



RESEARCH ARTICLE

Awareness, Satisfaction, and Willingness to Pay Remuneration for Architectural Services among Clients in Nigeria

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ABSTRACT

This study assessed relationships between awareness, satisfaction, and willing(ness)-to-pay (WTP) remuneration for architectural services from client perspectives toward improving the public image and business performance of architects in Nigeria. Likert ratings of 16 officially approved architectural services based on residential developments from 97 respondents using descriptive statistics, *t*-tests, and regression analysis revealed that clients obtained architectural information through word-of-mouth referrals from friends, colleagues, architects and finally, through digital media. Respondents were significantly more aware (mean 2.75 on a 4-point Likert scale) than were WTP for architectural services (mean 2.12), $P = 0.000$. Clients were WTP for only production of construction drawings and site supervision. Awareness significantly predicted WTP ($\beta = -0.7$, $\text{Exp}(\beta) = 4.106$, $P = 0.003$) in a model including age and income which explained 36% of the variance in WTP. Satisfaction with architectural services negatively predicted WTP ($\beta = -0.77$, $\text{Exp}(\beta) = 0.462$, $P = 0.16$), implying that client satisfaction, a key performance indicator for architects, was no guarantee for WTP. Revisions to professional fees and code of ethics are recommended to allow architects and allied professionals advertise and market their services through online and social media outlets. Architects should also leverage on interior, furniture, fittings, and component design to improve remuneration and business performance.

Keywords: Architectural services, awareness, client satisfaction, willingness-to-pay, remuneration

INTRODUCTION

Architecture as a discipline and profession faces fundamental challenges regarding its sustainability and financial performance. While the same can be said of allied professional disciplines within the construction industry (CI), architects face a chronic and acute problem pertaining the steady decline in value and appreciation for professional services they render.^[1,2] This often translates to poor remuneration and unwillingness of some clients to pay for the professional fees charged by architecture firms to the extent that some authors have suggested that the profession is at risk of being gradually wiped out.^[3,4] Within the Nigerian CI (NCI), the profession contends with a number of external and internal challenges. Externally, such challenges relate to the stiff competition in securing jobs traditionally believed to be within the exclusive domain of architects, notably that of the prime consultant or project manager.^[1] Others include economic recession leading to fewer commissions, unemployment, low fees and salaries, corruption, lack of respect for the profession, non-compliance with payment of professional charges based on standardized scale of fees, proliferation of non-professionals and quacks, complex changes in client expectations as well as the rapid and dynamic technological developments in ICT and BIM.^[5-8] Internal challenges emanating from the profession include fragmentation within different architectural specialists and

cadres (technologists, landscape architects, draftsmen etcetera), disputes between professional organizations governing the affairs of the profession, poor management practices within architecture firms, lack of competency, frustration and personal stress among architects, client dissatisfaction with services rendered, declining quality of graduates, curricula incongruence with industry needs/requirements, arrogance, and holding onto a romantic view of architecture as the leading discipline in building construction.^[6,8,9-12] The lack of synergy between academia and practice which would have been a panacea to addressing many of the aforementioned challenges continues to exacerbate them.^[13] Consequently, few concerted efforts have been made to empirically address challenges facing the profession. In addition, prospective client perspectives and opinions regarding what architects do are rarely investigated

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nor empirically ascertained.^[1,6,10,14] Oluwatayo^[14] investigated client expectations from residential design services based on factors which define client expectations from literature. More recently, Adamu *et al.*^[15] established architectural services that clients are willing-to-pay (WTP) for. The study, however, did not establish awareness levels for these services nor the degree to which clients who have requested for those services were satisfied with them. Importantly, relationships between awareness, satisfaction, and WTP for architectural services are seldom explored.

This study bridges this gap by assessing relationships between awareness, satisfaction, and WTP for services rendered by architects in Kaduna metropolis. Clients are the reason for providing such services as architects achieve their objectives through work commissioned by clients.^[16] Clients are also avenues architects usually get remunerated for services they have rendered. Consequently, opinions from clients provide valuable feedback for improving the quality of service delivery.^[17] Such opinions also proffer insights into areas architects ought to focus their skills and energies on to satisfy clients towards making profit. Theoretically, the study also establishes a methodology for future partnerships between academia and professional practice toward generating sustainable solutions to challenges plaguing the architectural profession.

The aim of the study is to assess relationships between awareness, satisfaction, and WTP for professional architectural services among clients specifically within Kaduna metropolis. The study poses the following research questions:

- i. What levels of awareness, satisfaction, and WTP for architectural services exists among clients in Nigeria?
- ii. What relationships exist between awareness, satisfaction, and WTP for services rendered by architects in the study area?

Kaduna, the capital of the defunct Northern region of Nigeria was chosen for this study due to the large number of architectural firms apart from Lagos, Port Harcourt, and Abuja.^[18] Most studies on architectural services have been conducted in southern Nigeria, notably Lagos and Port Harcourt, with comparatively few similar research efforts in northern Nigeria.

