

Research Article

Performance Assessment of Sustainable Architectural Practice in Nigeria: Insights from the Diminishing Role of the Architect

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Abstract

This paper aims at examining the effect of the diversification of the increasingly shared role of the architect and the other allied building professionals on the future of the architectural profession in the country. A mixed-method study of the expanding role of the architect, public awareness of the diversification in construction industry practices and the effect on the users of the built environment show that architects participated in 83.3% of the observed cases during pre-construction or design stages but only 33.3% of the cases during construction. Architects are twice as likely to be supplanted on construction sites by allied professionals because client and user perception holds that architects fail to provide “realistic” solutions to the brief and charge too much in professional fees. The study recommends: 1) architects need to embrace the diversification of roles in the construction industry through specialised tools such as project management, scheduling, cost reconciliation, property development and product marketing; 2) improvement in the level of creativity and practice ideology to prevent architects from getting supplanted on grounds of incompetence and 3) reminds legislative bodies, stakeholders and clients to protect the constitutional role of the architect and increase public sensitisation of the need to engage architects to preserve the essence of the built environment.

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1. Introduction

An architect is someone who plans, designs and reviews the construction of building and other related structures: a service which not only involves the design of buildings and related structures but as a licensed professional they are also responsible for public safety and overseeing of projects. This responsibility goes beyond the initial concept stage of the project to the official handover and, in some specific cases, extends to building maintenance and management, and building reuse (Sokanu, 2017, <https://www.sokanu.com/careers/architect>). The practice of architecture covers any sector that is involved in

the shaping or reshaping of the built environment either as a consultant in private firms, as a public servant, as a design/build professional or as an academician; all of which are seen as viable options for practice by the Architects Registration Council of Nigeria (ARCON) and Nigerian Institute of Architects (NIA). Other options of architectural practice though not specifically listed in the code of conduct of ARCON and the NIA, but are going on without attracting any sanction include sales and manufacturing of building materials, project management, technical staff of the works department in private companies, journalism, politics and free-lancing. The production and submission of all architectural documents including the sketch and detailed drawings, the specifications and the bill of quantities for approval by local, state and national planning authorities remains the constitutionally-protected right of only registered architects (ARCON, 2011).

Architects have a rich professional heritage as the team leader of the construction industry yet the prevailing situation in the sector is that present day professional practice is losing ground as the clamour by allied professionals is on the rise for the role as the “Prime Consultant”. Recent reports out of Nigeria have assessed the challenges facing sustainability of architectural practice, harmful trends to practice development and factors leading to the diminishing role of the architect (Haruna, 2008; Delano, 2010). The architect plays a role that is very significant to the construction industry and adds value to the built environment (and society at large): exclusion or marginalisation is tantamount to a downward spiral in the quality of the built surroundings. This study examines the challenges causing the redundancy of architects and proactive means used to overcome those challenges hence, securing future practices. In order to study the problems leading to the diminishing role of the architect holistically, the paper looks at three interrelated aspects of sustainable architectural practice development, namely: 1) the expanding roles and services of the modern day architect, 2) societal perception and appreciation of the role of the architect and 3) the resultant effect of shrinking architectural services on the built environment.

2.0 Sustainable Architectural Practice: The Paradigm Shift in Nigeria

The architect is a licensed design professional who blends intuitive techniques with rational knowledge of building structures and materials to create environments suitable for human (and in some cases, non-human) activity. The architect is expected to work with a utilitarian client budget, standards and legal requirements as well as cultural and aesthetic contextualisation in order to balance out the private needs of the client with the overall improvement of the built environment. By virtue of the rigorous and multifaceted training program, architects are trained and specialise in many areas from construction to structural engineering to historic preservation to computer programming and environmental biology (Souto deMoura, 2016).

To be able to see a project through from inception to completion, the architect must undergo years of training and lengthy internships on both technical and theoretical disciplines. In the past, such education was obtained as an apprentice under the tutelage of a “chief or master builder” who could be a sculptor, artist, engineer or carpenter who, according to Vitruvius, spent several years mastering their craft. By the end of the 19th century, architectural education became formalised; by the turn of the Millennium it expanded to meet the rising demands of 21st century development by introducing diverse areas of study such as sustainability, history, environmental concerns, retrofitting, project management, computing techniques and mechanics. Similar to other professionals like doctors and lawyers, the process of becoming an architect does not end after training or apprenticeship – all architects have to endure a tedious and expensive licensing procedure with the professional body in their locale (Anthony, 2008).

