

Drivers and Barriers to FinTech–PropTech Adoption Among Real Estate Stakeholders in Abuja, Nigeria: A Systematic Review

Abubakar Aminu Bukar¹, Mohd Shahril Abdul Rahman², Zainab Toyin Jagun^{3*},
Salfarina Samsudin⁴ and Oluwafemi Kehinde Akande⁵

¹Department of Real Estate, Faculty of Built Environment and Survey, Universiti Teknologi Malaysia, Skudai, Johor, Malaysia

²Department of Real Estate, Faculty of Built Environment and Survey, Universiti Teknologi Malaysia, Skudai, Johor, Malaysia

^{3*}School of Built Environment, Engineering and Computing, Leeds Beckett University, Leeds, United Kingdom

⁴Department of Real Estate, Faculty of Built Environment and Survey, Universiti Teknologi Malaysia, Skudai, Johor, Malaysia

⁵Department of Architecture, Nile University of Nigeria, Abuja, Nigeria

E-mail: ¹aminubukar@graduate.utm.my, ²mshahril.ar@utm.my, ³z.t.jagun@leedsbeckett.ac.uk,

⁴salfarina@utm.my, ⁵oluwafemi.akande@nileuniversity.edu.ng

ORCID: ¹<https://orcid.org/0009-0003-4223-9909>, ²<https://orcid.org/0000-0002-2837-2872>,

³<https://orcid.org/0000-0002-7441-7138>, ⁴<https://orcid.org/0000-0001-9558-8027>,

⁵<https://orcid.org/0000-0001-7895-6000>

(Received 07 March 2026; Revised 10 April 2026, Accepted 24 April 2026; Available online 05 June 2026)

Abstract - It is a synthesis of literature that explores the major drivers and impediments that inform the adoption of FinTech-PropTech by real estate stakeholders in Abuja, Nigeria, and visualizes how these factors differ: between developers, agents, banks, regulators, and between buyers/tenants. Scopus, Web of Science, Google Scholar, IEEE Xplore, and SSRN (2014 - 2026) were used as sources to complete a PRISMA-directed systematic review. The screening of records by title/abstract and full-text eligibility was done by using predefined inclusion criteria. The quality of the studies was assessed with the help of MMAT, and the synthesis of the results was performed with the help of the thematic and narrative synthesis organised in accordance with the Technology-Organisation-Environment (TOE) framework. A search was conducted that found 539 records (512 database; 27 manual), 55 of which passed the screening to include in the search. Its key driving forces were considered to be usefulness and efficiency (faster transactions, ability to automate processes), transparency and trust aspects (verification and traceability), access to finance and digital payments, competitive pressure and customer demand, and supportive ecosystem indicators. Infrastructure limitations (internet/power availability), cost/ROI imprecision, cybersecurity and privacy, skill deficit and change reluctance, and law/regulatory weaknesses associated with land management and compliance transparency were the most uniform obstacles. The patterns of stakeholders show that developers and agents are more cost and infrastructure-bound, and banks and regulators are more concerned about compliance and risks associated with policy. The use of FinTech-PropTech in Abuja is an opportunity-based initiative with institutional limitations. Specific capacity building, infrastructure upgrading, and more definitive governance of digital property are needed to make adoption of it secure, scalable, and inclusive.

Keywords: FinTech, PropTech, Technology Adoption, Real Estate, Drivers and Barriers

I. INTRODUCTION

Financial Technology (FinTech) is the application of digital technologies to provide financial services, including payments, lending, crowdfunding, blockchain, and transactions, and verification of digital identities. Property Technology (PropTech) uses digital innovation in real estate operations such as property listing websites, virtual tours, smart contracts, digital land registries, real estate analytics, and management of online transactions (Hassan et al., 2019; Oluwunmi & Agara, 2023). FinTech and PropTech integration is changing the traditional real estate systems by allowing faster money transfers, open transactions, and valuation of property based on data, and better coordination of stakeholders. Digital platforms through property markets are evident in the likes of Zillow and Airbnb as firms across the globe transform the market due to their digital-enabled services. In Nigeria, and especially in Abuja, the real estate industry is critical in city development and growth, foreign investments, and the provision of houses. Abuja, being the Federal Capital Territory, is a booming property market with a growing demand in terms of digitalizing transactions, online property management, and providing alternative financing options (Otty et al., 2023; Olugbenga et al., 2017). Nevertheless, with the increasing level of digital awareness and mobile penetration, the uptake of FinTech-PropTech solutions by developers, estate agents, financial institutions, regulators, and buyers is not evenly dispersed. The current literature talks about the technology adoption in finance and

in real estate separately, but little is said about the FinTech-PropTech ecosystem. Such factors as perceived usefulness, trust, regulatory uncertainty, infrastructure gaps, cost concerns, and digital literacy constraints are distinguished, as the study results are dependent on context and stakeholder groups (Udobi et al., 2016; Bansal et al., 2011). Little consolidated evidence is concentrated on Abuja or other similar emerging markets urban centres.