LITERATURE REVIEW

Professional Architectural Services in the NCI

A professional is an individual that has been trained following the dictates of a distinct body of knowledge having met all requirements for entry into a recognized organization of similarly trained individuals who offer services in the public domain.^[19] Traditionally, the body of knowledge and norms of professional practice reside within the domain of professional institutions.^[20] The Nigerian Institute of Architects (NIA) and Architects' Registration Council of Nigeria (ARCON) constitute institutions traditionally at the helm of affairs of professional architectural practice in Nigeria. The scope of orthogonal or primary architectural services and payment milestones for architects practicing in the NCI approved by ARCON, and the statutory regulatory body for the practice of the profession is classified under three main phases, namely design, production

of construction drawings, and tendering/construction services in Stages 1, 2, and 3, respectively. Architectural services in Stage 1 basically relate to the preparation of illustrative and descriptive proposal outline drawings following a thorough appraisal of client needs and requirements commonly known as the brief. This stage signifies commitment of both client and architect and usually attracts 15% of professional fees based in the overall project cost.^[21] Stage 2 services consist of the concept design, coordinated detail design, and construction documentation, attracting 20%, 25%, and 40% of the project cost, respectively.^[6] Note that stage 3 involves tendering and construction services which are often charged according to time, man-hour rates, or based on lump sum agreements. Services such as site supervision depend on project and construction managerial skills which have lately been heavily contested by allied professionals in the NCI notably quantity surveyors, engineers, builders, project managers, and contractors. Site supervision and other construction-related work are even taken up by non-professionals due the easy entry level into the CI.^[22] This has been attributed to the inefficiency of architects to adequately provide such services, especially in the area of cost control.^[23] Although architecture was viewed as the respectable gentlemanly public face of the CI,^[24] as well as^[25] established that architects exhibit weak team managerial and soft skills. These are critical to providing satisfactory services to clients in stage 3 of professional services offered by architects in Nigeria.^[18] likewise report that first-time residential clients were least satisfied with project management but most satisfied with design services and capabilities of architects, supporting the observation by Rolf and Chileshe^[23] that architects understand design and construction as well as the implication of choices made by design demands on the overall success of projects. This competitive advantage places architects ahead of other CI professionals when it comes to project management and should be leveraged upon by members of the profession.

Other supplementary or additional services offered by architects include maintenance, interior design, litigation and arbitration, feasibility studies, site management, production of as-built drawings, landscape design, special drawings, models and renderings, development planning, redesigns and additional designs due to changes in approved designs, special meetings for application planning, bye-laws, regulations, design, and build as well as selection of other allied professionals on the design and construction team.^[6,18,21]

Client Awareness of Architectural Services

Awareness or having conscious knowledge about something, in this case the range of services architects offer in the public realm has largely been relegated to the production of drawings and site supervision.^[6] Public awareness regarding what architects do is low^[1,10] and knowledge about what architects do is not in the public domain.^[2] This lack of awareness can be traced to the general belief among architects that good work is enough advertisement for the architect and this should automatically attract clients.^[26] Stringent codes of ethics likewise constrain outright advertisement of architectural services by architects in practice.^[19] Frimpong and Dansoh^[2] noted that many clients heard about architects by word of mouth (WoM) recommendations from other clients, relatives, friends, and neighbors. Many prospective

clients are introduced to architects through previous clients, acquaintances, family,^[27] or other allied professionals.^[28] Consequently, communication between architects and clients, a vital link in the architect-client satisfaction relationship has proven to be difficult,^[29] often influencing remuneration of professional fees. Good communication with clients as part of managing a project has also been frequently overlooked by architects.^[30] This arises from habitus shock on the part of the client when first introduced to architectural terminologies because the professional training of architects sets them apart from clients,^[27] whose needs may not always be explicit. According to Oluwatayo *et al.*,^[18] client needs are either basic and assumed to be present even if not voiced out (such as structural soundness of a building), articulated (such as special features), or exciting and causing delight if such desires are met (such as budgets). Architects need to clearly understand and manage such desires to achieve client satisfaction, considered a key performance indicator of project success by architectural practitioners.^[31] The cumulative impact of poor knowledge about the services architects render as well as communication management during the course of executing a project is likely to be expressed by low satisfaction ratings for the quality of services rendered by architects, leading to unwillingness to pay for such services. This relationship is illustrated in Figure 1. With the relatively easy entry of workers into the CI, many clients are willing to pay other construction professionals and workers rather than architects to render architectural services, often citing exorbitant professional fees as a reason since projects can be achieved at lower costs in that manner.^[2,6]

Client Satisfaction with Architectural Services

Satisfaction is a person's pleasure (or lack thereof) resulting from a comparison of the perceived performance or outcome of a product to what was expected.^[32] It is a perception of the quality of architectural services received by a client or owner of a building project and is influenced by service delivery, product quality, reputation/image of the architect as well as the relationship quality between client and architect.^[18,33] Clients attach the highest level of importance to designs which are within budgets while adequately addressing clients' main needs and requirements. Oluwatayo^[14] also established that while clients were sure of what they wanted, architects misconstrued and underestimated the importance of expertise, experience, and competence toward achieving client satisfaction. Cost and quality proved to be more important than timely delivery.^[14] Personalized experience also influenced satisfaction, much

more than architects' creativity, especially for 1st-time clients of residential projects.^[18] Unlike what architects generally believe, reputation and WoM recommendations may facilitate more commissions but they are no guarantee for client satisfaction^[33] and by implication, WTP or remuneration of architects.

