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Navigating the Landscape of Hard-Brand and Soft-Brand Architectural Products: Archi-preneurial Opportunities in a Contemporary Nigerian Practice

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Abstract: ***The study navigated the landscape of hard-brand and soft-brand architectural products as avenues for entrepreneurial growth within contemporary Nigerian architectural practice. It sought to examine the current status and trends of product diversification by architects, identifying key challenges and opportunities associated with hard-brand (tangible items such as furniture and prefabricated components) and soft-brand (digital and service-based offerings like virtual reality visualisations) products. Secondary data from professional bodies, academic literature, and industry reports were analysed to elucidate the entrepreneurial mindset of Nigerian architects and the structural and regulatory factors influencing product commercialisation. Findings revealed a strong entrepreneurial inclination among practitioners, with a majority demonstrating keen interest in diversifying beyond traditional consultancy. However, significant barriers were identified, including limited business training, uneven technological adoption, infrastructural deficits, and regulatory complexities. The study established that these challenges constrained the scalability and sustainability of architectural product ventures in Nigeria. Nonetheless, supportive policy environments and growing digital infrastructure provided a favourable context for innovation adoption. The research concluded that architect-led entrepreneurial diversification into hard-brand and soft-brand products holds substantial potential for enriching architectural practice and contributing to national economic development. Recommendations emphasised curriculum reform, technology access expansion, regulatory streamlining, and ecosystem development to empower architects as innovative entrepreneurs. In all, the study advanced scholarly and practical understanding of how Nigerian architects can strategically harness product innovation and entrepreneurship in a transforming built environment.***

Keywords: Archi-preneurship, Architectural Productisation, Hard-Brand and Soft-Brand Architectural Products, Contemporary Nigerian Practice, Economic Resilience

1. Introduction

The architectural profession in Nigeria is undergoing significant transformation, driven by evolving market demands, technological advancements, and the growing entrepreneurial spirit among practitioners. Traditionally, architectural firms in Nigeria have primarily engaged in consultancy services, concentrating on building design, planning, and construction oversight (Ikoli, 2018; Adebisi and Adeoye, 2018). However, recent trends indicate a shift toward diversification, where architects explore entrepreneurial (archi-preneurial) opportunities by developing and commercialising architectural products (Ayo-Odifiri, 2023; Olaide et al, 2023). These products broadly fall into two categories: Hard-Brand-Products, which are tangible items like bespoke furniture and prefabricated building components, and Soft-Brand-Products, encompassing digital services such as virtual reality visualisations and design consultancy packages.

Despite increased interest, Nigerian architectural practices face multiple challenges in capitalising on the archi-preneurial potential of hard-brand and soft-brand products. The sector suffers from skill shortages in business development, limited technological adoption across firms, constrained financial resources, and cumbersome regulatory frameworks (Idris et al, 2024). Consequently, only a small fraction of firms sustains diversified product offerings, leading to an underutilisation of architectural expertise in product innovation and commercialisation. There is a critical need to understand the landscape of these product categories, identify enabling factors and bottlenecks, and develop strategic pathways to support entrepreneurial growth within Nigerian architectural practice.

Aims and Objectives

This study aims to navigate the landscape of hard-brand and soft-brand architectural products within contemporary Nigerian practice to uncover entrepreneurial opportunities and challenges, guiding diversified and sustainable architectural entrepreneurship. Specifically, it seeks to:

- Analyse the current status and trends of hard-brand and soft-brand product development in Nigerian architecture
- Identify key barriers and facilitators influencing archi-preneurial diversification in architectural practice
- Examine the impact of technological adoption and regulatory frameworks on product innovation and market expansion
- Propose strategic recommendations for enhancing architectural entrepreneurship through integrated product portfolios

2. Literature Review

This chapter presents a comprehensive review of existing literature relevant to the theme of architectural productisation and entrepreneurship, particularly within the context of contemporary Nigerian practice. The purpose of this review is to establish a robust theoretical and conceptual grounding by examining key themes, concepts, and terminologies that underpin architectural entrepreneurship, with an emphasis on the emerging distinction between hard-brand and soft-brand architectural products. The scope encompasses scholarly discussions on entrepreneurial orientation in architecture, the process and implications of productisation, and the unique challenges and opportunities faced by Nigerian architects navigating these evolving domains.

