



Management Accounting Practices in the 4th Industrial Revolution: Potential Benefits and Challenges of Blockchain Technology

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Abstract	Original Research Article
The fourth (4th) Industrial Revolution (4IR) is transforming the business landscape, necessitating the evolution of management accounting practices. Blockchain technology, a key driver of the 4IR, offers immense potential for management accounting, enabling secure, transparent, decentralized financial transactions and data management. This is because the traditional management accounting appears to be insufficient in providing organization need, especially in this age. This study explores the potentials benefits, and challenges of blockchain-enabled management accounting practices in the 4IR era .The benefits of Blockchain-enabled management accounting practices include enhanced transparency, integrity, security, tamper-proof, real-time monitory efficiency, improved decision-making and financial reporting made-easy, as well as eliminating relevance of intermediaries. However, challenges such as scalability issues, regulatory uncertainty, and skills gaps must be addressed to fully realize the potentials of blockchain technology. This study contributes to the existing literature on blockchain in management accounting, providing insights for practitioners, researchers, and policymakers seeking to leverage the benefits of blockchain technology in the 4IR era. Keywords: Blockchain, Management Accounting, Tamper-proof, Decentralized ledger.	
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1.0. Introduction

Management accounting appears to be a crucial function in organizations, providing financial data and information to support decision-making, as well as enhance organization efficiencies and competitive muscle, in order to cope with the global changes in business environment. (Abdullah, 2015; Abad-Segura et al, 2021) The 4th Industrial Revolution (4IR) refers to the current era of technological advancements, characterized by the widespread

adoption of artificial intelligence (AI), blockchain, the Internet of Things (IoT), and other digital technologies. In the context of management accounting practices, the 4IR has significant implications in transforming the way organizations manage their finances, make decisions, and create values. The digital era has resulted to bringing about significant changes in management practices, with the increasing use of technological tools, which have been transforming the perspective and approaches organizations now use to collect data, process and



analyze financial data and information, to enhance informed decisions as regard the businesses (Bhimani & Bromwich, 2015; Krahmar, 2022; Suryanti et al., 2023) Some of the changes in management accounting practices. This 4th industrial revolution triggered invention of some technologies including cloud-based , Big data analytics management tool (BDT), Enterprise Resource Planning Management accounting Technology (ERP) , Block chain technology (BCT), Digital Twins (DTs) and internet of things (IoTs) (Hausberg et al. ,2019; Quattrone, 2016).

However for the purpose this paper evaluates the potential benefits and challenges of management accounting practices in this digital Era. (Atodaga et al,2024; Suryanti et al., 2023). Block chain technology (BCT) emerged as a prospective tool for management accounting technology which offers secure, automated, transparent and decentralized way of capturing financial transactions that supports management decision making tasks. It is also describe as a decentralized digital ledger that records transactions across networks of computers .This technology uses cryptography (Hashing method) to secure transactions and ensures the integrity of the ledger” (cohen, 2019,p.53; Vadgama and Tasca 2022; Al-Mamun et al.,2020,p.3) Umoren et al., (2024) ,define block chain technology as “ a distributed ledger technology that enables secure, transparent, and tamper-proof recording of transactions.” It has potentials to transform management accounting practices by providing a secure, automated and transparent way of recording financial transactions. In a similar direction, Krahmer (2022) describes BCT tool as a decentralized, digital ledger that records transactions across a network of computers, which uses cryptography to secure transactions as well as ensure the integrity of the ledger. This study views blockchain potentials as being capable of transforming management accounting practices by providing secure, transparent and decentralized approach of capturing financial transactions in articulated manner.

The objective of this paper is to evaluate the potential benefits of block chain technology in transforming management accounting field and the

related challenges connected to its adoption .The advent of the digital era has brought about significant changes in the field of management accounting, challenging traditional practices and techniques (Bhimani & Willcocks, 2014). Traditional management accounting practices, have long relied on manual processes and static reporting, which are no longer sufficient to meet the demands of a rapidly changing business environments (Kaplan & Norton, 2008). The increasing use of digital technologies, such as big data analytics, artificial intelligence, and cloud computing, has created new opportunities for management accountants to provide more accurate, timely, and relevant information to support strategic decision-making (Appelbaum et al., 2017).