WTP Remuneration for Services in the Built Environment

WTP is the maximum amount of money a customer is willing to exchange for a product or service.^[34] It represents the worth a person is willing to part with to obtain a good or service.^[35] WTP is linearly associated with satisfaction derived from the product or service and is predicated on other factors, notably a person's economic status or purchasing power.^[35] Although very rarely investigated in relation to architectural services, WTP has been investigated in studies involving housing^[36] and water supply^[35] within the Nigerian context. Okoko^[36] established that age was the singular most devastating negative predictor of better housing in Akure and that WTP would decrease by 51.9% if age of the household head doubled. Income, age, and length of stay of the household head as well as number of income-earning workers resident in the house emerged as predictors of WTP in the study area. Yacim and Bello^[35] reported that majority of urban residents were unwilling to pay above 2000 Nigerian naira (NGN) for the supply of clean piped-borne water. Only 19% of the respondents were WTP 3000 NGN. The study concluded that WTP was influenced by the earning power of households, supporting the observation that there was a difference between willingness and ability to pay as the latter is a function of the purchaser's economic power. WTP is commonly assessed using contingent valuation (CV) methods based on surveys to elicit and establish the value of goods and services not traded in the conventional market.^[37] A hypothetical market scenario is usually formulated and described to respondents. Consequently, a threshold for the WTP is contingent on this hypothesized market condition. We employ professional fees computed for a residential project using the schedule of fees recommended by ARCON/NIA as thresholds for WTP in the current study.

METHODOLOGY

To address the first research question, a questionnaire survey targeted 100 clients and prospective clients as a subset of the general populace within the Bank of Industry and new Nigeria development company buildings in Kaduna metropolis.^[15] All respondents who participated in the survey gave their

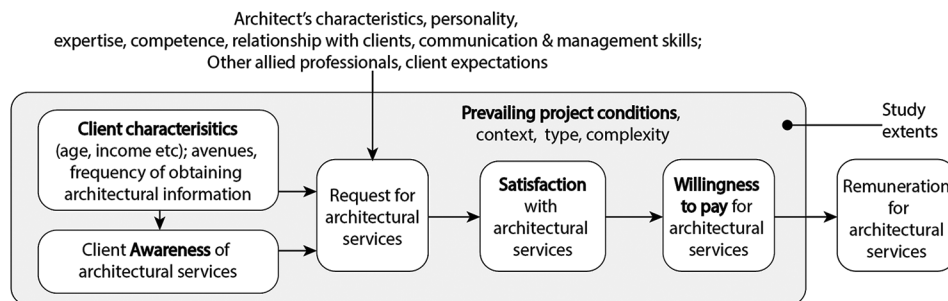


Figure 1: Conceptual framework. Source: Authors

consent before filling the anonymous questionnaire for the survey. The questionnaire was designed in three sections. The first section requested for demographic data on age, monthly income, frequent source of information regarding architectural services, frequency of coming across information on architectural services as well as whether respondents had ever requested for architectural services or not. Results from section one are presented in Table 1. Section two requested respondents to rate the degree of awareness and WTP for 16 architectural services adapted from ARCON/NIA^[21] using

Likert scales ranging from 0 (not aware) to 4 (fully aware). WTP for the services was based on professional fees for a three-bedroom bungalow designed by a Kaduna-based architectural firm. Residential developments are the most dominant category of buildings private clients patronize architecture firms for in the NCI.^[6,18,25,31] Fees for each of the 16 services presented in the Appendix were computed from the bills of quantities (BoQ) for the same project produced by a quantity surveying firm also based in Kaduna. The BoQ put the total cost of the project at 13,029,255.02 NGN at the time of

Table 1: Demographic profile and ratings from respondents

Variable	Item	Frequency	Percentage
Age	20–29 years (0)	41 (1)	42
	30–39 years (1)	19 (2)	20
	40–49 years (2)	25 (3)	26
	50+ (3)	12 (4)	12
Income	<100,000 (0)	22	23
	100–250,000 (1)	42	43
	251–500,000 (2)	16	17
	501–1M (3)	3	3
	1–5M (4)	5	5
	5M+ (5)	3	3
Source of architectural information	No response	6	6
	Friends/colleagues (4)	36	37
	Architects (3)	24	25
	Print media (2)	20	21
	Digital media (1)	14	14
	No response	3	3
Frequency of architectural information	Very often (4)	9	9
	Often (3)	15	16
	Fairly often (2)	34	35
	Not too often (1)	33	34
	Hardly ever (0)	6	6
Client status	Client (0)	67	69
	Non client (1)	30	31
Awareness	Very high (3)	28	29
	High-Moderate (2)	61	63
	Low (1)	5	5
	None-Very low (0)	3	3
Satisfaction (clients only)	Highly satisfied (4)	12	18
	Satisfied (3)	31	46
	Neutral (2)	14	21
	Fairly satisfied (1)	4	6
	Not satisfied (0)	0	0
	No response	6	9
WTP	Willing to pay (1)	28	29
	Unwilling to pay (0)	60	62
	No response	9	9

Source: Authors' survey

the survey in September 2017. According to records obtained from the Central Bank of Naira,^[38] 1 United States Dollar was exchanged at 305.62 NGN at the Inter-bank foreign exchange market. Respondents were requested to rate their WTP on a Likert scale of 0 (not WTP) to 4 (completely WTP). This range was chosen to offset measurement problems associated with the CV method,^[37] considering that the computed fees were fixed and based either on the approved schedule of fees or man-hour rates.^[21] Ranges provided options for respondents to vary their WTP decisions. Results from the Likert scale ratings were analyzed using simple descriptive statistics (means, M; standard deviations, SD; rankings) in SPSS v 24. The ratings were also analyzed for differences using *t*-tests, presented in Table 2. Clients who have requested for an architectural service before were also requested to rate their satisfaction with architectural services on varying ranges of satisfaction (1-fairly satisfied to 4-highly satisfied). 0 meant that the client was not satisfied. Interpretations for awareness, satisfaction, and WTP are presented in Table 3.

