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Factors Responsible for low Patronage of Quantity Surveyors' Services: Informal Clients' perspective

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Abstract

Studies have shown that patronage of Quantity Surveyors (QSs) by the public clients in Nigeria is discouraging in spite of the role they play in regulating professional services. This resulted in the Quantity Surveying (QS) services in building projects in the country not fully appreciated. Hence, this study used informal clients and registered quantity surveyors in Bauchi to assessed Factors Responsible for low Patronage of Quantity Surveyors' services for building projects Bauchi metropolis, Nigeria. The study used a sample frame of 443 informal clients that got approval for their residential building projects from planning authority between 2013-2018 to arrive at a sample size of 205. Subsequently respondents were surveyed using questionnaires through convenience and simple random sample techniques. Data obtained were analysed using descriptive statistics to ranked the factors. Findings revealed that most of the clients are not aware of the services offered by QS, hence misconcepts QS name for other sister professions. The implication of this finding is that there is high cost of construction project in Nigeria. The study recommends the application of effective awareness strategies which will, in a long run, enhance the patronage of QS services.

Keywords: Quantity Surveying; Informal Clients; Low Patronage; Bauchi metropolis.

Introduction

History traced the existence of quantity surveying (QS) profession in the Egyptian and the Roman Empires since 2000BC. The Egyptians engaged QS expertise in the preparation of estimates and costing of their great pyramid structures (Said, Shafiel

& Omran, 2014; Ogunsemi, 2015). Ogunsemi (2015) traced the existence of

the QS profession to the 1st century Romans through a citation in the book of Luke 14: 28 in the Bible; *for which of you, intending to build a tower, sitteth not down first, and countest the cost, whether he have sufficient to finish it?*. This shows that the Romans employs pre-construction cost forecasting before embarking in a full-scale construction works. However, with the fall of the two Empires (Egyptian & Roman), it became difficult to follow the progression of the QS profession development.

Documented evidence of QS profession development to date in history is traceable to the United Kingdom (UK); dating back to the historic Great Fire of London that occurred on 5th September 1666 (Olawumi & Ayegun, 2016). Prior to the 19th century, Quantity Surveyors (QSs) who were referred to as *measures* were engaged by various tradesmen to prepare estimates from a rough sketch for the tradesmen tender (Ogunsemi, 2015). It then became a custom in 1774 to engage a single QS to take off quantities (prepare unpriced Bills of Quantities-BOQ) using the rough building sketch; this then form the basis for tradesmen/contractors to tender on an equal basis. In 1802 a group of QS prepared the first method of measurement, which was used in 1836 for the construction of the new House of Parliament of Great Britain, designed by Sir Charles Barry. It became the first major public contract to be fully measured and tendered using detailed bills of quantities for financial accountability (Royal Institution of Chartered Surveyors, RICS, 1998). Subsequently, it became the practice to employ one quantity surveyor to prepare accurate BOQ and measured any variations that arose during the progress of the project (Seeley & Winfield, 2005).

According Moneke (2001), a prospective building client can be informed by a QS of his likely financial commitment through the production of preliminary estimation; by this, the client is guided on whether to halt or proceed with his plan. The QS have the potential to give cost advice at the design stage so as to accommodate the client budget in order to attain value for money. Moreover, where the client decided to proceed with his plan, the QS plan and manage the project procurement expenditure (Nnadi & Abel, 2016). The non-involvement of QS by informal clients in major cities in Nigeria had resulted in many building projects not attaining success due to cost overruns and resource wastage (Babalola, 2006; Kadiri & Ayodele, 2013). Kadiri and Ayodele (2013) advised that Quantity Surveyors should pursue private sector relevance rather than relying on government patronage alone.

One of the most important parameters used to define building project success is cost (Azhar, Farooqui, & Ahmed, 2015). Thus, client priority on construction time, contractor's planning capability, procurement methods, and market conditions including the level of construction activity, are qualitative significant factors affecting project costs that are dependent on the quality of the professional saddled with the responsibility of

project cost management (Elchaig et al., 2005 cited in Ogunsemi, 2015; Tanko, Abdullah, & Ramly, 2017).

Despite the numerous benefits of engaging QS in a building construction project, as a cost management and procurement expert, the profession has suffered a lot of set-backs in terms of engagement from clients, lack of awareness, among others (Dada & Jagboro, 2012; Olanrewaju, 2015; Oladimeji & Adebiyi, 2017).

