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ASSESSING THE SKILLS AND COMPETENCY REQUIRED OF NIGERIAN QUANTITY SURVEYORS IN PRACTICING SUSTAINABILITY ADVISOR IN THE CONSTRUCTION INDUSTRY

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As the sustainability issue in building construction phenomenon continues to grow and gain popularity, there is a need to better understand the pivotal attributes that professionals i.e. (quantity surveyors) in Nigeria should possess to manage and be able to stand as sustainable constructions advisers to their clients in construction industry. Despite numerous studies on sustainability, if not few but none have specifically examined; the skills and competencies required of Nigerian quantity surveyors in advising on sustainable construction. As a result, with the intent to enhance sustainability efforts within the professionals and the quantity surveying firms out large. This study aimed at assessing the skills and competencies required of medium Nigerian quantity surveying firms in advising on sustainable construction in construction industry. Objectives: (1) General awareness of sustainability advisor as a role in Nigeria construction industry (2) Identify the skills and competencies required of Nigerian quantity surveying firms in practicing as sustainability advisers globally; (3) Assess the skills and competencies identified globally. A Quantitative research approach was adopted. The total population of registered quantity surveyors firms in Nigeria is 318 number and the sampling size was calculated to be 67 number, using Kish (1965). The collection of data was through the use of semi-structured questionnaires, which was distributed among the medium professional quantity surveyors. A descriptive statistical tool was used for analyzing the data collected. The study conclude that Quantity surveying firms in the current market are very much aware and acquainted to sustainability related matters and also has a role to be played by them. The findings however proved that, from the evaluation of the required skills and competencies identified globally with the skills and competencies of Nigerian medium quantity surveying firms, the study therefore conclude that Nigerian medium quantity surveying firms has the required skills and competencies; Risk management with the mean of (1.27), followed by Cost management with the mean of (1.44) and whole life cost with the mean score of (1.46), in carrying out sustainability advisor in the construction industry. However, Nigerian institute of Quantity Surveyor (NIQS) should sensitize, motivate and commit the academia (both students and educators) to embark fully on practical application of sustainability practices for wider knowledge and understanding.

Keywords: construction industry, competencies, skills, sustainability

INTRODUCTION

The Construction Industry plays a crucial role in the economy of any nation, and its activities are vital to achieving national socio-economic development goals of providing shelter, infrastructure and employment (Oluwaseyi, 2018). In recent years

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many researchers and authors have reported on the evolving and the emerging roles of Quantity Surveying Profession together with the changes in the construction industry (Fellows, 2003; Hardie, 2005; Ismail, 2006; Cartridge 2011; Greg, 2017). Such as BIM, life costing, Industrial engineering cost management, Sustainability advisor, among others due to market changes, clients demand, and technological advancements. However, statements as to the poor sustainability nature of construction projects executed in most developing countries have been made in recent times, and the Nigerian Construction Industry (NCI) is no exception (Aje, 2016). This poor sustainability performance cut across all sectors where construction products are required in the country these bodies' demands among others include the need for standard buildings and up-to-date facilities (Karunasena, 2016) this means that the industry stakeholders should be able to inform the clients beforehand on the best building materials for sustainable buildings, how the end product will look like and also how it will benefit them and the environment. This role can be largely played by the quantity surveyor through bills of quantities which other stakeholders such as the engineer, architect and consultants will rely heavily on. Ashworth (2013) stated that sustainability issues are becoming more prominent in the construction industry. Construction industry is lacking professionals who are equipped with sufficient competencies and skills that would enable them to make decisions and advices that can meet the needs of the clients, alternatives materials, present and future generation without sacrificing too much the live ability of the Earth (Rosely, 2016). Therefore, equipping the workforce with relevant sustainability knowledge, skills and values has become the current focus of most countries throughout the world (Rosely et al., 2016). Experienced quantity surveyors largely have a detailed understanding of a multitude of specifications and are well placed on a project team to contribute towards the sustainability issue of a project at the initial stages (Kohler and Lützkendorf, 2002). On the perception of sustainability, within the building environment, there is a lack of competency and sufficient technically training to low and middle level professionals to ensure sustainability advisor in the profession even among the quantity surveyors. Karen et al. (2017) further acknowledge that quantity surveyor is a well-placed medium through which sustainability cost aspects can be addressed, however they still rely on engineers for information regarding sustainability of building materials due to their limited knowledge in the area. Koigi (2017) confirmed that the increasing emphasis on sustainable construction in the built environment and that quantity surveyor are viewed as lacking the competencies to give strategic advice on such projects.

