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Research Article

Blockchain Technology as A Catalyst for Transparency and Accountability in Nigeria's Public Sector

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Abstract

The Nigerian public sector has been plagued by corruption, lack of transparency, and accountability. Block-chain technology has been touted as a potential solution to these challenges. This study examines the potential of block chain technology as a catalyst for transparency and accountability in Nigeria's public sector. The data for this study were collected from secondary sources which include government publication/documents, both published and unpublished works such as text books, journals, periodicals, seminar and conference papers and internet. The study found out among others that Block-chain technology has the potential to promote transparency and accountability in Nigeria's public sector by providing a secure and transparent way of storing and verifying transactions. This is because block-chain technology uses a decentralized and distributed ledger system to record transactions, which makes it difficult for corrupt officials to manipulate or alter transactions. The study recommends among others that the Nigerian government should establish a block-chain-based platform for tracking the distribution of government funds to promote transparency and accountability in the management of public finances. The paper thus, concludes that block-chain technology can provide a secure and transparent way of storing and verifying transactions, which can help to reduce the risk of corruption and promote transparency and accountability in government transactions.

Keywords: *Block-chain, Technology, Transparency, Accountability, Corruption, Trust.*

INTRODUCTION

The Nigerian public sector has been plagued by corruption, inefficiency, and lack of transparency, resulting in widespread disillusionment among citizens (Egbe, 2019). The country's ranking on Transparency International's Corruption Perceptions Index (CPI) has consistently been poor, with Nigeria ranking 146 out of 180 countries in 2020 (Transparency International, 2020). This has significant implications for the country's economic development, as corruption and lack of transparency can deter foreign investment, undermine trust in institutions, and exacerbate poverty and inequality (Ibrahim, 2020). In recent years, block-chain technology has emerged as a potential solution to these challenges, offering a secure, transparent, and tamper-proof way of storing and verifying transactions (Wright & De Filippi, 2015). Block-chain technology has already been successfully implemented in various sectors, including finance, healthcare, and supply chain management (Kshetri, 2017). In the context of public sector governance, block-chain technology can be used to promote transparency and accountability by providing a secure and tamper-proof record of transactions (Reyna, 2018).

The use of block-chain technology in Nigeria's public sector has the potential to transform the way government agencies operate, promoting transparency, accountability, and good governance (Ojeka, 2020). For instance, block-chain technology can be used to track government spending, ensuring that funds are used for their intended purposes (Mansfield-Devine, 2019). Additionally, block-chain technology can be used to improve the efficiency and effectiveness of public services, such as the provision of identity documents, healthcare services, and social welfare benefits (Bui, 2019). The advent of block-chain technology has revolutionized the way transactions are conducted and data is stored, offering unparalleled levels of transparency, security, and accountability (Tapscott & Tapscott, 2016). As a distributed ledger technology, block-chain enables multiple stakeholders to access and verify transactions in real-time, reducing the

risk of fraud and corruption (Beck, 2018). In the context of Nigeria's public sector, block-chain technology has the potential to transform the way government agencies operate, promoting transparency, accountability, and good governance (Ojeka, 2020). The use of block-chain technology in Nigeria's public sector also has the potential to promote economic development and reduce poverty (Ibrahim, 2020). By providing a secure and transparent way of storing and verifying transactions, block-chain technology can help to reduce corruption and promote good governance (Tapscott & Tapscott, 2016). This, in turn, can help to promote economic development and reduce poverty, by ensuring that government funds are used for their intended purposes and that public services are delivered efficiently and effectively (Mansfield-Devine, 2019).

Furthermore, the use of block-chain technology in Nigeria's public sector can also help to promote citizen engagement and participation in governance (Reyna, 2018). By providing a transparent and accountable system of governance, block-chain technology can help to build trust in government and promote good governance (Tapscott & Tapscott, 2016). In addition, the use of block-chain technology in Nigeria's public sector can also help to reduce bureaucracy and increase the efficiency and effectiveness of public services (Bui, 2019). By automating many of the processes involved in the delivery of public services, block-chain technology can help to reduce the risk of corruption and promote good governance (Mansfield-Devine, 2019).

In the context of public sector governance, block-chain technology can be used to promote transparency and accountability by providing a secure and tamper-proof record of transactions (Reyna, 2018). This can help to reduce corruption and ensure that government funds are used for their intended purposes (Mansfield-Devine, 2019). Additionally, block-chain technology can be used to improve the efficiency and effectiveness of public services, such as the provision of identity documents, healthcare services, and social welfare benefits (Bui, 2019). The potential significance of block-chain technology in promoting transparency and accountability in Nigeria's public sector cannot be underestimated because it provides a secure and transparent record of transactions, reducing the risk of corruption and ensuring that government funds are used for their intended purposes (Mansfield-Devine, 2019). Block-chain technology can improve the efficiency and effectiveness of public services, such as the provision of identity documents, healthcare services, and social welfare benefits (Bui, 2019). It can promote citizen engagement and participation in governance, enabling citizens to track government spending and hold public officials accountable for their actions (Reyna, 2018). And can help to build trust in government and promote good governance, by providing a transparent and accountable system of governance (Tapscott & Tapscott, 2016).

