain has overcome the costly, time-consuming, and error-prone shortcomings of traditional trade financing. Companies with a long history, particularly those in the shipping and trading sectors, have been able to use blockchain technology in their financial transactions and have seen significant results. Automated financial decision-making is also made possible by incorporating Blockchain, which can independently verify the legitimacy of transactions. However, much research has yet to be done on the technology used in trade finance. As a result, this paper aims to investigate the use of blockchain technologies in trade finance and how they affect financial decision-making, as well as their ramifications for the future. Took a case study approach, and a few major use cases of well-established organizations in the trading and investment and technology and IT consulting sectors were used as examples of how they implemented Blockchain. Academics, subject matter experts, and organizations in the above industries would benefit from the study because they could make decisions about how to use the technology to their advantage.*

## INTRODUCTION

Trade Finance facilitates credit, payment guarantee, and insurance in a way that satisfies both parties, making financial transactions between buyers and sellers worldwide more efficient.

However, the physical paper documents generated and the subsequent move back and forth between the parties involved in the transaction present challenges for traditional trade financing methods. Because of this, there are disadvantages, such as a high cost, a lengthy process, and an increased risk of errors due to the physical nature of the documents. 1] Conversely, organizations can significantly overcome these drawbacks by utilizing Blockchain trade finance. Blockchain can protect transactions from tampering and revision with a database that maintains an organized list of documents recorded in blocks. 2] Blockchain utilizes technologies for end-to-end transfer and storage distribution. Blockchain networks' primary focus is developing a database system that simultaneously records and maintains transactions. This makes it impossible for any party to control the system completely. 3] Blockchain technology is still in its infancy, and further in-depth research is necessary to increase its efficiency.

Blockchain technology has been utilized and benefited businesses. As a result, this study aims to look at how blockchain technologies are used in trade finance and how they affect security and financial transactions. To accomplish this, we propose examining various use cases and gaining insight into each.

## RESEARCH METHOD

Our Research uses a case study approach to examine the impact of various use cases on financial transactions and security related to the use of Blockchain in trade finance. Each use case is examined and analysed independently. Gathered the use cases from a variety of sources.

A case study approach considers a comprehensive examination of the subject, bringing out its various viewpoints and perspectives. It shows the subject's features and characteristics from various perspectives, allowing experts in the field and organizations to make the most of them and gain an advantage. We can identify the prevalent Blockchain-related techniques and methodologies with the assistance of this strategy. The use cases will provide insight into how this technology can be used in the case of different organizations and work needs in this instance, given that Blockchain offers many attributes and can be applied by different organizations in a unique way that may bring them the desired output.

**USE CASE**

This section discusses various use cases for the Blockchain technologies that established businesses have implemented in the agri-food, trading and investment, shipping, technology & IT, and consulting industries.

A. Investment and Trading Blockchain offer several advantages in financial trading, including the preservation of pricing transparency, the development of new alternative markets, an increase in the processing speed of payments, and the immutability of transaction records.

[11] As a result of Blockchain's ledger technology, trading costs have decreased, and transaction speeds have increased. Blockchain keeps demonstrating how the technology will advance, from crypto-trading to a tool for smart contracts.

1. Apply Case 1: Mizuho and Marubeni (Hyperledger) On July 6, 2017, the Japanese company Marubeni and Sompo demonstrated how Distributed Ledger Technology could replace the use of L/Cs and other trade-related paperwork by utilizing blockchain technology. Reduced the transaction time by half to complete the trade deal using Hyperledger Fabric technology. Standard shipping and trading documentation is significantly reduced when DLT is used on a Hyperledger platform. The platform handles the sales contract request for L/C issuance, the transfer of documents (L/C and B/L), and the final payment and fund settlement. 12]

2. Apply Case 2: BBVA's Hybrid Blockchain The BBVA Blockchain is a hybrid network. The private platform uses Hyperledger Fabric, which makes it possible for bank-customer transactions and deals to be clear and concise. It keeps track of all the data and structures associated with the deal that the companies making the deal can see. Ethereum, on the other hand, powers the public network. The public Blockchain keeps track of the time-stamped hash of the completed transaction, similar to a digital fingerprint. 13] B. Technology and IT consulting even though blockchain technology is currently gaining popularity in IT, many people still need to learn about the concept. Blockchain is nowadays becoming a most revolutionary technologies of the moment, which will affect your business at some point. Consequently, executives anticipate that the platform will be able to address various transactional issues in the future because they are aware of the enormous potential and opportunities presented by Blockchain. 14]

**IMPLICATIONS**

Because this research paper focuses on how the Blockchain technologies adopted by the organizations mentioned have affected the financial transactions and security aspects of businesses, academics and practitioners will benefit from it. With the help of the use cases discussed, the paper covers a variety of Blockchain platforms, making it useful for academics and practitioners to learn about them and how they can put them into practice. Because this paper gives them an overview of the platforms, they can delve deeply into the topic.