The involvement of the architect in construction meant a shift in power. The client was expected to engage the services of an architect to receive the design brief and interpret it into a physical, tangible form through the use of drawings and specifications which the building team was responsible for erecting under direct instructions from the architect (Langford, 2017). The architect therefore became a mediator between the client and the builders. Today, the role of the architect is not as clear-cut as it used to be. The construction industry is currently made up of a large team of professionals and the architect is not always in pole position which was the more traditional assumption. The quantity surveyor evolved as a professional that protected the client from the architects’ perceived fanciful designs and adamant luxuries which may not have been requested by the client. The engineer took care of advanced structural and mechanical details outside the scope of the architects’ competence. The project manager was introduced to assure the client that the project time schedule was maintained under optimal technical performance within the agreed upon budget (Ahmadu, 2012). With the increase in complexity of design knowledge, the architect spent more time designing and less time constructing which pushed the other allied construction professionals into the limelight. This diversification of roles and duties in addition to upheavals in global economies, increased environmental concerns and decline in skilled labour has resulted in worrisome global unemployment rates for undergraduate architects and job cuts in the profession (Censky, 2012; Rosenfield, 2014).

However, the broad-based training that an architect receives creates many career opportunities which can be focused on individually or in combination. Table 1 shows the specific competencies required for the various capacities in which architects can maintain sustainable mainstream practices:

Table 1: Required competencies for architects in diverse areas of practice by Haruna, 2008 and Ola-Adisa, 2016

s/no.	Specialisation	Required competencies
1.	Private practice (salaried or self-employed)	<p>Architects need to be expert designers over a wide range of building types reflecting sustainable practice ideology.</p> <p>Competency in producing the building design and support documentation through all its stages from inception to completion.</p> <p>Ability to achieve equitable balance between building quality and functional performance despite pressure of cost and time control.</p> <p>Ability to inspect and monitor the construction process from inception to completion; must be professional and responsible to the client, the allied professionals, special consultants and society at large.</p>
2.	Public sector	<p>In addition to the competencies in the private sector, the architect should regulate public interest in the assessment of private sector services.</p> <p>Public sector architects should be able to respect and protect the Code of Conduct, Ethics and Bye-laws of the profession as given by the professional regulatory body in the area.</p>
3.	Academics	<p>While encouraging dynamism in knowledge, architects in the academia are expected to specialise in one or more areas of private practise for effective educational delivery. Emphasis on professionalism, mannerism and the ideals of the Code of Conduct in practice.</p>
4.	Politics	<p>Architects in politics are expected to make an impact on shaping policies that would create a better physical and enabling environment.</p>
5.	Sales/marketing	<p>Adequate knowledge about product specifications, performance, availability, installation, maintenance, warranty and brand options in order to facilitate client selection.</p>
6.	Project management	<p>Ability to oversee project time schedule is maintained without compromising on technical performance and deliver same within the project budget agreed upon with the client.</p>
7.	Environmentalism	<p>Proficiency in vast areas of architectural practice with emphasis on building form and function for renewable energy, low- or zero-tolerance for carbon emissions, retrofitting for green building index, stopping climate change and other projected related concerns for environmental friendliness.</p>
8.	Administration	<p>Architects can arrange and run professional organisations such as NIA, ARCON and ACA etc. as well as run complex business corporations which require managerial and entrepreneurial skills.</p>

It is a growing perception that society and not the architects themselves, sets the goals and assigns to the architect the means of achieving them. The architects' role in the society is determined by the amount of perceived benefits the society derives from the services rendered – although the debate lingers on whether the conduct of the architect is actually what influences the perception by society (Oyekola, 2010). With a reduction in services such as project management, contract administration, cost control, energy efficiency consultation and owners representation, architectural services are shrinking to little more than minimalistic computer drafted drawings and generic specifications. Several factors have been held responsible for the decline in architectural roles which include the reluctance of architects to step up and efficiently provide those services which allied professionals provide with less hassle; failure to utilise specialised tools for expanded roles in the construction industry and architects' tenacious grasp on a romanticised view of their importance on the built environment. Other factors include inadequate tutelage by young architects into the cadre of experienced designers; compromises in the quality of architectural service output; lack of proper enforcement of professional and legal polices that guide architectural practice and an overall lack of awareness by the public on what exactly it is architects do.