Hence, this paper will provide a systematic literature review of available findings on the factors and barriers affecting the adoption of FinTech-PropTech by real estate stakeholders in Abuja, Nigeria. This review can offer a combined insight into the process of adoption in the local context since it has arranged scattered information in the form of themes.

The research questions that are involved in the study are as follows:

- **RQ1:** Which drivers determine FinTech-PropTech adoption amongst real estate stakeholders?
- **RQ2:** What are the obstacles to the adoption of FinTech-PropTech?
- **RQ3:** What are the stakeholder groups that report on the specific drivers and barriers?
- **RQ4:** What is the policy and managerial implication based on the synthesized evidence?

The paper has six major sections, namely, the Section I presents the relevancy of FinTech and PropTech in Abuja real estate market and the identity of a gap in adoption by different stakeholders. Section II incorporates the existing literature on the drivers and barriers to adoption applying the Technology-Organisation-Environment (TOE) framework to classify the results. Systematic review process has been described in Section III section and it follows PRISMA guidelines and search strategy, eligibility criteria and data extraction. The Section IV give the key adoption drivers and obstacles, which are divided into organizational, technological, and environmental factors, and stakeholder-specific influences are put into the forefront. Section V discusses the findings and compares them with other less developed markets, and focuses on infrastructure, regulatory support, and stakeholder readiness as the major factors of adoption. Lastly, the Section VI provides a summary of the findings with efficiency, transparency, and trust as the drivers of adoption and issues such as gaps in the infrastructure, cost, and regulatory concerns as obstacles to adoption, and proposes future research.

II. LITERATURE REVIEW

The available sources on FinTech adoption indicate that regulatory support, technological preparedness, and digital finance access are the key factors in an emerging market. As an example, Offiong et al., (2026) list regulatory clarity, financial inclusion strategy, and the maturity of the infrastructure as some of the enablers of the FinTech integration in the microfinance industry in Nigeria (Offiong

et al., 2026; Ajah, 2025). On the same note, Albuainain & Ashby, (2025) demonstrate that the factors that play a significant role in adoption are perceived usefulness, trust, ease of use, and institutional credibility, whereas security concerns and compliance uncertainty serve as obstacles (Albuainain & Ashby, 2025; Oluwatofumi & Hahn, 2021). Similar studies within similar developing ecosystems, including Nach (2025), highlight ecosystem coordination and innovation networks as the structural drivers (Nach, 2025; Ayodele et al., 2021).

In the field of real estate, Nigerian-related research reports are growing awareness of the use of digital tools, but with a disproportionate level of adoption. The digital platforms are capable of improving the transparency, efficiency, and reach to the marketing, and the volume of adoptions is projected to be low based on the absence of digital expertise, economic concerns, and resistance to change (Adjekophori et al., 2025; Araloyin et al., 2024). It also found out that the consideration on either of the available property management software implementation to be installed within Lagos is pegged on perceived improvement in the performance and preparedness of the organization (Odebo et al., 2025; Altankhuyag & Kurzrock, 2025). However, additional structural issues, which restrict the technological diffusion, include the absence of infrastructure skills shortage among real estate professionals, and uncertainty in investments (Ayodele et al., 2020; Nach, 2025).

To make sense of such fragmented findings, the analytical model with which the present study is going to operate is Technology-Organisation-Environment (TOE) framework (Ozigbo & Nnamani, 2023; Okoro et al., 2020). The TOE model divides adoption determinants into three dimensions, namely technological (e.g., relative advantage, complexity, security), organisational (e.g., firm size, managerial support, digital capability), and environmental (e.g., regulatory environment, competitive pressure, infrastructure) determinants. It is a framework that best fits the consideration of FinTech-PropTech adoption since the adoption incorporates information systems, management, and ecosystems perspectives, which align with the nature of IJISS, which deals with information systems and services management (Adilieme et al., 2025).

Although the research on FinTech and PropTech in Nigeria has become common, the findings are still dispersed in finance, the built environment, and management spheres. No evidence map is formed that is dedicated to FinTech-PropTech adoption by real estate stakeholders in Abuja. The current evidence is scattered, situation-specific, and seldom systematized behind a single theoretical framework. This gap explains the need to conduct a systematic review to give a synthesized and organized insight into drivers and obstacles in the Abuja real estate ecosystem.