To improve transaction efficiency and security, businesses could map their current functions and requirements to the platforms discussed and implemented. Additionally, this paper would benefit from the Trading & Investment and Technology & IT Consulting industries that were the subject of the use cases. It could be decided by other industry players whether or not to implement such platforms and how to develop a strategic strategy for doing so.

## CONCLUSION

After looking at the use cases of businesses in the trading and investment and technology and IT consulting industries, we can see that the adoption of the blockchain platform by each of these businesses had a significant impact on the transaction and the firm's security. The platforms were appropriate to the industry's requirements and the kind of work that engaged the businesses, and they provided the organizations with various advantages and attributes. Blockchain-based platforms have been noted to increase trade actors' dependability and accountability, as participants in trade were compelled to adhere to the rules outlined in trade documents and held accountable for their actions. Can also find the potential of Blockchain to lower the cost of exchanging trade documentation. In trade financing activities, this capability exemplifies the immutable and auditable characteristics of the blockchain mechanism. The shared transaction ledger reduces the time spent processing paper-based procedures, making trade workflows timelier and more effective.

## REFERENCES

1. Youssef, H 2020, The application of Blockchain in Trade Finance:Opportunities and Challenges, Trade Finance Global, viewed 17 July 2021, <https://www.tradefinanceglobal.com/posts/the-application-ofblockchain-in-trade-finance-opportunities-and-challenges/>.
2. Marco Polo Network 2020, The evolution of Trade Finance: Blockchain signals new era, Marco Polo Network, viewed 14 July 2021, <https://www.marcopolonetwork.com/resources/evolution-of-tradefinance blockchain/?redirect=true>.
3. Guerrouj, L 2020, The power of Blockchain Technology and its revolutionary uses in the Financial Sector, Salesforce, viewed 9 July 2021, <https://www.salesforce.com/eu/blog/2020/02/how-financialservices- are-implementing-blockchain-technology.html>.
4. Dewey, JN, Hill, R & Plasencia, R 2018, 'Blockchain and 5G-Enabled Internet of Things (IOT) will redefine Supply Chains and Trade Finance', The Secured Lender, January, pp. 42-45, viewed 12 July 2021, <https://www.hklaw.com/files/Uploads/Documents/Articles/Blockchain 5GEnabledInternetofThings.pdf>.
5. Chang, SE, Luo, L & Chen, Y 2019, 'Blockchain-Enabled Trade Finance Innovation: A potential paradigm shift on using Letter of Credit', Sustainability, vol. 12, no. 1, pp. 188-203, DOI:10.3390/su12010188.
6. Gupta, VC, Agarwal, M & Mishra, A 2019, 'When Trade Finance meets Blockchain Technology', International Journal of Innovative Science and Research Technology, vol. 4, no. 10, pp. 342-346, viewed 13 July 2021, <https://ijisrt.com/assets/upload/files/IJISRT19OCT19961.pdf>.
7. Treleaven, P, Brown, RG & Yang, D 2017, 'Blockchain Technology in Finance', Computer, vol. 50, pp. 14-17, DOI:10.1109/MC.2017.3571047.
8. Coita, DC, Abrudan, MM & Matei, MC 2019, 'Effects of the Blockchain Technology on Human Resources and Marketing: An Exploratory Study', in A Kavoura, E Kefallonitis & P Theodoridis (eds), Strategic Innovative Marketing and Tourism, Springer International Publishing, pp. 683-691, DOI:10.1007/978-3-030-12453-3_79.
9. Sankar, LS, Sindhu, M & Sethumadhavan, M 2017, 'Survey of consensus protocols on Blockchain Applications', 2017 4th International Conference on Advanced Computing and Communication Systems (ICACCS), IEEE, Coimbatore, India, pp. 1-5, DOI:10.1109/ICACCS.2017.8014672.
10. Jaoude, JA & Saade, RG 2019, 'Blockchain Applications – Usage in different Domains', IEEE Access, vol. 7, pp. 45360-45381, DOI:10.1109/ACCESS.2019.2902501.
11. Daley, S 2019, Bullish on Blockchain: 12 companies using Distributed Ledger Technology to transform Financial Trading, Builtin Beta, viewed 10 July 2021, <https://builtin.com/blockchain/trading-financeinvestments>.
12. Bermingham, F 2017, Mizuho completes trade transaction using Blockchain, Global Trade Review, viewed 12 July 2021, <https://www.gtreview.com/news/asia/mizuho-completes-tradetransaction-using-blockchain/>.

13. Ledger Insights 2019, BBVA's Blockchain Loan Platform wins Banking Tech Innovation Award, Ledger Insights, viewed 12 July 2021, <https://www.ledgerinsights.com/blockchain-telecom-consortiumsoftbank-tbcasoft-mobile-wallet/>.
14. Blockchain Technology: The next frontier in Information Technology n.d., Delaware, viewed 6 July 2021, <https://www.delawareconsulting.com/en-us/solutions/blockchaintechnology>