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PAPER
TITLE

**FINANCIAL AND TECHNOLOGICAL
INNOVATION IN REAL ESTATE NEGOTIATION,
DEVELOPMENT, AND RESALE IN NIGERIA**

BY

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ABSTRACT

Nigeria's real estate sector is experiencing a transformative shift, driven by financial and technological innovations that are altering traditional practices of negotiation, development, and resale. With a growing population, rapid urbanisation, and increasing demand for residential and commercial properties, the Nigerian real estate market is ripe for innovation. This paper investigates the impact of fintech and proptech innovations in reshaping the Nigerian property landscape. It critically analyses the application of blockchain, smart contracts, artificial intelligence (AI), virtual reality (VR), Internet of Things (IoT), and digital financing platforms in real estate processes. The research further explores challenges to implementation, including regulatory uncertainty, infrastructure limitations, data integrity issues, and resistance to change. Drawing on empirical data, industry reports, and academic literature, the study presents a comprehensive overview of how innovation can contribute to transparency, efficiency, and inclusivity in Nigeria's real estate sector. Recommendations are made for policymakers, investors, developers, and regulators to harness these innovations for sustainable urban and economic development.

KEYWORDS: *Artificial intelligence (AI), Virtual reality (VR), Internet of Things (IoT), and Digital financing platforms*

INTRODUCTION

Real estate is a cornerstone of economic development and urban growth, playing a critical role in wealth creation, infrastructure development, and employment generation. In Nigeria, the sector is particularly vital due to the country's rapid urbanisation and population growth, which has triggered increasing demand for housing, commercial, and industrial

properties. However, traditional real estate practices in Nigeria are often marred by inefficiencies, lack of transparency, limited access to financing, and bureaucratic bottlenecks. As a result, there is a growing recognition of the need to embrace innovative approaches to enhance the effectiveness and accessibility of real estate operations.

The integration of financial and technological innovations, often referred to as fintech and proptech, is emerging as a game-changer in global real estate. These innovations offer the potential to streamline negotiations, improve property development processes, and facilitate seamless resale of properties. In developed countries, the adoption of blockchain technology, artificial intelligence, virtual and augmented reality, and digital financing tools has already redefined real estate markets. Nigeria is beginning to follow suit, albeit at a slower pace, due to infrastructural and policy challenges.

This paper explores how financial and technological innovations are transforming the real estate landscape in Nigeria. It begins by examining the role of financial innovation, including digital mortgage platforms, smart contracts, and tokenisation. It then delves into technological innovation in property development and resale, highlighting the contributions of AI, IoT, VR, and digital marketplaces. Furthermore, it discusses the unique challenges facing Nigeria in adopting these innovations and proposes strategies for overcoming these barriers to create a more inclusive and efficient property market.

Financial Innovation in Nigerian Real Estate

Financial innovation refers to the introduction of new financial instruments, technologies, and processes that improve the efficiency of financial systems. In the context of real estate, financial innovation can address some of Nigeria's most persistent challenges, including lack of access to credit, high cost of borrowing, and opaque transaction processes. The emergence of fintech companies is gradually enabling more Nigerians to participate in property markets.

Table 1: Overview of Financial Innovations in Nigerian Real Estate

Description	Key Examples
Digital Financing	Online platforms for mortgage access and property investment
Seso Global, Coreum	Blockchain & Smart Contracts
Decentralised transactions and automated agreements	Pilot blockchain land registry
Tokenisation	Fractional property

Digital Financing Online platforms for mortgage access and property investment
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Tokenisation Fractional property

ownership through digital tokens
Emerging platforms REITs
Pooling investor funds for real estate assets
Union Homes REIT, Skye Shelter

Digital financing platforms are among the most significant financial innovations in Nigeria's real estate sector. Companies such as Seso Global, Coreum, and Estate Intel are providing platforms for digital property listings, mortgage applications, and real estate analytics. These platforms help streamline the process of acquiring property and offer investors better access to market information. Fintech also enables alternative financing models, such as crowdfunding and micro-mortgages, which are crucial for low- and middle-income earners.

Blockchain technology and smart contracts represent another breakthrough in financial innovation. Blockchain offers a decentralised and transparent ledger system for recording property transactions, ensuring security and authenticity. Smart contracts, powered by blockchain, automate real estate agreements by executing terms when pre-defined conditions are met. These technologies can reduce fraud, eliminate intermediaries, and shorten the property transfer process. However, their adoption in Nigeria remains limited due to regulatory uncertainty and limited digital literacy.

Real Estate Investment Trusts (REITs) and tokenised assets are also gaining traction in Nigeria. Tokenisation allows fractional ownership of property through digital tokens, making real estate investment more accessible. While REITs have been in existence in Nigeria since the early 2000s, the concept of property tokenisation is still new. Regulatory frameworks, investor awareness, and digital infrastructure need to evolve for these innovations to scale.

Technological Innovation in Property Development

Technological innovation in real estate development focuses on improving the planning, construction, and management of buildings using advanced digital tools. In Nigeria, the application of such technology remains uneven but is gradually gaining momentum, especially in urban centres like Lagos and Abuja.