STATEMENT OF PROBLM

The adoption of block-chain technology in Nigeria's public sector is faced with several challenges, including the lack of awareness and understanding of the technology among public officials and citizens (Ojeka, 2020). This lack of awareness and understanding can hinder the effective adoption and use of block-chain technology, as public officials and citizens may not fully appreciate the benefits and potential applications of the technology (Kshetri, 2017). Another challenge facing the adoption of block-chain technology in Nigeria's public sector is the lack of infrastructure and technology to support the implementation of the technology (Ibrahim, 2020). This includes the need for high-speed internet connectivity, computer hardware and software, and other technical requirements necessary for the effective implementation of block-chain technology (Kshetri, 2017).

Furthermore, the adoption of block-chain technology in Nigeria's public sector is also faced with the challenge of regulatory frameworks and policies (Reyna, 2018). The Nigerian government needs to develop and implement clear and effective regulatory frameworks and policies to govern the use of block-chain technology in the public sector (Kshetri, 2017). Additionally, the adoption of block-chain technology in Nigeria's public sector is also faced with the challenge of cyber security (Mansfield-Devine, 2019). Block-chain technology is not immune to cybersecurity threats, and the Nigerian government needs to ensure that adequate measures are put in place to protect the security and integrity of block-chain-based systems (Tapscott & Tapscott, 2016). The high cost of implementing and maintaining block-chain technology is another challenge facing its adoption in Nigeria's public sector (Ibrahim, 2020). The cost of implementing block-chain technology can be prohibitively expensive for many government agencies, particularly those in developing countries like Nigeria (Kshetri, 2017).

Moreover, the adoption of block-chain technology in Nigeria's public sector is also faced with the challenge of scalability (Reyna, 2018). Many block-chain-based systems are not scalable, and this can limit their effectiveness in large and complex systems like those found in the public sector (Tapscott & Tapscott, 2016). The lack of standardization is another challenge facing the adoption of block-chain technology in Nigeria's public sector (Mansfield-Devine, 2019).

Furthermore, the adoption of block-chain technology in Nigeria's public sector is also faced with the challenge of interoperability (Reyna, 2018). Many block-chain-based systems are not interoperable, and this can limit their effectiveness in systems that require the integration of multiple different block-chain-based systems (Tapscott &

Tapscott, 2016). The lack of skilled personnel is another challenge facing the adoption of block-chain technology in Nigeria's public sector (Ibrahim, 2020). There is currently a shortage of skilled personnel with the necessary expertise and experience to implement and maintain block-chain-based systems (Kshetri, 2017).

Moreover, the adoption of block-chain technology in Nigeria's public sector is also faced with the challenge of data privacy (Mansfield-Devine, 2019). Block-chain technology raises important questions about data privacy, particularly in systems where sensitive personal data is stored and transmitted (Tapscott & Tapscott, 2016). Lack of public awareness and education is another challenge facing the adoption of blockchain technology in Nigeria's public sector (Ojeka, 2020). There is currently a lack of public awareness and education about blockchain technology, and this can make it difficult for citizens to understand and appreciate the benefits of the technology (Kshetri, 2017). The adoption of blockchain technology in Nigeria's public sector is also faced with the challenge of resistance to change (Reyna, 2018). Many public officials and citizens may be resistant to the adoption of blockchain technology, particularly if they do not fully understand the benefits and potential applications of the technology (Tapscott & Tapscott, 2016). The lack of coordination and collaboration is another challenge facing the adoption of blockchain technology in Nigeria's public sector (Ibrahim, 2020). The adoption of blockchain technology requires coordination and collaboration among different government agencies and stakeholders, and this can be difficult to achieve in practice (Kshetri, 2017). The adoption of blockchain technology in Nigeria's public sector is also faced with the challenge of ensuring inclusivity (Mansfield-Devine, 2019). The adoption of blockchain technology should be inclusive and equitable, and should not exacerbate existing social and economic inequalities (Tapscott & Tapscott, 2016).

The lack of a clear business case is another challenge facing the adoption of blockchain technology in Nigeria's public sector (Reyna, 2018). The adoption of blockchain technology requires a clear business case, including a detailed analysis of the costs and benefits of the technology (Kshetri, 2017). The adoption of blockchain technology in Nigeria's public sector is also faced with the challenge of ensuring sustainability (Ibrahim, 2020). Moreover, the adoption of blockchain technology in Nigeria's public sector is also faced with the challenge of ensuring compliance with existing laws and regulations (Reyna, 2018). The adoption of blockchain technology should comply with existing laws and regulations, and should not create new regulatory challenges (Tapscott & Tapscott, 2016). The lack of a clear risk management strategy is another challenge facing the adoption of blockchain technology in Nigeria's public sector (Ibrahim, 2020). The adoption of blockchain technology requires a clear risk management strategy, including a clear definition of risks and mitigation strategies (Kshetri, 2017).

The adoption of blockchain technology in Nigeria's public sector is also faced with the challenge of ensuring cultural fit (Mansfield-Devine, 2019). The adoption of blockchain technology should be culturally sensitive and appropriate, and should not disrupt existing cultural norms and practices (Tapscott & Tapscott, 2016). The lack of a clear evaluation framework is another challenge facing the adoption of blockchain technology in Nigeria's public sector (Reyna, 2018). The adoption of blockchain technology requires a clear evaluation framework, including a clear definition of metrics and benchmarks (Kshetri, 2017).

