
**AN APPRAISAL OF THE ROLE OF BLOCK CHAIN
TECHNOLOGY IN THE GROWTH OF INSURANCE
BUSINESS IN NIGERIA.**

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Abstract: The study appraises the essence of block chain technology in driving the growth of the insurance business, with a focus on transparency, trust, fraud prevention, and operational efficiency. Drawing from scholarly works, industry reports, and practical case studies, the research highlights block chain's potential to transform traditional insurance systems into more efficient, customer-centric models. The paper concludes that adopting block chain in insurance operations is pivotal for sustainable growth in Nigeria's evolving digital economy.

Keywords: Block chain technology, Insurance business

Introduction

Insurance is a business organization that protect the policy holders against unforeseen circumstance that can lead to financial loss. The business is one of the financial service providers in Nigeria that offers intangible products to their customers. The industry plays a vital role in growth and development of the nation. They mitigate, manage and provide indemnity to businesses and individuals who suffer loss. In Nigeria, insurance companies carry out their through a network of underwriting, claims processing, customer service, and policy administration. Traditionally much of this process was manual, involving physical documentation and face to face interaction.

However, the industry has witness significant shift toward transformation in recent years. The global insurance industry is undergoing transformation driven emerging technologies and block chain stand at the fore front of this evolution. The insurance in Nigeria like many other developing countries faces several systematic challenges including low customer trust, fraud, poor claims management and high administrative costs. This issue has limited the growth and penetration of insurance operation, mainly in the rural and informal sector. In Nigeria, the performance of insurance industry is characterized by low penetration, limited digital infrastructure, poor public trust, and operational inefficiencies (Marei, 2023). These challenges hinder growth, limit customer acquisition, and reduce financial performance. According to Alshirah et al. (2020), many Nigerian insurers struggle with outdated systems, leading to data manipulation and fraud. However the introduction and gradual adoption of block chain technology present new opportunity to address these long term issues and improve the overall efficiency and trustworthiness of insurance services. As a result, there is a pressing need for innovative solutions that can drive customer efficiency transparency and insured confidence.

Block chain is a decentralized digital ledger that records transactions across a network of computers. Once information is entered, it cannot be altered without consensus across the network (Nakamoto, 2008). The

309

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technology offers core features such as transparency, security, and immutability, making it suitable for industries that rely on trust and data integrity—like insurance (Deloitte, 2022). Block chain technology has emerged as one of the most transformative innovations of the 21st century, with wide-reaching implications across various sectors including banking, healthcare, logistics, and insurance (Gupta & Gupta, 2018; Kshetri, 2017). In the insurance sector these capabilities can redefine how policies are underwritten, how claims are processed, and how insured data is managed securely to attract more buyers (Lutfi et al., 2022; Moradi & Mohammadi, 2020).

The implication of block chain on the growth of insurance is very crucial. Block chain reduce fraud and operational delay by automating claims and underwriting processes. It also enhances trust through transparency and traceable data. Making it easier to attract and retain customers. . Once the information is registered in the block chain, it is very hard to manipulate or changed without the agreement of the entire net work. This information is opened to both the insured and the insurer with internet access. Block chain technology offers a promising solution by providing a tamper-proof environment, secure audit trails, and real-time access to transaction data, all of which could significantly improve transparency and accountability in insurance transactions(Kim&Shin, 2019; Almaiah et al, 2022).

Block chain helps customers to see every transaction on what is happening in their policy documentation, every transaction like premium payments, claims payment, insurance investment and other insurance business transactions are uploaded in the internet. The customer can track every transaction with the insurer at the comfort of his home or elsewhere with the internet device like phone, computer etc.

(Sarker & Datta, 2022). Okun (2012) opines that customer deposits not only reflect the level of trust and engagement customers have with their insurers but also serve as a tangible indicator of the impact of digital transformation and block chain technology.

