SERVICES THAT QUANTITY SURVEYORS PROVIDE IN NIGERIA- PART 2

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ABSTRACT

This is the second part of an ongoing study on the services that Nigerian Quantity Surveyors provide. Since 1960 when quantity surveying profession evolved in Nigeria, it has expanded both in scope and size. The main objective this paper is to assess the services the Quantity Surveyors in Nigeria provide alongside the best practices. The paper also seeks to exploit the perceptions of other professionals in the Nigerian built environment with regards to the Quantity Surveyors services. To achieve these objectives, the paper combined extensive literature reviews and questionnaire survey. Twenty eight (28) services expected of a Quantity Surveyor on a project were identified and presented to respondents in the Nigerian construction industry to determine the services Quantity Surveyors provide. Data obtained were analyzed by descriptive statistics. This paper has been able to demonstrate that Quantity Surveyors in Nigeria provide the services that other Quantity Surveyors elsewhere provide. However, the Quantity Surveyors need to improve on some of the critical services expected from them in order to occupy strategic positions.

Keywords: best practices; built environment; Quantity Surveyors; (re) branding; RICS

1. INTRODUCTION

This paper is concerned with the unique roles of Quantity Surveyors towards providing clients focused services. The services of Quantity Surveyors are required in all sectors of economic endeavor including sectors like financial, insurance, oil and gas, and construction industry as well as in the academic sector. The dynamism of quantity surveying enables it to venture into other areas. Quantity Surveyors are adaptable creatures that are capable of reinventing themselves according to the demands of the modern progressive clients (Cartlidge, 2003). This is the second part of an ongoing study on the measurement of services that Quantity Surveyors in Nigeria provide. The first of the paper focused on the general services required of the Quantity Surveyors on construction projects. This paper reports on the second category which covers services that are particular to non-traditional methods of procurement. However, whilst there have been some published studies that investigates the kind of services that the Nigerian Quantity Surveyors provide, to the knowledge of the authors of this paper, there is no detail empirical study on the services that the Nigerian Quantity Surveyors provide in terms of comparing with the best practices. Similarly, the perceptions of other professionals in the Nigerian construction industry on the services the Quantity Surveyors provide have not been adequately exploited. It is imperative to measure the services the Quantity Surveyors in Nigeria provide through "external" parties like the clients, architects and engineers for a meaningful comparison. This will facilitates improvement on the services that the Quantity Surveyors provide. Performance measurement is an invaluable technique to improve productivity so that clients and other members of the team and indeed Quantity Surveyor's themselves would know where they are and what needs to be done.

It is only through performance measurement that those "who insist their firm is achieving near maximum effectiveness can provide the evidence to prove the reality of their claim to others such as end-users (i.e. clients) seeking better value" for money (Cain, 2004). A survey questionnaire was developed to measure the service that Quantity Surveyors in Nigeria provide. The services were those outlined by the RICS. Those services are regarded as the best practice. Best practices services are those services that could ensure best value for money to the clients, ensure good working relationship among the project teams. It is high time that the Nigeria Quantity Surveyors provide better services. This is the most appropriate time; the Nigerian government is making stringent effort towards re-branding its policies. Re-branding Nigeria and Nigerians is a collective responsibility of all the stakeholders and including professionals like the Quantity Surveyors given the unique roles being played by the construction industry of which the Quantity Surveyors are prominent members.