Several studies conducted on QS in construction projects ranging from competency requirements (Fadason *el al.*, 2017), service improvement (Ganiyu *et al.*, 2012; Luqman *et al.*, 2012), marketing (Ojo,2011; Yankah & Dadzie, 2015; Ogbu, 2015; Nnadi *et al.*, 2016), knowledge and service enhancement (Ibrahim, 2011; Kadiri & Ayodele, 2013; Oladimeji & Adebiyi, 2017;), and service utilization (Nnadi & Abel 2016; Oladimeji & Adebiyi, 2017; Anosike *et al.*, 2016; Kehinde & Ehijel, 2017) focused on formal clients. Few studies conducted on informal client focus on mode of business engagement in Ogun state (Aduloju & Dada, 2015), while Chidiebere *el. al.*, (2017) focused on other professionals such as legal practitioners, accountants, and medical practitioners in Abuja (FCT), Ahmad and Inuwa (2022) concludes the patronage was low, but did not study further their study on factors responsible for the low in patronage, thus needs for this study with the aim to investigate factors responsible for law patronage of QS services in Bauchi metropolis.

Theoretical Framework

This study is modelled after Social Exchange Theory (SET) propounded by Thibault and Kelley in 1959. The theory has roots in economics, psychology (Homans 1961) and sociology (Thibault &Kelley, 1959). It is a social psychological and sociological perspective that explains social change and stability as a process of negotiated exchanges between parties. George (1961) defined social exchange as the exchange of activity, tangible or intangible, and more or less rewarding or costly, between at least two persons. The basic premise on which social exchange theory has been developed is that social behaviour represents an exchange of activity, tangible or intangible, and more or less rewarding or costly, between at least two persons (Homans 1961). Fundamental to this proposition is the notion of reciprocity (Emerson 1976). This refers to the premise that an individual's action towards another is based on the expectation that it will elicit a fitting and proportional reaction from which the initiating individual will gain some value (Becker 1986). The more valuable a person receives, the more likely that person will respond with an activity which will further elicit that rewarding activity (Homans 1961). Social exchange theory posits that human relationships are formed by the use of a subjective cost-benefit analysis and the comparison of alternatives. People engage in Behavioural Sequence, or a series of actions designed to achieve their goal. This is congruent with their assumption that human beings are rational. All human relationships are formed by the use of a subjective cost-benefit analysis and the comparison of

alternatives that people develop relationships, which yield the greatest profits. When costs exceed rewards people seek to dissolve relationship.

The benefits of social exchange theory can only be enjoyed between the two parties in a business relationship if both parties have a reciprocal contribution to offer; this entails a symbiotic relationship. However, where one of the party to a business relationship fall short of given commensurate contributing to attain the full benefits of social exchange theory, the cost benefits that accrues between the party can never be attained. Thus, informal clients not patronizing of the QS potentials could result in their poor patronage or patronizing the wrong professionals for the cost management in building delivery projects.

Quantity Surveying Profession

The QS profession is defined by the RICS as the profession concerned with ensuring that the resources of the construction industry are utilized to the best advantage of the society by providing, amongst others; the financial management for projects and a cost consultancy service to both clients and contractors during the whole construction process (Ashworth, Hogg, & Higgs, 2013). The person responsible for undertaking and delivery of the above service is popularly called Quantity Surveyors (QSs). Today, the QSs are known by many other names such as 'construction cost consultants', 'building economists', 'construction accountants' and 'contractual and procurement specialists' (Ashworth et al., 2013: 19).

Services of a Quantity Surveyor

Traditionally, QSs are expected to conduct initial cost planning, increase and quantify all elements of a project, control costs throughout construction, give procurement advice and prepare financial documents accounts and valuations (Ashworth, 2010). Fanous (2012), further emphasis that QSs function is known as a simple measure and value system and still remains the main. The most important functions traditionally carried out by quantity surveyors are based upon the measuring and pricing of construction works (Olatunji, Sherard and Gu, 2009). The evolved roles and responsibilities of a Quantity surveyor as summarized by Fanous (2012) are:

Investment appraisal, analysis of financial risks, project planning, contractual dispute resolution, facilities management, project management, insurance valuates, providing insolvency services, measuring environmental impact and costs, managing maintenance programmes, cash flow accounting forecasts, value management attend client, design, project, site and other meetings as provided under this appointment.

