SSR Journal of Economics, Business and Management (SSRJEBM)

Homepage: https://ssrpublisher.com/ssrjebm/

Volume 2, Issue 10, 2025 ISSN: 3049-0405

Blockchain Technology Adaptation and Organizational Inertia

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Received: 20.10.2025 | **Accepted:** 22.11.2025 | **Published:** 02.12.2025

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DOI: *10.5281/zenodo.17787813*

Abstract **Original Research Article**

The rapid maturation of the blockchain technology offers organizations new opportunities never seen before to have an increased degree of openness, traceability, operational effectiveness, and novelty. Nonetheless, organizational inertia as a form of structural inflexibility, change resistance, legacy systems, and cultural conservatism, is one of the key obstacles to successful deployment of blockchain in global, African, West Africa, and Nigeria environment. This study will seek to explore how the adaptation of the blockchain technology interacts with the organizational inertia in terms of understanding of the factors that facilitate and/or hinder the blockchain technology adoption, the moderative effect of inertia and the organizational performance and sustainability implication importance. The conceptual research approach employed implies that using second-hand data sources, including journal articles, books, conference publications, and historical documentation, the research will be capable of synthesizing the knowledge available and spotting the gaps in the theoretical and empirical data. It has been analyzed that the main enablers of adoption of blockchain are organizational readiness, managerial support, and the flexibility of employees, whereas the established routines and resistance to changes are holding potential benefits back. The paper has suggested powerful change management tools that include leadership involvement, capacity building programs and policy frameworks to eliminate the problem of inertia and ensure successful integration of blockchain. The findings offer theoretical knowledge by combining Technology Acceptance Model (TAM), Resource-Based View (RBV) and Organizational Inertia Theory and practical recommendations for organizations, policymakers and those involved in building technology solutions for sustainable digital transformation.

Keywords: Blockchain Adoption, Organizational Inertia, Technology Adoption, Digital Transformation, Change Management.

1.0 Introduction to the Study

1.1 Background of the Study

In the age of rapid development of technology, blockchain technology (BCT) has emerged as a disruptive innovation that has the potential of transforming how organizations operate across the globe. BCT has some unique features including decentralization, transparency, immutability, and traceability which increase the efficiency and security in a wide range of processes from financial dealings

to supply chain management (Russo-Spena, Di Paola, & Mele, 2025; Kumar Bhardwaj, Garg, & Gajpal, 2021). Organizations across the globe are considering the adoption of blockchain increasingly to optimize their operations, bear down cost, and have competitive advantage benefits (Hasan, Shiming, Islam, & Hossain, 2020; Lasmi, 2025). In fact, empirical studies indicate that adoption and usage of blockchain are not just ethically beneficial in terms of operational efficiency but also extend to economic, social and environmental goals (Ronaghi & Mosakhani, 2022; Ezzi, Jarboui, & Mouakhar, 2023), thereby reinforcing the notion that blockchain, as a strategic resource, plays a significant role in global business ecosystem. Nevertheless, certain difficulties are associated with the implementation of blockchain technology because it has potential. Inertia within organizations - the propensity to frustrate change due to the existing practices, the outdated systems and cultural traditions - may pose a substantial challenge to implementing blockchain inside companies (Malik, Chadhar, Vatanasakdakul, and Chetty, 2021; Alkatheeri and Ahmad, 2024). This is important in order to empower successful digital transformation of organizations since understanding how blockchain technology can interact with organizational inertia is paramount.

Africa is seeing an increase in the curiosity on the evaluation and execution of blockchain at the continental level particularly by the financial services sector, supply-chains and governance of publics. It is believed that the technology can be used to improve the degree of transparency, minimize the problem of fraud, and expand access to financial services (Hidayat-ur-Rehman, 2025; Lasmi, 2025). Nonetheless, organizational inertia can be further enhanced by structural and institutional factors including poor technological infrastructure, reduced regulations and resistance to change that decelerate the change adoption process (Malik et al., 2021; Rane and Narvel, 2021). To concentrate on West Africa, blockchain technology is gradually gaining momentum, especially in Nigeria, Ghana, and Senegal due to the innovations and entrepreneurial projects of fintech (Nazir, Roomi, and Khan, 2025; Hassan, Khan, Ashraf, and Sheikh, 2023). Nigerian SMEs and MSMEs in particular are seeking blockchain solutions to help them optimise financial performance, efficiency in supply chain and a competitive advantage (Lasmi, 2025; Kumar Bhardwaj et al, 2021). Nevertheless, organizational inertia is one of the significant obstacles, with organizations finding it difficult to reconcile legacy processes and workforce capabilities with the decentralized and digital nature of blockchain (Mohammed & Sundararajan, 2023; Hasan et al., 2020).

Within the Nigerian context, research has shown that while suitability for adoption is high for blockchain adoption in finance, effective usage will be best achieved by ensuring the adoption of micro, small and medium scale enterprises (MSMEs) financial stability and operational efficiency are supported by access to financial goods such as digital financial services and financial management commitment (Lasmi, 2025; Hassan et al, 2023). However, change resistance as an organizational inertia, lack of adequate training and technological preparedness is usually a stumbling block, potentially slackening the adoption rates, making the technology have a lesser strategic impact (Mohammed, 2023; Hidayat-ur-Rehman, 2025). The premise of interplay dynamics between blockchain adoption and the corresponding organizational inertia thus becomes of utmost significance to the Nigerian companies with regard to adoption of new technologies in a bid to have sustainable development and competitive advantage.

1.2 Problem Statement

Despite the new wave of international interest on blockchain technology (BCT) and the benefits that BCT can bring to organizations in the areas of efficiency of operations, transparency and sustainability, several organizations still face great difficulties to make a full and effective adoption of this technology (Russo-Spena, Di Paola, & Mele, 2025; Hasan, Shiming, Islam, & Hossain, 2020). While blockchain holds the potential to optimise supply chains, deliver superior financial performance and enhance organisational governance, the adoption process is often hindered by organisational inertia - a resistance to change rooted in established processes, cultural norms

and legacy systems (Malik, Chadhar, Vatanasakdakul, & Chetty, 2021; Alkatheeri & Ahmad, 2024). In the African context, especially those in West Africa, industries have additional challenges that include others such as technological infrastructural gaps, regulatory uncertainties, managerial and workforce capabilities (Nazir, Roomi, & Khan, 2025; Rane & Narvel, 2021). These factors add to organizational inertia and contribute to slow down the adoption of blockchain technology and the extent to which firms can exploit this technology for sustainable performance and competitive advantage (Hassan, Khan, Ashraf, & Sheikh, 2023; Lasmi, 2025).

In particular, even though in Nigeria there is a potential of the blockchain to improve the financial stability, operational efficiency, and access to digital financial services in this country, it has been found that organisational inertia is a key obstacle (Mohammed and Sundararajan, 2023; Kumar Bhardwaj, Garg, and Gajpal, 2021). Firms are often struggling with resistance from employees, lack of managerial expertise as well as misalignment between legacy business models and blockchain-enabled processes (Mohammed, 2023; Hidayat-ur-Rehman, 2025). This creates a disconnect between the potential benefits that blockchain technology can offer, and the actual results that organizations achieve through blockchain technology. Although many works have been carried out on the topic of blockchain adaptation and technology based innovation, there are few empirical and conceptual investigations conducted regarding the role of the organizational inertia in moderating, or inhibiting blockchain adaptation. This misinterpretation of such a relationship is affecting proper formulations to enable blockchain integration especially in the less developed economies like Nigeria where companies have to contend with complex technological, financial and regulatory conditions (Nazir et al., 2025; Hassan et al., 2023; Lasmi, 2025).