However, poor sustainability natures of construction projects executed in most developing countries have been made; in recent times and the Nigeria Construction Industry (NCI) is no exception (Aje, 2016). Researchers have shown that professionals are facing challenges in giving advice on sustainable construction due to their lack of skills and adequate knowledge, even among the middle professional quantity surveyors firms (Koigi, 2017; Okewu, 2017). Hence, no or little studies has been carried out on the skills and competencies required of Nigerian small and medium quantity surveyors firms towards advising on sustainable constructions in construction industry.

The aim of this research is to assess the skills and competencies required of small and medium Nigerian Quantity surveying firms in advising on sustainable

construction in the construction industry and thus to look at the general awareness of Nigerian Quantity surveying firms towards sustainable constructions.

LITERATURE REVIEW

Review of evolved roles of a quantity surveyor

The evolved roles entail the additional non-traditional professional services that have been evolved (Frei and Mbachu, 2009) and which are gradually being accepted over time.

In recent years many authors have reported on the evolving roles of quantity surveying profession together with the changes in the construction industry and it has been emphasized that the roles played by quantity surveyors have been expanding both in scope and size (Page et al., 1999; Page et al., 2001; Boon, 2001; Fellows et al., 2003; Hardie et al., 2005; Fadhlin and Ismail, 2006; Chong et al., 2012). Currently, due to globalization, it can be seen that the role of quantity surveyors has changed quite dramatically and firms will expect future quantity surveyors to be well equipped with an understanding of economic, legal and technical aspects of project development as well as management techniques in order to deliver a project successfully. Ashworth et al. (2013) identify that various factors have operated to bring about significant change within the quantity surveying profession. They report the findings of 1991 Davis, Langdon Everest report, QS2000, which identified changing client needs and attitudes, changing markets and business practice, a changing and more managerial industry, a changing quantity surveying profession, as well as the impact of information technology as drivers for diversification and expanding the range of services offered by the industry. They point in particular to the declining use of bills of quantities, which traditionally formed the principle source of fee income as a significant contributing factor in this process. The small practice of concentrating on traditional pre- and post-contract services is still alive and healthy.

However, at the other end of the spectrum the larger practices are now diversely expanding in scope and would be unrecognizable to earlier QS practitioners. The principal differences between these current practices and traditional quantity surveying practices are generally accepted to be the elevation of client focus and business understanding and the move by quantity surveyors to develop clients' business strategies and deliver added value, modern quantity surveying involves working in increasingly specialized and sectorial markets where skills are being developed in areas including strategic advice in the Private Finance Initiative, partnering, value and supply chain management.

Quantity surveyors have realized that the acquisition of a more extensive skills set enables them to deliver greater benefits to clients, which may, in turn, lead to more work (Fanous, 2012). Quantity surveyors also have become more involved in the measurement and valuation of engineering services which traditionally had been dealt with through prime cost and provisional sums. The evolved roles of Quantity Surveyors as listed by Ashworth, et al. 2013) are:

1. Sustainability Advisor
2. Advice on cost limits and budgets.

3. Life cycle costing.
4. Value management.
5. Risk analysis.
6. Insolvency services.
7. Cost engineering services.
8. Subcontract administration.
9. Environmental services measurement and costing.
10. Technical auditing.
11. Planning and supervision.
12. Valuation for insurance purposes.
13. Project management.
14. Facilities management.
15. Administering maintenance programmes.
16. Advice on contractual disputes.
17. Planning supervisor.