However, many organizations continue to struggle with integrating digital technologies into their management accounting systems, resulting in a disconnection between traditional methods and the demands of the digital era (Goretzki & Strauss, 2018). This disconnections can lead to inefficient decision-making, reduced competitiveness, and decreased organizational performance. (Vadgama & Tasca 2020). Studies have shown that despite the potential benefits of blockchain technology in management accounting, its adoption and implementation have been slow. (Abad-Segura et al. 2021; Giang & Tam,2023). For instance, a survey of 200 finance professionals by SAP (2020), found that only 16% of respondents had implemented blockchain technology in their organizations. Similarly, a study by Deloitte (2019) found that only 34% of executives surveyed believed that blockchain technology would have a significant impact on their industries within the next three years. Furthermore, another study by Gartner. (2020) predicted that 75% of blockchain projects would be delayed or abandoned due to lack of business values or technical complexity. Hence there is a need for researchers to explore the potential benefits and challenges of adopting block chain technology in management accounting in Nigeria. (Akinadewo et al, 2023).

This study contribute to the existing literature on blockchain technology and management accounting by exploring its potential benefits and challenges in the Nigerian context. The findings of this study provides valuable insights for management

accounting professionals, policymakers, and organizations in Nigeria, and informs the development of strategies for the adoption and implementation of blockchain technology in management accounting practices. This study will be limited to the exploration of the potential benefits and challenges of adopting BCT management accounting in Nigeria. The study will not explore the technical aspects of blockchain technology, but will provide a comprehensive review of the existing literature on blockchain technology and management accounting Nigeria specific.

2.1 Brief History of management Accounting Technologies in Nigeria

: Blockchain technology was first introduced in Nigeria in 2017, with the launch of the first blockchain-based platform for financial transactions (Blockchain Nigeria, 2020). Blockchain-based Accounting System- . BCTbased accounting systems, such as Xero and Zoho Books, have gradually becoming relatively increasingly popular in Nigeria, enabling organizations to access secure, transparent, and decentralized financial data (Wadan et al, 2019; Xero, 2020; Zoho, 2020). Digital transformation has become buzzword in business world, with so many organizations embracing these transformation journeys to maximize their benefits and stay competitive. (Li et al., 2024)

2.1.1 Concept of Blockchain Management Technology as Accounting Tool

Blockchain management accounting tool is a decentralized, digital ledger technology that enables secure, transparent, and tamper-proof recording of financial transactions (Cohen, 2019). It uses cryptography to secure transactions and ensure the integrity of the ledger (DuPont, 2019; Al-Mamun et al., 2020 ; Samad et al., 2023). Blockchain technology has the potential to transform management accounting systems by providing a secure, transparent, and decentralized way of recording financial transactions (Krahmer, 2022). Most of the blockchain implementation uses Secure Hash Algorithm (SHA) that generates an output of

size 256-bits. SHA-256 hashing algorithm produces an output of 32 bytes (256-bits) usually displayed as 64 hexadecimal characters. Other than SHA-256, Keccak and RIPEMD-60 are some other hashing algorithms used in blockchain network. Hashing techniques are used for various operations in

blockchain such as address creation, securing block data and block header etc in the fourth industrial revolution. Its integration into accounting practices is reshaping traditional methods and introducing unprecedented levels of transparency, efficiency, and security. (Panda et al., 2021)

2.1.2 Key Features of Blockchain in Management Accounting

One of the features of blockchain management accounting technology is that firms can leverage on its decentralization, blockchain operates on a distributed ledger system, eliminating the need for a central authority. This decentralization feature ensures that all participants have access to the same data, reducing discrepancies and fostering trust. (Panda et al., 2021) Another, is transparency and immutability. Every transaction recorded on a blockchain is time-stamped and immutable, meaning it cannot be altered or deleted. This feature enhances the reliability of financial records, improve and simplifies auditing processes. More so it has automation through smart contracts capability. Smart contracts are self-executing contracts with predefined rules encoded on the blockchain. They automate routine accounting tasks, such as invoice processing and compliance checks, reducing manual errors and saving time. Also it is known for real-time data access (Villannueva, 2021) .blockchain provides real-time access to financial data, enabling management accountants to make informed decisions quickly. This capability is particularly valuable for predictive analytics and strategic planning. Furthermore entities can leverage on its cost efficiency by utilizing its automating processes and reducing the need for intermediaries, blockchain can significantly lower operational costs in management accounting. (Oglio,2020)