Data from the questionnaire were also utilized in a regression model to explore relationships between awareness, satisfaction, and WTP, with results presented in Table 4. Lastly, an interview with the principal partner of Archi-Trendz was later conducted to triangulate results obtained from the survey.

RESULTS AND DISCUSSION

Out of the 100 questionnaires distributed equally in both buildings, 97 were retrieved. Results in Table 1 illustrate that 85 respondents were aged <50 years and well within the active working age bracket. 64 (66%) earn monthly wages below N250,000, 27 (28%) earn above this amount while 6 (6%) did not disclose their income. This result suggests that the average respondent is a mid-income earner. Friends and colleagues ($n = 36$, 37%) were the most frequent source of information regarding architectural services while a quarter ($n = 24$) noted that architects and the print media ($n = 20$, 21%) were the other frequent sources of information. Digital media ($n = 14$,

Table 2: Comparison between awareness and willingness to pay for architectural services

Architectural service	Awareness			Willingness to pay			t-test	Sig.
	Mean	Rating	Rank	Mean	Sig.	Rank		
Preparation of site measurement, drawing of existing buildings and landscape design	3.44	VH	1	2.10	0.00	9	9.35	0.00
Production of working drawings, specification, and details	3.43	VH	2	2.87	0.00	1	4.64	0.00
Site supervision	3.13	VH	3	2.50	0.00	2	3.524	0.00
3D renderings, special drawings, models	3.04	VH	4	1.97	0.00	13	7.543	0.00
Development plans	2.80	HM	5	2.30	0.00	5	4.278	0.00
Maintenance services, Renovation of wall and floor finishes	2.76	HM	6	2.44	0.01	3	2.542	0.01
Development studies	2.69	HM	7	1.66	0.00	14	7.756	0.00
Additional services, production of as-built drawings	2.59	HM	8	2.28	0.05	6	2.003	0.05
Redesigns and additional designs due changes in approved designs	2.56	HM	9	1.98	0.00	12	5.104	0.00
Interior designs	2.52	HM	10	2.41	0.49	4	0.694	0.49
Preparation of illustrative and descriptive proposal outline	2.49	HM	11	2.14	0.00	8	4.340	0.00
Obtain tenders to complete project	2.42	HM	12	2.20	0.03	7	2.220	0.03
Feasibility Studies	2.26	HM	13	2.09	UWTP	10	2.509	0.01
Special meetings for application for planning or building bye-laws and regulation	2.26	HM	14	1.49	UWTP	15	6.215	0.00
Furniture, fittings and component design	2.18	HM	15	2.06	UWTP	11	1.568	0.12
Litigation and arbitration	1.62	L	16	1.49	UWTP	16	1.693	0.09

Source: Authors' survey, UWTP: Unwilling to pay, VH: Very high, HM: High-Moderate, L: Low

Table 3: Interpretation for awareness, satisfaction, and WTP

Awareness		Satisfaction		WTP	
Mean range	Interpretation	Scale	Interpretation	Mean range	Interpretation
3.00–4.00	Very high	4	Highly satisfied	2.40–4.00	WTP
2.00–2.99	High-Moderate	3	Satisfied	0.00–2.39	Unwilling to pay
1.00–1.99	Low	2	Neutral		
0.00–0.99	None-Very low	1	Fairly satisfied		
		0	Not satisfied		

WTP: Willingness-to-pay, Source: Authors

14%) recorded the lowest frequency, implying that architects are yet to leverage on the rise of personal advertisement using numerous digital social media outlets available on the internet. This has been noted to be a challenge when it comes to marketing of professional services in architecture^[26] and the CI^[39] due to constraints imposed by professional code of ethics in the CI. 60% of respondents were fairly or less exposed to information on architectural services as only 40% receive such information often or very often. About a third (31%) had never requested for architectural services while the other 67 (69%) were clients who had requested for such services at one time or the other.

Overall, respondents were more aware of architectural services ($M = 2.75$, $SD = 0.57$) compared to their WTP for them ($M = 2.12$, $SD = 0.78$). This difference (0.63 , $SE = 0.09$) was significant ($t = 6.89$, $P = 0.000$). Illustrated in Figure 2, all mean values of WTP (green lines) fell within the area covered by awareness of the 16 services (blue lines). Details of comparisons between awareness and WTP for the services are presented in Table 2.

Data from Table 2 reveal that four architectural services recorded very high awareness levels based on respondents' ratings. These are preparation of site measurement, drawing existing buildings and landscape design; production of working drawings, specifications and details; site supervision as well as preparation of 3D, special drawings, models, and renderings.