Competency requirements of QS

The PMI (2002) defined competence as 'a cluster of related knowledge, attitudes, skills, and other personal characteristics that affect a major part of one's job, correlates with performance on the job, can be measured against well-accepted standards, can be

improved via training and development and can be broken down into dimensions of competencies'. Babalola (2009) while relating this to quantity surveying profession viewed a competent quantity surveyor as a person who is expected to possess a range of skills, knowledge and understanding and be able to apply these skills and knowledge in a range of context and organization. RICS (2009) has established a guide identifying, classifying and explaining QS competencies for the assessment of professional competence. There are 24 competencies that have classified in three sets of competencies, mandatory competencies, core competencies and optional competencies. Mandatory competencies are related to the personal, interpersonal, professional practice and business competencies common; core competencies are fundamental competencies required for every QS in the assessment of professional competence; and optional competencies are technical competencies that will be selected by QS for 2 options to reflect areas of specialization as follows:

Mandatory competencies

Conduct rules, ethics and professional practice, client care, communication and negotiation, health and safety, accounting principles and procedures, business planning, conflict avoidance, management and dispute resolution procedures, data management, sustainability, team working

• Core competencies

Commercial management of construction or design economics and cost planning, contract practice, construction technology and environmental services, procurement and tendering, project financial control and reporting, quantification and costing of construction works.

Optional competencies

Capital allowances, commercial management of construction or design economics and cost planning, contract administration, corporate recovery and insolvency, due diligence insurance, programming and planning, project evaluation, risk management, conflict avoidance, management and dispute resolution procedures.

Informal Construction Sector

The concept of informal sector originated in studies of the urban economy in developing countries in the early 1970s. The term 'informal sector' was used to describe unregistered and unregulated construction activities (ILO, 2002). In recent decades, the informal construction sector has gained popularity in developing countries such as South Africa, Nepal, Kenya and Tanzania in recent decades (Jason, 2008; Wells & Jason, 2010; Mlinga & Wells, 2002).

In any building process three groups of people will have to be involved; the client, the professional advisers and the contractor. Although each party has a distinct role to play, each party must understand and accept his interdependence with the others for the whole process to be carried out effectively. In order to achieve the most effective relationship

with the design and building teams, it is essential that a client is geared to provide information and to make decisions and act on them with the necessary urgency to maintain the desired program. Therefore, as things are, inexperienced clients are potentially at a disadvantage because they have no certainty of getting maximum service from the construction industry every time. What clients demand is service to satisfy their demand.

Constraints to Quantity Surveying Patronage in Nigeria

A number of reasons contributes to beset the patronage of the Quantity Surveying profession in Nigeria. The following were identified from the literature as barriers to non-corporate clients' patronage of QS services;

- 1. Conservative attitude of QS
- 2. Inadequate number of QS
- 3. Misconception about QS name
- 4. Misconception about QS role
- 5. Poor adoption of modern technology
- 6. Poor marketing strategy by QS
- 7. Unethical practices
- 8. Usurpation from sister professions

1) Misconception about QS name

The QS is a construction professional who ensures that the resources of the construction industry are utilized to the best advantage of the society by providing the financial management for projects and cost consultancy services to the client and designer during the whole construction process (Willis &Ashworth, 2006). Majority of non-corporate clients neither heard about the profession nor understood the role QS plays in building project management (Olatunde & Okorie 2016). Thus, misunderstood QS for either Land or Estate Surveyors (Babalola, 2006; Olanrewaju, 2015; Oladimeji & Adebiyi, 2017). This is because the profession is very young in Nigeria when compared with other professions in the built environment.

2) Misconception about QS Roles

The role of a QS is to ensure that the resources of the construction projects are utilised to the best advantage by giving the clients best value for money. The profession is very young in Nigeria when compared with some professions in the built environment such as Architects and Engineers (Olanrewaju, 2015). Thus, it could be seen that QS as a profession in Nigeria is relatively younger when compared with Architecture and the Engineering professions, for example. It is expected therefore that it will take some time for the society to get acclimatized with the novelty of the profession. (Babalola, 2006)

3) Poor marketing strategy by QS

Another issue identified in the literature as a confrontational factor is the poor marketing of the profession. Ajanlekoko, (2004) reported that the quantity surveyor is the least popular professional in the construction industry. Onashile (2005) posited that among the players involved in the procurement of constructed assets, the quantity surveyors are the least valued, respected and recognized. They are excluded from developments at every possible opportunity by other professionals and sometimes even by the developers out of ignorance.

