

Quantity Surveying Profession and Its Prospects in Nigeria

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Abstract: *The study assessed the prospects of the Quantity Surveying profession in Nigeria. The study identified and evaluated the level of performance of the identified functions performed by the quantity surveyors in the Nigerian Construction industry. The study reveals that there is a high level of performance of the basic functions of the quantity surveyors which include feasibility and viability studies, contract documentation, life cycle costing, preliminary cost advice, etc. The study also examined the factors militating against the effective performance of the quantity surveyor's functions in the Nigerian Construction industry. The study identified and presented some possible factors militating against the performance of Quantity Surveying functions and some anticipated measures to enhance the quantity Surveying profession for evaluation by the respondents using structured questionnaires. The data collected were analyzed with SPSS version 23 using frequencies and mean item scores. The study revealed some major factors militating against the effective performance of the quantity surveying profession in the Nigerian Construction industry like widespread corruption in Nigeria with a mean score of 4.53, obsolete curriculum and inadequacy in modern equipment with a mean score of 4.41, professional rivalry from kindred profession with a mean score of 4.35, level of adoption of UT with mean a score of 4.32, and inadequacies in academic and professional training with a mean score of 4.18 among others. The study equally revealed some important measures requiring implementation to enhance the quantity of Surveying profession in Nigeria like a clear delineation in professional functions in the construction industry to curb professional rivalry with a mean score of 4.35, reviewing the curriculum of Tertiary Institutions with a mean score of 4.24, improving professional skills through continuing professional development with a mean score of 4.15, improving technological applications in the execution of Quantity Surveying functions with a mean score of 3.91 and professional certification in specialized areas with a mean score of 3.85.*

Keywords: *Quantity surveying profession, Construction industry, Skills, Nigeria, Certification*

I. INTRODUCTION

The profession of Quantity Surveying originated in great Britain (Odeyinka, 2006; Oke, Timothy & Olaniyi, 2010 as cited in Eze, Awodele and Seghosime, 2017). In Nigeria however, the professional body (Nigerian Institute of Quantity Surveyors) was founded by a group of Nigerian Quantity surveyors who trained and practiced in the United Kingdom (UK) in 1969. This was born out of the realization of the urgent need to establish a professional body of Quantity Surveying parallel to that of UK's Royal Institution of Chartered Surveyors. The Quantity Surveying Profession being practiced in Nigeria is similar to the pater of that of the UK along other Commonwealth countries (NIQS, 2004; Odeyinka, 2006; Oke, Timothy & Olaniyi, 2010 as cited by Eze, Awodele, and Seghosime, 2017). The functions of Quantity surveying are performed under various names in different countries. Thus, the role is universal. NQIS, (2004) opined that the Quantity Surveying Profession is Recognized by the 1978 regulated and other Professions Act as being among the scheduled Professions while the recognition and legal backing of the Quantity Surveying Profession was given by the decree No.31 of 1986. The decree also helped to set up the Quantity Surveyors Registration Board of Nigeria (QSRBN) which is meant to regulate the Profession (Eze, Awodele & Seghosime, 2017).

The introduction of the Quantity Surveying profession in Nigeria gained recognition and legal backing guiding its practices as stated earlier. The service rendered by the profession then was limited. Quantity surveyors are responsible for the initial phase of capital expenditure in the construction of any facility or building. They are involved in the design, feasibility and construction phases (Timothy & Olaleke, 2016). Over the 19th Century, the profession of Quantity surveying witnessed great development (Opawole, Awodele, Babatunde, & Awodele, 2012 as cited in Timothy & Olaleke, 2016). Quantity surveyors participate in various levels of construction including mining, building, civil, building and installing refineries as well construction of petrochemical plants (Olanrewaju & Anahwe, 2015 as cited in Timothy and Olaleke, 2016).

The quantity surveying profession despite its development in its service quality over the years is not without challenges. Several challenges have been identified as militating against the effective and efficient practice of the profession in Nigeria.