Figure 1: Adoption Rate of Technological Tools in Nigerian Real Estate

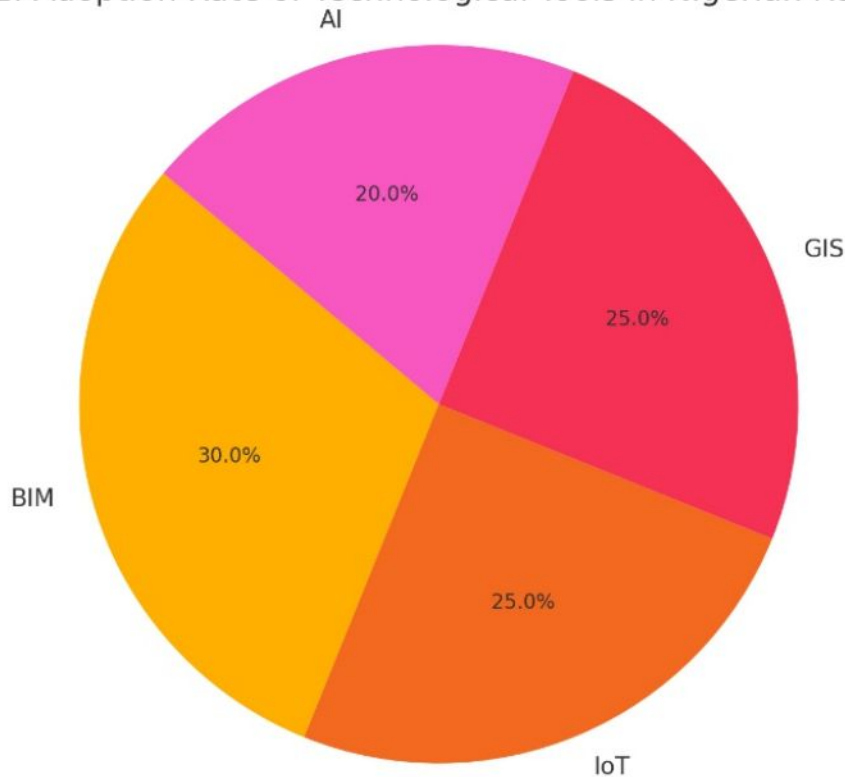


Figure 1: Technological Tools Used in Nigerian Real Estate Development

One of the most significant technological tools in property development is Building Information Modelling (BIM). BIM facilitates better design coordination, cost estimation, and resource management. It enables developers to create digital representations of buildings, including structural and functional characteristics, thereby reducing errors and enhancing collaboration among stakeholders. Despite its benefits, BIM adoption in Nigeria is still low due to limited expertise and software costs.

The Internet of Things (IoT) is also playing a role in enhancing the functionality of buildings. Smart homes equipped with IoT devices offer automation in lighting, heating, security, and energy management. These features are becoming more prevalent in luxury developments, appealing to high-income earners and foreign investors. IoT can also support maintenance and sustainability by monitoring building performance in real

time.

Geographic Information Systems (GIS) are another innovative tool being used in land use planning and site selection. GIS helps real estate developers identify viable locations, assess environmental risks, and plan infrastructure. Nigerian state governments are increasingly integrating GIS in urban planning, though the use of this technology by private developers remains limited.

The integration of AI in real estate development is promising. AI can analyse large datasets to forecast market trends, predict construction costs, and evaluate project risks. Machine learning algorithms assist developers in making data-driven decisions, improving project viability and returns on investment. In Nigeria, the main barriers to AI adoption are the high cost of data collection, lack of standardised property databases, and insufficient technical capacity.

Technological Innovation in Real Estate Resale and Negotiation

The resale of properties in Nigeria has traditionally been characterised by manual processes, inadequate records, and fraud.

Technological innovation is now offering solutions to these longstanding problems. Digital marketplaces, AI-powered valuation tools, and virtual reality tours are reshaping how properties are bought and sold.

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Tokenisation	Fractional property ownership through digital tokens	Emerging platforms
REITs	Pooling investor funds for real estate assets	Union Homes REIT, Skye Shelter

Digital platforms such as PropertyPro.ng, PrivateProperty.com.ng, and Hutbay allow sellers and buyers to connect seamlessly. These platforms offer verified listings, digital documentation, and even legal support services. By providing access to property data and reviews, they improve transparency and foster informed decision-making. The use of mobile apps further enhances the convenience of property transactions.

Virtual reality (VR) and augmented reality (AR) are enabling immersive property tours, allowing prospective buyers to explore properties remotely. This is particularly useful for diaspora Nigerians and international investors. While still in its infancy in Nigeria, VR technology is being adopted by premium real estate firms to showcase luxury apartments and gated communities. Challenges to broader adoption include poor internet connectivity and the high cost of VR equipment.

Artificial intelligence is also transforming property resale by enabling predictive analytics and automated valuation models. These tools can assess market trends, calculate fair property values, and suggest optimal selling times. They are useful in

negotiation as they empower both buyers and sellers with reliable information. AI chatbots are increasingly being used for customer service, guiding users through listings and answering queries in real time. The use of blockchain in property resale ensures that titles are tamper-proof and verifiable. Land title fraud is a major issue in Nigeria, often resulting in protracted legal disputes. Blockchain-based land registries could eliminate this problem by providing a secure and transparent record of ownership. However, implementation is slow due to the need for legal reform and capacity building among public institutions.

