

Architecture as a multi-sector employment generator; the underexplored aspects beyond Design and Construction in Nigeria

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Sub-theme: Skills Development and Job Creation: Architecture as Employment Generator

Abstract: *Architectural training and practice in Nigeria have long been confined to two narrow domains, building designs and construction supervision. This restricted scope has limited the profession's capacity to absorb graduates and stifled opportunities for practicing architects, despite the inherently multidisciplinary nature of architecture. Addressing this gap requires a reorientation of architectural education, professional culture and policy towards broader and non-traditional employment pathways. This paper examines the potential of architecture as a multi-sector employment generator, with particular emphasis on the underexplored domains that lie beyond conventional practices in Nigeria. Drawing insights from evolving global trends and selected Nigeria/Foreign case studies, the study highlights opportunities in heritage conservation, product and furniture design, naval architecture, architectural journalism, digital visualization (VR/AR/BIM), set and theatre design and fashion/garment construction. Methodologically, the paper adopts a qualitative and descriptive approach which combines literature review with case-based analysis to identify emerging job markets and skill demands within and beyond the built environment sector. Findings indicate that while global practices have successfully diversified architectural role, Nigerian's professional orientation remain narrowly focused, revealing that the few Nigerian architects who have transitioned into other industries are still "playing safe" –per se- limiting graduates' employability and entrepreneurial innovation. The author recommends; structured effective industry partnership as critical step towards the immediate implementation of the newly approved faculty of architecture and curriculum which proves as a model for unlocking new job market, fostering entrepreneurship and positioning the profession as a catalyst for creativity/innovation, cultural preservation and economic growth. The study also recommends and emphasizes the importance of start-ups support and incentives for upcoming architects/firms as a way of sustaining this course*

Keywords: architectural education, professional diversification, non-traditional employment, entrepreneurship and innovation, Nigeria architectural practice.

1 Introduction

1.1 Background

Architecture is considered a fundamental aspect of the built environment industry. In Nigeria, though, the field of architecture has predominantly been viewed and engaged in through two limited perspectives: design documentation and supervising construction sites. This narrow outlook, supported by years of educational programs and professional practices, has constrained the ability of the profession to tackle the significant issues of unemployment and underemployment faced by graduates in the country.

It is a known fact that architecture is an inherently multidisciplinary profession. Architecture education usually combines creativity in arts and aesthetics, precision in technicality, structural

complexity resolutions, climate alert awareness and socio-cultural sensitivity. (Adewunmi and Ogunala, 2018).

This group of skills have great potentials applicable far beyond building designs and site jobs. However, the ability to venture into and explore other sectors still remains largely minimal in Nigeria. This paper aims at analyzing and highlighting the neglected sectors in which architectural skills and knowledge can graciously thrive while impacting both the social and economic landscape of the nation, using global practices as motivational tools, recommending immediate reformation in our architectural training and policies which would enable architecture graduates niche into alternative sectors.



1.2 Problem Statement

Despite Nigeria's growing population and urgent needs for jobs, architectural graduates often struggle with limited employment prospects. The traditional curriculum emphasizes only two primary dimensions—design and construction—without adequately preparing students for alternative applications of architectural knowledge (NIA, 2020). Consequently, the country faces a paradox: while creative and technical industries are expanding globally, Nigerian architects remain confined within conventional boundaries. The absence of curricular diversity, technological integration and industry partnership has curtailed the potential of architecture to function as a major employment generator.

1.3 Research Questions

The following questions are basis for this study;

- 1 What is the Nigerian perception about the architect's roles?
- 2 What is the role of the architectural training curriculum as it concerns skills diversification in the profession?
- 3 Are there architects/firms who have leveraged the potentials of multidisciplinary/interdisciplinary career paths with prior architectural backgrounds?

1.4 Justification of Study

The justification of this study is backed up by; the growing rate and concerns of graduate unemployment and lack of available jobs by architecture firms, and the recent global revolution toward multidisciplinary, technological/innovation-driven economies. A more careful look into architecture reveals that architecture features transferable skills to shipbuilding/design, media, digital visualization, manufacturing of product and cultural heritage management (Adeyemi, 2021). Venturing into these neglected sectors could pave ways for job opportunities and lighten the saturated job market in the profession. Also the currently reviewed curriculum of architecture in Nigeria made provisions for infusing related sectors' skills training.

1.5 Objectives of The Study

The study seeks to;

- 1 Point out certain underexplored career path of the architecture profession that possess possible job generation potential outside the conventional practice of design and construction.
- 2 Critically assess cases of architects and firms who have leveraged the potentials of architectural diversification

- 3 Analyse and examine the effects of the newly approved NUC CCMAS for Architecture 2023 curriculum as it concerns skills development,
- 4 To propose strategies for realigning Nigerian architecture with the global trend of multidisciplinary job generator.