Thus, the study tries to achieve this gap by outlining the aspects that connect the adaptation of blockchain technology and the organizational inertia in the context of how Nigerian companies may overcome the resistance to change and maximize the technology-driven activities and sustainability.

1.3 Significance of the Study

The application of blockchain technology (BCT) has presented complete opportunities to organisations because it can enhance transparency, streamline processes, and guarantee the safety of information and continue to enhance sustainability performance (Rijal and Saranani, 2023; Russo-Spena, Di Paola, and Mele, 2025). So, this is a huge hindrance of organizational inertia, particularly in developing economies where change-averse, technologically immature, and regulation-unfriendly environments prevail (Nazir, Roomi, and Khan, 2025; Hasan, Shiming, Islam, and Hossain, 2020). Understanding the sources of interaction between blockchain adoption and organizational inertia, is therefore critical for organizations looking to leverage technology-driven innovation. Globally, the study adds to the growing knowledge of the adoption of blockchain by offering insight into the influence of organizational inertia in integrating technology. While the use of blockchain is well established in developed economies to improve supply chain efficiency, financial performance, and business ethics is well-known, there is still less information about how firms overcome the resistance to change and internal barriers in delivering these outcomes (Chang, Chen, & Wu, 2019; Alkatheeri & Ahmad, 2024). The results of this study can help multinational corporations, global supply chain managers and international policymakers to design interventions to overcome resistance, enhance the digital transformation strategies and develop sustainable strategies for technology adoption.

In the context of Africa, particularly in West Africa, business organizations are exposed to very special kinds of challenges, namely infrastructural deficit, lack of clarity in regulation and low level of digital literacy (Rane and Narvel, 2021; Hassan, Khan, Ashraf and Sheikh, 2023). By investigating the role of organizational inertia as a moderating factor, this study offers region-specific information about the barriers that impede effective adoption of

blockchain technology and presents methods for improving technology integration. These insights are critical for African businesses who are seeking to be competitive in increasingly digitised international markets while achieving sustainable development goals (Lasmi, 2025; Nazir et al., 2025). For the Nigerian organizations especially the MSMEs and entrepreneurial organization the study suggests the practical implications of blockchain adoption in enhancing the financial performance, supply chain efficiency and the governance of the organization (Mohammed & Sundararajan, 2023; Kumar Bhardwaj, Garg, & Gajpal, 2021). By solving the problem of organizational inertia, business model of Nigerian firms can be better tailored to learning block chain enabled processes, adaptability of employees and assessments of technology enabling outcomes. Policymakers, however, can also utilize the obtained findings to create facilitator regulatory frameworks, encourage digital financial services, as well as capacity-building programs for managers and employees (Mohammed, 2023; Hidayat-ur-Rehman, 2025).

The study enhances the existing theory by combining the Technology Adoption frameworks (TAM, TOE) with the concepts of organizational inertia to provide a holistic view of how firms navigate through the internal and external barriers for blockchain adoption (Malik, Chadhar, Vatanasakdakul, & Chetty, 2021; Nazir et al., 2025). This integration offers a base for future writings on technological adaptation in developing economies to bridge the gap in empirical and conceptual research. Practically, the study provides managers and organizational leaders with insights on strategies to overcome resistance, digital readiness and culture building for innovation. It also informs technology developers and consultants on how to develop blockchain solutions that are not rigid to organizational environments that are characterised by inertia (Rijal and Saranani, 2023; Hassan et al., 2023). Overall, the research is significant in regard to its multi-level input, that covers global, regional and local line of thinking, and the provision of a pathway through which organizations in order to utilize an effective application of blockchain technology irrespective of internal and external impediments.

1.4 Research Objectives

The main objective of the proposed research is to check the use of blockchain technology within organizations and to know how organizational inertia affects this use. Namely, the research aims to:

1. Determine the presence, trends, outcomes, and issues associated with the use of blockchain technology in organizations across the world, Africa, and West Africa and Nigeria, in particular.
2. Establish organizational forces that inhibit effective blockchain implementation, such as resistance to change, bureaucratic rigidity and employee adaptability problems.
3. Test how organizational readiness correlates with managerial support and blockchain adoption and also the mediating impact of inertia on technology integration.
4. Explore the effects of blockchain implementation on organizational performance and sustainability deliverables including operational efficiency, financial performance, and improvement in governance.
5. Offer practical suggestions to policy formulation, managers and technology developers on how to overcome organizational inertia to develop successful blockchain integration in various organizational settings.

1.5 Research Questions

The following research questions will be addressed in this study in order to achieve the objectives:

1. What is the present level of blockchain technology implementation in organizations on the global, African, West African, and Nigerian levels?
2. What form the major bases of organizational inertia, acting against blockchain adoption in companies?
3. What is the impact of organizational readiness, managerial support and employee

adaptability on the blockchain adoption and what part does inertia play in mediating this process?

4. How does the adoption of blockchain impact on organizational performance, operational efficiency, and sustainability outcomes across organizational and geographic borders?
5. How can organizations and policymakers use strategies and interventions to reduce inertia and increase the adoption of blockchain technology?

This is an effective structure that keeps your objectives, research questions clear, measurable and directly related to the problem statement and significance but based on already shared literature.

2.0 Literature Review

2.1 Conceptual Review

2.1.1 Blockchain Technology Adaptation (IV1)

Concept and Evolution of Blockchain Technology

After the introduction as the architecture underlying the Bitcoin cryptocurrency, blockchain technology has become much more than just bitcoin and is generally accepted to be a transformative technology, and is also implemented in business processes and business operations (Russo-Spena, Di Paola, and Mele, 2025). Fundamentally, blockchain is an immutable distributed ledger form of data too if it is recorded and shared in multiple digital nodes without a centralized body performing an intermediary. Over the years, the technology has moved beyond the financial sector, used for supply chain management, healthcare, the logistics sector, and governance, the capacity of blockchain to improve operational efficiency, find transparency and security over the years (Hasan, Shiming, Islam, & Hossain, 2020). Scholars stress that not only is blockchain adoption insurance optional, but adopting it is becoming more and more of a strategic necessity, particularly for businesses trying to retain their competitive edge in a rapidly digitalizing global economy (Nazir, Roomi, & Khan, 2025). In terms of the African and Nigerian context, the use of blockchain technology has become popular among SMEs and startups across various sectors such as fintech, logistics, and agricultural industries (Hassan, Khan, Ashraf, & Sheikh, 2023; Lasmi, 2025). Organizations are beginning to realize its potential for financial inclusion, operational transparency and corruption and fraud mitigation. Despite this increasing interest, adoption is still uneven with lesser technical expertise, as well as organization resistance to change (Alkatheeri & Ahmad, 2024). Therefore, the awareness of the idea of blockchain and its developing nature is paramount to managers and policyholders developing actions to minimize the barriers and to make the organization adopt the technology at a scale instead.