Competencies required of Nigerian quantity surveyors

Competence has been defined as the ability to perform the activities within an occupation to the standard expected for employment. The Competencies required of Nigerian Quantity Surveyors according to Circa (2012) are:

Competency	Prefer classification
Cost Planning and Control	Core
Estimating	Core
Construction Procurement System	Core
Contract Documentation	Core
Contract Administration	Core
Project Management	Core
Feasibility/Viability Studies	Core
Valuation	Core
Financial Management	Core
Development Economics	Core
Risk Management	Special
Life Cycle Costing	Core
Facility Management	Special
Arbitration and Dispute Resolution	Core
Economic Mgmt. of Urban Infrastructure	Optional

Also, a research by Dada and Jagboro (2012) listed core competencies required of Quantity Surveyors which are: Arbitration and Dispute Resolution, Life Cycle Costing, Development Economics, Financial Management, Valuation, Feasibility/Viability Studies, Project Management, Contract Administration, Contract Documentation, Construction Procurement System, Estimating, and Cost Planning and Control.

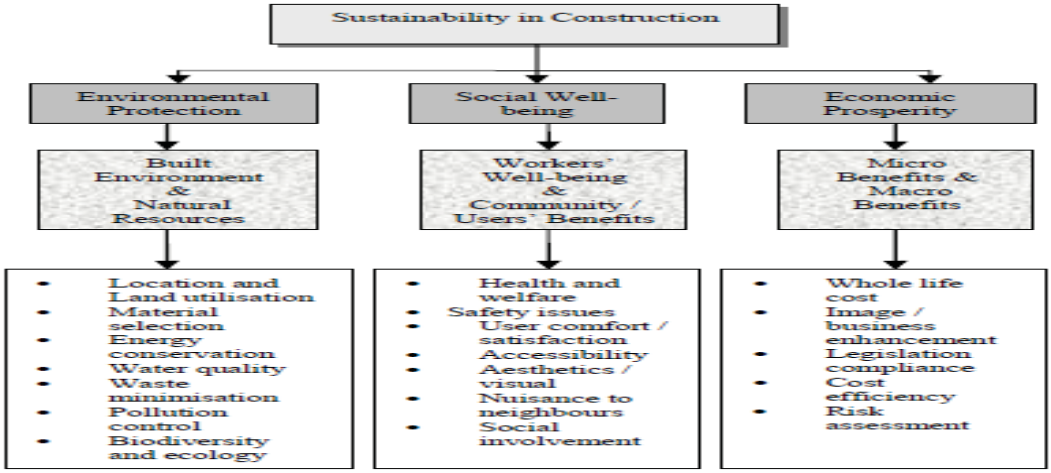
Sustainability in construction

Sustainability in building is considered as a way for the building industry to move towards protecting the environment. The promotion of sustainability practices is to pursue a balance among economic, social, and environmental performance in implementing construction projects. If we accept this, the link between sustainable development and construction becomes clear construction is of high economic

significance and has strong environmental and social impacts. With the growing awareness on environmental protection, this issue has gained wider attention from construction practitioners worldwide. Implementing sustainable building construction practices has been advocated as a way forward in fostering economic advancement in the building industry while minimizing impact on the environment. In order to reduce these detrimental impacts of construction on the environment and to achieve sustainability in the industry, three principles emerge: resource efficiency, cost efficiency and design for human adaptation

Benefits of sustainable construction

Sustainability is a goal that allows for the continuing Improvement of standard of living without reversible damage to resources (Idowu and Salawu, 2017). We need to survive as human in our physical environment (Lehrer, 2001). It is the practice that would allow the continued existence of human resources in its environment and alternative use of building materials As the importance and awareness of sustainable project is growing, it is important to consider what attributes can be managed to achieve the sustainability goals (Ekundayo *et al.*, 2011).



Sustainability in construction, Source: (Stephen, 2016)

Green construction yields a number of benefits to the owner, both tangible and intangible. Sustainably-designed buildings benefit from lifecycle cost savings; including deferred replacement cost, improvements in human performance; including productivity gain, better health (Nalewaik and Venters, 2008).

Langdon, (2011) indicated the Benefits of sustainable construction for building owners to include:

i. Potential higher occupancy rates
ii. Higher future capital value
iii. Reduced risk of obsolescence
iv. Less need for refurbishment in the future
v. Ability to command higher lease rates
vi. Higher demand from institutional
vii. Investors lower operating costs
viii. Costs less to maintain and operate

Sustainability knowledge of construction professionals

Murray and Cotgrave (2007) mention that the need for professionally qualified individuals to deliver sustainability related issues have increased due to an envisaging vision of an equitable, safe and healthier future for the planet. However, there are only few professionals who are likely to fully deliver this kind of development and able to comprehend the sustainability issues. In other words, construction industry is lacking of professionals who are equipped with sufficient knowledge and skills that would enable them to make decisions and advice that can meet the needs of alternatives building materials, present and future generation without sacrificing too much the live ability of the Earth (Rosely et al., 2016). Therefore, equipping the workforce with relevant sustainability knowledge, skills and values has become the current focus of most countries throughout the world (Rosely et al., 2016). However, Holmes (2009) added that, the poor understanding of sustainability concept of construction workforce including QSs has become one of the barriers to the adoption of more sustainable methods in delivering construction activities.