Central to this review is the exploration of architectural productisation, which refers to the transformation of architectural knowledge and designs into standardised, marketable products. In view of this process enabling architects to extend their role beyond traditional consultancy towards diversified entrepreneurial activities, the literature review will further delves into entrepreneurship in architecture (often termed "archi-preneurship"), which typically embodies the innovative and strategic efforts by architects to create new business models, products, and services in response to shifting market conditions and technological advancements, notably within Nigeria's socio-economic landscape.

2.1 Conceptual Framework

This conceptual framework explores the intersection of architectural products branded as either hard-brand or soft-brand and their entrepreneurial potential within the Nigerian architectural practice landscape. The conceptual framework delineates core constructs, key relationships, and the theoretical underpinnings guiding the research inquiry.

Core Concepts

- *Hard-Brand Architectural Products:* These refer to tangible, manufactured building components and architectural products that are distinctly branded for quality, performance, and consistency. Typical examples include modular components, prefabricated panels, custom furniture's, sub-base finishing materials, finishing materials and standardised architectural fittings.
- *Soft-Brand Architectural Products:* Soft-brands encompass the intangible, experiential, and customised aspects of architectural work that revolve around design identity, creative expression, client relationships, and bespoke solutions.
- *Archi-preneurial Opportunities:* Entrepreneurship in architecture involves recognising, creating, and exploiting opportunities to develop new products, services, or business models that generate economic and social value.
- *Contemporary Nigerian Architectural Practice:* This refers to the current professional environment in which Nigerian architects operate, shaped by socio-economic factors, infrastructural demands, regulatory frameworks, and evolving client expectations.

Archi-preneurial Trends in a Contemporary Nigerian Practice

Nigerian architectural practices are increasingly exploring ways of diversifying into architectural productisation, propelled by digital technology like Building Information modelling (BIM) and Virtual Reality (VR) in course of meeting clients demand for customised design solutions, and government infrastructure initiatives (Akande et al, 2023; AfridesignGroupLTD, 2025; Adewumi, 2025; Mba et al, 2025). Globally, the adoption of hard-brand products such as modular building components and customised furnishings has surged, paralleling the rise of soft-brand offerings like virtual walkthroughs (Oluwunmi & Coker, 2024; Ismail et al, 2024; Jorshari et al, 2025; Vosloo, 2022; Richardson, 2011).

The integration of Building Information Modelling (BIM) and digital fabrication enhances the

feasibility of productisation, allowing for rapid prototyping and client engagement.

Challenges

Nigerian architects face challenges as they seek to diversify into architectural productisation, such as limited access to manufacturing technology, inadequate business training, market fragmentation, and regulatory hurdles (Nnaemeka-Okeke et al, 2019; Mudashir, 2024). Additionally, the lack of awareness about branded architectural concepts and entrepreneurial mindset hampers product innovation.

Hard-brand product development requires substantial capital investment in prototyping and manufacturing, which is often constrained by limited firm resources. Meanwhile, soft-brand products necessitate skills in digital technologies which is absent from the typical architectural curricula in Nigeria (Iheanachor et al, 2021).

Opportunities

Despite challenges, the Nigerian market's growing urbanisation, demand for affordable housing, and government infrastructure investment present significant entrepreneurial prospects (Umaru, 2025). Hard-brand products such as modular building components and locally manufactured architectural fixtures could reduce costs and construction times while enhancing quality control.

Soft-brand products provide low-risk, scalable services targeting digitally savvy Nigerian clients seeking immersive design experiences. Localisation of both product types to reflect cultural aesthetics offers unique brand value in Nigerian and West African markets (Fatoki & Fatoki, 2020).