1.6 Scope of The Study

The scope of this paper is centred on Nigerian architectural education and professional practice in comparison with global trends giving instances from Japan, the United Kingdom and United States of America. The study lays particular emphasis on different sectors other than architecture design and construction which includes; naval architecture, architectural journalism, product design, fashion design and garment construction, digital visualization (VR/AR/BIM), heritage conservation/preservation and design in set/theatre. The research sources span the period from 2000 to date.

2 Literature Review/Context

2.1 Global Perspectives on Skills Diversification in Architecture

Globally, architecture profession has years long experienced great revolution, making it a multidisciplinary career path. There is a great need for diversification in architectural education. This diversification extends to entrepreneurship, innovation through emerging technologies, multi-sector collaboration and heritage conservation/preservation. (UNESCO-UIA charter for Architectural Education, 2017).

Instances of global threats in architecture professional diversification are given below;

- **Japan:** Architecture professionals here have leveraged sectors like product design, manufacturing of furniture and lifestyle goods both for domestic and international trade. (Nakashima, 2019; Nakamura, 2021; Archisoup, 2025).
- **United Kingdom:** We see in the UK, architects who have specialized in restoring and conserving heritage sites and buildings, thereby making it their major employment sector (Historic England, 2021).
- **United States of America:** In USA, the transition of practicing architects into designing sets/theatre for the movie industry which is worth millions of dollars yearly is seen (National Endowment for the Arts, 2021; Archisoup, 2025).

The few mentioned instances above reveal the proper application of creative architectural expertise and practical knowledge have great potential of thriving and creating pathways in different socio-economic sectors, lots of which are



obviously not within the conventional construction industry (Archisoup, 2025).

2.2 Nigerian Context/Traditional Perspectives of Architecture

In Nigeria, both the layman and the built environment professionals view architectural roles as mostly mere drawing/design, site supervision and drawing documentations. This limiting perspective which is as a result of; the long-standing academic curriculum structure and guiding principles of the profession, backed up by the way the media have painted/presented the architect's role as a building designer (Olotuah & Adesiji, 2005). The outcome of this is the reality that we now see architecture graduates competing around a limited target market, ignorant of the alternative privileges available in the profession.

2.3 Architecture and the Creative Economy

The Nigeria's creative/entertainment industries (which include the movie industry, fashion, music, cultural tourism etc.) are one of the fast-rising creative industry in Africa. For instance, the Nigerian movie industry popularly known as Nollywood is rated the second largest globally by output, however, there has been only very minimal partnership between the architecture professionals and the filmmakers as regards theatre/set designs. Recent reporting based on NBS figures estimates ~220,000 direct jobs in 2023, underlining its employment potential for allied professions.

Alternatively, the available design opportunities as regards the events industry, arts and exhibitions including museum exhibitions, product design and exhibitions, installation of public arts etc. is greatly underexplored in the Nigerian architecture space. When positioned strategically, architecture can be an integral part of the creative economy, driving innovation while generating employment.

3.0 Methodology

This paper adopts a qualitative and descriptive research method which successfully combines literature review and analysis of both local and foreign cases of architects and firms who have successfully transited or found a proper balance across other sectors that are outside the traditional construction/built industry.

3.1 Data Sources:

- **Curriculum Review:** A comparison of the previous NUC curriculum for the department of architecture and the newly approved NUC curriculum for the faculty of architecture was carried out.

- **Case Selection Criteria:** The case that were cited in this paper were selected based on at least two or all of the following criteria
 - i. The architect/firm must be a licensed member/firm of the professional body in their respective country of residence/practice.
 - ii. The architect must be a practicing architect despite the diversion
 - iii. The selection must be within the scope of this study

4 Research Findings and Analysis

4.1 Naval Architecture; The Case of Rear Admiral ITUNU HOTONU:

Background: Rear Admiral Itunu Hotonu's story is a very strong instance of architecture multi-sector potential. She is a Nigerian trained architect who transitioned from architecture to a naval career, married to Arc. Hotonu

"I had graduated with a degree in architecture from the university of Nigeria Nsukka...I was just looking for something different to do. I tried to join the army...Then I heard the Navy was taking women into all field so that was how I joined the Navy." (Hotonu, 2017, para.6).

Name: Rear Amiral Itunu Hotonu

Institute of Study: University of Nigeria, Nsukka.