3. Understanding the Practice Dynamics of the Architect

Not understanding what the architect does is the major reason why all the other aforementioned factors exist in the first place. Public perception suggests that architects are proponents of unrealistic design proposals which are disconnected from the real life wants and needs of the clients. Architects are discriminated against due to perceived arrogance about their self-importance and largely introverted social habits (“Personality types – INTP”, 2012). Many people wonder why architects (who on their part bemoan underpayment and lack of respect) still charge so much in professional fees when there are several computer-aided design tools and software available which require manipulation from even untrained designers and children to produce basic schemes. Table 2 shows the three main roles of the architect and the

commensurate payment milestones approved by the Architects Registration Council of Nigeria (ARCON), Nigerian Institute of Architects (NIA) and Association of Consulting Architects Nigeria (ACAN):

Table 2: Scope of architectural services and payment milestones by Delano, 2010 and ARCON, 2011

Architectural role	Summary of commitments to the client	Payment milestone
Design phase (Stage I)	Commitment: <ul style="list-style-type: none"> • Receipt of letter of commission; • Receive and appraise client brief; • Outline potentials and demerits of the proposed scheme; • Receive and interpret the site analysis and report; • Advice on budget planning 	Milestone 1 - 15% of estimated project cost for new projects
	Concept design: <ul style="list-style-type: none"> • Site situation and planning, outlining space provision; • Preparation of anticipated project timeline, estimated cost and planning relationships; • Preparation of list of allied consultants and specialists 	Milestone 2 – 20% of estimated project cost
Construction drawings (Stage II)	Coordinated detail design: <ul style="list-style-type: none"> • Production of site design and location of structures on site; • Preparation of all graphical representation of the building; • Coordinate input of allied consultants and statutory planning authorities 	Milestone 3 – 25% of estimated project cost
	Construction documentation: <ul style="list-style-type: none"> • Selection of contract documents; • Compilation of supporting design documents from the allied professionals; • Full preparation and reconciliation of Specifications and Bill of Quantities 	Milestone 4 - 40% of adjusted final project cost
Tendering and Construction services (Stage III)	Tendering: <ul style="list-style-type: none"> • Advice client on prequalification of contractors, sub-contractors and tender awards by qualified firms 	Milestone 5 – Time charges or Man-hour rates (or lump sum)
	Construction services: <ul style="list-style-type: none"> • Organisation of site meetings and visitations; • Overseeing construction and providing clarification about the design and any additions; • Sign off on various works, certifying completion for contractors' progress billing; • Review of shop drawings and fabricated materials /samples from vendors; • Prepare building and project appraisals; • Prepare and manage all intermediate and final progress reports and certificates for the architect and allied consultants; • Prepare project for handover ad manage the defects liability period 	Milestone 6 – Time charges or Man-hour rates (or lump sum)

The production and submission of all architectural documents including the sketch and detailed drawings, the specifications and the bill of quantities for approval by local, state and national planning authorities remains the constitutionally-protected right of only registered architects (ARCON, 2011). This legally-backed privilege for architects typically remains easier to protect in public-sector rather than private-sector construction. Architects generally can and do make positive and often considerable contribution to a project both in terms of cost efficiency and ultimate overall value yet the decision to forgo the services of an architect beyond the phase of construction drawings is on the increase largely due to contention with the scaled and lump sum figures attracted by professional fees. So, with the ever-shrinking role of the architect due to the resurgence of allied professionals and diversification of roles in the construction industry, how sustainable are architectural practices in the coming years? The answer to this lies in the findings from performance assessments which support improvement in the quality and long-term sustainability of the built environment by architects who make a claim to usefulness of the profession to the general public (Hughes and Hughes, 2013). The most visible effect of the detrimental practice of supplanting the architect is evident in the increase in failed buildings around the country which has tainted the construction industry and stunted growth of the profession as a whole (Umeora, 2013; Uji, 2016). A building is said to have failed when it does not meet the functional, structural, technical, aesthetic, cultural, organisational or environmental purpose(s) for which it was erected. Building collapse is the end result of a building that suffers permanent structural damage.