RESEARCH QUESTIONS

1. How has block-chain technology promote transparency and accountability in Nigeria's public sector?
2. What are the challenges and limitations of implementing block-chain technology in Nigeria's public sector?
3. How can block-chain technology be effectively integrated into Nigeria's public sector to promote good governance and accountability?

OBJECTIVES OF STUDY

The broad objective of this study is to evaluate block-chain technology as a catalyst for transparency and accountability in Nigeria's public sector. While the specific objectives are as follows:

1. To examine the potential of block-chain technology in promoting transparency and accountability in Nigeria's public sector.
2. To identify the limitations of implementing block-chain technology in Nigeria's public sector.
3. To propose a framework for the effective integration of block-chain technology into Nigeria's public sector.

HYPOTHESES

1. Block-chain technology has a significant impact on transparency and accountability in Nigeria's public sector
2. There is a significant relationship between the adoption of block-chain technology and the level of corruption in Nigeria's public sector.
3. Block-chain technology is feasible for implementation in Nigeria's public sector, despite technical and infrastructural limitations.

OPERATIONALIZATION OF TERMS

Block-chain technology is a decentralized, digital ledger that records transactions across a network of computers in a secure and transparent manner. It is the underlying technology behind crypto-currencies such as Bitcoin and Ethereum, but its applications extend far beyond digital currency. A block-chain is essentially a chain of blocks, each of which contains a set of transactions. These blocks are linked together through cryptographic hashes, which ensure the integrity and immutability of the data stored on the block-chain.

One of the key features of block-chain technology is its decentralized nature. Unlike traditional databases, which are typically controlled by a single entity, a block-chain is maintained by a network of computers working together. This decentralized architecture makes block-chain technology highly resistant to tampering and censorship, as there is no single point of failure. Additionally, the use of advanced cryptographic techniques ensures that all transactions on the block-chain are secure and trustworthy.

LITEREATURE REVIEW

The concept of block-chain technology

Block-chain technology has gained significant attention in recent years, particularly in the context of promoting transparency and accountability in the public sector (Tapscott & Tapscott, 2016). Blockchain technology is a decentralized, digital ledger that records transactions across a network of computers in a secure and transparent manner (Nakamoto, 2008). This technology has the potential to transform the way government agencies operate, promoting transparency, accountability, and good governance (Ojeka, 2020). One of the key benefits of blockchain technology is its ability to promote transparency in government transactions (Egbe, 2019). Blockchain technology provides a secure and transparent way of storing and verifying transactions, making it difficult for corrupt officials to manipulate or alter transactions (Mansfield-Devine, 2019). This can help to reduce corruption and promote good governance in Nigeria's public sector (Ibrahim, 2020).

Another benefit of blockchain technology is its ability to promote accountability in government agencies (Ojeka, 2020). Blockchain technology provides a secure and transparent way of storing and verifying transactions, making it easier for citizens to hold government agencies accountable for their actions (Egbe, 2019). This can help to promote good governance and reduce corruption in Nigeria's public sector (Ibrahim, 2020). The use of blockchain technology in Nigeria's public sector can also help to improve the efficiency and effectiveness of government agencies (Mansfield-Devine, 2019). Blockchain technology can help to automate many of the processes involved in government transactions, reducing the risk of errors and increasing the speed of transactions (Tapscott & Tapscott, 2016). This can help to improve the overall efficiency and effectiveness of government agencies in Nigeria (Ojeka, 2020).

Furthermore, the use of block-chain technology in Nigeria's public sector can also help to promote citizen engagement and participation in governance (Egbe, 2019). Blockchain technology can provide citizens with a secure and transparent way of accessing information about government transactions, making it easier for them to hold government agencies accountable for their actions (Mansfield-Devine, 2019). This can help to promote citizen engagement and participation in governance in Nigeria (Ibrahim, 2020).

The use of blockchain technology in Nigeria's public sector can also help to promote good governance and reduce corruption (Egbe, 2019). Blockchain technology can provide a secure and transparent way of storing and verifying transactions, making it difficult for corrupt officials to manipulate or alter transactions (Mansfield-Devine, 2019). This can help to promote good governance and reduce corruption in Nigeria's public sector (Ibrahim, 2020).

Furthermore, the use of blockchain technology in Nigeria's public sector can also help to improve the efficiency and effectiveness of government agencies (Ojeka, 2020). Blockchain technology can help to automate many of the processes involved in government transactions, reducing the risk of errors and increasing the speed of transactions (Tapscott & Tapscott, 2016). This can help to improve the overall efficiency and effectiveness of government agencies. The use of blockchain technology in Nigeria's public sector can also help to improve the efficiency and effectiveness of government agencies (Ojeka, 2020). Blockchain technology can help to automate many of the processes involved in government transactions, reducing the risk of errors and increasing the speed of transactions (Tapscott & Tapscott, 2016). This can help to improve the overall efficiency and effectiveness of government agencies in Nigeria (Ibrahim, 2020).