Role of the quantity surveyor on sustainable construction

According to the RICS (2009), quantity surveyors have the opportunity to provide not only financial advice at the design stage but, on the other factors that drive sustainability as well as the impact of the building's lifecycle costs. Also, when working together with the client and the professional team, the quantity surveyor can effectively contribute towards the business case by providing realistic costs on alternative designs and construction that meet the overall business objectives whilst incorporating sustainable aspects (Matipa et al., 2008). It is therefore important for the project stakeholders to receive a clear briefing from the client on their project requirements in order to ensure sustainability is carried out from the planning phase to procurement to construction (Matipa et al., 2008). As the designs and ideas developed for the client at the early stage will impact the client's decision to invest, rent or sell the potential building (RICS, 2009).

The quantity surveyor plays an essential role, as a project cost consultant, they provide the cost advice of designs, prepare procurement documentation as well as manage costs during the construction phases to ensure that the client's demand for value for money is achieved up to completion (Matipa et al., 2008; Nagalingam et al., 2013). As such, their role calls for mastery of various disciplines effectively implying that the role of a quantity surveyor keeps evolving with the change in times and change in client needs (RICS, 1983 and Ozorhon et al., 2010).

For the quantity surveyor to act in the best interest and fully advise the client on the financial aspects of the project, the consultant must wholly understand the client's viewpoints and interests (Bartlett and Howard, 2000). Ofori (2006) discusses that the role of quantity surveyors has evolved to be client oriented to meet the business strategies and add value to the client. The traditional approach to cost management on projects has been generally been based on an economic approach (Ekundayo, 2011).

The quantity surveyor's work begins at the conception stage of the project by estimating the price forecast of the project. Experienced quantity surveyors largely have a detailed understanding of a multitude of specifications and are well placed

on a project team to contribute towards the sustainability agenda of a project at the initial stages. Sustainable construction is one of the areas today where cost studies can play a significant part for the long term" (Ashworth, 2010). The Quantity Surveyor's knowledge on Preliminary cost of building works, Cost planning, investment appraisal, life-cycle costing and value analysis of buildings, and this will enable him to do the cost study of the construction project (Mohammed, 2012).

There is a need for effective synergy between construction and professionals and there has to be genuine collaborative training and integrated practice among professionals to fast track the implementation of sustainability.

Level of sustainable construction practicing in Nigeria

Most professionals are aware of the new trend (Sustainable Building) and enormous benefits derived from it and they see sustainable Building as a basis for appealing livable homes and preserving natural resources. While taking care of their health. However, the general public are not fully aware of this development i.e. level of awareness of sustainability advisor is low (Dahiru et al., 2014; Idowu and Salawu, 2017). Sustainability and environmental issues are hardly put into consideration when designing a new building or renovating an old one, environmental considerations are not considered in community design. These results in a short fall in user satisfaction, functional space planning and service type, In addition sustainable building components are often neglected during design and construction (Otegbulu, 2011). The approach to construction by Nigerian construction industry does not follow the basic principles of sustainability.

Windapo and Rotimi (2012) reported that current construction practices in Nigeria are unsustainable, and not in alignment with ideal sustainability principles, the current practices have wider implications on national development goals for which construction is strategic, with the upturn of the national economy and the general boom, building failures persist. Even in the tertiary institutions students are uncertain to whether their curriculum in its entirety captures adequately the issues of sustainable construction practice and also their understanding of the concepts and key issue of sustainability is low (Lurwanu, 2010).