Globally, empirical studies have started exploring block chain's role in transforming financial reporting and performance. For instance, Breda (2023) found that although block chain's immediate benefits are not always visible, long-term adoption positively impacts liquidity and efficiency. Similarly, Pan et al. (2020) emphasized that block chain increases enterprise operational capability, which translates into improved Return on Assets (ROA). As Nigerians seek to deepen financial inclusion and expand the insurance base, understanding the strategic role of block chain become very important. This study, therefore appraises the essence of block chain as a transformative force in the growth of insurance business in Nigeria.

Conceptual Framework

Challenges of Block Chain Adoption in Nigeria Insurance companies.

Despite the benefits block chain offers in business, adaptation of block chain in Nigerian faces several obstacles. These challenges limit it growth potential in insurance sector and industry.

a. High Cost of Implementation. Initial setup is expensive because it requires strong investment on technology, skilled manpower and security system. Most small insurance companies cannot afford the initial cost. According Olojede and Akinola (2022) observe, that most Nigerians financial institutions find the cost of transmitting to block chain prohibiting, particularly small insurers.

b. Poor awareness and understanding. Aboyeji (2020) states that a major barrier to block chain development is lack of widespread education and understanding, leading to mistrust and low adoption rate in Nigerians. In

Nigeria block chain knowledge is limited among business, regulators and general public, may fear their private information become too open if not manage properly.

c. Regulatory uncertainty. In 2021 the Central Bank of Nigeria (CBN) shows interest in digital innovations conflicting policies, such as the ban on crypto currency transaction. This makes Nigerian legal and regulatory framework remain unclear having caused fear and hesitation among investors.

Overview of the Insurance Business in Nigeria

The Nigerian insurance sector contributes less than 1% to GDP, showing low Penetration due to weak trust, fraud, delayed claims, and lack of awareness (NAICOM, [2020](#)). The industry operates on manual and semi-digital systems, often causing inefficiency and data loss. Growth in the sector requires a shift towards innovation and customer-centered services, which block chain offers. Block chain is essential in insurance due to its ability to handle sensitive data securely, automate processes through smart contracts, and offer traceable and permanent records (PwC, [2021](#)). It can eliminate the need for intermediaries, reduce administrative costs, and increase accountability between insurers and policyholders.

Applications of Block chain in Insurance

The application of block chain technology will go a long way in the transformation of insurance business in Nigeria, where the business operation seen to be difficult to understand by average Nigerian. The business activities in Nigeria are challenged with a lot of problems such as fraud, inefficient processes, lack of transparency and limited customer trust persist. Block chain can be applied in the Nigerian insurance industry to support and promote insurance business operation as follows:

1. Fraud Detection and Prevention: The use of block chain in Nigeria's insurance sector will help to control and dictate fraud, such as false claims or multiple claims on a single policy. According to the OECD ([2020](#)), insurers that have integrated block chain report increased customer satisfaction and cost savings up to 30%. Block chain shared, immutable ledger that can record all transactions and claims across insurers, making it difficult to falsify claims or data. Smart contracts can automatically reject suspicious or duplicate claims.

2. Automated Claims Processing: Claims in insurance business are often delay because it requires carefulness on the part of the insurer. The insurer thoroughly exams the claim proposal details to find out whether the claim request exist due to insured event. Most often insurer's surveyor is send to the scene to document and provide report to the company. As a result, claim may be delayed and the client may not find the situation easy. Delays in claims processing and payment discourage insurance adoption. However, with the use of block chain in insurance firm can automatically trigger claim payments when predefined conditions are met (e.g., accident verified, policy active). This reduces processing time and increases customer satisfaction. Automated contract execution ensures timely claims processing without human intervention ([Deloitte, 2022](#)).