Of the four well-known aforementioned architectural services, clients were only WTP for production of construction-related drawings, specifications, and details as well as for site supervision. Clients were unwilling to pay for the other two well-known services in Table 2. Production of construction documents and site supervision are services that are primed for architects in the construction market to target and improve their competitive advantage. Production of construction documents often involves input from allied CI professionals notably quantity surveyors who usually produce BoQs and engineers responsible for producing mechanical, electrical, and structural drawings. Although several studies point to the strength of architects and architecture graduates in the design domain,^[11,19,23,26] recent observations from architectural practice point to a decline in design competencies and quality of architecture graduates from Schools of Architecture.^[40] Architects need to improve and perfect their design and construction-related competencies right from school into practice as this gives the profession its edge over all others even within the CI. This includes design competencies for site measurements, as-built drawings, landscape design as well as 3D renderings, special drawings, and models. Results from this study also illustrate that site supervision is the other architectural service clients that are likely to remunerate based on WTP ratings from respondents. These results also imply that clients are WTP for services mandatory to the realization of successful project completion considering construction

Table 4: Regression model, willingness to pay for architectural services among clients

Variable	β	S.E.	Wald	df	Sig.	Exp(β)
Age	-0.010	0.319	0.001	1	0.97	0.988
Income	0.244	0.181	1.813	1	0.18	1.276
Frequency of obtaining architectural information	0.426	0.436	0.956	1	0.33	1.532
Satisfaction	-0.770	0.546	1.999	1	0.16	0.462
Awareness of architectural services	1.413	0.656	4.632	1	0.03	4.106

$R^2 = 0.356$, Prediction 82.1%, Omnibus test of model coefficients $P = 0.005$. Source: Authors' survey

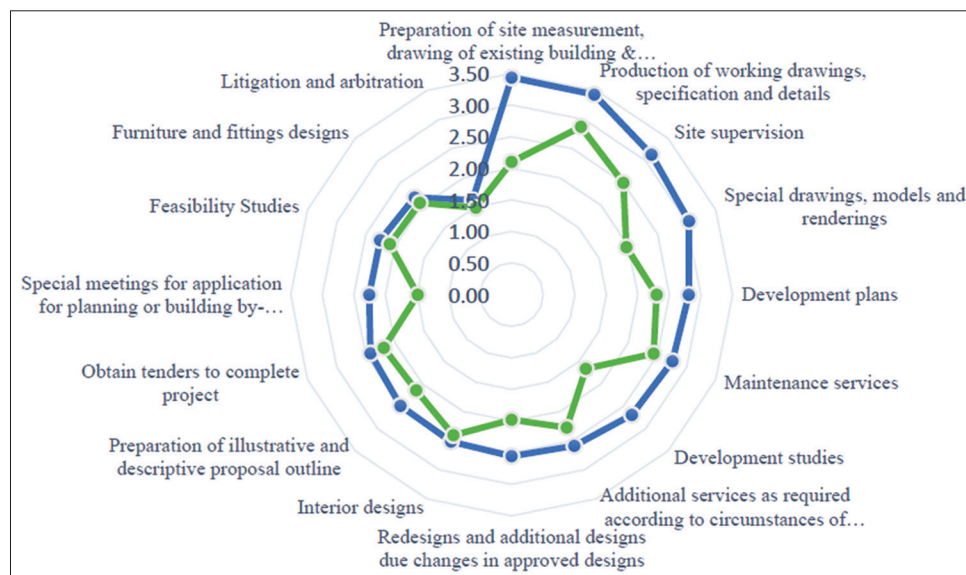


Figure 2: Awareness and WTP for architectural services. Source: Authors' survey

drawings and site supervision are statutory requirements for obtaining building permits from development control offices. Two other services recorded non-significant differences between ratings for awareness and WTP, suggesting opportunities for architects to take advantage of on the premise that awareness is not much different from WTP. These are interior design as well as furniture and fittings (components) design. This result supports recent calls made by Ajaero^[41] for architects to expand their market into other areas of competence apart from building design and site supervision. An interesting result was that production of initial proposal design, ranked 11th for awareness and 8th for WTP, is comparatively far less well known and that production of construction documents ranked 2nd for awareness and 1st for WTP. This suggests that architects or other allied professionals are liable to skip progressive stages of design development, probably through free designs as a marketing strategy^[42] and directly embark on production of construction documents considering that respondents noted that architects were the second most frequent source of architectural information after friends and colleagues [Table 1]. This trend partly explains the low value attached to architectural creativity vested in the proposal outline stage from which construction documents eventually emerge, thereby short-circuiting avenues for architects to be adequately remunerated for stage 1. Eze *et al.*^[42] established that free designs were ranked 1st by architects, quantity surveyors, and engineers as a marketing practice in the NCI, in spite of the professional code of ethics generally banning open marketing in the CI among construction professionals. This calls for a reassessment of such codes, especially as it affects marketing to reflect realities of contemporary practice not only for architects but also other allied professionals. Digital media, effectively employed by the service industry for marketing, especially through social media outlets and the internet was the lowest in ranking for avenues clients receive information of architectural value [Table 1]. Professional bodies regulating the conduct of professional practice in the NCI will need to revisit the issue of fees and codes of ethics as this may be hampering the business performance of architects and allied professionals within the NCI.

The least known service with the lowest ranking for WTP is litigation and arbitration [Table 2]. This calls for public awareness as it is a vital component for managing conflict in construction. Along with the other services which received highly moderate but low ratings for WTP, these are services

architects that have been trained for and ought to be presented to the public through contemporary avenues of communication and marketing such as the internet, digital, and even social media.