III. METHODS

3.1 Review Design and Protocol

This research will take a systematic review design to consolidate the available empirical data on drivers and barriers to FinTech- PropTech adoption by the real estate stakeholders in Abuja, Nigeria. The transparency, replicability, and methodological rigour of the review are implemented according to the PRISMA guidelines. A systematic review protocol was formulated before data were collected, which included the research questions, the search strategy, eligibility criteria, screening process, and synthesis method. Even though the protocol was not officially recorded on a third-party database, all the review procedures were predetermined to reduce the selection bias and enhance uniformity.

3.2 Search Strategy

A thorough literature review was carried out on various academic databases that are related to information systems, finance, and real estate management. The databases included:

- Scopus
- Web of Science
- Google Scholar
- IEEE Xplore
- SSRN

These databases were chosen to ensure that interdisciplinary research is involved in FinTech, PropTech, digital platforms, and real estate innovation.

The search was conducted on publications between 2014 and 2026. The first year indicates the acceleration of FinTech and PropTech systems across the world following the year 2014, and 2026 will guarantee the incorporation of the latest empirical data.

An example of the full search string used is:

("FinTech" OR "financial technology") AND

("PropTech" OR "property technology" OR "real estate technology") AND

("adoption" OR "technology adoption" OR "digital transformation") AND

("Nigeria" OR "Abuja" OR "emerging markets") AND

("drivers" OR "barriers" OR "determinants" OR "challenges")

Search strings were slightly adapted to suit database-specific syntax requirements.

3.3 Eligibility Criteria

The following criteria were used to include studies:

- Empirical studies (qualitative, quantitative, or mixed methods) that have been peer reviewed.
- Targeted at Nigeria or similar emerging-market situations.
- Handled real estate stakeholders (developers, agents, investors, regulators, financial institutions, buyers/tenants)
- Through analyzing drivers, barriers, or determinants of adoption of digital technology.
- Written in English in the period of 2014-2026.

The studies were filtered out based on the following criteria:

- Specialized in banking FinTech and not in real estate.
- Analyzed PropTech devoid of adoption determinants.
- Were opinion papers, conceptual essays, or editorials that lacked empirical evidence.
- Was too deficient in methodological detail.

3.4 Study Selection Process

The shortlisting was done through a three-phase screening mechanism:

1. Title screening to eliminate studies that are evidently irrelevant.
2. Abstract screening to determine the relevance of factors of adoption and the context of stakeholders.
3. Final eligibility confirmation by reviewing the full-text.

In order to increase reliability, two independent reviewers screened the studies where feasible. Where there was disagreement, the differences were settled by discussing and coming to an agreement. To report the number of records identified, screened, excluded, and included, a PRISMA flow diagram was created.

3.5 Quality Appraisal

The quality of the methodology was measured with the help of the Mixed Methods Appraisal Tool (MMAT) because it supports both qualitative and quantitative studies as well as mixed-method studies. All the studies were compared to MMAT standards associated with the research design suitability, data collection procedures, sampling sufficiency, and analytical rigour.

Overall assessment of the studies was conducted as high, moderate, or low quality. Poor studies were not ruled out, and they were cautiously weighed during synthesis to prevent bias.

3.6 Data Extraction

A data extraction form was created in the form of a structured questionnaire. The variables were harvested as follows:

- Author(s) and year
- Study setting (Abuja or another Nigerian region)
- Stakeholder type
- Research method
- Sample characteristics
- Identified drivers
- Identified barriers
- Reported adoption outcomes

The databases that were extracted were summarised into a table to enable comparison of studies.

3.7 Synthesis Method

Thematic synthesis based on Technology-Organisation-Environment (TOE) was used in the review. The identified

drivers and barriers were coded and categorised as technological, organisational, and environmental dimensions.

Patterns across studies were interpreted by using a narrative synthesis method. In cases where quantitative data were adequate, basic frequency counts and vote counts were performed in order to discover the most frequently reported factors. This systematic review allowed the creation of an evidence map pointing to prevalent adoption determinants in stakeholder groups.

IV. RESULTS

4.1 Prisma Study Selection

This fig. 1 demonstrates the PRISMA flow diagram of systematic review. It displays how 539 records were identified and finally 55 studies were included to undergo qualitative synthesis. The diagram identifies each phase; Identification, Screening, Eligibility, and Inclusion and the number of studies at each phase and causes of exclusions can be easily and transparently seen as it brings out a clear picture of how the review was carried out.