Implications to the Study

This conceptual framework situates the study within existing architectural entrepreneurial theory, adapting it to Nigeria's unique socio-economic landscape. The examination of hard- and soft-brand productisation intersects with architectural branding and innovation studies, offering a novel understanding of diversification strategies.

The integration of historical, definitional, trend, challenge, and opportunity dimensions lays a rigorous foundation for empirical investigation. It substantiates the study's aim to explore how Nigerian architects can strategically navigate and capitalise on these entrepreneurial opportunities.

2.2 Theoretical Framework

Typically, theoretical frameworks provide a foundational lens through which research problems are examined by linking key concepts to established theories. In the context of architectural entrepreneurship in Nigeria, particularly relating to the differentiation and utilisation of hard-brand and soft-brand architectural products, a multi-theoretical approach offers a comprehensive explanation of the dynamics driving entrepreneurial opportunities and challenges. This framework integrates theories from entrepreneurship, diffusion of innovation, and architectural business models to elucidate how Nigerian architects might diversify and commercialise their offerings effectively.

Entrepreneurial Orientation Theory

Entrepreneurial Orientation (EO) refers to the behaviour or mindset of an organisation or individual that reflects risk-taking, innovativeness, proactiveness, and competitive aggressiveness (Lumpkin & Dess, 1996). In architectural practice, EO is pivotal as it influences architects' willingness to diversify into new product areas such as hard-brand (physical products) and soft-brand (digital or service-based products) offerings. Nigerian architectural firms with a strong EO are likely to innovate continuously by identifying and exploiting market gaps through product development, thus reshaping traditional consultancy models.

Diffusion of Innovation Theory

Sahin (2006), gave a detailed account of Everett Rogers "Diffusion of Innovation Theory" by explaining how, why, and at what rate new ideas and technologies spread within cultures. This theory is useful in understanding how architectural innovation (through hard-brand and soft-brand products) is adopted in Nigeria's architectural sector. The innovation adoption stages (knowledge, persuasion, decision, implementation, and confirmation) mirror the entrepreneurial journey of architects engaging new product strategies. The Nigerian context, characterised by infrastructural and socio-economic variability, influences the diffusion speed and scale of these innovations.

Business Model Theory

In the Business Model Canvas (BMC), Alexander Osterwalder & Yves Pigneur provided a framework for desining, visualizing and innovating business models with key components including (Customer Segment, Value Propositions, Channels, Customer Relationships, Revenue Streams, Key Resources, Key Activities, Key Partnerships and Cost Structure) as nine building block for businesses (Murray & Scuotto, 2015). Architectural enterprises traditionally centred on customised consultancy have the potential to reconceptualise their business models through productisation of hard-brand and soft-brand architectural products. This

transformation includes integrating new revenue streams such as manufacturing customised furniture or offering digital visualisation services, enabled by technology and client demand changes. The smart Archi-preneurship model emphasises strategic resource management and stakeholder collaboration to capitalise on entrepreneurial opportunities in Nigerian architecture.

Integration of Theories in the Research Context

This study positions archi-preneurial orientation as the catalyst for innovation in architectural productisation, moderated by the societal and technological factors explained by diffusion of innovation. The business model theory offers a practical framework for translating innovation into sustainable practice models, particularly in the Nigerian context where market and infrastructural challenges preside. Together, these theories provide a subtle understanding of how Nigerian architects can successfully navigate the transition from consultancy to diversified architectural enterprises by leveraging hard-brand and soft-brand product development.

2.3 Empirical Framework

An empirical framework structures the study around measurable, factual evidence related to archi-preneurship in Nigeria, with a focus on hard-brand and soft-brand product development. This framework investigates existing data, market realities, prevailing gaps, and socio-economic factors, outlining key empirical variables and their implications for the architectural profession.