Results from the regression analysis presented in Table 4 in response to the second research question illustrate that awareness of architectural services was the only significant predictor of WTP in a model consisting of satisfaction with architectural services, age, income, and frequency of obtaining architecturally relevant information. The odds are that WTP is likely to increase 4 times by an increase of 1 unit in awareness of architectural services. The model explains about 36% of the variance in WTP, implying that other variables such as gender, employment level, and experience with architectural services, whether the services were obtained from architects or not should be considered in future studies. Satisfaction with architectural services was not only a negative predictor but also it records the lowest odds ratio ($\text{Exp}(\beta)$) value in Table 4. This result suggests that satisfaction with architectural services does not guarantee WTP professional fees for residential projects, nor does it mean clients will remunerate architects for services rendered, supporting data in Table 1. Less satisfied clients were more WTP for architectural services rendered than satisfied clients. In view of the argument for free design services presented in the preceding section, it is likely that while clients are generally satisfied with services offered by architects [Table 1], construction work may have been performed at sub-standard levels in terms of quality, cost, and time and not even necessarily by architects, in support of observations preferred by Enwerekowe and Tsok^[6] as well as Frimpong and Dansoh^[2] that clients were WTP non-professionals for services architects can render due to exorbitant professional fees charged by the latter. Consequently, the framework presented in Figure 1 was modified in Figure 3 to reflect the foregoing observations. Income of respondents as well as frequency of receiving information of architectural importance recorded odds ratios > 1 in Table 4 and are thus important in explaining the model. This implies that income and frequency of receiving information of architectural relevance is positively related with WTP among clients.

Information from the interview generally supports these observations as firms in the study area largely rely on government projects for financial survival. "Funds from residential developments were employed largely to purchase consumables

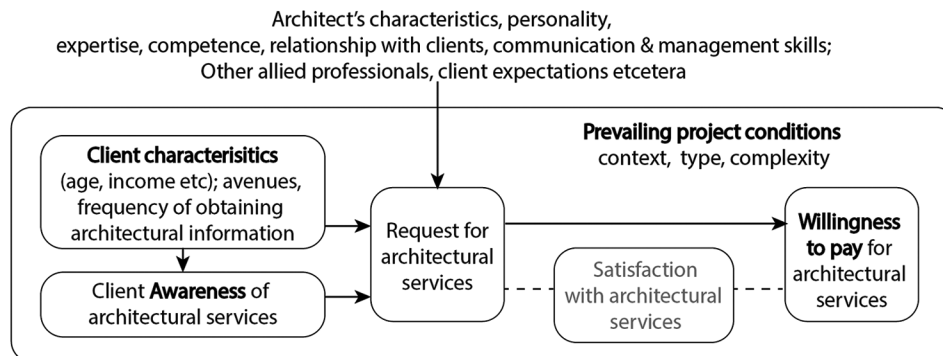


Figure 3: Revised framework for the relationship between awareness, satisfaction, and willingness-to-pay. Source: Authors

such as office supplies but not for business sustainability as clients are only willing to pay for basic services. These are rarely computed using the professional schedule of fees but by plea bargaining.”

CONCLUSIONS

This study set out to assess levels of awareness, satisfaction, and WTP for architectural services as well as to explore possible relationships between the three constructs with the aim of establishing areas architects can focus on in order to improve their services and address the decline in remuneration within the profession. Results revealed that:

- Clients obtain information regarding architectural services mainly from WoM sources, notably friends and colleagues as well as from architects and sometimes through print media. Digital media was the least employed avenue for obtaining information of architectural relevance.
- Clients were significantly more aware of architectural services than they were WTP for them. Clients were specifically WTP for two services-production of construction documents as well as site supervision, the latter being an area contested by other allied and non-allied professionals in construction.
- Preparation of site measurement, drawing existing buildings and landscape design as well as preparation of 3D, special drawings, models and renderings, interior design, furniture fittings, and components design were also well-known architectural services.
- Awareness of architectural services emerged as the only significant predictor of WTP.
- Satisfaction negatively and insignificantly predicted WTP, implying that satisfaction does not guarantee WTP. This is a pertinent finding considering architects in the NCI rated client satisfaction very highly,^[31] on the premise that satisfied clients infer more commissions^[26] and by implication, better remuneration. Findings from this study suggest that this linear progression may, in reality, not always apply to architectural services, especially residential projects which proliferate architectural services in the NCI.^[18,31]
- Collaborations between academic research and practice go a long way to resolve challenges facing the profession through systematic analysis of identified problems towards generating sustainable solutions. History proves that creative innovations often emerge out of difficult circumstances, especially when professionals in industry join forces with research and academia.^[43] Architecture is a time consuming and energy demanding profession. Combining forces within practice and academia is a pragmatic strategy for addressing challenges facing the profession and the CI at large.

RECOMMENDATIONS

- Architects need to explore and deploy the use of contemporary avenues for disseminating architecture-related information to clients, especially the internet and social media outlets.
- Architects have to improve their construction management skills as clients are likely to commission a single

professional who is efficient in both design and project management rather than split the interrelated services between two or more professionals.