4) Usurpation from sister professions

Odusami (2000) called on professional quantity surveyors to diversify into other areas like the cost management of civil and industrial engineering works. Ashworth and Hogg (2007), writing from the UK, argue that quantity surveyors have now largely been accepted as members of the engineer's design team. However, that is not the case in Nigeria. Attempts to diversify into the cost management of engineering projects have met oppositions from engineers. Mogbo (2002) posited that in Nigeria, the engineers have not always welcomed the idea of incorporating quantity surveyors into civil and heavy engineering works. This is a critical issue in professional quantity surveying in Nigeria, continues Mogbo, considering the fact that the bulk of the national construction budget is always allocated not to buildings but rather to civil and heavy engineering works. Writing on the challenges facing the quantity surveying profession in Nigeria, Ndanusa (2004) isolates inadequate contribution of the quantity surveyor to the cost management of engineering projects as one of them.

5) Conservative attitude of QS

Jagboro (2004) draws our attention to another issue in the professional practice of quantity surveying in Nigeria. He posits that the quantity's surveyor's preoccupation with production of bills of quantities, tender reports, interim valuations, fluctuation claims and final accounts has become the quantity surveyor's undoing in a challenging global construction village. Mogbo (2002) said that as the emphasis on public building development is shifting to civil engineering projects, the present restrictive role of the quantity surveyor in building projects has seriously challenged the profession. This study therefore includes declining demand for traditional services like production of bills of quantities as a probable strategic issue in professional quantity surveying.

6) Inadequate number of QS

A recent report shows that most university departments offering quantity surveying in the country are carrying more than the regulatory carrying capacity of 1 lecturer to 15 students (Ogunsemi, 2013). Therefore, dearth of qualified quantity surveying lecturers is one of the factors confronting professional quantity surveying in Nigeria. Concluding discussions on the roles of leadership in promoting the profession, Ofori and Toor (2012) submitted that more attention is

needed on innovation and people development. It stated that the profession should be able to entice and keep talents. Bauchi state with the highest population in the north-eastern part of the country also has limited number of qualified QS, with less than 40 registered professionals in the state (NIQS Bauchi chapter, 2019)

7) Unethical practices

Another aspect of the image of the profession is the integrity and technical competence of professional quantity surveyors. It appears that the integrity and technical competence of quantity surveyors have been impugned. Omole (2000) observed that quantity surveyors allow themselves to be used as agents and/or facilitators of corruption by their employers all in the vain hope of looking for security of employment and/or continuity of patronage. Surveyor's estimates are being challenged on a daily basis. Adebola (2000) spoke of the disdain of quantity surveyors in the public sector.

8) Poor adoption of modern technology

Commenting on the impact of technology on the profession, Esenwa (2000) writes that many software packages are now available for performing the services being rendered by the professional quantity surveyors. Such packages can easily be learned and used by persons who are not trained as quantity surveyors. Esenwa's fears are captured in these words: "it will not be long before some bright young computer scientists will take over our daily bread away with clever software". Smith (2011) also shared a similar view and supported the call for diversification to protect the profession.

METHODOLOGY

Informal clients that got approval of their residential building projects from Bauchi state urban planning and development board from 2013 to 2018 are the population of the study. The area of the study is Bauchi Metropolis; the capital city of Bauchi State. The State is the most populated in the north eastern Nigeria (NPC, 2006). The study adopted exploratory and descriptive designs through literature review and questionnaire survey. The study used convenience sampling because getting access to some of the clients when using simple random sampling became impossible since not all information about the clients was captured by planning authority. Out of the population of 443, 205 were surveyed and issued with a structured questionnaire accompanied and covering letter. The questionnaire comprised of two (2) sections: respondents' demographic profiles and factors responsible for low patronage. Frequency, percentage and severity index analysis was used. This study was able to satisfy research ethics in relation to other stakeholders, as well p-value of 0.782, the study questionnaire construct satisfies the crucial level values for its reliability (Pallant, 2011; Creswell & Plano, 2011).