Facts and Figures

1. As of 2021, the Architects Registration Council of Nigeria (ARCON), has registered nearly 5,000 architects with diverse practice scales, reflecting modest professional growth amid economic fluctuations (Agwaibor, 2021).
2. Surveys from architectural students and early-career architects indicate a strong entrepreneurial mindset: approximately 82% express interest in diversifying services beyond traditional consultancy into product development, including furniture design and digital visualisation services (Mudashir, 2024).
3. The Nigerian construction industry contributed about 4.0% to the national GDP in Q1 of 2024, with increasing adoption of prefabricated components and digitised design tools (Ogundeji, 2024).
4. Internet penetration in Nigeria reached 68% in 2024, facilitating digital product dissemination, marketing, and client engagement critical for soft-brand architectural products (Adepetun, 2024).

Loopholes and Challenges

1. Despite archi-preneurial interest, only a few Nigerian architects have formal business development training, indicating a significant skills gap in commercialising architectural products (Ebong et al, 2019).
2. Limited access to finance and market networks constrain architects' ability to scale hard-brand product manufacturing. Many rely on artisanal or cottage industry partnerships lacking industrial efficiency or quality controls (Uwaegbulam, 2025).
3. The adoption rate of advanced digital design technologies such as VR and BIM is uneven, with large firms benefiting disproportionately compared to smaller firms and sole practitioners, creating inequities in soft-brand product opportunities (Elamah & Eromonsele, 2025).
4. Regulatory hurdles and slow bureaucratic processes can delay product patenting, market certification, and firm registration, further complicating entrepreneurial efforts in architectural productisation.

Empirical Implications to the Study

This study considered the following empirical variables to offer realistic pathways and policy recommendations:

1. *Entrepreneurial Mindset and Skills:* the level of business acumen among architects impacts their readiness to develop and market architectural products.
2. *Market Access and Infrastructure:* physical and digital infrastructures influence the feasibility of scaling hard-brand products and delivering soft-brand services.
3. *Technological Adoption:* disparity in technology access shapes product innovation and competitiveness.
4. *Policy and Regulatory Environment:* Government support and procedural efficiency affect entrepreneurial outcomes.

Conclusion

Grounded in empirical data, this framework highlights critical factors shaping Nigerian architects' pursuit of entrepreneurial diversification via hard-brand and soft-brand architectural products. Addressing identified loopholes (such as skills deficiencies, market constraints, technological gaps, and regulatory challenges) is essential for

harnessing the full potential of archi-preneurship in Nigeria.

3. Research Methodology

Research Design

This study adopts a descriptive research design leveraging secondary data to explore archi-preneurial opportunities within hard-brand and soft-brand architectural products in Nigeria. The use of secondary data allows comprehensive analysis of existing knowledge, statistical facts, and documented experiences, providing a broad perspective on market trends, entrepreneurial behaviours, and challenges without the logistical constraints of primary data collection.

Data Sources

Secondary data sources ranges from credible government reports, academic publications, professional regulatory bodies such as the Architects Registration Council of Nigeria (ARCON), the Nigerian Institute of Architects (NIA), industry analyses, and reputable online databases (e.g., Google Scholar, ScienceDirect, and ResearchGate). Key sources include architectural entrepreneurship studies, Nigerian construction sector reports, technology adoption surveys, and digital infrastructure statistics relevant to architectural product development and marketing.

Data Collection and Analysis

Relevant quantitative data ranging from registered firms, technology adoption rates, and entrepreneurial interest among architecture students were systematically extracted and collated. Qualitative insights on regulatory barriers, skill gaps, and market opportunities were synthesised from existing literature. The collected data were analysed through content analysis and thematic synthesis to identify patterns, strengths, gaps, and implications for archi-preneurship in Nigeria.

Implications of Using Secondary Data

The use of secondary data ensures cost and time efficiency and access to a wide array of established research findings essential for conceptualising archi-preneurial trends and opportunities in Nigeria's architectural sector. However, limitations such as data currency, scope restrictions, and secondary reliance on others' data accuracy were acknowledged. The study mitigates these by triangulating multiple sources and focusing on recent, peer-reviewed, or official records to enhance reliability and validity.

Ethical Considerations

As the study exclusively uses publicly available secondary data, no direct human or organisational participation occured, thereby mitigating ethical concerns related to confidentiality or consent.