This study examines public opinion on the effect of the diminishing role of the architect on sustainable architectural practices in Nigeria and proffers practical suggestions on mitigating measures needed to improve and sustain service delivery in the profession. Very little research has been published about performance assessment and post-occupancy evaluations on architectural output without the current fixation with energy efficiency and this has failed to yield an evidence base for reference (Enwerekowe & Abioye, forthcoming). Due to slow technological advancement of infrastructure across the nation, Nigeria has a low Human Development Index (HDI) and a world ranking of 156 out of 187 participating countries (Ohajuruka, 2013). This is because the domestic construction industry pays little attention to concerns for

green building retrofitting and energy performing buildings – outside modern adaptation of traditional building forms such as the open courtyard and impluvium in both private and public buildings – despite documented financial, social and health benefits to the users (Maina, 2013). However, central to overcoming the criticism of being inefficient, of poor quality and obsolete, performance assessments and post-occupancy evaluations of architectural service delivery provides a bottom-up approach to experienced learning and improvement of products and processes in the construction industry as a whole (Hay, Samuel, Watson & Bradbury, 2017). By bringing to the fore issues surrounding assessment of the services of the professionals who are in the construction industry, this research aims to enlighten the practice environment on the learning loops and the effect on the future of the practice on an evidence base rather than on isolated experiences of individual professionals as discussed on informal social sites and gatherings (Hajiri & Crozier, 2009; Henderson, Ruikar & Dainty, 2013).

The study is situated in the capital city of Jos, Plateau state in the north central zone of Nigeria which witnessed exponential building development and reconstruction following ethnic and religious conflict from 2001 to 2008. The zone also holds the second largest concentration of architectural firms in the federation (Ola-Adisa, 2016).

4. Methodology

This study is a fusion of literary research, field studies and data interpretation. Literary research covered the review of existing knowledge and trending debates on the changing roles and duties of the architect and the challenges to architectural service delivery and practice development. The field studies gathered the responses from clients and building users around the Jos metropolis on their perceived benefits or discontent with architectural service delivery as a bottom-up approach to a quantitative analytical process. The sample was randomly drawn from demographics of clients and building users around Jos based on the statistics of the Office of Development Control at the Jos Metropolis Development Board (JMDB). The sample size was obtained using the Moser-Kalton (1974 In Uji, 2009) derivative method. From the Jos-based statistics, less than 18% of the approximately 480 building construction documents and drawings

submitted for planning authorisation each year meet the stringent approval requirements. Most private sector construction spans a duration of 2 (two) to 5 (five) years from conception to final completion. As a consequence, the assessment for the study was based largely on the opinions of clients and users of legal buildings which met minimum requirements for approval from the Board within the last 5 (five) years. The relationship between the services rendered by architects and other building professionals was further studied using the Hierarchical Cluster Analysis procedure which functions by creating groups that have minimum variance within and maximum dissimilarities between them. Zand, Wang and Hilchey (2015) observed that the distances between points and their relative locations reflect the proximity (similarity or dissimilarity) of the variables, as measured by a metric function of their attributes, such as Euclidean distance where the distance is an indication of the degree of the strength of the relationship. The means of simple statistical analysis such as pictographs, index ranking and means of statistical dispersion were also utilised for analysis into public perceptions of the shrinking role of the architect in the Nigerian society. By derivation, a minimum of 52 questionnaires are required to give a credible sample size. A total of 57 questionnaires were properly filled and returned out of 60 distributed.

5. Data presentation: Discussion and analysis

The results from the field study present the data on public opinion about the role of the architect in the built environment and evaluate the perception about the changing dynamics in the profession. The sample was made up of male (62%) and female (38%) respondents all of Nigerian descent. All of the respondents engaged in privately-sponsored development, 16% of which were commissioned by corporate organisations or joint private partnership initiatives and from Table 3 it was observed that most of the respondents were above middle-age.

Table 3: Age range of respondents that did or did not employ the service of a building construction professional as the leading consultant

Age Range of Respondents	Did you employ a building construction professional?			
	Yes	%	No	%
Below 35 years	0	0	0	0
36-45 years	9	37.5	17	51.5
Above 46 years	15	62.5	16	48.5

Housing was observed to be the most frequent building type in the sample. 54.1% of the buildings in the sample were residential buildings (of which 75% were single floor dwellings), 12.5% of the buildings were designed for religious purposes. Institutional and commercial buildings made up 16.7% each of the observed buildings in the survey. The higher number of residential buildings is indicative of the housing needs in most Nigerian communities which are yet to overturn the national housing deficit.