License Status: She got licensed to practise architecture in Nigeria

Feats: She held positions in the Navy such as;

- a. Director of Projects, Naval Headquarters
- b. Eastern Naval Command, Calabar
- c. Managing Director, Nigerian Navy Post Service Housing Scheme Karshi, Nassarawa State, etc.

She also attained first female officer in the following areas

- a. The position of the rear admiral in the Navy both in Nigeria and West Africa
- b. To attend the National Defence College (Women's Empowerment Principles, 2025; GidiArchitect, 2017).

SWOT Analysis

Strength: She was able to transition from architecture to a career in the Navy, successfully applying her architectural skills, knowledge and expertise into her given roles which put her on the spotlight to attain top positions in the Navy including making her first female to attain such positions.

Weakness: There is no record of her involvement in any shipbuilding project

Opportunities: Despite not having any record of her involvement in any shipbuilding project, the case of Rear Admiral Itunu Hotonu is a very clear example that architects are built to thrive in any given sector. The fact that architecture is a/an art, science and engineering inclined profession reveals that anyone with an architecture degree can smoothly transition into naval architecture and thrive there.

Threat: The concerns raised about the newly approved faculty of architecture hosting the department of naval architecture is a big threat to this course that shouldn't be allowed.

4.2 Fashion Design and Garment Construction; The Case of Arc. ZUWEIRAT BELLO

Background: A Nigerian trained architect who finished a fashion design course from the Fashion Academy, Abuja, one of West Africa's leading fashion Schools and the official host of the EVOLVE program, a yearly free-to-attend conference aimed at giving back to the Africa fashion community.

Name: Arc. Zuweirat Bello

Brand: Zuwbi

Location: Abuja

Qualifications: Bachelor of Science in Architecture (Bsc Archi), Ahmadu Bello University, Zaria and Master of Science in Architecture (Msc Archi), Ahmadu Bello University, Zaria

Feats: *"Architect-turned-designer, Zuweirat Bello, is the founder of Zuwbi, a modest fashion brand that champions sustainability with degrees in architecture from Ahmadu Bello University. Zuweirat incorporates the precision of design into her slow-fashion collections."* (Encomium, 2024, para. 5).

SWOT Analysis

Strength: The ability of incorporating design precision, sustainability knowledge/skills and creativity has made her brand stand out in Africa's Fashion space.

Weakness: A slow-fashion brand founded by a trained architect can mostly be frustrating with lots of abandoned projects eventually making it an extremely slow process.

Opportunities: The availability of these kinds of jobs and enhance fast delivery of service.

Threats: If there is no proper balance of the two disciplines, there's bound to be abandonment of either of the disciplines

4.3 Architectural Journalism; the Case of Arc. TIJJANI MUHAMMAD MUSA

Background: An architect with a very unique dual background, haven started a professional career in the media space (blogger and broadcaster)

and a formal training in architecture at Ahmadu Bello University (ABU), Zaria.

Name: Arc. Tijjani Mohammad Musa

Qualifications: Bachelor of Science, Architecture (Bsc, Archi) 1994 and Master of Science in Architecture (Msc, Archi) 1998, all in Ahmadu Bello University, Zaria

TV Program: "Paradise on Earth", Radio Kanoll 89.3FM (2001)

Location: Kano State. (Tijjani, 2014)

SWOT Analysis

Strength: The proper combination of design knowledge and media literacy gives him a niche advantage

Weakness: His works are limited to blog post and self-published platforms. Formal industry infrastructure and recognition are relatively weak in Nigeria

Opportunities: There are great opportunities to bridge the architecture and media gaps in Nigeria thereby creating jobs for graduate architects.

Threats: The crowded nature of modern digital content poses as a threat

4.4 Design in Set and Theatre; The Case of DAVID ROCKWELL

Background: An American architect, principal of Rockwell Group whose childhood experiences prompted his choice of career in architecture and as a set/theatre designer, allowing storytelling form the basis of his works.

"Architecture are Theatre are both designed by the people that inhabit and animate them." (Rockwell, 2021, para.4)

Name: David Rockwell, FAIA

Firm: Rockwell Group

Year: 1984

Institutions: Syracuse University and Architectural Association, London

Areas of Expertise: Interior Designs of Hotels and Restaurants, Theatre/Broadway Sets, Product Exhibition etc. (Rockwell, (n.d))

Notable Projects: The 2009 Oscar's Telecast Stage, the 81st Academy Award Ceremony. (Oscars,2009)

SWOT Analysis

Strength: Thriving in this niche

Weakness: This seemingly prestigious niche only has potential of global employability therefore full dependence on it means vulnerability to economic downturns in the entertainment industry.