2. BACKGROUND TO THE STUDY

Quantity Surveying is carried out under different names, such as cost consultant, management consultant, cost engineer, cost estimators, project consultant, the list is endless (what a loss of identity!). In countries like the USA, Quantity Surveyors are known as Cost Engineers. However, this trend is gradually diminishing as the number of RICS members in America is on the increase. The RICS in America has members throughout North, Central and South America and the Caribbean. However quantity surveying is more than any of those titles. The services provided by modern Quantity Surveyors are vast such that its present title is quite inadequate to describe the services it provides. Arguably quantity surveying was initially conceived out of the necessity to have a dedicated "person" to manage the cost of building projects. Quantity Surveyor's roles are dominant throughout the entire life span of a project: from inception to completion and in fact their services are required during the pre and post contract stage of projects. The functions the Quantity Surveyors provide even extend beyond the boundaries of the construction industry. A Quantity Surveyor ensures that proactive and strategic balance is struck between investment and output. The training and expertise of the modern Quantity Surveyors have enabled the roles of the professional to venture into other areas. Quantity Surveyors can venture into value management, risk management, arbitration, construction procurement, contract administration, maintenance management and project management. Whether, the Quantity Surveyor is appointed as project manager or not, his / her roles are distinct. This holds true, even under the traditional procurement strategies whereby the designers (i.e. architect or engineers) serve as the project manager and the Quantity Surveyors only provide professional advisory roles in order to facilitate the achievement of client value system. In fact, many architectural or engineering firms now engage Quantity Surveyors to guide them on the selection of alternative solutions particularly on such matter that relates to costs and value. The Quantity Surveyor is concerned with financial integrity, contractual matters, procurement and achieving value for the clients' money in a project.

"Quantity surveying" is a catch-up term that hides a multitude of meaning. Since the inception of the profession, there has been a paradigm shift in the practices and services that the Quantity Surveyors provide, from someone who was concerned with cost reduction and substitution of materials and components to someone that is concerned with the achievement of value and enhancing productivity (Ashworth and Hogg, 2002). The Services that Quantity Surveyors provide place them in strategic positions as process managers. Quantity Surveyors provide advice on the strategic planning of a project, this advice affect clients' decisions on whether to build or not, and if the client decides to build what effect does cost have on time and quality performance (Langston, 2002). Quantity surveying services are required throughout the entire life of construction projects (Bennett, 2003) and are not limited to only building projects but encompassing all other engineering projects. Regardless of the procurement strategies adopted, the roles of Quantity Surveyors are prominent for a successful completion of projects. Quantity Surveyors could be engaged by client or as contractor's Quantity Surveyors. Client engaged Quantity Surveyor to help the client manage the project processes and advice him / her on selection of the best procurement strategies so that the client would achieve value for their investment.

Due to the services that Quantity Surveyors provide, they possess' dominant managerial, behavioral and technical skills for the overall planning, control and coordination of a project from inception to completion in order to meet the clients' value systems. However, it has been noted that there is a misconception regarding the roles of Quantity Surveyors (Mohd Zaid, 2001). Often the functions of Quantity Surveyors have been questioned (Cartlidge, 2003). To many architects, Quantity Surveyors are a threat to their aesthetic and leadership liberties. While many engineers (notably civil and structural engineers) believe that Quantity Surveyors sometime perform the engineers' functions. Naturally, a question hereby emerge is "are the services that the Quantity Surveyors claim they provide are they same in comparison with those that say architects or engineers perceive them to provide? If they are providing or not providing, "what aspects of the services are they not providing?

3. RESEARCH OBJECTIVES, METHODOLOGY AND METHODS OF DATA ANALYSIS

3.1 Research Aim

The aim of this research work is to assess the services that the Quantity Surveyors in Nigeria provide with a view to exploit the perceptions of other professionals in the Nigerian built environment with regards to quantity surveying services.

3.2 Research Objectives

In light of the above research aim, the following objectives have been set:

1. Determine the services that the Quantity Surveyors in Nigeria provide alongside the best practices

2. Investigate the perceptions of other professionals in the Nigerian construction towards the services that Quantity Surveyors provide.