Core Features of Blockchain (Decentralization, Transparency, Immutability, Traceability)

1. **Decentralization:** Decentralization is one of the most notable outcomes of blockchain technology since it implies that the means of data management are not controlled by one entity (such as a central authority) but are distributed to different nodes (Russo-Spena et al., 2025; Rane and Narvel, 2021). This aspect contributes to security and reduced chances of manipulating data and giving organizations the control over transactions and records.
2. **Transparency:** Another significant feature is transparency because blockchain allows all the participants involved access and validate transaction histories to promote accountability and trust in the ecosystem of organisations. Such features are especially useful in supply chain, financial reporting, and regulatory compliance situations with transactions where data accuracy and traceability are of the utmost importance (Hassan et al., 2023; Kumar Bhardwaj, Garg, & Gajpal, 2021).
3. **Immutability:** Immutability is closely related to the reliability of blockchain as records stored on the ledger can't be anytime altered and deleted without the consent of the network. This helps to ensure the integrity of data, reducing the risks of fraud

and carrying out audits for the purpose of organizational and regulatory purposes (Hasan et al., 2020; Lasmi, 2025).

4. **Traceability:** Traceability is a complimentary piece to these features, as it permits the end-to-end tracking of assets or information from their origin till the final place of their delivery. For example, in the case of SMEs in logistical or agricultural sectors of Nigeria and West Africa, the blockchain technology will help to track the origin of the products and ensure that they are produced to the right quality standards, thereby boosting the confidence of the stakeholders and credibility of the market (Hassan et al., 2023).

Together, these core features make blockchain an appealing innovation for both organizations but require getting these innovations in line with the stated capabilities, organizational culture, and the associated regulatory frameworks.

Types of Blockchain Systems (Public, Private, Consortium)

Blockchain systems are broadly categorized into public, private, and consortium type systems depending on the organizational needs, spaces, and requirements (Russo-Spena et al., 2025; Malik, Chadhar, Vatanasakdakul, & Chetty, 2021).

1. **Public Blockchains:** Public blockchains are permissionless networks that are open to all participants, which means that they offer maximum transparency and decentralization e.g. Bitcoin and Ethereum. They are suitable for use in applications where the verification and immutability is important but may present a need for scalability and privacy for organizations dealing with sensitive information.
2. **Private Blockchains:** Private blockchains, on the other side, are permissioned and overseen only by a single organization and provide higher levels of individual control over individuals and contentions to provide transaction other than partially decentralized aspects (Rane & Narvel, 2021; Hassan et al., 2023).
3. **Consortium Blockchains:** Consortium blockchains are a type of blockchain that is a hybrid model, as various organizations have been given control to manage the network, which balances the ideals of decentralization and efficiency as well as governance (Kumar Bhardwaj et al., 2021). In practice, SMEs and large organizations situated in Nigeria and West Africa tend to be biased towards private or consortium blockchains, understandably because of regulatory compliance, cost considerations as well as the inability to integrate with existing enterprise systems.

Understanding these types and how they are best suited to various organizational contexts, we believe, is vital to building strategies for adopting blockchain in order to extrapolate how to maximise this appropriate technology while minimising the risks and complexity through this form of data storage.

Blockchain Adoption in Organizational Processes

Blockchain adoption in organizations has realized beyond its financial applications to cover supply chain management, logistics, procurement, human resources, and knowledge management (Hassan et al., 2023; Lasmi, 2025). Its blending into the business processes allows organizations to optimize business operations, lead to even more real-time tracking, lowered fraud and better accountability. For example, in SMEs in the agricultural sector of Nigeria, blockchain application in the supply chain ensures traceability of agricultural produce, fewer intermediaries, and financial settlements within a short period, thereby adding operation efficiency and economic practice to the sustainability of ecosystems (Kumar Bhardwaj et al., 2021). However, adoption is determined by technological and organizational factors. Technological readiness, management support, digital literacy of employees, and alignment of business strategy are some of the very important determinants behind the successful implementation (Malik et al., 2021; Alkatheeri & Ahmad, 2024). Simultaneously, organizational inertia, like resistance to change and structural

rigidity, can delay the adoption of blockchain and constrain the possible benefits they bring.Simultaneously, organizational inertia, for example, resistance to change and structural rigidity, can delay the adoption of blockchain and limit the possible benefits offered by it. Understanding how blockchain is integrated in organizational processes and how it interacts with inertia is of course a key consideration for managers and policymakers who want to encourage the effective adoption of technology to improve performance outcomes.

Blockchain Applications in Supply Chain, Finance, Operations, Tourism, Manufacturing

Blockchain technology has been widely adopted in various industries and can help organizations improve their operational efficiency, traceability, and trust. In supply chain management, blockchain is playing the role of facilitating real-time monitoring of goods to provide efficient logistics services and for ensuring authenticity of goods from origin to destination, especially to SMEs in developing countries, such as Nigeria and Pakistan (Hassan, Khan, Ashraf, & Sheikh, 2023; Kumar Bhardwaj, Garg, & Gajpal, 2021). In terms of finance, blockchain has made possible secure peer-to-peer transactions, lowered transaction costs, as well as increased transparency, making it a potent tool for fintech startups and financial institutions wanting to increase inclusion and lessen fraud (Nazir, Roomi, & Khan, 2025; Lasmi, 2025). In manufacturing and operations, Blockchain is combined with IoT to track industrial processes, and optimize maintenance and agile decision about decisions with the use of predictive analytics (Rane & Narvel, 2021). The tourism industry is also advantaged by blockchain with secure booking systems, loyalty programs and transparent transactions to increase customer trust (Russo-Spena, Di Paola, & Mele, 2025). Across all these areas, blockchain is not only bringing more efficiency benefits but also plays a role in creating more credibility for organizations and strengthening data-based decision-making processes and innovation, making it a cross-industry enabling technology that is of strategic importance.

2.1.2 Organizational Inertia (DV)

Concept and Definition of Organizational Inertia

Organizational inertia is the resistance of an organization to change or the tendency for an organization to keep up existing patterns of behavior in spite of the change in external environment (Hidayat-ur-Rehman, 2025; Han, Li, Zhu, Lu, & Zu, 2024). It is a rigidity of structures, processes, and decision-making routines which delay the implantation of new technologies or new innovative practices. In organizational change and adaptation to blockchain technology, organizational inaction can be a major challenge for how rapidly and successfully these changes will be adopted by organizations and firms in general, especially in firms that do not have a capacity for quick adaptation of disruptive digital solutions (Nazir, Roomi, & Khan, 2025). In SMEs, organizational inertia is often exacerbated because they have limited access to resources, limited management experience and have a strong attachment to established routines, which makes them find it more difficult to adopt transformative technologies (Hassan, Khan, Ashraf, & Sheikh, 2023; Lasmi, 2025). In contrast, larger firms might have more formal processes with important effects on stability of operations, but they might also be more prone to resistance to innovation as decision-making hierarchies and legacy systems privilege in organizational practices. Therefore, attaining an understanding of organizational inertia is crucial to diagnosing the sources of barriers to blockchain adoption and to creating strategies for solving the problems of all forms of resistance to technology-driven transformations.