3. Customer Identity and KYC (Know Your Customer): Most insurance firm in Nigeria manually documents the insured detail, given room for loss of document and constant request for verification and documentation of customer details. KYC is a digital process use to document, verify and indentify the insured

identity. The goal is to prevent fraud, money laundering and financial crime. With block chain, once the insured submits their KYC to one insurance company, other trusted insurers on the same block chain network can access it securely. This reduces stress for the insured and save time for insurance companies. Procedures are often slow, repetitive, and inconsistent across providers.

4. Reinsurance Transparency: Insurers often transfer risks to reinsurers. Tracking these agreements and claims can be complex and opaque. Block chain act as a shared digital ledger. Both the insurance and reinsurance company can see the same data at the same time, such as premium paid, claim filed and risk details.

5. Micro insurance Expansion: In Nigeria, a large portion of the population remains uninsured due to cost, complexity, or lack of access. Block chain removes the need for too many middlemen and paper work enables low-cost, transparent micro insurance models that can reach the underserved. Mobile-based block chain platforms can offer affordable policies and seamless claim handling.

Methodology

Research Design

This is qualitative research Ex-post facto research design was used. Data were sourced from secondary sources such journals, online sources, and textbooks.

Population of the study

The population of this study was made up of twenty (20) giant listed companies in Nigeria. They include:

1. Dangote Cement Plc
2. Zenith Bank Plc
3. Nigerian Breweries Plc
4. First Bank Plc
5. United Bank of Africa
6. First City Monument Bank
7. Unilever Nigeria Plc
8. Cadbury Nigeria Plc
9. Stanbic IBTC
10. Access Bank Plc
11. Union Bank of Nigeria Plc
12. Guinness Nigeria

13. Flour Mills of Nigeria Plc

14. Guaranty Trust Bank Plc

15. Lafarage Cement WAPCO Nigeria Plc

16. Total Nigeria Plc

17. Unilever Nigeria Plc

18. PZ Cussons Nigeria Plc United Bank of Africa

19. UACN

20. Nestle Nigeria Plc

For the purpose of this study, data were obtained from the company's websites and published annual report of the companies under study. The technique used in analyzing the formulated hypotheses for the study is the multiple regression technique done with the aid of SPSS (Statistical Package for Social Sciences) version 23.0. The study also used GRI 3.1 to analyze economic, environmental and social performance disclosure index. In doing this, content analysis was used to extract data from Global Reporting Guideline.

Sample and sampling Techniques

Due to the fact that our population is not large we therefore adopt the whole companies as our sample size.

Data Analysis and Results

Recommendations

From the study, the following recommendations are made to enhance sustainability reporting.

1. Sustainability reporting should be encouraged and a regulatory body set up to see that company's include sustainability report in their annual report as the study has shown there is a significant effect of sustainability reporting on company's performance.
2. Companies should be encouraged to disclose economic performance as this may increase their performance in the long run.
3. Since companies have not been complying fully to international best practices, there should be mandatory localized environmental reporting framework in line with international best practices on issue of sustainability reporting.
4. Companies should maintain a good relationship with their employees, suppliers, local communities and others concerned and report this appropriately in their annual report as this has an effect on their performance.

Contribution to Knowledge

To the best of our knowledge this study has contributed to the body of existing literature by looking into the effect each of the component of sustainability: economic, environmental and social has on company's performance. The study also contributed to knowledge by finding out that economic performance disclosures has no significant effect on return on asset.

Suggestions for Further Study

Since we have different financial performance indicators, the researcher suggests that further studies should be carried out using other indicators such as return on equity, or a market performance indicator like market share. Further research can be carried on least performing companies covering same number of years or a broader number of years.

Conclusion

In this study, effort has been made to examine the effect of sustainability reporting on company's performance. The study has four specific objectives: to determine the effect economic, environmental and social performance disclosures have on company's performance. The study made use of secondary data. The study found that economic performance disclosure and environmental performance disclosure has no significant effect on company's performance while social performance disclosure has a significant effect on company's performance. Mandatory localized reporting framework in line with international best practices should be put in place to encourage sustainability reporting.

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