3.3 Research Methodology

A questionnaire survey was used for the purpose of this study. The questionnaire was divided into two parts to capture the respondent's profiles and the extent to which the Quantity Surveyors provide the services. The respondents were randomly selected. The services addressed to the respondents were those outlined by the Royal Institution of Chartered Surveyors (RICS, 2001). In a publication of the RICS, entitled "*Appointing a Quantity Surveyor: A guide for clients and Surveyor*s; with form of Enquiry, Schedules of Services, Fee Offer of Agreement and Terms of Appointment". The publication outlined the services expected of Quantity Surveyors as consultants. The services are regarded as the best practices. The services are divided into three major categories. Category one covers the general services that Quantity Surveyors provide on a project irrespective of the procurement methods. The second category which is the concerns of this present study covers services that are particular to non-traditional methods of procurement. These services relate to particular methods of procurement and contract arrangement and should be incorporated into agreement as required in conjunction with services from categories one and three of the schedule. The third category, which covers the services that are not covered under the categories one and two, will be investigated in the next phase of the study. The data collection and collation commenced in March 2009 and lasted through to April 2009. The analyses are divided into two parts, Part one presents the respondents' profiles. The mode technique was used to analyze the profiles of the respondents. The frequencies of the respondents are expressed in percentages. Part two is concerned with achievements the objectives of the study. As mentioned above, this current study is concerned with the second category of the services that Quantity Surveyors provides the services listed in Table 1.

Table 1: General Services that the Quantity Surveyors Provide

s/n	Nature of Services
1	Obtain agreement of a contractor to the amount of the approximate estimate and confirm the amount of the fee for the contract
2	Prepare recommendations for interim payments to contractor based on contractor's prime costs
3	Adjust the approximate estimate to take account of variations and price fluctuations
4	Check the final amounts due to contractors, subcontractors and suppliers
5	If required assist in drafting special forms of contract
6	Prepare tender documents for the appointment of a management contractor or construction manager
7	Attend interviews of prospective contractors or managers
8	Obtain manager's agreement to contract cost plan and confirm amount of manager's fee
9	Assist in allocation of cost plan into work packages
10	Assist in preparation of tender and contract documents
11	Price tender documents to provide an estimate comparable with tenders
12	Review cost plan as tenders are obtained and prepare revised forecast of cash flow
13	Prepare periodic cost reports to show effect of variations, tenders let and prime costs
14	Check the amounts due to managers, contractors, subcontractors or works contractors and suppliers
15	Draft the client's brief, in association with the client and his designers
16	Prepare tender documents incorporating the client's requirements
17	Prepare contract documentation, taking into account any changes arising from the contractor's proposals
18	Prepare recommendations for interim and final payment to the contractor, including compliance with all relevant statutory requirements
19	Assist in agreement of settlement of the contractor's final account
20	Prepare alternative cost studies to assist in determining the optimum scheme for a contractor's submission
21	Draft specification forming the contractor's proposal
22	Prepare bills of quantities to assist in the preparation of a contractor's tender
23	Assist with specialist enquiries in compiling the contractor's tender
24	Measure and price variations for submission to the client's representative
25	Prepare application for interim payment
26	Agree final account with client's representative
27	Take measurement, price from agreed schedule of rates and agree totals with contractor
28	Check final amount due to contractor(s)

Respondents were asked based on their current experience, to tick the services they provide (or agree the Quantity Surveyors are providing. This is in case the respondent is not a Quantity Surveyor)on the projects they were involved on a five point's continuum (1) very often; (2) often; (3) do not know; (4) not often; (5) not at all. The first of these categories, i.e. very often, involves a condition where the Quantity Surveyors always provide the services while the last of the categories (not at all) indicates that the Quantity Surveyors have never performed the services. The provision of the services will be determined using the mode technique. The mode technique is the most appropriate technique to use for ordinal (Muijs, 2004). Model is the value which occurs most frequently in a dataset (Fellows and Liu, 2008). Mean and Median are not very sensible methods of measuring "average" of ordinal data.

4. FINDINGS AND ANALYSIS

4.1 Respondents' Profile

A total 200 questionnaire were sent out to experts in the Nigerian construction industry. A hundred and forty were returned. This is a response rate of 70%.

Table 2, represents the outcome on the respondents profile. The data analysis found that majority (34%) of the respondents that completed the questionnaires possesses a Higher National Diploma and Bachelor of Science; while 33% of them hold a Bachelor of Technology. Higher National Diploma is academically acceptable to be able to practice in the Nigerian construction industry. Quantity surveying as a course is offered in universities and polytechnics in Nigeria. Thirty three percent of the respondents possessed post graduate diploma / master. Most (61.7%) of the respondents were registered member of their professional bodies.