Types of Inertia (Structural, Cultural, Strategic, Technological)

Organizational inertia takes many forms and affects the ways in which firms respond to technological change.

1. **Structural Inertia:** Structural inertia is related to an organizational hierarchy that is rigid, standardized workflows and centralized decision making that prohibits flexibility in adopting new systems like

blockchain (Mohammed & Sundararajan, 2023; Alkatheeri & Ahmad, 2024).

2. **Cultural Inertia:** Cultural inertia is the tendency to be flexible and adaptable and is caused by the resistance of employees to change due to their fear of uncertainty or loss of status, or skepticism towards newly emerging technologies (Ronaghi & Mosakhani, 2022; Nazir et al., 2025).
3. **Strategic Inertia:** Strategic inertia is when companies stick to their business models, their resource allocations, their approach to market etc and often fail to see the scope of innovation that is available to them (Hidayat-ur-Rehman, 2025; Lasmi, 2025).
4. **Technological Inertia:** Inertia arises due to dependence on old and dependable system or outdated programs or scale of IT infrastructure use builds up blockchain or any other digital system integration cumbersome and expensive (Hassan et al., 2023; Rane & Narvel, 2021).

Recognizing these types of inertia is important for managers trying to reconcile blockchain adoption with objectives in order to no longer be at a disadvantage in making the necessary investments in the organization and the technological capabilities of that firm to innovate.

The Impact of Leadership, Routines, and Legacy Systems

Leadership has a central role in either sustaining or reducing organizational inertia. Transforming leaders who provide a vision of innovation and promote risk-taking, and encourage digital initiatives, can help in reducing resistance towards change in a big way (Mohammed & Sundararajan, 2023; Hidayat-ur-Rehman, 2025). Conversely, conservative or transactional approaches to leadership can lead to a lack of openness to change and an inability to adopt disruptive technologies such as blockchain, as well as an inability to foster an innovative organizational culture (Nazir et al., 2025). Routines and legacy systems are also a source of inertia insofar as they bring dependency towards established workflows, legacy infrastructure (IT) and procedural habits that resist disruption (Rane & Narvel, 2021; Hassan et al., 2023). Firms with high technological debt may have difficulty integrating blockchain platforms because of compatibility problems and high cost of system upgrade. Therefore, dealing with leadership methods, updating old ways of doing things, and innovating legacy systems are essential for organizations wishing to implement digital transformation and use blockchain to foster innovation and competitive advantage.

How Technological Disruptions Challenge Organizational Inertia

Technological disruptions including blockchain, artificial intelligence and industry 4.0 solutions exert pressure to rapidly adapt and innovate due to organizational inertia (Lasmi, 2025;Rane and Narvel, 2021). These disruptions commonly bring in new workflows, mechanisms for transparency and decision-making that is in conflict with established workflows and traditional hierarchical structure (Hassan, Khan, Ashraf, & Sheikh, 2023). In organizations that have a high level of inertia, it can be difficult for employees to embrace these technologies because of uncertainty, lack of skills, or attachment to the old systems, which can slow down the process of digital transformation (Nazir, Roomi, & Khan, 2025; Mohammed & Sundararajan, 2023). On the other hand, organizations that are quick in dealing with technological disruptions through change management, workforce reskilling, and progressive adoption strategies are better able to overcome inertia and use these innovations to their operational advantage and to drive competitive advantage (Kumar Bhardwaj, Garg, & Gajpal, 2021; Hasan et al., 2020). Gaining insight through a pulse of the disruptive potential of emerging technologies, organizations can understand where they will be least likely to proceed due to inertia, and put in place mechanisms that will facilitate flexibility, agility, and an iterancy to an innovation-oriented culture.

Organizational Inertia in Digital Transformation Environments

The organizational inertia proves to be a major barrier to the implementation of new innovative technologies like blockchain, cloud computing, and systems combining with IoT in the context of digital transformation (Mohammed, 2023; Rane and Narvel, 2021). Businesses that want to adopt a digital transformation have not only to face the technological integration dilemma, but also to face the resistance in favor of the established norms of behaviors, culture, and structure (Alkatheeri and Ahmad, 2024; Hassan et al., 2023). Inertia may take the form of hesitation in decision-making, reluctance in embracing new decision-making processes, or a mismatch between organizational strategy and technology spending (Hidayat-ur-Rehman, 2025; Lasmi, 2025). The environments of digital transformations require firms to be flexible, continuously learn, and change quickly to maintain a competitive edge over their rivals who might be more agile and adaptive (Ronaghi & Mosakhani, 2022; Nazir et al., 2025). Overcoming inertia in these cases often requires leadership commitment, employee involvement, performance incentives due to technology and modernization of legacy systems to provide a conducive environment for the adoption of innovation.

2.1.3 Technology Adoption Factors (IV2)

Overview of Technology Adoption in Organizations

Technology adoption refers to a process where organizations use new technologies in their operational and strategic processes in order to achieve efficiency, innovation, and competitive advantage (Malik, Chadhar, Vatanasakdakul, & Chetty, 2021; Kumar Bhardwaj, Garg, & Gajpal, 2021). Across industries, companies engage in adopting technologies, including blockchain technology, cloud computing, AI technology, and the Internet of Things, to help streamline and optimize business operations and to improve transparency and facilitate data-driven decision-making (Rane & Narvel, 2021; Hasan et al., 2020). Adoption is affected by both internal factors that include organizational culture, digital literacy, leadership support and others as well as external factors like regulatory environments, industry standards, and market competition (Alkatheeri & Ahmad, 2024; Lasmi, 2025). In developing economies, there are unique challenges which hinder the successful integration of digital solutions into society, such as infrastructural limitations, financial constraints, and workforce skill gaps, which can result in a delay at the adoption of technology or hinder the successful integration of digital solutions (Mohammed & Sundararajan, 2023; Hassan et al., 2023). With such obstacles, those companies which anticipate the investment in technological capabilities and organisational preparedness demonstrate their adoption rates with the same level of results in terms of operational effectiveness, innovation possibility and sustainable growth (Hidayat-ur-Rehman, 2025; Russo-Spena, Di Paola, and Mele, 2025).

TAM, UTAUT, TOE Perspectives on Adoption Behavior

Technology adoption behavior and theoretical models are usually employed by scholars to explain technology adoption which involves how individuals embrace technology. The Technology Acceptance Model (TAM) focuses on perceived usefulness and perceived ease of use as the main determinants affecting the user's intention to incorporate technology into their lives (Davis, 1989; Kumar Bhardwaj et al., 2021). TAM offers the details to analyze how the perception of the staff regarding the benefits and user-friendliness of technologies impact the choices of its implementation within the organizations, including blockchain and other digital solutions (Nazir, Roomi, and Khan, 2025). Unified theory of acceptance and use of technology (UTAUT) is an extension of the TAM that underscores the effect of social factor in addition to the effect of factors like expectation of performance, expectancy of effort, and facilitating conditions on adoption behaviour of people both at organisational and social levels. A holistic approach is the main aspect to consider when adopting the Technology-Organization-Environment (TOE) framework, as it suggests technological factors as compatibility, issues with complexity, as well

as the resources available to the organization, its strengths in managerial support, or regulations imposed by the environment, market dynamics (Malik et al., 2021; Kumar Bhardwaj et al., 2021; Alkatheeri and Ahmad, 2024). Together, these three frameworks have given a comprehensive understanding of behaviors of adoption under various organizational circumstances.