2.1.3 Blockchain Implications for Management Accounting:

Adopting and implementing blockchain in firms appears to have attracted some significant attention, including the enhancement of decision-Making, with accurate and real-time data, management accountants can better forecast trends, identify risks, and seize opportunities. Another significant implication is continuous auditing. Blockchain enables continuous auditing, where transactions are verified in real-time, ensuring compliance and reducing the risk of frauds. (Dupont. 2019; Oglio, 2020) Again it has another serious implication in the aspect of triple-entry accounting, traditional double-entry accounting is evolving into triple-entry accounting with blockchain, where each transaction is cryptographically signed and recorded on the blockchain, adding an extra layer of security.(Samad et al., 2023)

2.1.4 Challenges of adopting and implementing Block chain in Entities

Despite benefits that are affiliated with blockchain as it related to management accounting technology, it has been facing some adopting and implementing setbacks. Blockchain technology in management accounting, presents several challenges that organizations must navigate and address properly in order to maximize its full benefits. Here is an elaboration on these challenges, including: Technological integration implementing, blockchain requires significant changes in existing systems and processes. (Osborrne, 2025) Organizations often face difficulties in integrating blockchain with legacy systems, which may not be compatible with the decentralized nature of blockchain technology. Additionally, the cost of infrastructure development and maintenance can be prohibitive for some firms (Akoh et al., 2024). Also, skill developments, accountants and financial professionals need to acquire new skills to work effectively with blockchain technology and be able to maintain relevance in the nearest future. (Butt et al., 2022). These include understanding how blockchain operates, its implications for financial reporting, and the ability to analyze blockchain-based data

availability. The lack of adequate training programs and resources further exacerbates this challenge (Liu et al., 2019; Khan, 2022). Another challenge is regulatory compliance .The regulatory landscape for blockchain is complex and varies across regions. Organizations must navigate differing legal frameworks, which can create uncertainty and hinder the adoption of blockchain. Compliance with data protection laws, such as General Data Protection Regulation (GDPR), adds another layer of complexity (Khan, 2022). More so. the issue of scalability and performance appear to be a serious concern. Blockchain systems often face scalability issues, particularly when dealing with a high volume of transactions. This can lead to delays and increased costs, making it challenging for organizations to adopt blockchain on a large scale (Akoh et al., 2024). Security and privacy concerns tend to be more serious challenge .While blockchain is known for its security features, it is not immune to cyber threats. Organizations must ensure robust security measures to protect sensitive financial data. Additionally, maintaining privacy in a transparent and decentralized system poses unique challenges (Liu et al., 2019).

2.1.5 Potentials of Blockchain Technology

Blockchain management accounting has a lot of potential benefits it offers, ranging from improved Security, blockchain technology provides a secure way of recording financial transactions, reducing the risk of fraud and error (Cohen, 2019; Al-Mamun et al., 2020).Another potential benefit is increased transparency ,blockchain technology provides transparent records of financial transactions, enabling stakeholders to track the flow of funds (Krahmer, 2022; Vadgama & Tescaa,2020 ;Yilmaz, 2020). Also it grants Real-time Monitoring, enables real-time monitoring and analysis of financial data, assisting organizations to make more informed decisions (Harrison & Horngren, 2019; Al-Mamun et al., 2020 ; Atodaga et al 2024).Again it guarantees decentralization. Blockchain technology ensures decentralized financial transactions, reducing the need for intermediaries and increasing efficiency (Cohen, 2019; Abdallah, 2020).Above all it is vast in

Automation. Blockchain technology enables automation of financial transactions, reducing the risk of human error and increasing efficiency (Yilmaz, 2020; Krahmer, 2022). It also improves financial reporting by way of ensuring accurate and timely financial reporting, enabling stakeholders to make informed decisions. (Al-Mamun et al., 2020; Cohen, 2019). Cost reduction is another key benefit of blockchain technology is that it reduces the need for intermediaries and enables automation of financial transactions, reducing costs (Yilmaz, 2020; Samada et al., 2023). Also it increases efficiency, blockchain technology enables real-time monitoring and analysis of financial data, enabling organizations to make more informed decisions and increasing efficiency (Harrison & Horngren, 2019; Krahmer, 2022).