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The Profession according to Kadiri and Ayodele (2013) as cited in Eze, Awodele, and Seghosime (2017), is embattled by a series of challenges that undermines its awareness which includes the corruption climate of the environment, the relatively young age of the profession and the attitude of Quantity Surveyors themselves. They further explained that the immense benefits of the profession are yet to be fully appreciated in Nigeria. Despite the overwhelming evidence of the vital roles of this noble profession “quantity surveying” plays on construction projects, the awareness level of both students and parents is very low (Olatunde & Okorie, 2016). Another identified challenge to the profession in Nigeria is the issue of quackery in the practice and the intrusion of allied professionals in the quantity surveying functions in regards to which, the NIQS president, Qs Onashile in his visit to President Muhammadu Buhari, appealed that a clear delineation in functions is made among construction professionals.

II. RESEARCH METHODOLOGY

A. Research design

The research design also refers to the structure, plan, and strategy of investigation concerned for the purpose of obtaining responses to the research questions and controlling any variance that may arise (Brandon, as cited in Rohana, 2012). Based on the above definitions, this study adopted a developmental survey research design. A developmental survey research design seeks to discover how some variables or characteristics of a given population change over time, at what rate and in which direction, and also to discover what factors contribute to or are responsible for the changes (Godwin & Samuel, 2016).

B. Research population

According to Lawal and Adeyeye (2006), the population is the total number of objects, units, or individuals used for the research which could be finite/limited or infinite/uncountable. And the main objective of a study population is to define the scope of the proposed study (Olufemi, 2007). The target population for this study will be strictly Practicing Quantity surveyors in Edo state.

C. Sampling frame

According to Godwin and Samuel (2016), a sample is a proportion or subset of the population which is studied in place of the entire population. A sampling frame simply means the total number of the population out of which the sample is actually drawn. The sampling frame for this research is the number of quantity surveyors in Edo state which is 47.

D. Sampling technique

A sampling technique is a plan that specifies the manner in which elements will be sampled from the whole (Godwin & Samuel, 2016). In carrying out this research study, a non-probability sampling method known as Purposive sampling was strategically employed. The key feature of a purposive non-probability sampling according to Godwin and Samuel (2016), is that population elements are purposefully selected. Such selection may not be made on the basis of representativeness but rather because they can offer the contributions sought.

E. Data collection instrument

The collection of data is a very crucial step in the educational research process. Every scientific research involves the collection of pertinent data (Godwin & Samuel, 2016). According to Nworgu (as cited in Godwin and Samuel, 2016), such is necessary for arriving at the solution(s) to the problem on hand. For the purpose of this study, a structured questionnaire was used to collect primary data.

F. Data collection and analysis

The method used for data collection in this research work includes both primary and secondary methods of data collection of which information was extracted through the use of structured questionnaires. The structured questionnaire was distributed and collected by the researcher. The information that was obtained from the structured questionnaire served as the primary source of data, while the secondary source of data includes the use of textbooks, journals and internet sources. Data was carefully analyzed statistically using descriptive statistics, using frequency and mean item score to draw inferences.

III. RESULTS

A total of forty-seven questionnaires were administered among practicing quantity surveyors in Edo state and only thirty-four questionnaires were recovered successfully which were analyzed for this research work. SPSS was used for data analysis using frequency for the analysis of the demographic information of respondents and Mean item score for the analysis of relevant data Kadiri and Ayodele (2013).

A. Respondents’ components

Gender

Table 1 reveals the gender of the respondent quantity surveyors. A total of 25 respondent quantity surveyors amounting to 73.5% are male while a total of 9 respondent quantity surveyors amounting to 26.5% are female.

Table 1 : Respondent's gender

Gender	Frequency	Percent
Male	25	73.5
Female	9	26.5
Total	34	100

Age

Table 2 reveals the age bracket of the respondent quantity surveyors. A total of 3 of the respondent quantity surveyors amounting to 8.8% fall within the age bracket of 25-30years, a total of 6 of the respondent quantity surveyors amounting to 17.6% fall within the age bracket of 31-40years, a total of 12 respondent quantity surveyors amounting to 35.3% fall within the age bracket of 41-50years, a total of 8 respondent quantity surveyors amounting to 23.5% fall within the age bracket of 51-60years while 5 of the respondent quantity surveyors amounting to 14.7% are over 60years.