RESULTS AND DISCUSSION

Reliability Test

This study used Cronbach's Alpha test for testing the reliability of its questionnaire for internal consistency (Pallant, 2011). The level of acceptance on a measure of the internal

reliability of the items on the questionnaire survey using Cronbach's Alpha ranges from 0 to 1.0 (Fellow & Liu, 2008); the crucial level to determine the internal reliability of a questionnaire that is considered to be acceptable is above 0.7 (Pallant, 2011). The study questionnaire construct satisfies the crucial level values for its reliability as shown on Table 1.

Table 1: Reliability Test Result

Factor category	No. of Items	Cronbach's α
Barriers to QS patronage	8	0.782

Questionnaire response rate

Table 2 shows the response rate of respondents on the questionnaire survey. The table shows a response about 79%, which is acceptable for research.

Table 2: Questionnaires response rate

Questionnaire	Questionnaire	Percentage
Administered	Returned	Returned
205	161	78.5%

Demographic information of the respondents

The respondents' level of education indicates over 80% have at least elementary education, out of which 31% have tertiary education qualifications. About 68% of the respondents have at least secondary school education, which means the respondents can read respond to information required. The age of informal client respondents indicates about 6.9% in 20-30 years, 31% in 31-40 years, 37% in 41-50 years, 10% in 51-60 years and 13% above 60 years. This indicates that more than 60% of the respondents are aged above 40 years. About 54% of the respondents indicated the building projects is for personal use, 24% indicated that the building projects is for rent, while only 18% build for sale

Table 2: Demographic information of the respondents

	_	•	U	-	
Questions		Options		frequency	Percentage
Respondents	Level				
of education		No	formal	24	13.8
		education			
		Elementary		18	10.3
		Secondary		66	37.9
		Tertiary		54	31.0
		Others		12	6.9

	Total		161	99.9
Age of respondents				
	20-30 YEARS		12	6.9
	31-40 YEARS		54	31.0
	41-50 YEARS		66	37.9
	51-60 YEARS		18	10.3
	ABOVE	60	24	13.8
	YEARS			
	Total			99.9
The use of the project				
	Personal		87	54.0
	Rent		39	24.2
	For sale		29	18.0
	Others		6	3.8
	Total		161	100

Factors responsible for low Patronage of QS Services

Table 3 presents responses on barriers to patronage of QS services. Misconception about QS role, misconception about QS name, poor marketing strategy by QS, usurpation from sister professions, and conservative attitude of QS were ranked to be severe barriers. While, inadequate number of QS, unethical professional practices, and poor adoption of modern technology were ranked to be moderately severe barriers.

Table 3: Responses on barriers to patronage of QS services

Barriers	Mean	SD	Rank
Misconception about QS role	3.97	0.671	1
Misconception about QS name	3.79	1.050	2
Poor marketing strategy by QS	3.79	0.849	3
Usurpation from sister professions	3.72	1.102	4
Conservative attitude of QS	3.62	0.762	5
Inadequate number of QS	3.41	0.968	6
Unethical practices	3.41	0.965	7
Poor adoption of modern technology	3.41	0.932	8

The study shows that misconception about the roles of QS, misconception about QS name, poor marketing strategy, and usurpation from sister professions are severe barriers. This

agrees with the work of Kawu (2011); Oladimeji and Adebiyi (2017) that some clients subsume QS services under the services rendered by the design consultants. The misconception about the name for either estate surveyors or land survey is a finding that agrees with the studies of Babalola (2006); Olanrewaju (2015); Oladimeji and Adebiyi (2017). The revelations that poor marketing strategy and usurpation by sister professions concur with the findings of Anunike (2011) and Babalola (2006).

CONCLUSION AND RECOMMENDATION

Previous studies indicated that informal clients do not get value for money in construction project delivery, due to poor patronising of quantity surveyors for cost management services of their building projects (Ahmad & Inuwa, 2022). There is a need to conduct a study on the most appropriate marketing strategy for marketing the QS profession in the country.

The study recommends that:

- i. The Nigerian Institute of Quantity Surveyors should employ effective measures that could drive informal clients QS service patronage.
- ii. The Nigerian Institute of Quantity Surveyors should strategize on the appropriate measures for increasing awareness to informal clients on QS service patronage.
- **iii.** More studies should be conducted on how best to sensitize Nigerians on the advantages of patronising QS services for cost management services.