Challenges to Innovation Adoption in Nigeria

Despite the promising benefits of financial and technological innovations in real estate, several barriers hinder their widespread adoption in Nigeria. These include infrastructural deficits, regulatory ambiguities, lack of digital literacy, and market resistance.

Figure 2: Key Barriers to Innovation Adoption in Nigeria

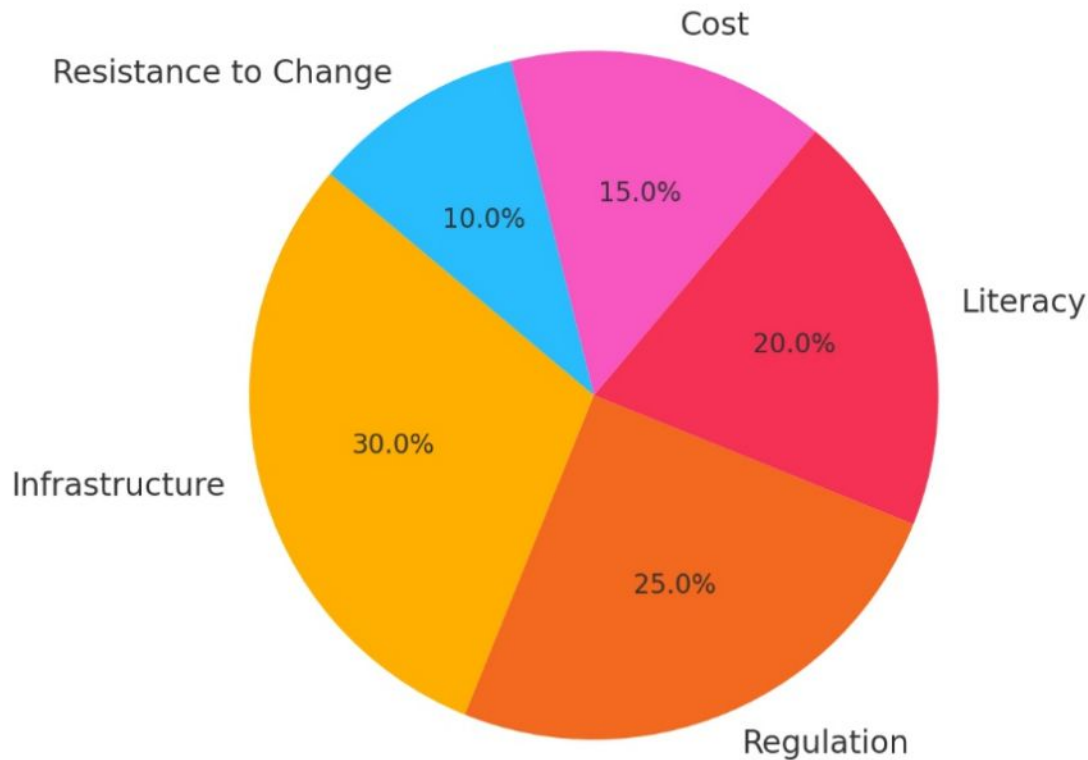


Figure 2: Key Barriers to Innovation Adoption in Nigeria

The country's inadequate infrastructure, including erratic power supply and low broadband penetration, hampers the operation of digital platforms and tools. Many potential users lack access to smartphones or internet services, limiting the reach of fintech and proptech solutions. Additionally, high costs of hardware and software deter small and medium-sized developers from adopting advanced technologies.

Regulatory uncertainty is another significant challenge. Nigeria lacks comprehensive laws governing digital property transactions, blockchain applications, and data protection. The absence of legal recognition for smart contracts and tokenised assets creates confusion and discourages investment. Clear and supportive

regulations are needed to legitimise these innovations and protect stakeholders.

Digital illiteracy among key actors in the real estate value chain is also a concern. Many agents, developers, and government officials are unfamiliar with new technologies, leading to poor adoption and misuse. Training and capacity-building initiatives are essential to bridge this knowledge gap and promote effective use of innovation.

Resistance to change is a human factor that cannot be overlooked. Traditional players in the real estate sector may be sceptical of digital tools, fearing job loss or loss of control. Efforts must be made to demonstrate the value of innovation and involve stakeholders in the transition process.

Conclusion

Financial and technological innovations hold immense potential to transform Nigeria's real estate sector by improving transparency, efficiency, and inclusivity. While significant progress has been made through the emergence of fintech and proptech solutions, challenges persist in terms of infrastructure, regulation, digital literacy, and stakeholder buy-in. To unlock the full benefits of innovation, a coordinated

effort involving government, private sector, and civil society is required. Policymakers must develop enabling laws and invest in digital infrastructure. Industry stakeholders should embrace capacity building and public-private partnerships to scale successful innovations. With the right support, Nigeria's real estate sector can become more resilient, competitive, and accessible to a broader population.

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