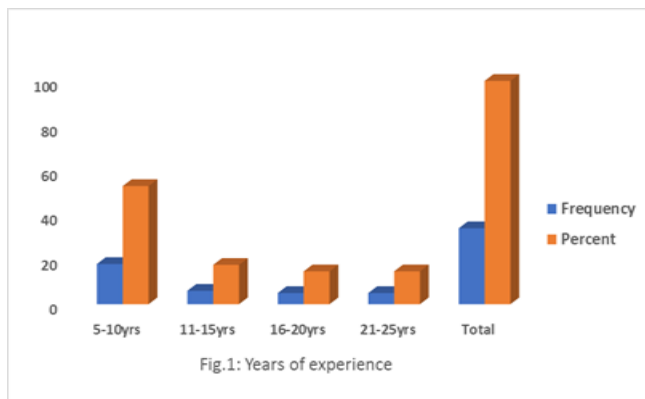


Table 2: Respondent's age

Age bracket	Frequency	Percent
25-30yrs	3	8.8
31-40yrs	6	17.6
41-50yrs	12	35.3
51-60yrs	8	23.5
over 60yrs	5	14.7
Total	34	100.0

Year of experience

Fig.1 reveals the years of experience of the respondent quantity surveying. A total of 18 respondent quantity surveyors amounting to 52.9% have years of experience between 5-10years, a total of 6 respondent quantity surveyors amounting to 17.6% have years of experience between 11-15years, a total of 5 respondent quantity surveyors amounting to 14.7% have experienced between 16-20 years and a total of 5 respondent quantity surveyors amounting to 14.7% have experienced between 21-25years.



Performance of quantity surveying

Table 4 shows the evaluation of the level of performance of the identified functions by the quantity surveyors. The table reveals that functions like preliminary coat advice, life cycle costing, cost control and post-contract management, estimating, contract documentation, valuation of variations, feasibility and viability studies, procurement management, value management, analysis and engineering, preparation of schedules of dilapidation, and arbitration and expert witness with the means score 5.88, 5.82, 5.71, 4.91, 4.88, 4.85, 4.62, 4.59, 4.48 and 4.41 respectively were ranked 1st, 2nd,3rd,4th,5th,6th 7th, 8th,9th,10th and 11th respectively.

On the other hand, functions like planning supervision, sustainability advisor, facilities management, monitoring capital projects, direct labor project evaluation, administering maintenance programs, and representing client/employer in design and build contracts with the means score of 3.47, 3.38, 3.35, 3.24, 3.00, 2.82 and 2.56 respectively were ranked 21st 22nd, 23rd,24th, 25th, 26th, and 27th respectively.

Table 4: Performance of QS functions

Function of Q.S	Mean	Ranks
PCA	5.9	1
LCC	5.8	2
CCPCM	5.7	3
ESTIM	4.9	4
CD	4.9	5
VV	4.9	6

FVS	4.6	7
PM	4.6	8
VMAE	4.6	9
PSD	4.5	10
AEW	4.4	11
PMC	4.4	12
PESTA	4.2	13
ABRVI	4.2	14
CA	4.0	15
CAD	3.9	16
TA	3.9	17

Note:

- Preliminary cost advice (PCA)
- Life cycle costing (LCC)
- Cost control and post contract management (CCPCM)
- Estimating (ESTIM)
- Contract documentation (CD)
- Valuation of variations (VV)
- Feasibility and viability studies (FVS)
- Procurement management (PM)
- Value management, analysis and engineering(VMAE)
- Preparation of schedules of dilapidation(PSD)
- Arbitration and expert witness (AEW)
- Project management and coordination(pmc)
- Preparation of expenditure statements for taxation and Accounting purposes (PESTA)
- Assessment of building replacement value for insurance (ABRVI)
- Contract administration (CA)
- Contract auditing(CAD)
- Technical auditing(TA)

Table 5 contains an evaluation of the level of challenges posed by the identified militating factors. Evaluation based on the table shows that factors like widespread corruption in Nigeria, obsolete curriculum and inadequacy of modern equipment, professional rivalry from kindred professions, level of adoption of IT, inadequacies in academic and professional training, devaluation of Quantity Surveying services through excessive and unhealthy completion on fees and inability to invest in necessary technology with the mean score 4.53, 4.41, 4.35, 4.32, 4.1 77, 4.15 and 4.09 were ranked 1st, 2nd, 3rd,4th,5th, 6th, and 7th respectively. On the other hand, factors like lack of good marketing strategies, professional incompetence, inadequate skilled and experienced practitioners, unethical practices by the quantity surveyors, young age of the profession in Nigeria, and inability to embrace change/conservative attitude of Quantity Surveyors with mean score 3.00, 2.91, 2.71, 2.65, 2.59 and 2.29 respectively were ranked 16th,17th,18th,19th,20th, and 21st respectively.