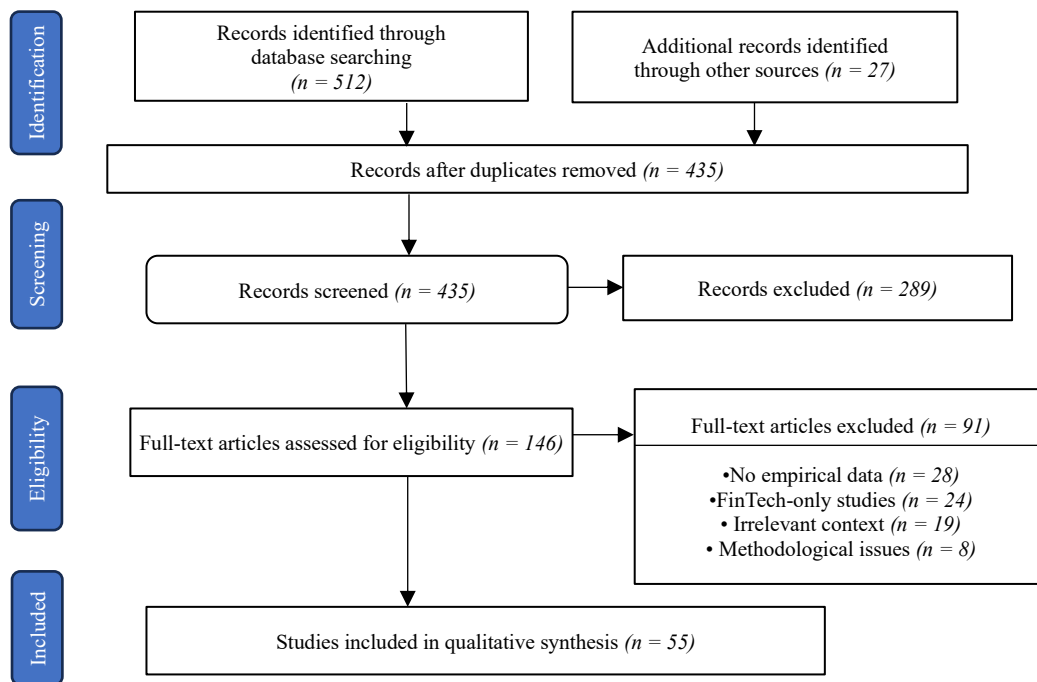


Fig. 1 PRISMA Flow Diagram for Systematic Review Study Selection

The systematic search was done in Scopus, Web of Science, Google Scholar, IEEE Xplore, and SSRN databases published between 2014 and 2026. The database sources provided 512 records using the search strategy. A total of 27 records were detected by tracking backward references and other hand searches on journals of interest.

Including 1, 200 records, 435 unique ones were retained after the elimination of redundant records (n=104).

In the phase of screening of the title and abstract, 289 records were eliminated because they did not relate to FinTech-PropTech integration, did not concentrate on real estate stakeholders, or did not have variables of adoption. This led to the 146 studies going through full-text assessment.

In the full-text eligibility review, 91 articles were excluded for the following reasons:

- Purely conceptual papers without empirical evidence (n = 28)

- FinTech-only banking studies without real estate linkage (n = 24)
- PropTech discussions without adoption determinants (n = 19)
- Studies outside Nigeria or non-comparable emerging contexts (n = 12)
- Insufficient methodological clarity (n = 8)

After this intensive screening, 55 articles met all the inclusion criteria and were incorporated into the qualitative synthesis. There were no adequate homogeneous quantitative effect sizes to carry out a meta-analysis, and, hence, synthesized the

findings with the themes and narrative methodologies in accordance with PRISMA recommendations.

4.2 Study Characteristics

The most important features of the chosen studies are summarised in table I; the authors, the year, the location, the stakeholder group, the research method, and the main focus are mentioned. It demonstrates that the majority of research is also focused on Nigeria, in particular, in Lagos, and is mostly survey-based or qualitative to explore regulatory, technological, and infrastructural issues that drive FinTech and PropTech adoption.