The demographic findings in Table 4 show that 57.8% of the respondents opted to forgo the services of any building professional as the leading consultant (popularly known as the Prime Consultant) during the course of executing their building projects. This decision was based on a number of reasons among which cost implication of engaging a building professional seemed “unnecessary” when the building project had a small scope. Most of the older respondents who declined the services of a building professional opined that building was a “straightforward process” that they had participated in before which required more experienced wisdom than professional or technical know-how, thereby making the involvement of a building professional a redundant expense. The architects were particularly criticised for being responsible for producing “unrealistic” designs which in many cases were adjusted or corrected by more “experienced” artisans on the site during construction, most of whom had no formal training. 21% of the respondents admitted to carrying out their building project using building drawings adopted from other works with or without modification – an act which further undermines the role of the architect who is due remuneration for even prototype or repeat works. The actions by the building users and clients were completely ignorant of current sustainable practices and ideologies geared towards green retrofitting or ecological viability.

Table 4: Which building professional do you prefer to act as Lead or Prime Consultant?

Preferred professional (Lead consultant)	Frequency	Percentage
Architect	8	14.0
Builder	6	10.6
Land Surveyor	3	5.3
Quantity Surveyor	2	3.5
Town Planner	0	0
Civil / Structural Engineer	4	7.0
Mechanical/Electrical Engineer	1	1.8
None	33	57.8

Considering Nigeria's low ranking of the Human Development Index (HDI) and the decline in service opportunities for building professionals, architects could well endear themselves to more sustainable building practices such as developing indoor environmental simulations and green building retrofitting which involves renovation or refurbishment of existing buildings for ecological and resource-management purposes. Such practices ensure that buildings are used sustainably and guarantees healthier occupancy in the face of rising energy demands in Nigeria. The high cost of retrofitting, however is a source of concern to proponents in the face of waning public interest in a profession that already has a negative reputation for being over-priced and poor on service delivery. The onus rests on building professionals like the architect to ginger public interest in sustainable materials, solid waste management and sanitation, energy efficiency, ecology, pollution, emissions reduction and innovative designs.

Another key finding from the study of building trends that undermine the role of the architect reveals that fewer architects are involved in the building process after the design stages I (design phase) and II (production of construction drawings). Although architects were the most frequently-selected leading consultants in the sample where acknowledged, more than two-thirds (67.7%) of the sample selected an allied professional as the leading consultant which indicates a shift in the status quo where the architect held a monopoly on the role of the Prime Consultant. Further insight into the respondents' views on the specific roles given to building professionals show that where construction professionals are engaged, architects play a more dominant role in pre-construction activities (see Table 5).

Table 5: Number of participating building professionals during key stages in the construction process

Work Stage	Consultants	Number of participants	%
Stage I	Architect	20	83.3
	Others	4	16.7
Stages I and II	Architect	11	45.8
	Others	13	54.2
Stages I, II and III	Architect	8	33.3
	Others	16	67.7
Stage III	Architect	6	25.0
	Others	18	75.0

Additional statistical analysis on the service usage at various construction stages shown in Table 5 using the Hierarchical Cluster Analysis procedure (computed with Statistical Package for Social Sciences [SPSS] version 22.0) reveals a better understanding of the service participation levels of architects and allied professionals during key stages of construction based on user assessment. The results of a proximity matrix (in this case, to examine the level of dissimilarity between the services of the architect and other allied professionals at key construction stages) shows that architects have the greatest level of dissimilarity at Stages I (pre-construction) and III (construction) which would require direct intervention strategies to overcome as the margin increased at an exponential rate (see Table 7).