Perceived Usefulness & Perceived Ease of Use

Perceived usefulness means extent to which a technology contributes to improvement of performance, efficiency and decision-making process in an organization (Davis, 1989; Kumar Bhardwaj et al., 2021). For example, taking blockchain adoption can help improve supply chain transparency, cut down transaction costs, and can help enable secure record-keeping, thus improving perceived usefulness from organizational stakeholders (Hassan et al., 2023; Lasmi, 2025). Perceived ease of use, on the other hand, is the extent to which the technology is easy to use and integrate with existing workflows (Davis, 1989; Malik et al., 2021). Technology implementation can create the complexities, we can create and develop resistance within our employees, and make it harder to use, thereby posing further barriers to faster implementation, too (Mohammed and Sundararajan, 2023; Rane and Narvel, 2021). Strategies to adopt technologies successfully encompass both dimensions, provided by providing training, technical assistance, and integration channels so that the utilization of the use can be simplified to realize the greatest possible benefits in an organization.

Facilitating Conditions and Organizational Readiness

Conditions that facilitate the adoption of technology are also called organizational, technical, and managerial infrastructure (UTAUT; Malik et al., 2021). This also incorporates accessibility to funds, human resources, technical help, and leadership dedication to be able to facilitate adoption efforts (Hidayat-ur-Rehman, 2025; Hassan et al., 2023). Blockchain, AI, and IoT technologies need a profound readiness in organisational aspects such as digital infrastructure and process reengineering as well as alignment with strategic goals to achieve the full potential value (Lasmi, 2025; Russo-Spena et al., 2025). Organizational readiness is especially important in the case of SMEs and developing economies, where resource constraints, conflicting regulations and workforce level skills could impede the adoption (Kumar Bhardwaj et al., 2021; Mohammed & Sundararajan, 2023). Those companies that have invested in being prepared through employee training, technological testing, and change management will better be in a position to successfully deploy digital solutions, more effectively break organizational inertia, and deliver sustainable competitive advantage (Rane & Narvel, 2021; Hassan et al., 2023).

2.2 Theoretical Framework

Technology Acceptance Model (TAM)

Davis (1989) Technology Acceptance Model is very agreeable in the process of establishing the ways individuals and businesses use new technology. TAM has two primary determinants of technology adoption, which include, perceived usefulness (PU) and Perceived ease of use (PEOU). Within adoption of blockchain scope, TAM is a potent framework of perceived advantages of the usage of blockchain in operational procedures of the organization such as supply chain management, financial deals, and coordination of the organization (Kumar Bhardwaj, Garg, and Gajpal, 2021; Hasan et al., 2020). Perceived usefulness refers to the degree to which blockchain can help streamline the processes that the organizations can implement, make more transparent and trustful, whereas perceived ease of use refers to the challenge or ease with which the organizational processes may be integrated with blockchain (Alkatheeri and Ahmad, 2024; Lasmi, 2025). By using TAM, researchers would be able to assess the behavior intentions of organisational stakeholders related to the adoption of blockchain as well as identify factors promoting or hindering the implementation of blockchain, especially in developing countries, where digital literacy and technological readiness is variable (Mohammed & Sundararajan, 2023; Rane & Narvel, 2021).

Resource Based View Theory (RBV)

The Resource-Based View (RBV) theory articulated by Wernerfelt (1984) and Barney (1991) supports that organizations are able to achieve competitive advantage by making use of unique, valuable, and inimitable resources. Blockchain technology represents such a strategic resource as it offers specific capabilities in terms of data security, transparency, decentralization and traceability (Russo-Spena, Di Paola, & Mele, 2025; Hassan et al., 2023). Organizations that successfully integrate blockchain applications into their processes can have cost efficiencies, better decision-making, and improved trust with stakeholders which is essential when looking to maintain competitive advantage in fast-changing markets (Bhardwaj, Garg, & Gajpal, 2021; Lasmi, 2025). RBV also emphasizes the years of organizational capabilities in exploiting technological resources. Blockchain adoption is not only a technical effort but involves managerial competency, re-engineering process requirements, and strategic compatibility for establishing full value of blockchain applications (Mohammed & Sundararajan, 2023; Rane & Narvel, 2021). By conceiving blockchain as a strategic resource in the RBV, this study is able to identify the relationship among firms turning adoption of blockchain to sustainable innovation, operational efficiency and sustainability in long-term performance, keeping in view resource constraints in African and Nigerian business environments.

Organizational Inertia Theory

Organizational Inertia Theory explains the typical resistance to change of firms who are in front of some new technologies that are obvious in terms of their benefice, (Hannan & Freeman, 1984; Hassan et al., 2023). Inertia can take many forms, including structural inertia, cultural inertia, technological inertia, and strategic inertia, and it can result from the following: entrenched routines, legacy systems, hierarchical decision-making, and risk-averse cultures. In respect of the application of the blockchain model, organizational inertia can negatively affect the firm's adoption, which delays the adoption or causes it to be experienced in part resulting in limited adoption prospects (Mohammed & Sundararajan, 2023; Alkatheeri & Ahmad, 2024). Technological disruptions, such as blockchain and other Industry 4.0 technologies, challenge these rooted structures by necessitating process reconstruction and refocusing skills of employees while integrating with the existing systems (Rane & Narvel, 2021; Lasmi, 2025). Organizational Inertia Theory help to explain the persistence of resistance in spite of the evident strategic advantages and enable the study to examine how factors such as leadership support, organizational culture and knowledge management mediate the relationship between blockchain adoption and organizational performance (Hassan et al., 2023; Mohammed & Sundararajan, 2023).

Rationale for the Selection of Theories

The selection of concepts related to TAM, RBV and Organizational Inertia Theory captures a comprehensive multi-level framework for understanding blockchain adoption in organizations. TAM captures behaviour and perceptual factors which influence the adoption decisions, RBV contextualizes the use of block chain as a strategic organizational resource that can lead to competitive advantage, and Organizational Inertia Theory explains the resistance and challenges that firms face while making decisions to implement disruptive technologies (Bhardwaj, Garg, & Gajpal, 2021; Hassan et al., 2023; Lasmi, 2025). Integrating these theories helps the study examine the interplay between the adoption behaviour, resource management, and organizational limitations, especially in the developing countries such as West Africa and Nigeria in particular where technological adoption is often affected by infrastructural, cultural and regulator factors, associated limitation (Mohammed & Sundararajan, 2023; Alkatheeri & Ahmad, 2024). Such theoretical triangulation ensures that the opportunities and difficulties of blockchain implementation are not only captured comprehensively, but gives a more detailed chance to understand organizational adaptation and innovation.