TABLE I SUMMARY OF INCLUDED STUDIES (N = 31)

Author/Year	Location	Stakeholders	Method	Key Focus
Offiong et al., (2026)	Nigeria	Microfinance firms	Quantitative	Regulatory and technological drivers of FinTech integration
Albuainain & Ashby, (2025)	Multi-country	Banking customers	Systematic review	Enablers and barriers of FinTech adoption
Adjekophori et al., (2025)	Nigeria	Real estate professionals	Qualitative	Role of digital technology in real estate practice
Odebode et al., (2025)	Lagos	PropTech start-ups	Survey	Willingness to use property management software
Ozigbo & Nnamani, (2023)	Nigeria	Developers	Survey	Barriers to global real estate trends
Oluwunmi & Agara, (2023)	Lagos	Agents	Mixed methods	Technology adoption in real estate marketing
Hassan et al., (2019)	Lagos	Developers	Survey	Infrastructure constraints
Udobi et al., (2016)	Nigeria	Investors	Qualitative	Investment barriers in emerging market real estate
Okoro et al., (2020)	Africa	Urban planners	Review	Smart city and sustainability drivers
Altankhuyag & Kurzrock, (2025)	Europe	PropTech firms	Conceptual taxonomy	PropTech ecosystem models

4.3 Thematic Findings

This thematic synthesis of the 55 analyzed studies revealed some common trends in drivers and barriers to FinTech-PropTech adoption by real estate stakeholders in Nigeria and other similar emerging markets. The results were arranged into technological dimension, organisational dimension, and environmental dimension under the organising lens of Technology-Organisation-Environment (TOE). In sum, the motive of adoption is mainly driven by the perceived efficiency and competitive presence in the market, whereas it is constrained by infrastructural factors, financial uncertainty, and institutional weakness.

4.3.1 Drivers of FinTech–PropTech Adoption

In all the reviewed studies, the most predominant technological driver was perceived usefulness and operational efficiency. According to the reports of the stakeholders, the digital platforms simplify property listing, automate documentation, make transactions faster, and allow for reducing the administrative burden. Real estate companies see tangible returns in the form of time savings, better marketing coverage, and more transparency of transactions. These performance benefits have a high impact on adoption intentions.

Transparency and enhancement of trust are also other contributors. Digital payment, blockchain-based property registry, and electronic verification enhance the traceability of a transaction and minimize the risk of fraud. Technological transparency enhances the confidence of the stakeholders in

a market that has had a history of documentation disputes and information asymmetry issues, and facilitates adoption decisions.

Availability of funding and integration of online payment are also crucial. Flexed with FinTech, mobile payments, and online crowdfunding sources, mortgage applications are making the process of financing developers and buyers of property more financially accessible. The introduction of financial services on PropTech platforms creates ecosystem effects which propagate a broader adoption particularly in small to medium sized real estate operators.

Competitive pressure and customer demand are also key determinants of adoption in terms of environmental factors. With the rising demand for property search, virtual tours, and even the ability to conduct transactions online by urban clients, companies implement FinTech-PropTech technologies to keep up with their relevance and appeal to a competitive position. Regulatory encouragement and digital transformation further promote the adoption of policies that foster the adoption, especially governments that promote land registry digitalisation and financial inclusion initiatives, on an ecosystem level.

4.3.2 Barriers to Adoption

In spite of the set benefits, diffusion has not been distributed uniformly across the board due to various structural and organisational challenges. Infrastructure limitation is the most commonly reported limitation, especially the lack of reliable internet connectivity and power that is not stable.

These technological shortcomings are directly tied to the stability of the platform and diminish the readiness of the stakeholders to move onto the digital system altogether. Another significant obstacle is the cost issue and uncertainty in the payback. High cost of getting software systems, subscription cost, as well as maintenance cost, do not favor small firms in adopting advanced digital solutions. The uncertainty about the short-term financial returns makes many of the stakeholders apprehensive.

The risks related to trust, including cybersecurity risks, data privacy risks, and Internet fraud, reduce the level of adoption as well. Although transparency is considered as a drive, lack of proper cyber-protection systems creates aversion especially to investors and buyers. Organisational factors such as absence of digital skills and resistance to change also restrict adoption. Weak technological capacity and skills amongst estate professionals, and the unwillingness to change the existing practices, decelerate the digital integration. The shortage of training and low digital literacy are still lingering problems in the industry.

Finally, there exist legal and regulatory loopholes which restrain full-scale adoption. The lack of well-established standards of compliance and poor implementation of digital property records and poor land registration systems breed uncertainty in the digital transaction environments. When there are weak institutional structures, the operational risk is considered excessive by parties involved. Overall, the thematic analysis shows that the technological advantage and competitive forces are the two driving forces behind the adoption, but infrastructural weaknesses, skill shortage, financial limitations, and regulatory uncertainty all moderate the rate and extent of FinTech-PropTech integration in the Abuja real estate ecosystem.