- Preparation of 3D, special drawings, models and renderings, design, furniture fittings, and components design present areas ripe in the construction market for architects to leverage their competitive advantage on. The other 10 services though moderately known require strategic awareness campaigns by members and professional bodies involved in the practice of architecture in the NCI.
- A dramatic paradigm shift in the attitude of architects and allied professionals is required to change the idea that client satisfaction is a guarantee for WTP and remuneration of architectural services. This may not always be true.
- Architects need to rethink not only the skills they have been trained for or have acquired over time but also the business aspect of architectural practice.
- Similar studies across larger samples of clients and CI professionals will be beneficial for highlighting other areas of intervention uncovered in the current study. This should include other building typologies apart from residential developments as well as government projects in other locations within the NCI.

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Authors acknowledge the respondents who participated anonymously in the survey.

REFERENCES

1. R. Petrie. *Architects are Facing a Silent War*, 2014. Available from: <https://archmarketing.org/architects-facing-silent-war> [Last accessed on 2018 Aug 21].
2. S. Frimpong and A. Dansoh. Client perceptions of satisfaction and value for money in the employment of architects on private house projects. *International Journal of Qualitative Research in Services*, vol. 2, no. 3, pp. 211-237, 2016.
3. S. Frimpong and A. Dansoh. Marginalization and invasion of architects' role on house projects: Institutional intervention inadequacy and super wicked problems. *Frontiers of Architectural Research*, vol. 7, no.3, pp. 292-303, 2018.
4. E. Navarro-Astor and V. Caven. Architects in Spain: A Profession Under Risk. In: *Proceedings, 28th Annual ARCOM Conference*. Edinburgh, 2012.
5. C. T. Ndandok, S. A. Zemo and M. A. Mustapha. An assessment of the challenges of the architectural profession for its implication to the architectural technology curriculum in Nigeria. *African Scholar Journal of Environment, Design and Construction Management*, vol. 19, no. 4, pp. 97-108, 2020.
6. E. O. Enwerekwe and D. J. Tsok. Performance assessment of sustainable architectural practice in Nigeria: Insights from the diminishing role of the architect. *Journal of Applied Sciences and Environmental Sustainability*, vol. 3, no. 8, pp. 123-140, 2017.
7. P. A. Opoko and A. A. Oluwatayo. Architectural education for today's challenges. *Arts and Design Studies*, vol. 38, no. 2015, pp. 24-30, 2015.
8. O. O. Awolere. *Challenges Facing Architects in Practice in Nigeria*, 2011. Available from: https://s3.amazonaws.com/academia.edu/documents/38069455/challenges_facing_architects_in_practice_in_nigeria.pdf [Last accessed on 2017 Mar 23].
9. J. J. Maina. *Architecture Education in Nigeria: Problems and*