Moreover, the use of blockchain technology in Nigeria's public sector can also help to reduce the risk of corruption and promote good governance (Mansfield-Devine, 2019). Blockchain technology can provide a secure and transparent way of storing and verifying transactions, making it difficult for corrupt officials to manipulate or alter transactions (Egbe, 2019). This can help to promote good governance and reduce corruption in Nigeria's public sector (Ibrahim, 2020). The use of blockchain technology in Nigeria's public sector can also help to improve the delivery of public services (Ojeka, 2020). Blockchain technology can provide a secure and transparent way of storing and verifying transactions, making it

easier for citizens to access public services (Egbe, 2019). This can help to improve the overall delivery of public services in Nigeria (Ibrahim, 2020).

The use of trust in promoting transparency and accountability in Nigeria's Public Sector

Trust is a fundamental component of any successful organization, including those in the public sector (Ojeka, 2020). In Nigeria, the lack of trust in government institutions has been a major challenge to promoting transparency and accountability in the public sector (Egbe, 2019). Trust is essential for building strong relationships between citizens and government institutions, and for promoting a sense of ownership and accountability among citizens (Ibrahim, 2020).

The concept of trust is complex and multifaceted, and it can be defined in various ways depending on the context (Mansfield-Devine, 2019). In the context of Nigeria's public sector, trust can be defined as the confidence that citizens have in the ability of government institutions to act in their best interests (Ojeka, 2020). Trust is built over time through consistent and transparent behavior, and it can be eroded quickly through actions that are perceived as corrupt or self-serving (Egbe, 2019).

Lack of trust in government institutions in Nigeria is a major challenge to promoting transparency and accountability in the public sector (Ibrahim, 2020). When citizens do not trust government institutions, they are less likely to engage with them or to participate in the democratic process (Ojeka, 2020). This can lead to a sense of disconnection and disillusionment among citizens, and it can undermine the legitimacy of government institutions (Egbe, 2019).

One of the key ways to promote trust in government institutions in Nigeria is through transparency (Mansfield-Devine, 2019). Transparency involves providing citizens with access to information about government activities and decisions, and it is essential for building trust and promoting accountability (Ojeka, 2020). When citizens have access to information about government activities and decisions, they are better able to hold government institutions accountable for their actions (Ibrahim, 2020).

Another way to promote trust in government institutions in Nigeria is through accountability (Egbe, 2019). Accountability involves holding government institutions responsible for their actions, and it is essential for building trust and promoting good governance (Ojeka, 2020). When government institutions are held accountable for their actions, they are more likely to act in the best interests of citizens (Ibrahim, 2020). The use of technology, including blockchain technology, also has the potential to promote trust in government institutions in Nigeria (Mansfield-Devine, 2019). Blockchain technology can provide a secure and transparent way of storing and verifying transactions, making it difficult for corrupt officials to manipulate or alter transactions (Ojeka, 2020). This can help to promote trust and accountability in government institutions, and it can help to reduce the risk of corruption (Ibrahim, 2020).

The Importance of regulatory framework in promoting transparency and accountability in Nigeria's Public Sector

A regulatory framework in Nigeria's public sector refers to the set of rules, laws, and guidelines that govern the behavior of public officials and institutions in the country (Egbe, 2019). This framework is designed to promote transparency, accountability, and good governance in the public sector, and to prevent corruption and abuse of power (Ibrahim, 2020). The regulatory framework in Nigeria's public sector includes laws and regulations such as the Public Procurement Act, the Freedom of Information Act, and the Code of Conduct for Public Officers (Ojeka, 2020). The regulatory framework in Nigeria's public sector is established by the government to ensure that public officials and institutions act in the best interests of the country and its citizens (Egbe, 2019). The framework is designed to promote transparency and accountability in the public sector by requiring public officials and institutions to disclose information about their activities and finances (Ibrahim, 2020). The regulatory framework also provides mechanisms for citizens to report corruption and abuse of power, and for public officials and institutions to be held accountable for their actions (Ojeka, 2020).

In Nigeria, the regulatory framework is enforced by various institutions and agencies, including the Economic and Financial Crimes Commission (EFCC), the Independent Corrupt Practices Commission (ICPC), and the Office of the Auditor-General for the Federation (Ojeka, 2020). These institutions and agencies are responsible for investigating and prosecuting cases of corruption and abuse of power, and for ensuring that public officials and institutions comply with the regulatory framework (Egbe, 2019).

The importance of a regulatory framework in promoting transparency and accountability in Nigeria's public sector cannot be overstated (Ojeka, 2020). A regulatory framework provides a set of rules and guidelines that govern the behavior of public officials and institutions, and it is essential for promoting transparency and accountability in the public sector (Egbe, 2019).

In Nigeria, the lack of a robust regulatory framework has been a major challenge to promoting transparency and accountability in the public sector (Ibrahim, 2020). The country's regulatory framework is often characterized by a lack of clarity, consistency, and enforcement, which can create opportunities for corruption and abuse of power (Ojeka, 2020).

A regulatory framework is essential for promoting transparency and accountability in the public sector because it provides a clear set of rules and guidelines that govern the behavior of public officials and institutions (Egbe, 2019). This can help to prevent corruption and abuse of power, and it can promote a culture of transparency and accountability in the public sector (Ibrahim, 2020). In addition, a regulatory framework can also help to promote transparency and accountability in the public sector by providing a mechanism for reporting and investigating corruption and abuse of power (Ojeka, 2020). This can help to ensure that public officials and institutions are held accountable for their actions, and it can promote a culture of transparency and accountability in the public sector (Egbe, 2019).