Opportunities: If formalized in academic programs and workshops, it could arouse great interests in interdisciplinary design thoughts. With the recent Nigeria movie industry's collaborations with international movie industries, Nigeria architecture

bodies can also collaborate to create architecture roles in the movies industry as well.
Threats: The emergence of virtual production may lead to high level of competition from virtual and technical specialties

4.5 Product Design; An Analysis on Arc. TOSIN OSHINOWO

Background: A female practicing architect in Nigeria who combines her architectural practise with product design (Furniture Design)

Name: Arc. Tosin Oshinowo

Firm: Oshinowo Studio formerly cmDesign Atelier

Year: 2013

Location: Lagos State, Nigeria

Qualifications: Masters in Business of Architecture (MB Archi), IE University, Madrid 2021; AA (Dip) Architecture Association, London 2007; M.Sc. Urban Design, University College London, 2003; B.Sc. Architecture Kingston University, London 2001

Areas of Expertise: Furniture Design (Chair Design)
Notable Product Design Projects: Ile-Ila (House of Lines) made to order 2017

Membership: NIA full member, Royal Institute of British Architects International Member (Architectural Digest, 2021)

SWOT Analysis

Strength: Another very good example of a balanced inter-disciplinary career path

Weakness: Not much of her products are known

Opportunities: Architects have high possibilities of thriving in this niche as product design is not limited to furniture design alone.

Threats: The overcrowded furniture market condition in Nigeria poses as a very high competition threat.

4.6 Digital Visualization (VR/AR & BIM); The Analysis of GENSLER

Background: Gensler is a licensed architecture firm that fully adopts virtual reality (VR), augmented reality (AR) and building information modelling (BIM) in their practise of architecture.

Name: Gensler

Leadership: Founded by Arthur & Drue Gensler and James Follett. Current CEO is Andy Cohen

Year: 1965

Location: 57 locations across 16 countries including America, Europe, Greater China & APME
Firm's Headquarters: San Francisco, California

Areas of Expertise: Designing smarter workspaces, developing innovative leisure destinations & creating more liveable cities, through emerging technologies. (Gensler, 2022)

SWOT Analysis

Strength: They have an edge with the fastest, non-glitch process of reaching a wider range of client

and taking the through different stages of project actualization without being in the same location.
Weakness: If solely dependent on technologies, technical challenges may cause delays in service delivery

Opportunities: With global expansion, the firm can grow to cause a technological revolution in the construction/built industry

Threats: Upcoming technologies can pose as threats if not followed up duly

4.7 Heritage Conservation/Preservation; An Analysis of DONALD INSALL ASSOCIATES

Background: A UK based firm, Donald Insall Associates sets to demonstrate how the skills gotten from architectural training (material knowledge and understanding, structural repairs, historic research, stakeholder engagement) is infused into heritage conservation and preservation projects which is one underexplored professional pathway in Nigeria. (Donald, n.d)

Name: Donald Insall

Founder: British Architect Sir Donald William Insall

Areas of Expertise: A powerful knowledge of architectural history, conservation and traditional materials (usage and repair techniques with modern standards and technology applications).

SWOT Analysis

Strength: There is a proper application of architecturally obtained skill set in their career pathway

Weakness: Their focused niche limits the volume of their projects and clients, depending on public sector funding or heritage funding

Opportunities: There are great opportunities for adaptive reuse and sustainability as this topic gradually takes importance aiming at repurposing buildings for new use.

Threats: There would be technology disruption as emerging technologies may reduce demand for traditional craft-intensive conservation services except otherwise allowed by the architect/firm.

5 Discussion

5.1 Curriculum Review

In 2018, the announcement for an upgrade in architecture education was made which has led to a necessary review and change regarding the guiding curriculum of architecture education in Nigeria. (NUC Communiqué, 2018).

A brief comparison between the previous (long-lasting departmental syllabi, ARCON-aligned course outlines from the period 2010s also referenced in 2018 NUC communications) and the new (the NUC Core Curriculum for Minimum Academic Standard CCMAS for Architecture, completed and approved in 2023 for immediate



operation in Nigerian Universities) curricula is shown below.