This methodology facilitated an informed, evidence-based exploration of diversified entrepreneurial opportunities for architectural practice in Nigeria, providing a valuable foundation for policy recommendations and future empirical research.

4. Findings and Discussion

The study on "Navigating the Landscape of Hard-Brand and Soft-Brand Architectural Products: Archi-Preneurial Opportunities in a Contemporary Nigerian Practice" reveals a complex but promising entrepreneurial landscape within the Nigerian architectural sector. Findings indicate that Nigerian architects increasingly recognise the importance of diversifying their practices through both hard-brand and soft-brand architectural products to supplement traditional consultancy services and enhance revenue streams.

Entrepreneurial Interest and Orientation

Empirical evidence indicates a strong archi-preneurial inclination among Nigerian architects and architecture students. Recent surveys show that approximately 82% of architecture students and early-career professionals explicitly express interest in diversifying into entrepreneurial ventures, including both hard-brand products (such as custom furniture and prefabricated components) and soft-brand products (such as virtual reality visualisations and design consultancy services) (Mudashir, 2024). This demonstrates a proactive mindset essential for fostering product innovation beyond traditional consultancy.

Market and Industry Insights

As of mid-2021, the Architects Registration Council of Nigeria (ARCON) recorded nearly 5,000 registered architects (Agwaibor, 2021), ranging from sole proprietorships to larger consultancies. However, only a few of these firms have expressed the ability to diversify into product manufacturing or digital service delivery. The construction sector remains a significant contributor to Nigeria's GDP (4.0% in 2024), with incremental adoption of prefabricated and digitised building solutions (Ogundeji, 2024).

Technology Adoption

The penetration of digital tools such as Building Information Modelling (BIM) and Virtual Reality (VR) in Nigerian architectural firms varies widely. Large firms typically lead in adoption, while smaller firms exhibit a digital divide due to financial and training

constraints. Internet penetration reaching 68% nationally provides a growing platform for marketing and dissemination of soft-brand products but disparities in access affect uniform adoption (Adepetun, 2024).

Challenges and Loopholes

The study reveals significant barriers including limited archi-preneurship training, regulatory procedural delays, constrained finance for production scaling, and fragmented manufacturing capacity for hard-brand products. Many architects rely heavily on artisanal workshops for product manufacturing, affecting quality control and market competitiveness (Ebong et al, 2019; Uwaegbulam, 2025; Elamah & Eromonsele, 2025).

Table 1: Hard-Brand Architectural Products that Architects can Diversify Into

Product	Definition	Starting Steps
Custom Furniture	Bespoke chairs, tables, shelving units designed to complement architectural spaces	Consider modular, adaptable designs for diverse client needs. Collaborate with skilled local artisans and use sustainable materials.
Prefabricated Building Components	Factory-made structural or decorative elements like wall panels or roof trusses.	Consider partnering with local manufacturers, Focus on quality control and ease of assembly.
Custom Fixtures & Fittings	Door handles, light fixtures, bathroom fittings personalised with architectural design details.	Consider designs in local cultural motifs, ergonomics and aesthetics. Ensure compliance with safety.
Acoustic and Thermal Ceiling Panels	Innovative panels that improve indoor comfort through sound absorption and heat mitigation.	Invest in R&D with academic partners. Test materials for performance in tropical climates.
Custom Landscaping Kits	Packaged sets of hardscape elements like paving stones, planters, and garden furniture.	Develop modular kits tailored to common Nigerian outdoor environments.
Custom-built Sleeping Pods or Booths	Modular, transportable sleeping or work units designed for temporary or permanent use.	Consider designs for rapid assembly and disassembly. Use of lightweight, durable materials. Market to SMEs and event organisers.

Source: Author

On the soft-brand side, digital architectural products such as 3D visualisations, virtual reality walkthroughs, Building Information Modelling (BIM) services, and online design consultations are emerging as fertile grounds for innovation and entrepreneurship. Yet, uneven adoption of advanced digital tools disproportionately advantages larger firms and urban centres, creating a digital divide that limits smaller firms and sole practitioners from fully leveraging soft-brand opportunities (Ayo-Odifiri, 2023; ARCON, 2025).