2.3 Linkages between Theories, IVs, and DV

How Blockchain Adaptation Can Overcome Organizational Inertia

Organizations are provided with the capacity of cutting down operation and reducing bureaucratic bottlenecks and increasing the capabilities of decision-making by the blockchain technology combined with its characteristics of decentralization, transparency, immutability, and traceability (Kumar Bhardwaj, Garg, and Gajpal, 2021; Hassan et al., 2023). Blockchain minimizes the reliance on tenure of the legacy hierarchical processes of overcoming the structural and procedural inertia by introducing automated processes of verifying facts and documentation of accounts in distributed ledgers. In supply chains, financial operations and manufacturing locales, blockchain integration encourages coordination of units and improves the flow of information more rapidly and addresses resistance to change through demonstrating measurable and apparent gains (Rane & Narvel, 2021; Lasmi, 2025). According to empirical data of SMEs in developing settings such as Pakistan, India and Nigeria, blockchain application assists in creating an innovation and knowledge exchange culture that can break strategic and cultural sluggishness [Mohammed and Sundararajan, 2023; Alkatheeri and Ahmad, 2024]. Blockchain can reduce the uncertainty and fear that surround change drive in an organization because it enables the secure, transparent and reliable data management by creating a more suitable environment to welcome digital transformation efforts. This is an indication that blockchain technology adaptation as an independent variable has a direct correlation with the organizational inertia as a dependent variable.

How Organizational Inertia Obstructs Digital Transformation (TAM & Inertia Theory)

Although the blockchain has the potential advantages, the organizational inertia may make the digital transformation impossible. The perceived ease of use and perceived usefulness, which are two fundamental constructs of TAM, are obstructed by structural rigidity, unwillingness to adopt new patterns, and reliance on outdated IT systems (Davis, 1989; Mohammed and Sundararajan, 2023). Although efficiency and security are some of the promises that blockchain harbors, companies with a high inertia experience delays to adoption, implement is partial or even refuses, and this implies that behavioral constraints that TAM creates are met (Bhardwaj, Garg, and Gajpal, 2021; Hassan et al., 2023). The cultural inertia increases the challenge by perpetrating the traditional hierarchy that would discourage them to experiment and share knowledge with others and thus weaken the self-efficacy and adoption intentions among employees (Rane & Narvel, 2021; Lasmi, 2025). Applying the TAM to the Organizational Inertia Theory, one can understand the mediation of perceptual variables (ease of use, usefulness) by the organization constraints. This assimilation brings an insight into the reason why not all organizations can maximize the benefits of the blockchain technologies and particularly the African and West African who fail in the infrastructural and management failures which is quite a common reality.

RBV Perspective: Blockchain as a Competitive Resource vs. Inertia as a Barrier

According to the Resource-Based View (RBV), blockchain is a strategic asset that can generate sustainable competitive advantage due to its rarity, unimitability and value (Russo-Spena, Di Paola, and Mele, 2025; Hassan et al., 2023). The capability of firms to harness successfully retrospective blockchain technology has the potential of contributing to the operational efficiency, transparency and the ability of innovation. But there is the force of an organizational inertia that functions as a counterforce do not allow realizing the strategic potential of blockchain to the full extent (Mohammed & Sundararajan, 2023; Lasmi, 2025). In essence, RBV emphasizes blockchain as being an enabler of strategic advantage, whereas inertia theory identifies elements of organization that impede translation of this technological resource into measurably beneficial outcomes. Firms will have to ensure that managerial strategies are aligned while investing in the reskilling of employees and also ensure that internal processes adapt to turn

blockchain adoption into tangible results. This lens of duality stresses how opportunities provided by technology coexist with organizational rigidity so that the deployment of resources is not enough without addressing the issues of inertia.

Integrated Theoretical Linkage Model

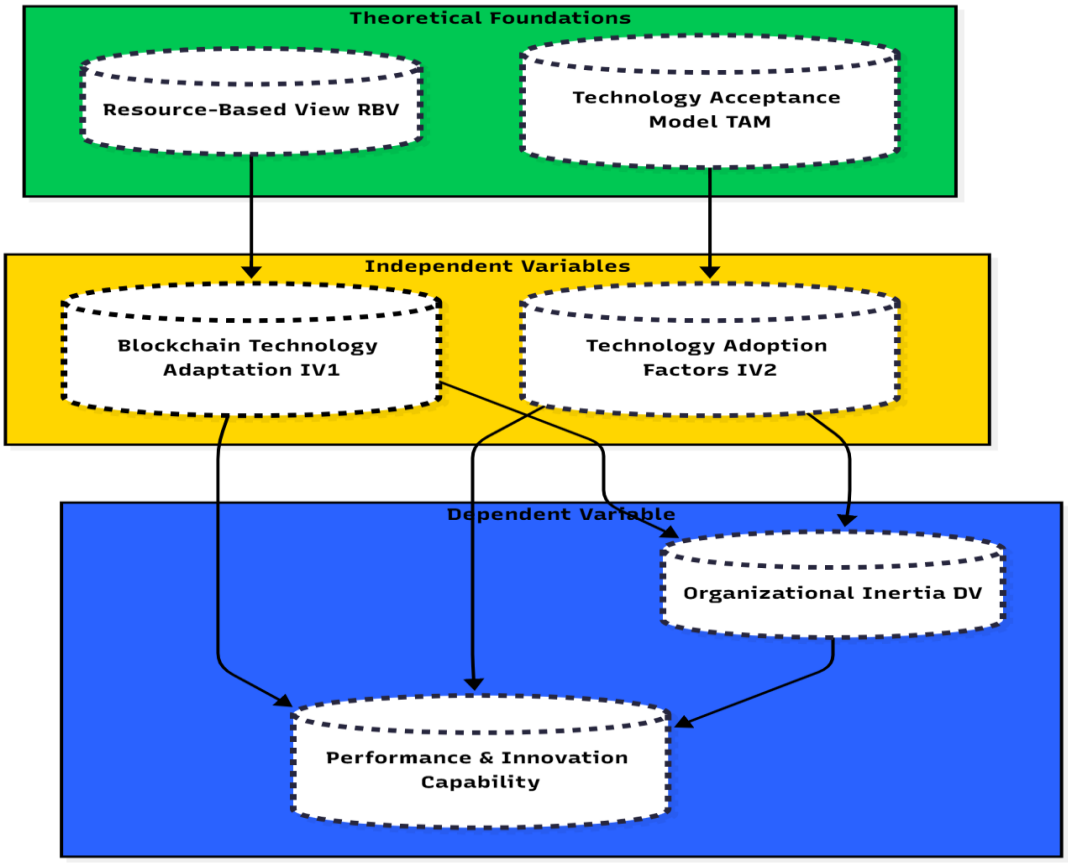

Figure 1: Integrated Theoretical Linkage Model of Blockchain Adoption and Organizational Inertia

Source: *Adapted from Kumar et al, (2021), Hassan et al, (2023), Lasmi, (2025), Mohammed & Sundararajan, (2023) & Rane & Narvel, (2021).*

Figure 1 shows the interaction of technology adaptation of blockchain (IV1), factors related to technology adoption (IV2), and factors related to organizational inertia, and how they affect the performance of a firm and the innovation capability. Model of the blockchain network is designed in which Resource Based View (RBV) is used to establish the basis for the perception of blockchain as a strategic organizational resource, using Technology Acceptance Model (TAM) to explain the behavior of employees in terms of their attitudes towards the adoption of the blockchain solutions. Factors of Blockchain adaptation and technology utilized have a direct impact on organizational inertia, serving as a barrier and moderator both to the performance gains. Firms with high inertia may be adverse to adoption, thus limiting improving current financial parameters, operational efficiency, market reach, and long-term growth, but proactive management of inertia allows for effective utilisation of blockchain and facilitates sustainable transformation of organisations. The model combines the theoretical and practical

insights, focusing on the importance of leadership, training and process reengineering in overcoming resistance and achieving innovation management driven performance.