REFERENCE

- Ajanlekoko, J. (2004). Branding the Quantity Surveying Profession to Meet the Challenges of Built Environment. The Quantity Surveyor, Vol. 49 No. 8, 3-7.
- Anosike, N. M., Enenmoh, C. R., Nkeleme, E., & Mosaku, T. O. (2016). Comparative Analysis of Contributions of Building and Quantity Surveying Professions Towards the Development of Sustainable Construction Industry in Nigeria,. *African Journal of Built Environment Research, Vol. 1, Iss. 1*, 1-14.
- Ashworth, A., Hogg, K., & Higgs, C. (2013). Willis's Practise and Procedure for the Quantity Surveyor. 13th Ed. West Sussex: John Wiley & Sons Ltd.
- Babalola, O. (2006). Harnessing the Opportunities at the Grassroots to make Quantity Surveying Profession Competitive at the National and International Markets. 22nd Nigerian Institute of Quantity Surveyors (NIQS) Biennial Conference. . Cross River, Nigeria: NIOS.
- Becker, L. C. (1986). Reciprocity. New York: Routledge and Kegan Paul.
- Berry, L. L. (1983). Relationship Marketing. Emerging Perspectives on Service Marketing, Chicago, American Marketing Association.
- Chidiebere, E. E., Abraham, A. I., & Ramat, S. (2017). Appraisal of the Perception of Quantity Surveying Profession by Non-allied construction professionals in Nigeria. *International Journal of Advanced Engineering, Management and Science*. 3(), 2454-1311.
- Chua, D. H., Kog, Y. C., & Loh, P. K. (2007). Critical Success Factors for Different Project Objectives. *Journal of Construction Engineering and Management*, 125(3), 142-150.
- Creswell, L. W., & Plano, C. L. (2011). Designing and conducting mixed methods research (2nd ed.). Thousand Oaks, CA: Sage Publications, Inc.
- Dada, J. O., & Jagboro, G. O. (2012). Core Skills Requirement and Competencies Expected of Quantity Surveyors: Perspectives from Quantity Surveyors Allied Professionals and Clients in Nigeria. Australia Journal of Construction Economics 12: 4.
- Emerson, R. M. (1962). Power-dependence relations,". *American Sociological Review*, 27, 31-41.

 Fadason, R. T., Chitumu, D. Z., & Buba, S. G. (2017). Repositioning the Nigerian Quantity Surveyor for Global Competitiveness in Infrastructure Development. *Quantity Surveyors Registration Board Of Nigeria (QSRBN) 7th Building And Construction*
- Economic Roundtable . , Abuja: QSRBN.
- Field, A. (2012). Discovering Statistics using IBM SPSS Statistics, 4th edition.