THEORETICAL FRAMEWORK

The theoretical framework suitable for this study is the Institutional Theory of Transparency and Accountability (ITTA) (Hood, 2006). This theory posits that institutions play a crucial role in promoting transparency and accountability in the public sector (Peters, 2017). According to ITTA, institutions such as laws, regulations, and norms shape the behavior of public officials and institutions, and influence their level of transparency and accountability (Hood, 2006). In the context of Nigeria's public sector, ITTA suggests that the lack of transparency and accountability is due to the weakness of institutions (Egbe, 2019). The theory argues that institutions such as laws and regulations are not strong enough to prevent corruption and abuse of power (Ibrahim, 2020). Therefore, ITTA recommends the strengthening of institutions as a way to promote transparency and accountability in the public sector (Hood, 2006). Blockchain technology can be seen as a tool for strengthening institutions and promoting transparency and accountability in Nigeria's public sector (Ojeka, 2020). According to ITTA, blockchain technology can provide a secure and transparent way of storing and verifying transactions, making it difficult for corrupt officials to manipulate or alter transactions (Mansfield-Devine, 2019). ITTA also suggests that blockchain technology can help to promote transparency and accountability in Nigeria's public sector by providing citizens with access to information about government activities and decisions (Egbe, 2019). This can help to promote citizen engagement and participation in governance, and to hold public officials and institutions accountable for their actions (Ibrahim, 2020).

Furthermore, ITTA argues that blockchain technology can help to promote transparency and accountability in Nigeria's public sector by reducing the risk of corruption and abuse of power (Ojeka, 2020). This can be achieved through the use of smart contracts, which can automate many of the processes involved in government transactions, reducing the risk of human error and corruption (Mansfield-Devine, 2019).

In addition, ITTA suggests that blockchain technology can help to promote transparency and accountability in Nigeria's public sector by increasing the efficiency and effectiveness of government transactions (Egbe, 2019). This can be achieved through the use of blockchain technology to automate many of the processes involved in government transactions, reducing the risk of human error and increasing the speed of transactions (Ibrahim, 2020). ITTA also argues that blockchain technology can help to promote transparency and accountability in Nigeria's public sector by providing a secure and transparent way of storing and verifying transactions (Ojeka, 2020). This can help to prevent corruption and abuse of power, and to promote transparency and accountability in government transactions (Mansfield-Devine, 2019).

GAP IN LITERATURE

Thus, one of the key gaps in the literature on this topic is the lack of empirical studies that have investigated the impact of block-chain technology on transparency and accountability in Nigeria's public sector (Ojeka, 2020). While there are several theoretical studies that have explored the potential of block-chain technology in promoting transparency and accountability, there is a need for more empirical studies that can provide insights into the actual impact of block-chain technology on transparency and accountability in Nigeria's public sector (Egbe, 2019).

Another gap in the literature on this topic is the lack of studies that have explored the challenges and limitations of implementing block-chain technology in Nigeria's public sector (Ibrahim, 2020). While block-chain technology has the potential to promote transparency and accountability in the public sector, its implementation is not without challenges, particularly in a country like Nigeria where there are significant infrastructure and institutional challenges (Ojeka, 2020).

METHODS OF DATA COLLECTION

The data for this study were collected from secondary sources from related literature on the subject matter. By this, we mean any written material (whether hand-written, typed or printed) that is already in existence, which was produced for other purpose than the benefit of the investigator. The secondary sources of data therefore include government publication/documents, both published and unpublished works such as text books, journals, periodicals, seminar and conference papers and internet.

HYPOTHESIS ONE

Blockchain technology has a significant impact on transparency and accountability in Nigeria's Public Sector

The use of blockchain technology in Nigeria's public sector has been touted as a potential solution to the country's transparency and accountability challenges (Egbe, 2019). Blockchain technology, which is the underlying technology behind crypto-currencies such as Bitcoin, has been shown to have the potential to promote transparency and accountability in various sectors, including the public sector (Ibrahim, 2020). However, the impact of blockchain technology on transparency and accountability in Nigeria's public sector is still a topic of debate among scholars and practitioners (Ojeka, 2020). One of the ways in which blockchain technology can promote transparency and accountability in Nigeria's public sector is by providing a secure and transparent way of storing and verifying transactions (Mansfield-Devine, 2019). Blockchain technology uses a decentralized, distributed ledger system to record transactions, which makes it difficult for corrupt officials to manipulate or alter transactions (Egbe, 2019). This can help to promote transparency and accountability in government transactions, and can help to reduce the risk of corruption and abuse of power (Ibrahim, 2020).

Another way in which blockchain technology can promote transparency and accountability in Nigeria's public sector is by providing citizens with access to information about government activities and decisions (Ojeka, 2020). Blockchain technology can be used to create a transparent and accessible record of government transactions, which can help to promote citizen engagement and participation in governance (Egbe, 2019). This can help to promote transparency and accountability in government, and can help to reduce the risk of corruption and abuse of power (Ibrahim, 2020). In addition, blockchain technology can also help to promote transparency and accountability in Nigeria's public sector by reducing the risk of human error and increasing the efficiency of government transactions (Mansfield-Devine, 2019). Blockchain technology can automate many of the processes involved in government transactions, which can help to reduce the risk of human error and increase the efficiency of government transactions (Egbe, 2019). This can help to promote transparency and accountability in government, and can help to reduce the risk of corruption and abuse of power (Ibrahim, 2020).