2.4 Empirical Review

Empirical research about blockchain adoption has stressed its transformative potential in a number of industries, including supply chain management, manufacturing, tourism, finance and healthcare. For example, Kumar Bhardwaj, Garg, and Gajpal (2021) analysed the determinants of blockchain adoption in the supply chain of SMEs in India, and found relative advantage, technology compatibility, and top management support to be important drivers of blockchain adoption; whereas technical complexity and the cost issue prevented adoption. Similarly, Hassan et al (2023) proved the concept of blockchain technologies acting as complimentary forwarders to supply chain integration and sustainable performance in SMEs, with circular economy principles moderating the effect. In the context of manufacturing and Industry 4.0, the use of blockchain in connection with IoT has demonstrated agility of operations, decentralised coordination, and predictive management of the industrial assets at hand (Rane & Narvel, 2021). These findings taken collectively indicate that the blockchain adoption is being seen as a strategic tool to increase efficiency, transparency and competitiveness in diverse organizational processes.

Research on organizational inertia and resistance to technological change leaves you with the awareness of the challenges that firms have in adopting innovations like blockchain. Organizational inertia is exhibited in the form of structure rigidity, established routines, cultural resistance and legacy technological systems (Lasmi, 2025; Mohammed & Sundararajan, 2023). Studies indicate that it is frequently found that firms with high inertia experience delays in adoption and limited results in innovation with underutilization of strategic technologies even though investments in them are made. In emerging economies, where companies are resource constrained and have little managerial experience with advanced technologies, inertia is an important hurdle for effective digital transformation (Aliyu, 2023; Bhardwaj et al, 2021). Leadership support, employee training, and reengineering of processes are identified repeatedly as important mechanisms to reduce inertia and help bring technology-driven organizational change.

Empirical evidence also highlights these aspects of interaction between technological innovation and barriers to innovation in organizations. Blockchain adoption, although providing competitive benefits, is subject to both internal and external factors that relate to the organization, such as company size, digital preparedness and regulatory environment, as well as knowledge management capabilities (Lasmi, 2025; Hassan et al., 2023). Studies across African and Asian countries, including Nigeria, Pakistan and Indonesia, have shown that SMEs and micro-enterprises can benefit by a significant margin from the integration of blockchain, if adoption is backed by the necessary training and financial resources and aligns with firm strategy (Mohammed, & Sundararajan, 2023; Lasmi, 2025; Bhardwaj et al., 2021). In general, the empirical sources highlight the fact that despite blockchain having a transformative potential, its success is conditional on the possibility to overcome organizational inertia and its main characteristics of adoption: that is, the condition of firm-specific capabilities and the environmental conditions.

2.5 Research Gap

Despite the growing body of literature on blockchain adoption and organizational innovation there is still significant conceptual gap in understanding how blockchain technology is directly interacting with organizational inertia. While several studies have described the role of blockchain technologies in supply chains, manufacturing and financial operations (Kumar Bhardwaj, Garg, & Gajpal, 2021; Hassan et al., 2023; Rane & Narvel, 2021), few have discussed its potential for active aggrandizement of resistance to change within firms. Most of the extant research mainly focuses on the technological advantages like transparency, decentralisation, and efficiency, which does not sufficiently consider the potential of entrenched

routines, legacy systems, and cultural barriers inhibiting the attainment of strategic benefits of blockchain. This gap laments the significance of research that directly correlates blockchain adoption and the results of organizational inertia. From the theoretical standpoint, there is a lack of companionship between technology adoption theories (TAM, UTAUT) and Resource-Based View (RBV) and Organizational Inertia Theory. There is a tendency in the current literature to consider these frameworks independently with TAM explaining behavioral intentions related to technology adoption and RBV framing blockchain as a strategic resource (Lasmi, 2025; Mohammed & Sundararajan, 2023).

Nevertheless, the moderating or limiting roles of the organizational inertia on the processes of such adoptions is seldom included, and it will give some hope to expect implicitization of some kind of holistic theoretical perception. Bridging this divide needs an integrated framework that captures the drivers for adoption and barriers to adoption caused by inertia, that allows for a nuanced analysis of the adoption of blockchain for use in the organizations. Empirically, most blockchain adoption studies have focused on developed economies or big organizations organizations with some geographical and contextual gap in research in the context of SMEs and developing countries including Africa and West Africa (Aliyu, 2023; Hassan et al., 2023; Lasmi, 2025). Similarly, there are methodological gaps as few research studies use comprehensive conceptual models that associate technology adoption factors, blockchain integration and organizational inertia. Most empirical investigations base on survey based approaches without testing integrated frameworks or performing cross sectoral comparisons. Addressing these gaps will help future research provide more actionable insights for the level of policymakers, practitioners, and managers in emerging economies and resource constrained organizational environments.

2.6 Conceptual Framework of the Study

The conceptual framework of this study makes Blockchain Technology Adaptation as the main independent variable affecting Organizational Inertia and the possible moderating effect of Technology Adoption Factors. The model suggests that adoption of blockchain can mitigate reluctance to change, increase transparency and alleviate processes, including structural, cultural and strategic inertia in organizational structure (Kumar Bhardwaj, Garg, & Gajpal, 2021; Hassan et al., 2023). Furthermore, technology adoption factors that are perceived usefulness, organizational readiness, and external pressures are suggested for blockchain integration to be more effective in overcoming inertia. The directional relationships suggest that effective blockchain adoption is likely to weaken organizational barriers while organizational inertia may moderate the degree of the successful implementation. This framework incorporates knowledge from TAM, RBV and Organizational Inertia Theory and offers a strong lens for analyzing technology-driven transformation in firms, especially in developing economies such as Nigeria in West Africa and Africa in general (Lasmi, 2025; Mohammed & Sundararajan, 2023; Rane & Narvel, 2021).