- Way Forward. PhD Seminar Paper, Department of Architecture. Ahmadu Bello University, Zaria, pp. 1-14, 2008.
10. J. D. Taylor. People know brad pitt wants to be an architect, but they can't name any real architects. *Journal of the American Institute of Architects California Council*, vol. 11, pp. 13-19, 2011.
 11. J. J. Maina. Professional competencies of architecture graduates: Perceptions from graduates, academics and employers in the Nigerian construction industry. *Built Environment Journal*, vol. 15, no. 2, pp. 1-13, 2018.
 12. J. J. Maina. Reliability of self-assessment questionnaires: Do architecture postgraduate students overestimate their employability skills? Feedback from graduates and employers. *Gazi University Journal of Science Part B: Art, Humanities, Design and Planning*, vol. 6, no. 2, pp. 71-81, 2018.
 13. E. Dassah and Z. Uji. Enhancing Architecture in Nigeria through Research: Bridging the gap between Academic and Practiced Research. In: *Proceedings 6th West Africa Built Environment Research (WABER) Conferene*. Accra, 2015.
 14. A. A. Oluwatayo. Client expectation from residential property design services and architects' perception. *DIMENSI, Journal of Architecture and Built Environment*, vol. 40, no. 1, pp. 33-38, 2013.
 15. D. I. Adamu, S. I. Sarafadeen and J. J. Maina. Willingness to Pay Remuneration for Architectural Services Among Potential Clients in Kaduna Metropolitan Area. In: *Proceedings, 6th Research Conference of NIQS (RECON 6)*. Uyo, 2022.
 16. RIBA. *Strategic study of the Profession: Phase 2 Clients and Architects*. RIBA, London, 1993.
 17. O. R. Aluko, G. Idoro and S. O. Ajayi. Perceived service quality of architectural consultancy firms and client satisfaction in building projects in Nigeria. *Journal of Engineering, Design and Construction*, 20, 1057-1072, 2022.
 18. A. A. Oluwatayo, E. Ibem and D. Amole. Satisfaction of first-time residential clients with architectural services. *Journal of Engineering, Design and Technology*, vol. 12, no. 3, pp. 316-335, 2014.
 19. C. Powell. Responding to marginalisation. *Architectural Research Quarterly*, vol. 2, no. 3, pp. 84-89, 1997.
 20. S. Laryea, R. Watermeyer and N. Govender. The Influence of Fees on the Quality of Professional Services in South Africa. In: *Proceedings of the Institution of Civil Engineers-Management, Procurement and Law*, pp. 1-10, 2020.
 21. ARCON/NIA. *Conditions of Engagement and Remuneration of Professional Architects' Services*. NIA, Lagos, 2011.
 22. G. Polat and U. Donmez. Marketing management functions of construction companies: Evidence from Turkish contractors. *Journal of Civil Engineering and Management*, vol. 16, no. 2, pp. 267-277, 2010.
 23. C. S. Rolf and N. Chileshe. Exploring the Role of the Project Manager within the Construction Design Team: Some Observations from the UK. In: *CIB W89 International Conference in Building Education and Research BEAR 2006 Construction Sustainability and Innovation*. Kowloon Shangri-la, 2006.
 24. H. I. Kwami, B. Hassan and F. Mustapha. An assessment of Management Knowledge, Skills and Abilities of Nigerian Architects: Towards a Sustainable Management in Architectural Practice. In: *IOP Conference Series: Earth and Environmental Science*, vol. 1054, no.1, pp. 012038, 2022.
 25. L. O. Oyedele and K. W. Tham. Examining architect's performance in Nigerian private and public sectors building projects. *Engineering, Construction and Architectural Management*, vol. 12, no. 1, pp. 52-68, 2005.
 26. A. Mitrache. Branding and marketing-an architect's perspective. *Procedia-Social and Behavioral Sciences*, vol. 62, pp. 932-936, 2012.
 27. J. Siva and K. London. Investigating the role of client learning for successful architect-client relationships on private single dwelling projects. *Architectural Engineering and Design Management*, vol. 7, pp. 177-189, 2011.
 28. P. D. Rwelamila and S. M. Machete. Marketing Development in Civil Engineering Consultancy Firms in South Africa. In: *Proceedings, 13th Annual ARCOM Conference*. Kings College, Cambridge, 1997.
 29. J. Siva and K. London. Client learning for successful architect-client relationships. *Engineering, Construction and Architectural Management*, vol. 19, no. 3, pp. 253-268, 2012.
 30. H. Taleb, S. Ismail, M. H. Wahab and W. N. M. Wan Mohd. Rani. Communication Management between Architects and Clients. In: *AIP Conference Proceedings 1891*, 2017.
 31. J. J. Maina and D. I. Adamu. Key Performance Indicators for Project Success: Perspectives from Architectural Practitioners in Nigeria. In: *Proceedings 6th Research Conference of NIQS (RECON 6)*. Uyo, 2022.
 32. J. Mbachu and R. Nkado. Conceptual framework for assessment of client needs and satisfaction in the building development process. *Construction Management and Economics*, vol. 24, no. 1, pp. 31-44, 2006.
 33. A. Oluwatayo, I. Ezema, P. Opoko and O. Fulani. Residential Property Developers' Satisfaction and Selection of Architectural Service Providers. In: *7th International Real Estate Research Symposium*, 2014.
 34. N. A. Z. Abidin. Willingness to Pay: What it is and How to Measure it, 2022. Available from: <https://conjontly.com/blog/willingness-to-pay> [Last accessed on 2022 Nov 19].
 35. A. J. Yacim and V. A. Bello. Willingness to Pay for Improved Water Supply in Nassarawa, Nasarawa State, Nigeria. In: *2nd International Conference on Infrastructure Development in Africa*. Johannesburg, 2013.
 36. E. Okoko. Tenants' willingness to pay for better housing in targeted core area neighbourhoods in Akure, Nigeria. *Habitat International*, vol. 28, no.3, pp. 317-332, 2004.
 37. H. Gunatilake, J.C. Yang, S. Pattanayak and K. A. Choe. Good Practices for Estimating Reliable Willingness-to-Pay Values in the Water Supply and Sanitation Sector. Asian Development Bank, Metro Manila, Philippines, 2007.
 38. CBN. Central Bank of Nigeria, n.d. Available from: <https://www.cbn.gov.ng/rates/exrate.asp?year=2017> [Last accessed on 2023 Nov 17].
 39. S. B. Yisa, I. Ndekugri and B. Ambrose. A review of changes in the UK construction industry: Their implications for marketing of construction services. *European Journal of Marketing*, vol. 30, no. 3, pp. 47-64, 1996.
 40. NIA. *Report Released at the 57th Annual General Assembly/Conference BGM 2017 "Affordable Housing: Rhetorics, Tectonics and Architecture"*. Ladi Kwali Hall, Sheraton Hotels and Towers, Abuja, 2017.
 41. F. Ajaero. *The Architect in the Marketplace*. NIA, New Delhi, 2022.
 42. E. C. Eze, O. Sofolahan, O. P. Onyeagam and U. Muhammed. Marketing strategies employed by construction firms in Abuja, Nigeria. *Journal of Construction Project Management and Innovation*, vol. 8, no. 2, pp. 1905-1925, 2018.
 43. V. Mulgundmath. Reimagining the academia-industry duology. *Academia Letters*, vol. 2, p. 2118.

APPENDIX

Architectural service	Fee (Nigerian naira)
Preparation of site measurement, drawing of existing buildings, and landscape design	217,000
Production of working drawings, specification, and details	403,000
Site supervision	30,000/h
3D renderings, special drawings, models	834,501.10
Development plans	30,000/h
Maintenance services, renovation of wall, and floor finishes	102,000
Development studies	30,000/h
Additional services, production of as-built drawings	30,000/h
Redesigns and additional designs due changes in approved designs	30,000/h
Interior designs	260,000
Preparation of illustrative and descriptive proposal outline	217,000
Obtain tenders to complete project	30,000/h
Feasibility studies	30,000/h
Special meetings for application for planning or building by-laws and regulation.	30,000/h
Furniture and fittings designs	30,000/h
Litigation and arbitration	30,000/h