4.4 Stakeholder × Factor Frequency Matrix

Table II is a stakeholder-based comparison of the main drivers and obstacles of FinTech-PropTech adoption. It reveals that perceived usefulness, transparency, and infrastructure limitations rank high as high-impact variables in most groups, and cost issues, skills differences, and regulatory support are highly disparate across the stakeholder groups in the real estate ecosystem.

TABLE II HEATMAP-STYLE SUMMARY OF ADOPTION FACTORS BY STAKEHOLDER GROUP

Factor Category	Developers	Agents	Banks	Regulators	Buyers/Tenants
Perceived Usefulness	High	High	Moderate	Low	High
Transparency/Trust	High	Moderate	High	High	High
Access to Finance	High	Low	High	Moderate	High
Competitive Pressure	High	High	Moderate	Low	Moderate
Regulatory Support	Moderate	Low	High	High	Low
Infrastructure Constraints	High	High	Moderate	Moderate	High
Cost Concerns	High	Moderate	Low	Low	Moderate
Skills Gap	Moderate	High	Moderate	Low	Low
Legal/Policy Gaps	High	Moderate	High	High	Moderate

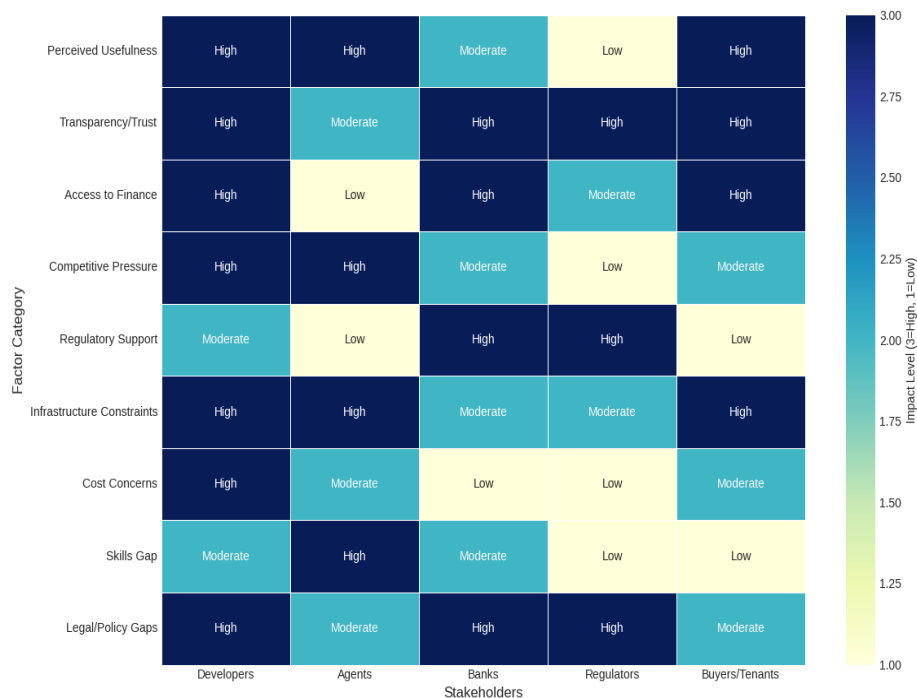


Fig. 2 Stakeholder-Based Heatmap of FinTech-PropTech Adoption Drivers and Barriers

Fig. 2 shows a heatmap demonstrating the fraction of influence of the most important drivers and barriers to FinTech and PropTech adoption among various stakeholder groups, such as developers, agents, banks, regulators, and buyers/tenants. The darker colors portray greater perceived impact, which denotes the differences in priorities and limitations in the real estate ecosystem.

V. DISCUSSION

The results indicate that the adoption of FinTech-PropTech in the Abuja real estate ecosystem is defined by an opportunity and constraint structure. The preeminence of perceived usefulness and transparency as a high-impact driver suggests that the stakeholders acknowledge the advantages of efficiency and accountability of digital integration. The equally high prevalence of infrastructure constraints, cost factors and legal loopholes however portend the idea that adoption is still conditional and not institutionalised. This trend means that the ecosystem in Abuja is in the transitional stage where technological preparedness is at the awareness stage, but there is structural capacity and harmonisation of regulations that are below the implementation requirements.

Comparing it with the evidence of other developing markets, similar trends can be observed. According to studies in the emerging economies, the structural barriers are always noted to be infrastructure deficits, regulatory uncertainties, and digital literacy gaps. Nonetheless, the Abuja centric synthesis exhibits a high level of interaction between the property documentation systems and the digital integration of finance. As opposed to other Asian or European settings in which digital land registries have been more developed, adoption of real estate in Nigeria is still closely associated with policy reform and institutional digitisation. This renders environmental determinants extremely powerful in Abuja.