Table 2: Soft-Brand Architectural Products that Architects can Diversify Into

Product	Definition	Starting Steps
3D Architectural Visulisations	Digital, photorealistic renderings for architectural designs and presentations.	Invest in high-quality rendering software. Consider interactive options.
Virtual Reality (VR) Walkthroughs	Immersive digital tool enabling clients to explore architectural	Develop VR packages using accessible platforms. Target real estate

	spaces virtually.	developers and clients.
Building Information Modelling (BIM) Services	3D digital tool incorporating detailed geometry, spatial relationships, and data.	Invest in customisable BIM software targeted at project management for engineers and contractors.
Parametric Design Templates	Algorithm-based design models enabling customised but standardised architectural elements.	Develop reusable template libraries with local relevance. License templates to fellow architects or builders.

Source: Author

In all, the research highlights the reciprocal relationship between entrepreneurial mindset, technological adoption, and market readiness as key drivers for successful architectural product diversification in Nigeria. Embracing both hard-brand and soft-brand productisation can position Nigerian architects as innovative leaders in the evolving African built environment sector.

5. Conclusion and Recommendations

Conclusion

This study has navigated the evolving landscape of hard-brand and soft-brand architectural products within contemporary Nigerian practice, elucidating significant entrepreneurial opportunities amid a changing professional and economic environment. The findings highlight a robust entrepreneurial mindset among Nigerian architects, especially young professionals keen to diversify beyond traditional consultancy into product development encompassing tangible hardware and digital services. This entrepreneurial drive aligns with Nigeria's broader economic diversification goals and the increasing demand for innovative, sustainable built environment solutions.

However, critical challenges remain, including a pronounced skills gap in business acumen and entrepreneurial training, uneven access to advanced technologies, infrastructural deficiencies, and complex regulatory bottlenecks. These factors constrain the scalability and competitiveness of both hard-brand and soft-brand architectural products in Nigeria. Addressing these gaps is essential to unlocking the sector's full potential and fostering resilient, innovative architectural entrepreneurship that contributes meaningfully to national development.

The study underscores the need for integrated strategies that combine entrepreneurial education reforms, technology democratization, supportive infrastructure development, and streamlined regulatory frameworks. Collectively, such measures will enable Nigerian architects to harness emergent market opportunities, improve professional viability, and position themselves as leaders in architectural innovation within Africa and beyond.

Recommendations

1. *Curriculum Reform and Capacity Building:* Architectural education institutions should embed entrepreneurship, business management, and intellectual property modules into the curriculum. Continuous professional development programmes should prioritise entrepreneurial skill acquisition, innovation management, and digital technology training.
2. *Technology Access and Infrastructure Development:* Government and private sector stakeholders should collaborate to improve access to digital tools such as Building Information Modelling (BIM), virtual reality (VR), and digital marketing platforms, especially for small and medium architectural practices. Investment in local manufacturing infrastructure can enhance the quality and scalability of hard-brand products.
3. *Regulatory and Policy Support:* Regulatory agencies including the Architects Registration Council of Nigeria (ARCON) must streamline business registration, product certification, and intellectual property protection processes. Proactive policy support, including financial incentives and grants, should be provided to entrepreneurial architects to encourage innovation and enterprise growth.
4. *Entrepreneurial Ecosystem Development:* Facilitate stronger networking and mentorship platforms connecting architects with business experts, investors, and industry partners. Establish incubators and innovation hubs tailored to architectural entrepreneurship to foster collaboration and market access.
5. *Public Awareness and Advocacy:* Promote mass awareness campaigns highlighting the value and potential of architectural

entrepreneurship. Encourage media and professional bodies to champion innovative Nigerian architectural products and services as drivers of socio-economic development.

By implementing these recommendations, Nigerian architectural practice can transition from traditional consultancy towards a diversified, entrepreneurial model that capitalises on hard-brand and soft-brand product innovation. This will not only enhance the profession's sustainability but also contribute to broader national economic and developmental objectives.

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