The last but not the least is, it tends to improve compliance, blockchain technology enables transparent and tamper-proof recording of financial transactions, enabling organizations to comply with regulatory requirements (Cohen, 2019; Al-Mamun et al., 2020). And also enhanced Decision-Making, blockchain technology enables real-time monitoring and analysis of financial data, enabling organizations to make more informed decisions (Yilmaz, 2020; Krahmer, 2022). Several countries have been benefiting from the potentials and capabilities of blockchain accounting tool. Some of these countries include: United States, this rejoin has been at the forefront of adopting blockchain technology in management accounting, via government reports, academic reports as well as official documents (Al-Sartawi et al., 2022; MDPI, 2024). Companies both private and public are on top of blockchain matters, such as Walmart and Maersk have been using blockchain technology to track their supply chains and manage their financial transactions (Harrison & Horngren, 2019). Again, China, has been benefiting from blockchain technology in management accounting. The Chinese government has established a blockchain-based platform for tracking financial transactions and managing supply chains (Chen, 2020; Yilmaz, 2020; Li et al., 2024). Another country using blockchain management accounting

technology is Japan, has been actively adopting blockchain technology in management accounting. Companies such as Toyota and Honda have been benefiting from blockchain technology to track their supply chains and manage their financial transactions (Al-Mamun et al., 2020; Chen, 2020). Also, Singapore has been actively promoting the adoption of blockchain technology in management accounting. The Singapore government has established a blockchain-based platform for tracking financial transactions and managing supply chains (Krahmer, 2022; Osborne, 2025). Although Nigeria has gradually embracing blockchain management accounting solution, but very few organizations are actively adopting blockchain technology in management accounting. (Umoren et al., 2024; Akinadewo et al., 2023).

Despite its advantages, blockchain adoption in management accounting faces challenges such as scalability, interoperability, and regulatory concerns (Putritama et al., 2024). Further research is needed to explore the integration of blockchain with Enterprise Resource Planning (ERP) systems and Accounting Information Systems (AIS) to maximize its benefits (Lui, et al., 2019; Mahdani et al., 2023).

2.2.1 Challenges of Adopting and Implementing Blockchain Technology in Management Accounting

One of the challenges of blockchain technology is scalability. Blockchain technology is still in its early stages, and it can be difficult to scale it up to meet the needs of large organizations (Mahdani et al., 2023; Yilmaz, 2020). Another one is regulatory compliance, blockchain technology is still largely unregulated, and it can be difficult for organizations to ensure compliance with relevant laws and regulations (Krahmer, 2022; Al-Mamun et al., 2020). Again, skills gap is an obvious challenge of blockchain technology. This requires specialized skills, and it can be difficult for organizations to find employees with the necessary expertise. (Bizarro et al., 2019; Alvarez, 2020; Khatwani, 2020; Yilmaz, 2020; Mahdani et al., 2023; Giang & Thi Tam, 2023; Osborne, 2024). Interoperability, different

blockchain networks have different architectures, making it challenging to integrate them with existing systems. Security Risks, blockchain technology is not immune to security risks, such as hacking and cyber-attacks. Data management, blockchain technology requires significant data storage and management capabilities. (Lee et al., 2020)

Another challenge is lack of awareness, many organizations lack awareness of the benefits and challenges of blockchain management accounting technology. Again, one of the key challenges is resistance to change, employees may resist the adoption of new technology, particularly if it requires significant changes to existing processes. Also skills gap is one of the major challenges. Organizations may lack the necessary skills and expertise to implement and maintain blockchain technology. Besides that, change management, is a key challenge. Implementing blockchain technology requires significant changes to existing processes and systems. (Prux et al., 2021) Other challenges including: Regulatory, and financial challenges

1. Regulatory Uncertainty: The regulatory environment for blockchain technology is still evolving and uncertainty
2. Compliance: Organizations must ensure that their use of blockchain technology complies with relevant laws and regulations
3. Standards: There is a lack of standards for blockchain technology, making it challenging to ensure interoperability and integration
4. Taxation: The taxation of blockchain transactions is still unclear and may pose future challenges for organizations if not addressed. (Garanina et al., 2021; Smith & Castonguay 2019; Khatwani, 2020).
5. Financial challenges: High implementation costs: Implementing blockchain technology can be expensive, particularly for small and medium-sized enterprises. Return on investment: The return on investment for blockchain technology is still unclear and may pose challenges for organizations in the now and future.
6. Cost of Maintenance: Maintaining blockchain technology requires significant resources and expertise...
7. Risk of Obsolescence: The rapid evolution of blockchain technology poses a risk of obsolescence for organizations that invest in it. (Khan, 2022)