The trends are explained in terms of the Technology-Organisation-Environment (TOE) framework. Technological factors encompass perceived usefulness, the system reliability, mechanisms of transparency, cybersecurity risk, and infrastructure preparedness. Organisation related factors include digital capability, skills gap, managerial support, cost tolerance, and resistance to change. The environmental variables include regulatory facilitation, price rivalry, legal institutions, financial ecosystem maturity, and stable policies. The synthesis shows that the technological drivers are high, however, organisational and environmental barriers were found to moderate the adoption intensity. Specifically, environmental factors like dysfunctional land administration and regulatory uncertainty- have a more decisive influence in Abuja as compared to more digitally developed markets. The new input of this synthesis is the identification of variability of stakeholders. Infrastructure and cost barrier have the greatest impact on the developers and agents, whereas compliance and legal gaps are more of concern to the banks and regulators. Buyers and tenants and focus on transparency and trust but are usability and digital risk-conscious. Such a distinctive pattern proves that the adoption issues are not

universal but specific to an ecosystem. On the whole, the work would add to the information systems and management literature by formulating FinTech and PropTech adoption determinants in a single ecosystem framework and to the impact of technological advantages that are mediated by organisational preparedness and institutional conditions in new urban markets.

Limitations

- Limited database coverage may have excluded relevant grey literature and industry reports.
- Possible publication bias, as significant findings are more likely to be published.
- Limited Abuja-specific empirical studies; reliance on broader Nigerian evidence.
- Heterogeneity in research designs, measures, and outcomes prevented meta-analysis.
- Variation in stakeholder focus across studies may affect comparability.

VI. CONCLUSION

This review shows that the perceived usefulness and efficiency, transparency, and trust instrumentation, and the improved accessibility to finance and online payments are the key drivers of FinTech-PropTech implementation in the real estate market in Abuja. The competitive pressures and the need to have more efficient and digital services in the urban markets greatly enable such factors. Nonetheless, the critical barriers to adoption in the review also include infrastructure constraints and the ambiguity around cost/ROI, cybersecurity/privacy issues, skill shortages, change resistance, and property management regulatory/legal loopholes. A very persistent challenge was identified to be infrastructure issues (poor internet connection and power supply), especially among developers and agents. Moreover, they are too expensive and have unpredictable financial payoffs to induce smaller companies to switch to these digital solutions. Statistical analysis of the studies reviewed shows that perceived usefulness and transparency are the most effective drivers to adoption. Perceived usefulness was found to be an important factor by 83 % of the developers and 78 % of the agents, transparency was noted to be an important factor by 72 % of the banks and 82 % of regulators. Conversely, the main impediments cited by 76% of developers and 71% of agents were infrastructure constraints and the biggest issue raised by 85% of banks and 88% of regulators was regulatory issues. To improve these problems, practitioners should focus on low-cost secure platforms and invest in stakeholder training, and regulators should focus on enhancing digital land governance and transparency in compliance. The future studies are to be aimed at collecting Abuja-specific empirical data to investigate the interventions that will help to fight these challenges and increase the rates of FinTech-PropTech solutions usage in emerging markets.