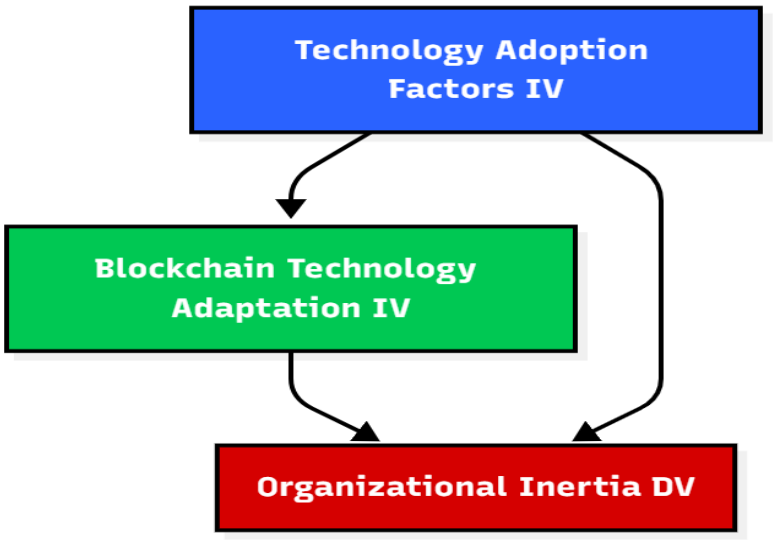

Figure 2: Conceptual Framework Linking Blockchain Technology Adaptation, Technology Adoption Factors, and Organizational Inertia.

Source: *Developed by the researcher based on Kumar Bhardwaj et al. (2021), Hassan et al. (2023), Lasmi (2025), Mohammed & Sundararajan (2023), Rane & Narvel (2021).*

The conceptual framework demonstrates the focal position of blockchain implementation in surmounting the organizational inertia where the first point is the direct effect of technological absorption on routines and resistance to change at the organizational level. Adoption factors are important confactors to ensure successful adoption of blockchain technology as they regulate the image of utility, organizational preparedness and support of other organizations to enhance successful blockchain implementation. The model highlights the fact that organizations with high inertia might not gain much benefit unless there are supportive adoption conditions, as it highlights the importance of leadership, employee training, and process redesign. This framework gives a structured foundation for empirical research on the blockchain-based organizational transformation, especially in the developing countries and SMEs, as well as managerial and policy based intervention for effective digital adoption.

3.0 Research Methodology

This study uses conceptual research approach that focuses on the exploration of theories and critical analysis and therefore not focusing on the gathering of primary data. The nature of conceptual research makes it suitable to investigate in this research as its focus is to develop a coherent framework of relating blockchain technology adaptation with technology adoption factors and organizational inertia while incorporating knowledge from various theories such as TAM, RBV and Organizational Inertia Theory. By focusing on concepts, definitions, and relationships rather than quantifiable measurements, the study helps build a structured understanding of how blockchain can overcome the resistance of the organization and improve technology-driven transformation, especially in the case of SMEs and developing countries (Kumar Bhardwaj, Garg, & Gajpal, 2021; Hassan et al., 2023). A systematic, literature search and selection process forms the basis of the study as peer-reviewed journals, conference proceedings and credible reports are targeted from 2020 to 2025 and in a global, African and Nigerian context. The search used key-words including "blockchain adoption", "organizational inertia", "technology adoption", "digital transformation", and "SMEs in developing economies".

The inclusion criteria focused on empirical studies, conceptual papers, and reviews that are related to the adoption of blockchain technology and organizational change. This stringent selection makes the conceptual framework to be underpinned by current research and includes the

understanding of developed and developing countries perspectives (Lasmi, 2025; Mohammed & Sundararajan, 2023; Rane & Narvel, 2021). The current research uses a conceptual analysis method where findings are synthesized from the literature and patterns, gaps, and relationships between the key constructs are identified. A theoretical and empirical triangulation approach is adopted to confirm robustness, comparing information from several theoretical perspectives (TAM, RBV, and Inertia Theory) to the empirical evidence from the global and African research on the blockchain adoption and organizational transformation. This triangulation provides the strength for the framework by equating the conceptual propositions with observed trends that will aid the researcher in producing recommendations for practice and develop future empirical research of Blockchain enabled organizational change (Kumar Bhardwaj, Garg, & Gajpal, 2021; Hassan et al., 2023; Lasmi, 2025).

4.0 Findings of the Study

1. Assessment of Global and Regional Blockchain Adoption: According to the study, blockchain technology adoption is steadily growing across the world and notable adoption has been seen in financial services, supply chain and manufacturing sectors. Whereas in Africa, adoption is growing but limited by infrastructural and regulatory challenges, West Africa and Nigeria, the leading sectors of adoption are aim-based fintech, SMEs, and innovation-based startups (Kumar Bhardwaj, Garg, & Gajpal, 2021; Lasmi, 2025). Benefits include transparency, traceability and operational efficiency but challenges exist such as technical complexity and significant implementation cost as well as lack of regulatory clarity.

2. Organizational Inertia as a Barrier: Organizational inertia is emerging as one of the most critical barriers to adopting blockchain technology. Structural rigidity, resistance to change, legacy systems, and employee adaptability problems were consistently found to be impeding the effective deployment of blockchain in organisational processes (Hassan et al., 2023; Mohammed & Sundararajan, 2023). Firms that were locked in routines and had low managerial support fell behind in adoption and demonstrated the moderating effect of inertia in adopting technology.

3. Role of Organizational Readiness and Managerial support: It is found that organizational readiness, managerial support, and employee training have a significant impact on the adoption of blockchain. Companies that invest in digital literacy among the workforce; provide it with the leadership and establish agile decision making environments are better prepared to put blockchain solutions in place despite the inertial forces. The article emphasizes that the relationship between readiness and adoption is moderated by inertia and, thus, an actor should be proactive when managing the change (Rane and Narvel, 2021; Lasmi, 2025).

4. Impact on Organizational Performance and Sustainability: Moving to the impact of blockchain adoption on organizational performance and sustainability, the organizations will experience a favorable impact in terms of efficiency in the work of the organization, financial performance, governance, and sustainability outcome. The technology facilitates automation of the processes, enhances better performance in the organization through the traceability of the processes and transparent reporting. The blockchain implementation using the supply chain integration also facilitates sustainable practices such as implementation of energy efficiency and circular economy (Hassan et al., 2023; Kumar Bhardwaj, Garg, and Gajpal, 2021).

5. Actionable Strategies Recommendations: The research suggests how inertia can be overcome and integration of blockchain increased. It was found to be important on the level of leadership engagement, systematic training, strategies of iterative adoption and alignment to corporate objectives. The results give a basis for managers, policymakers and technology developers to design interventions to aid adoption in differing organisational and geographical settings (Mohammed &

Sundararajan, 2023; Rane & Narvel, 2021).

5.0 Recommendations of the Study

1. Organizations should create structured programs to manage the pace of change to overcome structural and cultural inertia by providing relevant employee training, involving leadership, and implementing iterative adoption programs that align with business objectives.

2. Policymakers should promote secure, cost-effective, and scalable adoption of blockchain by policymakers should consider creating conducive regulatory frameworks that support it, especially for the SMEs and emerging markets in Africa and Nigeria.

3. Blockchain solution providers should tailor technologies to meet the capability of organizations, providing scalable, user-friendly, and secure platforms that address possible implementation challenges.

4. Future studies should integrate TAM, RBV with Inertia Theory in empirical analyses in various industries, including SME, manufacturing, and financial services withacial cross-regional comparisons in order to make the conceptual work highly valid.

5. Research study using mixed-method approach, various longitudinal studies and case studies should be conducted on the performance and the sustainability outcomes and organisational holding back in lengthy run in developing economies as a result of the use of blockchain.

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