RESEARCH METHODODLOGY

This section presents the research method procedure of the study to achieve its aim, which is to "Assess the skills requirement of Nigerian Quantity Surveyors firms in practicing sustainability advisor". A research is a scientific tool which is used in the systematic investigation for the purpose of advancing knowledge. A good research is a product of a well-organized set of principles and procedures geared towards the systematic investigation. This set of principles and procedures are known as the research methodology. A research methodology is a systematic and logical means by which a researcher goes about conducting his research with the aid of the research topic, specific research questions, and available resources.

Research Approach

For the purpose of this research, quantitative approach was used through the use of questionnaire which provided relevant data, facts, views and opinions of the respondents on the subject matter. The method has some advantages over the

others because it is practical, quantifies data and generalizes results from a sample to the population of interest, measures the incidence of various views and opinions in a chosen sample.

Also, the targeted populations in this research are Registered Quantity Surveyors firms in Nigeria. The total population of registered quantity surveyors' firms in Nigeria which was N=318 as obtained from http://98.130.113.83/Members/rqs.php?page=23 as of QSBRN 2018, INDUCTION.

.According to Kish (1965), the sample size of any given population can be calculated as:

N = n 1 / (1 + (n1/N))

Where; n = Sample size_____(1)

N = Total Population

n1 = S^2 /V^2 _____(2)

S^2= (P) (1-P)

Where;
S = Maximum Standard Deviation in the population elements

P = Proportion of the population elements that belong to the defined category i.e.

P = 0.5 (Considering 95% confidence level (C.L))

V = Standard error of the sampling distribution i.e. v = 0.05

Solving equation (2);

n^1 =S^2/V^2S = 1 – 0.5 = 0.5n^1 = (0.5) (0.5) / (0.05) (0.05) = 0.25/0.0025 =100

Substituting in equation 1;

n = 100/ (1 + (100/318)) n = 100/1.02 = 67

Data Gathering
Data for this research was collected using structured questionnaires distributed amongst registered quantity surveyors' firms through submission where quantity surveying firms were visited and questionnaire were administered to the Registered Quantity surveyors.

The questionnaire consists of five sections. Section A was designed to collect information about socio-demographic (general information) characteristics of the respondents and organizations in order to ascertain the quality of information for analysis; Section B was design to assess the respondents level of awareness and understanding to the subject matter; Section C was structured to assess the skills requirement for practicing as sustainability advisor Section D was designed with some identified competencies required in practicing as sustainability advisor globally from literatures, Section E was designed with some identified skills area required for practicing as sustainability advisor globally.

Data Analysis and Presentation
Data gathered was analysed and presented using SPSS v20 through descriptive analysis which comprises the use of percentages, mean and standard deviation.

Method of Data Analysis
The data generated from this study were subjected to analyses using tabular form, standard deviation, percentage and mean score. This however enabled the result to be properly evaluated and understood. A five-point Likert scale (Kothari, 2003) was applied.

$$\frac{5N5+ 4N4 + 3N3 + 2N2 + 1N}{N}$$

Using 5 (five) point LIKERT SCALE which corresponds to "5" = strongly disagree, "4" = Disagree, "3" = moderately agree, "2" = Agree, "1"= Strongly Agree

Where N = number of respondents to a particular scale n = total number of respondents.

5+4 +3 + 2 + 1 = 2.5 (i.e. Positive Decision)

Decision Rule

Any mean score below 2.5 is considered a positive decision, while any mean score from 2.5 and above is considered a negative decision.

DISCUSSION OF RESULTS

In this section, data collected in the course of the research (field survey) are explicitly presented. This section deals with data presentation which engages the use of tables and its presentation, and it also attempts to establish pattern using standard deviation, mean, ranking and percentages (%). The results are clearly presented in table format to show the percentages in individual variables and the remark has being given to each of the variable.

A total of 67 questionnaires were administered. 41 questionnaires were retrieved which is 62% of the sample size.

Breakdown of administered questionnaire
The illustration below showed that a total of 62% of the administered questionnaires were retrieved and 62 % were analyzed.