- Ganiyu, B. O., Oyewobi, L. O., Nwokobia, L., & Suleiman, B. (2012). Diversification and Performance of Quantity Surveyors in Nigerian Construction Industry. *The Construction, Building and Real Estate Research Conference of the Royal Institution of Chartered Surveyors (RICS)*. Held at Las Vegas, Nevada USA: Arizona State University.
- Homans, G. (1961). Social Behavior: Its Elementary Forms . New York: Harcourt Brace Jovanovich.
- International Labour Organisation (ILO). (2002). Decent work and the informal economy. Discussion paper,. *International Labour Conference*, 90th session,. Geneva: ILO.
- Inuwa, I. I. (2014). Project Planning In Construction Procurement: The Case of Nigerian Indigenous Contractors. Nairobi-Kenya: PhD Thesis: Jomo Kenyatta University of Agriculture & Technology.
- Kadiri, D. S., & Ayodele, E. M. (2013). Constraints to quantity surveying awareness in Nigeria. Civil and Environmental Research, 3(11), 17-21.
- Kanji, G., & Moura, P. (2002). Kanji's Business Scorecard. Total Quality Management, 13 (1),, 13-27.
- Kehinde, O. B., & Ehijel, E. T. (2017). Assessment of Participation of Quantity Surveyors in Oil and Gas Projects in Nigeria. Global Journal of Researches in Engineering, 17; 4(1).
- Kotler, P., & Armstrong, G. (2015). Principles of Marketing. Australia: Pearson Group Pvt.
- Krejcie, R., & Morgan, D. W. (1970). Determining of Sample Size for Research Activities. Educational & Psychological Measurement, 30: 607-610.
- Lee, S., Trench, W., & Willis, A. (2011). Willis's Elements of Quantity Surveying 11th Ed. West Sussex: Wiley-Blackwell.
- Lee, S., Trench, W., & Willis, A. (2011). Willis's Elements of Quantity Surveying. 11 ThEdu. West Sussex; : Wiley-Blackwell.
- Love, E., Staton, M., & Rotman, J. (2016). Patronageas a matter of principle: the influence of standards of judgment on client patronage. *Marketing Letters*, 27, (4), 661-674.
- Luqman, O. O., Bolaji, S., & Abubakar, M.-J. (2012). Job Satisfaction and Job Commitment: A Study of Quantity Surveyors in Nigerian Public Service. *International Journal of Business and Management Vol. 7*, No. 5.
- McNabb, D. E. (2009). Research Methods for Political Science: Qualitative and Quantitative Methods. New Delhi: PHI Learning Private Limited.
- Mogbo, T. C. (2002). Quantity surveying education: the dilemma of a threatened discipline in Nigeria. *The Quantity Surveyor*, *Vol. 39 No. 2*, , 14-22.
- Moneke, G. O. (2001). Quantity surveying profession of the millennium: Problems and prospects. *The Quantity Surveyor* 36(3), 27-31.
- Mselle, J., & Sanga, S. A. (2017). Knowledge Incubation in Informal Construction Practices in Tanzania: A Critical Review of the Literature. *International Journal of Construction Engineering and Management*, 6(3):, 63-77.
- Muhammad, K. A. (2016). The Challenges of Cost Management of Infrastructure Development in Nigeria. *Journal of Physical Sciences and Environmental Safety Volume 6, Number 1*,.
- Ndanusa, A. (2004). Our profession and future challenges. The Quantity Surveyor, Vol. 49 No. 8,.
- NIQS, N. I. (2004). Who is a Quantity Surveyor? What Can he Do For You-the Client? 21st biennial conference general meeting on Adding Value to a Reforming Economy. Abuja: Nigerian Institute of Quantity Surveyors.
- Nnadi, E. E., & Alintah-Abel, U. (2016). Utilization of Quantity Surveyors' Skills in Construction Industry In South-eastern Nigeria. . *International Journal of Latest Research in Engineering and Technology*: 2(2), 42-51.
- Ogbu, C. (2015). Application of Marketing Strategies in Nigerian Quantity Surveying Firms. Journal of Economics and Sustainable Development.
- Ojo, G. K. (2011). Effective Marketing Strategies and the Nigerian Construction Professionals . African Journal of Marketing Management Vol. 3(12), 303-311.
- Olatunde, N. A., & Okorie, V. N. (2016). Appraisal of Awareness Level of Quantity Surveying Profession among Secondary School Students in Benin City, Nigeria. *International Journal of Advanced Engineering, Management and Science (IJAEMS)*, 2(8).
- Olatunji, O., Sherard, A., & Gu, N. (2009). Building Information Modeling and Quantity Surveying Practice. *Emirates Journal for Engineering Research* (15), 67 70.
- Oso, W. Y., & Onen, D. (2011). Writing Research Proposal and Report: AHandbook for Beginning Researchers, Revised Edition. Nairobi-Kenya: The Jomo Kenyatta Foundation.
- Oxford Dictionary of English. (2013). Oxford Dictionary of English. Oxford: Oxford University Press.
- RICS, . (2012, January 06). Royal Institute of Charted Surveyors. Retrieved from from:http://www.rics.org/Global/APC_Requirements_and_Competencies_Guide.pdf [Accessed 6 Jan 2020]: from:http://www.rics.org/Global/APC_Requirements_and_Competencies_Guide.pdf [Accessed 6 Jan 2020]
- Seeley, I. H., & Winfield, R. (2005). *Building Quantities Explained. 5th ed.* Basingstoke: BookPower with Palgrave Macmillan. Smith, P. (2011). Information technology and the QS practice. *Australasian Journal of Construction Economics and Building, Vol. 1 No. 1*, 1-21.
- Tanko, B. L., Abdullah, F., & Ramly, Z. M. (2017). Stakeholders Assessment of Constraints to Project Delivery in the Nigerian Construction Industry. *International Journal of Built Environment And Sustainability*, 56-62.
- Thibaut, J. W., & Kelley, H. H. (1959). The Social Psychology of Groups. New York: John Wiley & Sons.
- Wells, J. (2007). Informality in the Construction Sector in Developing Countries. *Construction Management and Economics*, 25(1), 87–93.