Table 5: Mitigating factors against QS

Function of Q.S	Mean	Ranks
WSC	4.5	1
OCIE	4.4	2
PRKP	4.4	3
LAI	4.3	4
IACT	4.2	5
DQSE	4.2	6
UCF	4.1	7
PMPN	3.9	8
PMP	3.9	9
LSQS	3.8	10
VFCI	3.8	11
LPPE	3.6	12
CMEI	3.2	13
AQSP	3.1	14
AWUP	3.1	14
MRPS	3.0	15
LGMS	2.9	16
PI	2.9	16
ISEP	2.71	17
UPQS	2.65	18
YAPN	2.59	19
IEAS	2.29	19

Note:

- Widespread corruption in Nigeria (WSC)
- Obsolete curriculum and inadequacy of modern equipment (OCIE)
- Professional rivalry from kindred profession (PRKP)
- Level of adoption of IT (LAI)
- Inadequacies in academic and professional training (IACT)
- Devaluation of quantity surveying services through excessive and unhealthy completion on fees(DQSE)
- Inability to invest technology
- Public misunderstanding of the profession due to its name (PMPN)
- Poor marketing of the profession (PMP)
- Lack of specialization in the quantity surveying practice with respect to various fields in the construction industry (LSQS)
- Lack of professional proficiencies and exposure (LPPE)
- Constrained market due to economic issues (CMEI)
- Awareness of the quantity surveying profession (aqsp)
- Aging workforce and under-supply of new entrants to the profession (AWUP)
- Members' refusal to partake in workshops and seminars
- Lack of good marketing strategies (LGMS)
- Professional incompetence (PI)
- Inadequate skilled and experienced practitioners (ISEP)
- Unethical practices by quantity surveyors(UPQS)
- Young age of the profession in Nigeria(YAPN)
- Inability to embrace change/ conservative attitude of quantity surveyors (IEAS)

IV. DISCUSSION

The Study is characterized by 34 respondents who are Quantity Surveyors in Edo State. 26 (76.47%) of which are male and 8 (23.53%) of which are female. The response to the

demographic information in regards to the age of respondents shows that 3 of the respondents (8.82%) fall within the age bracket of 25-30years, 6 (17.65%) fall within the age bracket of 31-40years, 12 of the respondents (35.29%) fall within the age bracket of 41-50years, 8 of the respondents (23.53%) fall within 51-60 years while those above 60 years records a total of 5 numbers (14.71%). The demographic information reveals that the respondents with educational qualifications of B.Sc/B. Tech records a total number of 15 (44.12%), respondents with educational qualification of PGD records a total number 5 (14.71%), those with M. Sc /M. Tech records a total of 10 (29.41%) and those with Ph.D. records a total of 4 (11.76%). A total of 27 number of the respondents (79.41%) are corporate members of the Nigerian Institute of Quantity Surveyors while a total of 7 number (20.59%) are fellow members of NIQS. Also, a total of 28 of the respondents (82.35%) works in Government establishment while a total of 6 respondents (17.65%) works in private establishment. More so, the respondents' response to job function indicates that a total of 8 (23.53%) are in the physical planning department, a total of 2 (5.88%) are contractor/contractors' representatives and a total of 24 (70.59%) are lecturers in Tertiary Institutions in Tertiary Institutions.

Previous studies by Said, Shafiel and Omran, (2010) has shown that there has been a huge development in the number of services rendered by Quantity Surveyors. From the analysis, it is clear from the responses of the respondents That the generally known functions of the quantity surveyors include: feasibility and viability studies ,contract documentation and administration, project management and coordination, cost modeling, risk management, arbitration and expert witness, preliminary cost advice, life cycle costing technical auditing, value management, analysis and engineering, estimating, procurement management, contract auditing Coat control and post-contract management, valuation of variations, preparation of schedules of dilapidation etc. However, some of the respondents are in disagreement as to whether functions like administering maintenance programs, planning supervision, sustainability advisor, direct labour project evaluation, assessment of building replacement value for insurance etc are actually the functions of the quantity surveyors. From the evaluation of the level of performance of the identified functions of Quantity surveyors, it is evident that preliminary cost advice, estimating, contract documentation and administration, feasibility and viability studies, life cycle costing, arbitration and expert witness, value management, analysis and engineering, valuation of variations, preparation of schedules of dilapidation, project management and coordination etc. records high level of performance while functions like facilities management, cost modeling, monitoring capital projects, investment appraisals etc. record's a low level of performance. The effective performance of the functions of the quantity surveyors in the Nigerian Construction industry have always been compromised.