Table 1: Summary of Questionnaire Survey

No of questionnaires Administered	Number Retrieved	% Retrieved	Number Analysed	% Analysed
67	41	62%	41	62%

Source: Field survey (2018)

Level and general awareness of sustainability
The study sought the opinion of respondents on the level of awareness and understanding of sustainability issues with the following result: Meets the needs of

the present without compromising the ability of future generation to meet their own needs and economic, environmental and social aspect of construction, has the mean factor of 1.66 and 1.66 followed by one of the clients requirements from professionals and new concept introduced in the construction industry with the mean factor of 2.76 and 2.46, this indicate that the first two issues are top highest factors well known by the respondents and follow by the last two factors which are relatively known by the respondents, in conclusion this result shows that respondents has a fair understanding on some of the sustainability advisor issues in the construction industry.

Table 2: level of some basic issue of sustainability

Basic issue and understanding of sustainability advisor	Total	Mean	Std
One of the client's requirements from the professionals?	41	2.76	0.799
New concept introduced in the construction industry?	41	2.46	0.809
Sustainability comprises of environmental, social and economic aspect of construction?	41	1.66	0.693

Table 3: shows level of knowledge of sustainability advisor

Variable	Frequency	Percentage (%)
Yes	39	95
No	2	4.8
Total	41	100

Table 3 shows that the respondents have a good knowledge of sustainability with 95%. Hence, medium quantity surveyors' firms in Nigeria have relatively high knowledge and awareness of sustainability in the construction industry. Which also correspond to the research conducted by (Bashir, 2015 and Zainab, 2017) from the Department of Quantity surveying, Ahmadu Bello University, Zaria. On approach of quantity surveying curriculum towards a sustainable construction in Nigeria institutions and an appraisal of quantity surveyor's involvement in achieving clients' sustainability objectives.

Which of the following sources did you first heard of sustainability in construction?

Table 4: Source of awareness/ knowledge with the concept

Sources	Frequency	Percentage %
Magazine/Books	29	70
Seminars/Course	10	24
Radio/Television/Internet	2	4
Total	41	100

Table 4 shows source of awareness/ knowledge with the concept. From the survey, 70% of the respondents become acquainted with the sustainable construction from Magazines/Books. 24% of the respondents heard about the phase of Sustainable construction in Seminar/Course. 4% of the respondents heard it from the Radio/Television/internet etc. These show that there are numerous literature and commitment to create awareness for sustainable construction. Therefore, level of awareness among the respondents is relatively high. The findings are represented in the table above

The field survey showed that approximately 73.1% of the respondents were very familiar with the concept. It was also observed that 24.3 % of the respondents were familiar with it while only 2.6 % of the respondents were not familiar with the concept. The summary of these responses are presented in the table below:

Table 5: Level of familiarity with Sustainable construction

Variable	Frequency	Percent (%)
Very familiar	30	73.1
Familiar	10	24.3
Not familiar	1	2.4
Total	41	100

Table 6 below shows how competent are we in practicing as sustainability advisor. As professional quantity surveyors in Nigeria do you think we are competent to practice as sustainability advisor base on our curriculum and level of knowledge?

The result from the respondent clearly shows that Nigeria professional quantity surveying firms are competent to carry out a sustainability advice within the construction industry. The survey shows 82.9% respondents.

Table 6

Variable	Frequency	Percentage (%)
Yes	37	82.90%
No	7	17.10%
Total	41	100

Table 7 shows how useful sustainability advisor as a role is to Nigeria Construction Industry. From the survey result respondent were asked on how useful sustainability advisor as a role is to Nigeria construction industry, and from the result 97% agreed that is useful while 2.4% response were negative, in conclusion by the percentage it shows that sustainability as a role is very useful to Nigeria Construction Industry

Table 7

Key	Frequency	Percentage
Yes	40	97%
No	1	2.40%
Total		100

The identified competencies required in practicing as sustainability advisors globally

On the table 8 below are identified areas of competencies required in practicing as sustainability advisor globally. Respondents were asked to indicate their level of expert on those competencies, Health and safety management Which has the mean score of (3.61), stakeholder management (2.9) appear to be negative decision and which is further interpreted that the respondents had low level of competency on those aforementioned competencies. While it reveals that environmental management (2.51), environmental impact assessment (2.54), renewable

energy(2.3), energy and environmental technology (2.34), ecological management with (2.12), Human resources management (2.44), cost management with the mean score of (1.4), risk management (1.27), communication management (1.2), whole life cost (1.4), quality management (1.63), are the positive skills that Nigeria quantity surveying firms are competent with in carrying out sustainable advice according to the result of the respondents. These also correspond with the thesis written by Zainab et al. (2017) from the Department of Quantity surveying, Ahmadu Bello University Zaria, Nigeria, on appraisal of quantity surveyors' involvement in achieving client's sustainability objectives.