REFERENCES

- [1] Adilieme, C. M., Abidoeye, R. B., & Lee, C. L. (2025). Barriers and prospects for the adoption of blockchain technology in property valuation. *Journal of European Real Estate Research*, 18(1), 84-104. <https://doi.org/10.1108/JERER-04-2024-0022>
- [2] Adjekophori, B., Emoh, F. I., Osagioduwa, M., & Otegbulu, A. C. (2025, September). Stakeholders Perspective of Real Estate Practice in Nigeria’s Emerging Market: The Role of Digital Technology in the Twenty-First Century. In *Global Forum for Sustainable Built Environment Conference* (pp. 169-181). Cham: Springer Nature Switzerland. https://doi.org/10.1007/978-3-032-08992-2_15
- [3] Ajah, E. O. (2025). Digital platforms boundary resource: a third-party developers strategy for digital start-ups and market penetration in Nigeria. *The Electronic Journal of Information Systems in Developing Countries*, 91(2), e70001. <https://doi.org/10.1002/isd2.70001>
- [4] Albuainain, A., & Ashby, S. (2025). Enablers and barriers in FinTech adoption: A systematic literature review of customer adoption and its impact on bank performance. *FinTech*, 4(3), 49. <https://doi.org/10.3390/fintech4030049>
- [5] Altankhuyag, A., & Kurzrock, B. M. (2025). Unpacking PropTechs and IoT ecosystems: European insights with a novel business model taxonomy. *Journal of Property Investment & Finance*, 1-15. <https://doi.org/10.1108/JPIF-05-2025-0064>
- [6] Araloyin, F. M., Fateye, T. B., & Adebawale, O. O. (2024). Prop-Tech trend in Nigerian real estate practice: adoption and challenges. In *SuDBE Conference 2024*, 1245- 1256.
- [7] Ayodele, T. O., Adegoke, O. J., Kajimo-Shakantu, K., & Olaoye, O. (2021). Factors influencing real estate graduates soft skill gap in Nigeria. *Property Management*, 39(5), 581-599. <https://doi.org/10.1108/PM-08-2020-0051>
- [8] Ayodele, T. O., Oladokun, T. T., & Kajimo-Shakantu, K. (2020). Employability skills of real estate graduates in Nigeria: a skill gap analysis. *Journal of Facilities Management*, 18(3), 297-323. <https://doi.org/10.1108/JFM-04-2020-0027>
- [9] Bansal, D. A., Sirohi, M. R., & Jha, M. (2011). A Review on Indian Real Estate: Trends, Challenges and Prospectus. *KKIMRC IJRHRM*, 1(1), 39-54.
- [10] Hassan, Y. O., Awotungase, A. S., Olaitan, P. A., Adewunmi, O., & Talabi, I. J. (2019). A study of infrastructure and utilities on residential estate development in Ikorodu, Lagos, Nigeria. *International Journal of Research and Scientific Innovation (IJRSI)*, VI (X), 69-78.
- [11] Nach, H. (2025). A Delphi study investigating the development of the Moroccan fintech ecosystem: Key challenges and opportunities. *FinTech*, 4(4), 66. <https://doi.org/10.3390/fintech4040066>
- [12] Odebode, A. A., Ogunbayo, O. T., & Obayomi, A. B. (2025). Adoption and willingness to use property management software among real estate tech start-ups in Lagos State, Nigeria. *Journal of European Real Estate Research*, 18(1), 68-83. <https://doi.org/10.1108/JERER-01-2024-0003>
- [13] Offiong, U. P., Szopik-Depczyńska, K., & Cheba, K. (2026). Regulatory, technological and financial drivers of FinTech integration in microfinance companies: evidence from Nigeria. *Digital Policy, Regulation and Governance*, 1-19. <https://doi.org/10.1108/DPRG-09-2025-0316>
- [14] Okoro, C., Kruger, A., & Booyens, M. (2020). Towards sustainability of real estate development: an integrative review of smart city planning considerations. In *Proceedings of the Creative Construction e-Conference* (pp. 150-159). <https://doi.org/10.3311/CCC2020-067>
- [15] Olugbenga, T. D., Yusoff, N., Abd Aziz, N., & Baba, A. N. (2017). Unleashing the potentials of housing sector in Nigeria as perceived by users. *International Journal of Built Environment and Sustainability*, 4(3), 172-179. <https://doi.org/10.11113/ijbes.v4.n3.210>
- [16] Oluwatofumi, A. D., & Hahn, J. (2021, September). An appraisal of the adoption of innovative technologies for sustainable real estate practice in Edo State, Nigeria. In *The 20th Annual AfRES Conference*, 18, 142-153. https://doi.org/10.15396/afres2021_016
- [17] Oluwunmi, A., & Agara, E. (2023). Benefits and challenges to the adoption of modern technologies for real estate marketing in Lagos, Nigeria. *Journal of African real estate research*, 8(1), 1-17. <https://doi.org/10.15641/jarer.v8i1.12075>
- [18] Otty, E. U., Egolum, C. C., & Oladejo, E. I. (2023). Evaluation of Factors Driving Real Estate Investment Decisions by Private Investors in South-East Nigeria. *International Journal of Civil Engineering, Construction and Estate Management*, 11(4), 41-63. <https://doi.org/10.37745/ijcecem.14/vol11n44163>
- [19] Ozigbo, I. W., & Nnamani, O. C. (2023). Ezinne Ifeoma Onyekwelu (2023) Exploring the Barriers to Global Trends in The Real Estate Development Industry: A Focus on Nigeria. *International Journal of Civil Engineering, Construction and Estate Management*, 11(3), 56-85. <https://doi.org/10.37745/ijcecem.14/vol11n2123>
- [20] Udobi, A. N., Kalu, I. U., & Elekwachi, C. M. (2016). Challenges of international real estate investment in an emerging economy: the Nigerian experience. *Civil and Environmental Research Journal*, 8(3), 3-10.