Table 7: Proximity matrix of service participation levels for architects and allied professionals

Case	Euclidean Distance			
	Stage I	Stage I & II	Stage I, II & III	Stage III
Stage I	0.000	12.728	16.971	19.799
Stage I & II	12.728	0.000	4.243	7.071
Stage I, II & III	16.971	4.243	0.000	2.828
Stage III	19.799	7.071	2.828	0.000

Table 8: Average linkage (between groups) based on the proximity matrix

Stage	Agglomeration Schedule					Next Stage
	Cluster Combined		Coefficients	Stage Cluster First Appears		
	Cluster 1	Cluster 2		Cluster 1	Cluster 2	
I	3	4	2.828	0	0	I
II	2	3	5.657	0	1	II
III	1	2	16.499	0	2	0

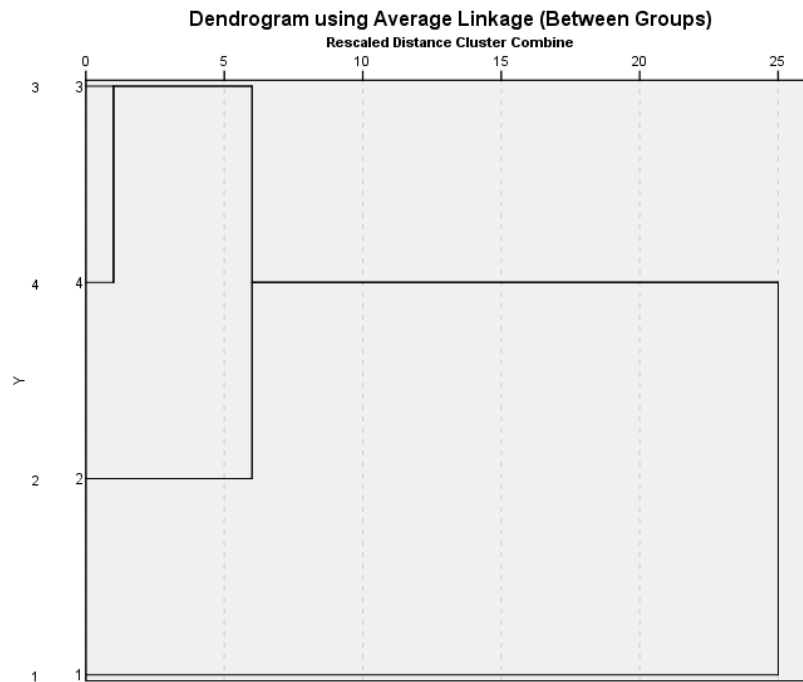


Figure 1: Dendrogram using average linkage (between groups) based on the results of the proximity matrix

The proximity matrix in Table 7 is symmetrical (the numbers on the lower half are the same as the numbers in the top half). From the table, the closest distance between the roles of the architect and the other building professionals during key stages in key construction process has a value of 2.828 while the farthest apart roles are valued at 19.799. The symmetrical proximity matrix reveals that architects find themselves largely out of contention during the construction process and public perception shows that allied professionals handle construction duties as efficiently as architects. From the proximity matrix, a hierarchy of cluster is

built as shown in Table 8 and the computed agglomeration schedule shows the average linkage between groups based on bottom-up approach. Finally a dendrogram (Figure 1) relates the cluster solution to a graphical distance or dissimilarity problem which illustrates the existing gap between architects dominating service delivery at Stage I and other professionals dominating at Stage III. The user-based performance evaluation of the services of architects and other professionals given in Table 9 shows that one of the major reasons why architects seem to be losing ground to other professionals at the construction stage is because the quality of their service output delivery seem to be on par but architects demand more in wages and remuneration.

Table 9: User-based performance evaluation of the service delivery of architects and other professionals

Traits	Satisfied		Undecided		Unsatisfied	
	Architects	Others	Architects	Others	Architects	Others
Professionalism	78.6	92.3	21.4	7.7	-	-
Integrity	71.4	69.2	21.4	23.1	7.2	7.7
Competence	78.6	61.5	14.3	23.1	7.1	14.4
Diligence	64.3	61.5	28.6	23.1	7.1	14.4
Punctuality	28.6	53.8	35.7	30.8	35.7	14.4
Fees and other charges	42.8	61.5	28.6	23.1	28.6	14.4
Attitude/Ideology	78.6	76.9	14.3	7.7	7.1	14.4
Literacy and eloquence	85.8	61.5	7.1	30.8	7.1	7.7
Average	66.1	67.3	21.4	21.2	12.5	11.5

Table 10 gives the public perception on the preferred terminal stage of work where the architect is best suited as the Leading Consultant. This finding indicates a general lack of confidence by users on the capabilities of the architect beyond the stage(s) of pre-construction documentation. This development is largely due to the fact that only building drawings produced by or under the supervision of a registered architect are considered for approval by State and Federal planning regulation bodies but construction (partial or full) can be supervised by any other consultant in the construction industry. This loosely-defined condition for building approval and erection often creates loopholes for building drawings produced by allied professionals to meet the requirements for planning approval as long as a registered architect endorses

them. Allowing the definition of architectural services to be blurred by these recurrent practices threatens the sustainability of the architectural profession in modern times.