Table 8: Competencies required in practicing as sustainability advisors globally

Required competencies (Identified)	Mean	Std.	Ranking
Risk management	1.27	0.449	1
Cost management	1.44	0.634	3
Whole life cost	1.46	0.778	4
Quality management	1.63	0.799	5
Material resources management	1.88	0.9	6
Ecological management	2.12	0.64	7
Renewable energy	2.32	0.756	8
Energy & environmental technology	2.34	0.693	9
Claims management	2.39	0.919	10
Human resource management	2.44	1.246	11
Environmental management	2.51	0.779	12
Environmental impact assessment	2.54	0.84	13
Health and safety management	3.61	0.703	15
Sustainable built services	1.62	0.43	
Sustainable building environment	1.14	0.12	

Table 9: Other added skills gotten from professional quantity surveying firms, practicing in nigeria construction industry

Added competencies identifiec	Frequency	Percentage
Mode of operation	17	14.65517241
Value appraisal	2	1.724137931
Environmental appraisal	2	1.724137931
Building Construction	20	17.24137931
Technical no how	14	12.06896552
TOTAL	55	100

On the table below are the identified skills required in practicing as sustainability advisor globally. Respondents were asked to indicate their level of competency on those skills as listed. The score revealed that, delegation with the mean score of (2.02), analytical (2.05), leadership with the mean score of (1.68), ability to make decision (1.95), presentation (1.68), stakeholder management (1.62) and

negotiation (1.66). The result appears that Nigeria professional's quantity surveying firms are competent on the skills required in giving advice as sustainability advisor in Construction Industry.

Table 10: Generic skills required in practicing as sustainability advisor globally

Skills Identified	Mean	Std.	Rank
Delegation	2.02	1.084	5
leadership	1.68	0.879	3
Ability to make decision	1.95	1.024	3
Analytical	2.05	1.024	3
presentation	1.68	0.879	2
Negotiation	1.66	0.911	2
Stakeholder management	1.62	0.722	1
Communication	1.27	0.445	
Marketing and sale	1.23	0.638	
Reading and understanding drawing	1.84	0.125	
Site late out and mobilization	1.12	0.234	
Public speaking	1.32	0.348	
Report writing	2.03	0.105	1

CONCLUSION

After the research survey, analysis of data collected, the study concludes that Medium quantity surveyors' firms in Nigeria have relatively high knowledge and awareness of sustainability in the construction industry. Also, the respondent's major sources of awareness of sustainability concept and issues were from Books, magazine, courses and seminars, they further shows that the current professional quantity surveying firms in practices' are competent in advising and capable of carrying out sustainability advisor as a role in the construction industry.

Furthermore, going by the percentages of the respondents to the level of competency in practicing sustainability advisor globally, it was clearly shown that Nigeria Medium quantity surveying firms have 70% competencies identified globally from literatures, which covers all the major aspect of sustainability the Economic, environmental and social aspect of sustainability i.e. Risk management, Cost management, whole life cost, quality management, value management, material resources management, Renewable energy, human resource management, communication management, energy and environmental technology and others, shows that Nigerian quantity surveying firms are capable in giving advice as sustainability advisor in the construction industry. The finding also identified the level of competency of the professionals on the generic skills required in practicing as sustainability advisor and it was indicated that the respondent's level of agreement confirm that they are competent in giving advice on those skills identified globally. Among the skills are; Delegation, Leadership, Negotiation, ability to make decision, presentation and analytical as ranked.

RECOMMENDATION

The study recommends that workshops, conferences and other training functions should be developed by quantity surveyors registration board of Nigeria (QSRBN) and the Nigerian institute of Quantity Surveyor (NIQS) to sensitize, motivate and commit the academia (both students and educators) to embark fully on practical application of sustainability practices for wider knowledge and understanding, and also the National Board for Technical Education in collaborations with school management should updates the curriculum of their programs and provides educators with the platform to support their training and expand their knowledge on all the area aspect of sustainability in Nigeria Construction Industry.

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