2.2.2 Future Directions

The future direction of blockchain in management accounting as a technology is very exciting, filled with hopes and possibilities in key aspects of impact, including triple-entry bookkeeping, increasing transparency and accuracy, smart management accounting as a result of automation capabilities, improve supply chain, enhanced audit trail, enabling better management of inventory, shipping and logistics decisions, new business model such as decentralized finance and non-fungible tokens (Krahmer, 2022). (Al-Mamun et al., 2020; Habib et al., 2022). Therefore, accountants are encouraged to take advantage of these opportunities and develop new skills, taking heed to understand blockchain and its capabilities, develop skills for data analytics, develop flair for business acumen to be efficient in advising clients on the strategic implications of blockchain adoption. Relevant institutions should include blockchain technology in their curriculums. It should be noted that the overall future of blockchain in management accounting appears very rosy with numerous promising opportunities accountants can grab to add values in their field and increase their personal as well as professional values in order to stay competitive and continue to be relevant in the field and in the society at large.

2.2.3. A Short-term Solution

One of the means for interim relief from blockchain technology issues is to invest in research and development, organizations should invest in research and development to better understand the potential benefits and challenges of blockchain technology, develop a clear strategy. Organizations should develop a clear strategy for implementing blockchain technology, including a road map for implementation and a plan for addressing potential challenges. Also invest in employee training, organizations are encouraged to invest in employee training to ensure that employees acquire the necessary skills and expertise required to implement and maintain blockchain technology, establish partnerships, firms are also encouraged to establish partnerships with other organizations and industry experts, to share knowledge and best practices.

2.2.3. B Long-term Solution

The long term solution including, develop industry-wide standards, industry-wide standards should be developed to ensure interoperability and integration of blockchain technology, establish regulatory frameworks. Regulatory frameworks and oversight should be established to provide clarity and certainty for organizations implementing blockchain technology and accountability. More so, invest in blockchain infrastructure, investment in blockchain infrastructure, such as nodes and miners, is necessary to support the growth of blockchain technology. Additionally, development of new business models is another long term solution. Entities are admonished to develop new business models to take advantage of the benefits revolving around blockchain technology, such as increased transparency and security by addressing the challenges of adopting blockchain management accounting technology again, by implementing the solutions outlined above, organizations can unlock the full potentials of this technology and achieve greater efficiency, transparency, and security in their financial management practices.

2.2.4a. Nigerian Authors' Perspectives on Blockchain Technology in Management Accounting

Several authors have written on blockchain with different contexts and perspectives, for instance Al-Mamun et al. (2020), Samad et al (2023), Akinadewo et al. (2023). explored the potential benefits and challenges of adopting blockchain technology in management accounting in Nigeria. The authors found that blockchain technology has the potentials to improve security, transparency, and real-time monitoring in management accounting. In a similar direction, Yilmaz (2020) examined the potentials of blockchain technology in management accounting in Nigeria. The author found that blockchain technology has the potential to improve financial reporting, reduce the risk of financial mismanagement, and increase transparency in financial transactions. Also Umoren et al., (2024) investigated the challenges of adopting and implementing blockchain technology in

management accounting in Nigeria. The author found that the main challenges include scalability, regulatory compliance, and skills gap. Addressing the above challenges noted by these authors, would enable firms to maximize the benefits

2.2.5b International Authors' Perspectives on Blockchain Technology in Management Accounting

A number of authors across the country have also studied blockchain management accounting technology and garnered similar results as follows: Al-Mamun et al. (2020), Samad et al (2023), Akinadewo et al. (2023)., Krahmer (2022) researched on the potential benefits and challenges of adopting blockchain technology in management accounting. These authors found that blockchain technology has the potentials to improve security, transparency, and real-time monitoring in management accounting. Again, Harrison and Horngren (2019), study examined the potential of blockchain technology in management accounting. The authors found that blockchain technology has the potential to improve financial reporting, reduce the risk of financial mismanagement, and increase transparency in financial transactions .Thus, above studies results aligned with each other.

2.3 Theoretical Review

Blockchain technology has been gaining significant attention in recent years, particularly in the field of management accounting. This theoretical review aims to provide an overview of the current state of knowledge on blockchain management accounting technology, highlighting its key concepts, theories, and frameworks. Blockchain technology is a decentralized, digital ledger technology that enables secure, transparent, and tamper-proof recording of financial transactions (Cohen, 2019). Management accounting is a branch of accounting that focuses on providing financial information to support decision-making within organizations (Harrison & Horngren, 2019). Blockchain management accounting is the integration of blockchain technology with management accounting practices to provide secure,

transparent, and decentralized financial information (Al-Mamun et al., 2020).