Several factors have been identified as militating against the effective performance of the quantity surveyors' functions in the Nigerian Construction industry. From the analysis, it is evident that the widespread corruption in Nigeria is a major challenge militating against the performance of Quantity Surveyors functions in the construction industry. Odesanya and Ebhohimen (2017), opined that the performance of Quantity Surveyors is also hindered by the educational curriculum in Tertiary Institutions. This is true as it is evident from the analysis that the second challenge militating against the effective performance of Quantity Surveyors is the obsolescence in educational curriculum and modern equipment.

According to Odesanya and Ebhohimwn (2017), research has shown that another prevalent factor that mitigates Quantity Surveyors performance is that of inter-professional rivalries. These rivalries amongst the various professionals in the construction industry refer to the level at which construction professionals responds to competitive moves of other professionals in the construction world (Olanrewaju as cited in Odesanya and Ebhohimen, 2017). This confirms the analysis showing that another major challenge militating against the effective performance of Quantity Surveyors functions is the professional rivalry from kindred profession. A typical example of such professional rivalry is the use of BEME by the Engineers. Also from the analysis, the other factors exerting significant level of challenge to the effective performance of Quantity Surveyors functions in the Nigerian Construction industry include the level of adoption of IT in the execution of Quantity Surveying functions, the inadequacies in academic and professional training, the devaluation of Quantity Surveying services through excessive and unhealthy completion on fees, the inability to invest in necessary technology and the public misunderstanding of the profession due to its name among several other factors.

This studies also sought ways in which the practice of the quantity Surveying profession can be improved. In light of this, several measures to be implemented to enhance the practice of the profession were identified and presented for the respondents to evaluate their importance at which if implemented will bring about enhancement in the practice of the profession. From the analysis of the evaluation, it was observed that a clear delineation in professional functions in the construction industry to curb professional rivalries was ranked 1st with the mean score 4.3529. The implementation of this measure is very important so that professionals in the construction industry will respond only to the services related to their profession. The second measure which according to the analysis, assumes great Importance of implementation for the improvement in the practice of the quantity Surveying profession is the review of the curriculum of tertiary institutions. Odesanya and Ebhohimen (2017) mentioned the Educational curriculum of tertiary institutions as one of the causative factors that could affect the participation of Quantity Surveyors in oil and gas projects. The review of the curriculum of Tertiary Institutions is very important as this will help to equip the students in the profession with the basic competence to enable them delve into the various aspect of the construction industry requiring their services. Another identified measure which according to analysis is requiring a

great importance of implementation for the enhancement of the practice of the quantity surveying profession is improving technological application in the execution of Quantity Surveying functions. It is generally accepted that we are in a computer age. The application of the use of computer in various endeavors is the order of the day. The use of paper and pen in executing certain functions is considered an obsolete practice. There is a relatively low record of the application of technology in carrying out quantity Surveying functions. Hence, the need for the improvement in technological application in the execution of Quantity Surveying functions is greatly anticipated.

V. CONCLUSION

The findings show that there is a high level of performance of the identified basic functions of Quantity surveyors in the Nigerian Construction industry which include: preliminary cost advice, feasibility and viability studies, contract documentation, contract administration, valuation of variations, etc. The findings also reveal that the identified factors militating against the effective performance of the Quantity Surveying function are true and the analysis of their evaluation reveals that the widespread corruption in Nigeria, obsolete curriculum and inadequacies of modern equipment, and professional rivalry from the kindred professions are the key challenges militating against the effective performance of the profession. The research also suggested several measures to be implemented to enhance the quantity of the Surveying profession in Nigeria. The analysis of the evaluation of the identified measures indicated a great need for the implementation of measures like making a clear delineation in professional functions, reviewing the curriculum of Tertiary Institutions, improving professional skills through continuing professional development, and the improvement in technological application in the execution of Quantity Surveying functions among several others.

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