Findings from the study also show that more than half of the respondents (57%) were not satisfied with the development of trends in the built environment and construction industry for a number of specific reasons, such as the considerable evidence of poor quality workmanship in projects executed due to lack of synergy between all the members the consultation team. In most projects, popular opinion criticised the high incidence of budget over-run and delayed completion of works when the project consumed more than what was budgeted as its initial cost. The incidence was noticeably higher when the architect acted as the Leading or Prime Consultant and was responsible for the project management. Consequentially, 15% of the respondents observed the project suffered cut-backs and amendments to the original scheme in order not to exceed the budget which disappointed the clients in the long run. This further underscores the high public dissatisfaction stemming from fees and professional charges incurred during Stage III which were more ambiguous and liable to manipulation than the scaled fees incurred during Stages I and II.

Table 10: At what stage in the building process should the architect serve as the Leading or Prime Consultant?

Building stage	Frequency	%
Pre-design	6	25.0
Sketch design	3	12.5
Detailed drawings and specifications	4	16.7
Construction	5	20.7
Landscaping	1	4.2
Interior design	1	4.2
Facilities management and building maintenance	1	4.2
Re-modelling/renovation	2	8.3
Project management	1	4.2

The emphasis of the study focuses on the public perception of the changing roles of the architect in the built environment and the sustainability of the profession as a whole. The architect used to be seen as the professional who best represented client interest on the construction site and demonstrated competency in all key stages of the construction process but other professionals appear to have stepped in to provide these

same services just as effectively as and with less hassle than the architect. The findings from this study suggest it is expected that the architectural profession re-examines its position in the built environment both in code and practice in order to become sustainable. Although this study did not examine the effects of diversification of architectural roles from the perspective of the architects themselves, several indices from the perspective of the consuming public seem to corroborate what little is known about the threats to sustainable architectural practices in Nigeria.

6. Conclusion

The study examines the effect of diversification of architectural roles on the sustainability of the architectural profession in Nigeria. While some of the challenges emanate from the code of architectural practice in the profession, others arise from the inability of the architect to properly meet the needs of clients and to adapt to changing environments, viable practice ideologies and practice goals. Architects need to remember their basic duties to the client and take advantage of specialised tools for project management, scheduling, cost reconciliation, property development, product marketing, etc. which have become more integral in developing and sustaining viable architectural practices. The architect may not be able to cling indefinitely to the monopoly of design stages I and II as a means of sustaining the profession.

This study advocates further research and implementation of professional fullness in building up a progressive construction industry. More than any other building professional, the architect has to take cognisance of the fact that the role of the Prime Consultant ceases to be a romanticised or idealised position held without due competence and willingness to adapt to practice diversification. Architects have a constitutionally-given duty to protect and promote the image of the profession and this is best achieved by an evolution of expanded roles geared towards remaining relevant in the construction industry. Architects need to diversify their practices and improve their level of creativity and innovation through use of new materials and construction techniques so they do not get supplanted on grounds of incompetence. Architects need to “pay their dues” in training and practice development to ensure they improve the quality of their service delivery; legislature and professional bodies need to take decisive action on quackery and unlicensed practices to ensure fairness and equality in irregular billing practices. In the public sector,

approval boards should ensure the professionals in charge in building drawings approval are made up of a well-trained architectural team. The implementation of a digitalised monitoring database to protect the copyrights of architectural drawings would also protect the rights of architects whose works are unknowingly duplicated without proper consent and remuneration.

Most members of the public are ignorant about the role of an architect in the society and therefore make wrong conclusions by assuming anybody that can draw a building plan or has a little knowledge about building construction is able to perform all the duties of an architect which could lead to cases of building failure and/or eventual collapse. This study therefore recommends regular and on-going public awareness initiatives by stakeholders in the profession on the role of the architect in society. The study also recommends awareness initiatives for architects in training about what it takes to become an architect, the challenges they may face in practice and how to handle such challenges without compromising with the professional standard.

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