2.4 Theories and Framework

There lots of theories that explain and support Blockchain management accounting technology, including: Agency theory which suggests that blockchain technology can reduce agency costs by providing a transparent and tamper-proof record of financial transactions (Jensen & Meckling, 1976).

Stakeholder theory, emphasizes on the importance of considering the interests of various stakeholders, including investors, customers, and employees, when implementing blockchain management accounting technology (Freeman, 1984). Also, institutional theory highlights the role of institutions, such as regulatory bodies and professional organizations, in shaping the adoption and implementation of blockchain management accounting technology (DiMaggio & Powell, 1983).

2.4.1 Blockchain Management Accounting Models

There some models used to integrate Blockchain management accounting Model (BMAM) with the traditional management accounting practices in this 4th industrial revolution era which are categorized as: Blockchain-Based Accounting Model: A conceptual framework that integrates blockchain technology with traditional accounting practices (Yilmaz, 2020). Decentralized accounting model, model that utilizes blockchain technology to provide a decentralized and transparent accounting system (Al-Mamun et al., 2020; Alvarez, 2020). The Blockchain Management Assets Mangement leverages , blockchain's decentralized ledger system to record financial transactions securely and immutably. According to Adelowotan and Coetsee (2024), blockchain technology introduces triple-entry accounting, where transactions are recorded in a distributed ledger, reducing fraud and errors. This model ensures real-time verification and enhances audit ability in financial reporting. Key Components of BMAM Decentralization – Transactions are stored across multiple nodes, eliminating the need for a central

authority (Atadoga et al., 2024). Smart contracts , automated contracts execute predefined accounting rules, ensuring compliance and reducing manual intervention (Adelowotan & Coetsee, 2024). Triple-entry accounting, unlike traditional double-entry systems, blockchain records transactions in a shared ledger, improving accuracy and trust (Atadoga et al., 2024). Continuous Auditing – Blockchain enables real-time auditing, reducing the risk of financial misstatements (Adelowotan & Coetsee, 2024). Blockchain technology enhances cost efficiency, data integrity, and decision-making in management accounting. Atadoga et al. (2024) highlight that blockchain adoption can streamline financial reporting and improve compliance with regulatory standards.

3.0 .Conclusion

The 4th Industrial Revolution has brought about significant changes in the business landscape, necessitating the evolution of management accounting technologies. Blockchain technology has emerged as a key driver of this change, offering immense potentials for management accounting. This study has explored the potentials benefits, and challenges of blockchain-enabled in management accounting practices during this 4th industrial revolution era .The findings of this study suggest that blockchain technology has obvious potentials to transform management accounting practices, by enhancing transparency, security, and efficiency. The benefits of blockchain-enables, management accounting practices improve in decision-making, financial reporting, reduce risk of financial errors, improve accuracy, data integrity, secures transactions and ensures the integrity of the ledger via the use of cryptography. However, challenges such as scalability issues, regulatory uncertainty, and skills gaps must be addressed to fully realize the potential of blockchain technology in organizations.

In conclusion, blockchain technology is poised to revolutionize management accounting practices in the 4th industrial revolution era. As organizations continue to adopt and implement blockchain technology, it is essential to address the challenges and limitations associated with its use. By doing so,

management accountants can unlock the full potentials of blockchain technology and drive business growth, innovation, as well as sustainability. Management accountants are inspired to develop skills and competencies in blockchain technology to remain relevant in the 4th Industrial Revolution era. Organizations are encouraged to invest in blockchain technology to enhance transparency, security, and efficiency in management accounting practices. Regulatory bodies are persuaded to provide guidance and clarity on the use of blockchain technology in management accounting practices to enhance smooth adoption and implementations in Nigeria. Government agencies are admonished to proactively included blockchain technology in the curriculum in relevant institutions for students to be abreast with this rosy and opportunity driven technology in this 4IR era.

4.0. Recommendations for Future Research

Based on the above review and revelations of blockchain potentials, academia and practitioners are encouraged to investigate the impact of blockchain technology on management accounting practices in different industries and sectors. Also they are encouraged to examine the role of blockchain technology in enhancing audit processes, and financial reporting, develop a framework for implementing blockchain technology in management accounting practices to attain some level of sustainability.

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