Table 1: Old and New Curriculum Comparison Table

Area of Consideration	Former Curriculum (Pre approval, 2023)	New Curriculum (Post approval, 2024-date)
Admin./Structure Status	This was functioning at departmental level under the faculty environmental sciences	Now upgraded to faculty level by NUC
Programme aim & Graduate Output based on Curriculum Content and Practicality	The learning programme was solely centred on design studio & site/construction practice, building technology and professional practice. SIWES and vocational development trainings were on apprenticeship (NYSC & site attachment) basis, mostly for the Bachelor degree programmes but vocational/workshop trainings were mostly adopted in the ND/HND Architectural Technology programmes.	The upgrade opens up more rooms and opportunities to new courses and also improves the curriculum for already existing courses. The new curriculum also introduces the learning programme to long-term employability skills through practical learning by infusing practical workshops courses (wood workshop, metal workshop, ceramics workshop etc.), maker labs, technology studios etc.

Sources: Author, retrieved from ARCON, 2021 p.12; NUC Communiqué, April, 2018; NUC CCMAS for Architecture 2023

Deductions:

The above compared old and new curriculum reveals the following;

- A gap was identified with regards to the outcome of the old curriculum in terms of graduate employability assessment.
- The new curriculum backs up the fact that architecture is a multi-sector employment generator with proper training and skill development.
- The new curriculum aims to bridge this gap that the old curriculum has not been able to fill.

5.2 The Underexplored Aspects Beyond Design & Construction

From the findings in Section 3 above, it shows that Naval Architecture, Fashion Design & Garment Construction, Architectural Journalism, Design in Set & Theatre Product Design, Digital Visualization VR/AR/BIM and Heritage Conservation & Preservation are possible pathways for trained architects to transition into. However, there are still more possible career pathways for the architect which are but not limited to;

- Architectural Photography
- Environmental & Sustainability Consultancy
- Urban Agricultural Infrastructure
- Public Health Architecture
- Arts and Exhibitions

- Digital Fabrications.
- Construction Safety
- Lifecycle Maintenance and Facility Management

All of these and more are possible career pathways that have not been or have only lightly been explored by Nigerian architects who have over time settled with "playing safe" rather than making great exploits and leveraging the very blessed privilege of being in the only prestigious profession that allows us to be versatile and creative while we combine our different skills, knowledge and expertise to creating jobs for the next generation architects.

5.3 Contribution to Knowledge

This study has contributed to the already established fact that for years long in Nigeria, there has been a training and practice gap in the architecture profession, highlighting key aspects for improved architecture education and practice while proposing practical strategies that can help in tackling this gap in the profession.

6. Conclusion and Recommendations

6.1 Conclusion

Generally, architecture has great potentials of creating jobs across many industries. Nigerian architects are by this study called to unlock and explore these potentials through more intense practical training in architecture education,



professional practice and public perception transformation.

Global shifts in technology, sustainability imperatives, and cultural awareness are reshaping the profession. Fields such as virtual reality (VR) studios, maker labs, heritage conservation, and product design are growing internationally (Kensek, 2014). By diversifying, Nigerian architects can engage in cross-disciplinary innovations, increase their competitiveness, and address socio-economic challenges.

6.2 Recommendations

1. **The Need for Immediate Implementation of the Newly Approved Curriculum:**

Since the newly approved curriculum strongly supports inter-disciplinary and vocational skills development in architecture training/education, there is the urgent need for implementation of the NUC CCMAS 2023 for Architecture curriculum across ALL architecture schools in Nigeria.

2. **The Urgent Need for Public-Private Partnership in The Development of Innovative Architecture Facilities for Education Purposes:**

Following the outcome of this study, the newly approved curriculum emphasizes the importance of high-technological learning facilities. This gives rise to the high need for public-private partnership for the development of these high-tech facilities in order to achieve this goal.

3. **Professional Diversification:**

The Nigerian architecture professional bodies –the Nigerian Institute of Architects, NIA and the Architects Registration Council of Nigeria, ARCON- should come up with and support certifications and mentorship in non-conventional practice areas.

4. **NIA/ARCON Support:**

Professional bodies like NIA and ARCON should support and encourage upcoming brands by featuring them during conferences and award events.

5. **The Importance of Start-Ups Support for Intending Architects from Cross-Sectors/Parents Firm:**

The study so far has highlighted the potentials of architecture as a multi-sector employment generator; however, the importance of sustainability cannot be overemphasized, the reason the author urges Parent-Firms together with public organizations collaborates to support

architect mentees and Start-Ups with incentives at the point of dismissal

6. **Public Awareness and Advocacy:**

This is where architectural journalism takes key role by engaging in public education in order to expand public's view on architecture as a multi-sector profession.

6.3 Areas for Future Study

For further study, the following sectors should be looked into;

1. Public Health Architecture
2. Urban Agricultural Infrastructure
3. Arts and Exhibition
4. Digital Fabrication
5. Environmental/Sustainability Consultancy
6. Architectural Photography/Archaeological Documentation

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