Furthermore, blockchain technology can also help to promote transparency and accountability in Nigeria's public sector by providing a secure and transparent way of storing and verifying identity documents (Ojeka, 2020). Blockchain technology can be used to create a secure and transparent digital identity system, which can help to promote transparency and accountability in government transactions (Egbe, 2019). This can help to reduce the risk of identity theft and fraud, and can help to promote transparency and accountability in government (Ibrahim, 2020).

Moreover, blockchain technology can also help to promote transparency and accountability in Nigeria's public sector by providing a secure and transparent way of storing and verifying contracts (Mansfield-Devine, 2019). Blockchain technology can be used to create a secure and transparent digital contracting system, which can help to promote transparency and accountability in government transactions (Egbe, 2019). This can help to reduce the risk of contract fraud and corruption, and can help to promote transparency and accountability in government (Ibrahim, 2020). In Nigeria, the use of blockchain technology in the public sector is still in its infancy (Ojeka, 2020). However, there are already several examples of how blockchain technology is being used to promote transparency and accountability in the public sector (Egbe, 2019). For example, the Nigerian government has established a blockchain-based platform for tracking the distribution of government funds (Ibrahim, 2020).

The use of blockchain technology in Nigeria's public sector has the potential to promote transparency and accountability in several ways (Egbe, 2019). Firstly, blockchain technology can provide a secure and transparent way of storing and verifying transactions, which can help to promote transparency and accountability in government transactions (Mansfield-Devine, 2019). Secondly, blockchain technology can provide citizens with access to information about government activities and decisions, which can help to promote citizen engagement and participation in governance (Ojeka, 2020). The use of blockchain technology in Nigeria's public sector can also help to promote transparency and accountability by reducing the risk of human error and increasing the efficiency of government transactions (Egbe, 2019). Blockchain technology can automate many of the processes involved in government transactions, which can help to reduce the risk of human error and increase the efficiency of government transactions (Mansfield-Devine, 2019).

Furthermore, the use of blockchain technology in Nigeria's public sector can also help to promote transparency and accountability by providing a secure and transparent way of storing and verifying identity documents (Ojeka, 2020). Blockchain technology can be used to create a secure and transparent digital identity system, which can help to promote transparency and accountability in government transactions (Egbe, 2019). The use of blockchain technology in Nigeria's public sector can also help to promote transparency and accountability by providing a secure and transparent way of storing and verifying contracts (Mansfield-Devine, 2019). Blockchain technology can be used to create a secure and

transparent digital contracting system, which can help to promote transparency and accountability in government transactions (Egbe, 2019). The use of blockchain technology in Nigeria's public sector also has the potential to reduce corruption and abuse of power (Ibrahim, 2020). Blockchain technology can provide a secure and transparent way of storing and verifying transactions, which can help to reduce the risk of corruption and abuse of power (Mansfield-Devine, 2019). The use of blockchain technology in Nigeria's public sector can also help to promote citizen engagement and participation in governance (Ojeka, 2020). Blockchain technology can provide citizens with access to information about government activities and decisions, which can help to promote citizen engagement and participation in governance (Egbe, 2019).

The use of blockchain technology in Nigeria's public sector can also help to promote transparency and accountability in the management of public finances (Ibrahim, 2020). Blockchain technology can provide a secure and transparent way of storing and verifying financial transactions, which can help to promote transparency and accountability in the management of public finances (Mansfield-Devine, 2019). The use of blockchain technology in Nigeria's public sector can also help to promote transparency and accountability in the provision of public services (Ojeka, 2020). Blockchain technology can provide a secure and transparent way of storing and verifying information about public services, which can help to promote transparency and accountability in the provision of public services (Egbe, 2019). This discussion supports our first hypothesis which says that Blockchain technology has a significant impact on transparency and accountability in Nigeria's Public Sector.

HYPOTHESIS TWO

There is a significant relationship between the adoption of blockchain technology and the level of corruption in Nigeria's Public Sector

The adoption of blockchain technology in Nigeria's public sector has been touted as a potential solution to the country's corruption challenges (Egbe, 2019). Blockchain technology, which is the underlying technology behind crypto-currencies such as Bitcoin, has been shown to have the potential to reduce corruption in various sectors, including the public sector (Ibrahim, 2020). However, the relationship between the adoption of blockchain technology and the level of corruption in Nigeria's public sector is still a topic of debate among scholars and practitioners (Ojeka, 2020).

One of the ways in which blockchain technology can help to reduce corruption in Nigeria's public sector is by providing a secure and transparent way of storing and verifying transactions (Mansfield-Devine, 2019). Blockchain technology uses a decentralized, distributed ledger system to record transactions, which makes it difficult for corrupt officials to manipulate or alter transactions (Egbe, 2019). This can help to reduce the risk of corruption and promote transparency and accountability in government transactions (Ibrahim, 2020).

Another way in which blockchain technology can help to reduce corruption in Nigeria's public sector is by providing citizens with access to information about government activities and decisions (Ojeka, 2020). Blockchain technology can be used to create a transparent and accessible record of government transactions, which can help to promote citizen engagement and participation in governance (Egbe, 2019). This can help to reduce the risk of corruption and promote transparency and accountability in government (Ibrahim, 2020). Blockchain technology can also help to reduce corruption in Nigeria's public sector by reducing the risk of human error and increasing the efficiency of government transactions (Mansfield-Devine, 2019). Blockchain technology can automate many of the processes involved in government transactions, which can help to reduce the risk of human error and increase the efficiency of government transactions (Egbe, 2019). This can help to reduce the risk of corruption and promote transparency and accountability in government (Ibrahim, 2020).

Furthermore, blockchain technology can also help to reduce corruption in Nigeria's public sector by providing a secure and transparent way of storing and verifying identity documents (Ojeka, 2020). Blockchain technology can be used to create a secure and transparent digital identity system, which can help to promote transparency and accountability in government transactions (Egbe, 2019). This can help to reduce the risk of identity theft and fraud, and promote transparency and accountability in government (Ibrahim, 2020). Moreover, blockchain technology can also help to reduce corruption in Nigeria's public sector by providing a secure and transparent way of storing and verifying contracts (Mansfield-Devine, 2019). Blockchain technology can be used to create a secure and transparent digital contracting system, which can help to promote transparency and accountability in government transactions (Egbe, 2019). This can help to reduce the risk of contract fraud and corruption, and promote transparency and accountability in government (Ibrahim, 2020). The adoption of blockchain technology in Nigeria's public sector can also help to reduce corruption by promoting transparency and accountability in the management of public finances (Ibrahim, 2020). Blockchain technology can provide a secure and transparent way of storing and verifying financial transactions, which can help to promote transparency and accountability in the management of public finances (Mansfield-Devine, 2019).

In addition, the adoption of blockchain technology in Nigeria's public sector can also help to reduce corruption by promoting transparency and accountability in the provision of public services (Ojeka, 2020). Blockchain technology can provide a secure and transparent way of storing and verifying information about public services, which can help to promote transparency and accountability in the provision of public services (Egbe, 2019).

Moreover, the adoption of blockchain technology in Nigeria's public sector can also help to reduce corruption by promoting citizen engagement and participation in governance (Ibrahim, 2020). Blockchain technology can provide citizens with access to information about government activities and decisions, which can help to promote citizen engagement and participation in governance (Ojeka, 2020).

Furthermore, the adoption of blockchain technology in Nigeria's public sector can also help to reduce corruption by promoting transparency and accountability in the procurement process (Mansfield-Devine, 2019). Blockchain technology can provide a secure and transparent way of storing and verifying information about procurement transactions, which can help to promote transparency and accountability in the procurement process (Egbe, 2019). From the above, we therefore accept our second hypothesis which states that there is a significant relationship between the adoption of blockchain technology and the level of corruption in Nigeria's Public Sector.

HYPOTHESIS THREE

Block-chain technology is feasible for implementation in Nigeria's Public Sector despite technical and infrastructure limitations

The implementation of blockchain technology in Nigeria's public sector has been touted as a potential solution to the country's transparency and accountability challenges (Egbe, 2019). However, the feasibility of implementing blockchain technology in Nigeria's public sector has been questioned due to technical and infrastructure limitations (Ibrahim, 2020). Despite these limitations, blockchain technology is feasible for implementation in Nigeria's public sector, and this discussion will analyze the reasons why.

Blockchain technology has the potential to promote transparency and accountability in government transactions, which is a major challenge in Nigeria's public sector (Egbe, 2019). Blockchain technology can provide a secure and transparent way of storing and verifying transactions, which can help to reduce the risk of corruption and promote transparency and accountability in government transactions (Mansfield-Devine, 2019). Blockchain technology can help to improve the efficiency and effectiveness of government transactions, which is another major challenge in Nigeria's public sector (Ibrahim, 2020). Blockchain technology can automate many of the processes involved in government transactions, which can help to reduce the risk of human error and increase the efficiency and effectiveness of government transactions (Egbe, 2019).

Blockchain technology can help to promote citizen engagement and participation in governance, which is an important aspect of democratic governance (Ojeka, 2020). Blockchain technology can provide citizens with access to information about government activities and decisions, which can help to promote citizen engagement and participation in governance (Egbe, 2019). Blockchain technology can help to reduce the risk of corruption and promote transparency and accountability in government transactions, which is a major challenge in Nigeria's public sector (Ibrahim, 2020). Blockchain technology can provide a secure and transparent way of storing and verifying transactions, which can help to reduce the risk of corruption and promote transparency and accountability in government transactions (Mansfield-Devine, 2019).

Furthermore, blockchain technology can help to improve the management of public finances, which is an important aspect of public sector management (Egbe, 2019). Blockchain technology can provide a secure and transparent way of storing and verifying financial transactions, which can help to promote transparency and accountability in the management of public finances (Ibrahim, 2020). Block-chain technology can help to promote transparency and accountability in the procurement process, which is an important aspect of public sector management (Ojeka, 2020). Blockchain technology can provide a secure and transparent way of storing and verifying information about procurement transactions, which can help to promote transparency and accountability in the procurement process (Egbe, 2019).

Consequently, blockchain technology can help to reduce the risk of identity theft and fraud, which is a major challenge in Nigeria's public sector (Ibrahim, 2020). Block-chain technology can provide a secure and transparent way of storing and verifying identity documents, which can help to reduce the risk of identity theft and fraud (Mansfield-Devine, 2019). Block-chain technology can help to promote transparency and accountability in the provision of public services, which is an important aspect of public sector management (Egbe, 2019). Blockchain technology can provide a secure and transparent way of storing and verifying information about public services, which can help to promote transparency and accountability in the provision of public services (Ojeka, 2020). Blockchain technology can help to reduce the risk of corruption and promote transparency and accountability in government transactions, which is a major challenge in

Nigeria's public sector (Ibrahim, 2020). Blockchain technology can provide a secure and transparent way of storing and verifying transactions, which can help to reduce the risk of corruption and promote transparency and accountability in government transactions (Mansfield-Devine, 2019).

Block-chain technology can help to promote citizen engagement and participation in governance, which is an important aspect of democratic governance (Ojeka, 2020). Blockchain technology can provide citizens with access to information about government activities and decisions, which can help to promote citizen engagement and participation in governance (Egbe, 2019). Blockchain technology can help to improve the management of public finances, which is an important aspect of public sector management (Egbe, 2019). Blockchain technology can provide a secure and transparent way of storing and verifying financial transactions, which can help to promote transparency and accountability in the management of public finances (Ibrahim, 2020).

Sequel to the above, block-chain technology can help to promote transparency and accountability in the procurement process, which is an important aspect of public sector management (Ojeka, 2020). Blockchain technology can provide a secure and transparent way of storing and verifying information about procurement transactions, which can help to promote transparency and accountability in the procurement process (Egbe, 2019). Block-chain technology can help to reduce the risk of identity theft and fraud, which is a major challenge. From the above discussion, we accept the above discussion which says that block-chain technology is feasible for implementation in Nigeria's Public Sector despite technical and infrastructure limitations.

FINDINGS

1. Block-chain technology has the potential to promote transparency and accountability in Nigeria's public sector by providing a secure and transparent way of storing and verifying transactions. This is because block-chain technology uses a decentralized, distributed ledger system to record transactions, which makes it difficult for corrupt officials to manipulate or alter transactions.
2. Block-chain technology can help to improve the management of public finances in Nigeria by providing a secure and transparent way of storing and verifying financial transactions. This can help to promote transparency and accountability in the management of public finances, and can help to reduce the risk of corruption and mismanagement of public funds.
3. This study also found that block-chain technology can help to promote transparency and accountability in the procurement process in Nigeria's public sector. This is because block-chain technology can provide a secure and transparent way of storing and verifying information about procurement transactions, which can help to promote transparency and accountability in the procurement process.
4. Block-chain technology can help to promote citizen engagement and participation in governance in Nigeria. This is because block-chain technology can provide citizens with access to information about government activities and decisions, which can help to promote citizen engagement and participation in governance.
5. Blockchain technology can help to reduce the risk of identity theft and fraud in Nigeria's public sector. This is because blockchain technology can provide a secure and transparent way of storing and verifying identity documents, which can help to reduce the risk of identity theft and fraud.
6. This study also found that block-chain technology can help to improve the efficiency and effectiveness of government transactions in Nigeria. This is because blockchain technology can automate many of the processes involved in government transactions, which can help to reduce the risk of human error and increase the efficiency and effectiveness of government transactions.
7. Blockchain technology can help to promote transparency and accountability in the provision of public services in Nigeria. This is because blockchain technology can provide a secure and transparent way of storing and verifying information about public services, which can help to promote transparency and accountability in the provision of public services.

RECOMMENDATIONS

1. The Nigerian government should establish a blockchain-based platform for tracking the distribution of government funds to promote transparency and accountability in the management of public finances.
2. The Nigerian government should provide training and support to public officials and institutions to help them understand and implement blockchain technology effectively.
3. The Nigerian government should establish partnerships with international organizations and other countries to promote the use of blockchain technology in the public sector.
4. The Nigerian government should ensure that the implementation of blockchain technology in the public sector is done in a way that is consistent with Nigerian law and regulations.
5. The Nigerian government should establish a regulatory framework for the use of blockchain technology in the public sector to ensure that it is used effectively and efficiently.

6. The Nigerian government should promote the use of blockchain technology in the private sector to promote transparency and accountability in business transactions.
7. The Nigerian government should ensure that the adoption of blockchain technology in the public sector is done in a way that is inclusive and accessible to all citizens.

CONCLUSION

The adoption of block-chain technology in Nigeria's public sector has the potential to promote transparency and accountability in government transactions. Blockchain technology can provide a secure and transparent way of storing and verifying transactions, which can help to reduce the risk of corruption and promote transparency and accountability in government transactions. Furthermore, blockchain technology can also help to promote citizen engagement and participation in governance, improve the management of public finances, and reduce the risk of identity theft and fraud. The implementation of blockchain technology in Nigeria's public sector is feasible despite technical and infrastructure limitations. The Nigerian government can establish a blockchain-based platform for tracking the distribution of government funds, provide training and support to public officials and institutions, and establish partnerships with international organizations and other countries to promote the use of blockchain technology in the public sector. Additionally, the Nigerian government can also establish a regulatory framework for the use of blockchain technology in the public sector to ensure that it is used effectively and efficiently.

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