More than 70% of the respondents have more than five years working experience in the construction industry (Table 2). Five years working is considered adequate for the respondents to possess minimum knowledge of the Nigerian construction industry. About 40% of the respondents were Quantity Surveyors, while 30% and 25% were engineers and architects respectively (Figure 1). The analyses revealed that many of the respondents (48%) hold strategic designations in their respective organizations, namely managing directors, contract managers and projects managers with recognizable working experience in Nigerian construction industry (Figure 4). Some respondents also indicate that they were principal partner or partner in their private firms. Most of those that have ticked "others" were Quantity Surveyors, architects or engineers, i.e. the respondent is working as a Quantity Surveyors. Therefore, on the basis of the respondents' profiles, it is considered that their opinions on the Nigerian construction industry are satisfactory enough to report the findings of this research work.

Table 2: Respondents' Profile

Criteria		Frequency	Percent
Highest Academic Qualification	Certificate	4	2.9
	Higher national diploma	34	24.3
	Bachelor of technology	33	23.6
	Bachelor of science	34	24.3
	Post graduate diploma/ master of science	33	23.6
	Doctor of philosophy	1	.7
	Others	1	.7
	Total	**140**	**100**
Professional Qualification	Graduate	53	38.1
	Associate	25	18.0
	Fellow	9	6.5
	Not yet registered	52	37.4
	Total	**139**	**100**
Organization	Government	25	17.9
	Private firm	58	41.4
	Contractors	25	17.9
	Private client	23	16.4
	Private developer	5	3.6
	Others	4	2.9
	Total	**140**	**100**
Position	Managing Director	14	10.1
	Contract Manager	23	16.5
	Project Manager	30	21.6
	Supervisor	66	47.5
	Others	6	4.3
	Total	**139**	**100**
Professional Background	Quantity Surveying	55	39.3
	Engineering	42	30.0
	Architecture	35	25.0
	Others	8	5.7

	Total	**140**	100
Working Experience	Not more than five years	40	28.6
	Five years to less than ten years	56	40.0
	Ten years to less than fifteen years	31	22.1
	Fifteen years and above	12	8.6
	Total	**139**	**100**

5. SERVICES THAT QUANTITY SURVEYORS PROVIDE

This section discuss the outcomes on the assessment of the services that Quantity Surveyor provide against the best practice. Generally, majority (35%) of the respondents often provide the services while about 34% of them provide the services very often (Table 3). Fifteen percent of respondents do not know whether provide the services or not while 8% of them do not provide the service often. Five percent do not provide the service at all. It is obvious that all the services were provided, albeit at different levels. Table 4 shows that the Quantity Surveyors often provide 15 of the services while other Quantity Surveyors, provide very often 13 of the services. Therefore, it could be inferred that the Quantity Surveyors provide all the services albeit with varying intensities.

Table 3: Summary of Score of Table 5 (in %)

Categories	Very Often	Often	Do Not Know	Not Often	Not At All	**Total**
Cumulative Scores	956.1	999.1	412.3	295.2	137.7	**2880.4**
Percentage	34	35	15	11	5	**100**

The service that ~~is~~ mostly provides (83.75) is to "Measure and price variations for submission to the client's representative" (service 24). This is one of the major services that Quantity Surveyors render. The variation order is usually issued to the contractor on the order of the client. Variation order is usually higher under a non-traditional method of procurement, since estimate is only prepared based on insufficient/ preliminary information. So the bill of variation (BoV) is prepared by the consultant Quantity Surveyor to know how much is actually due to the contractors. It is prepared in attendance of the contractor's Quantity Surveyor. Next to this service is service No. 11, "Price tender documents to provide an estimate comparable with tenders" and then, service No. 28 "Check final amount due to contractor(s)" with the respect to quantity surveying roles, these services could be described as technical services. Contrarily, services are least provided are to attend interviews of prospective contractors or managers (56.4%); check the amounts due to managers, contractors, subcontractors or works contractors and suppliers (59.3%) and Prepare alternative cost studies to assist in determining the optimum scheme for a contractor's submission (61.8%). This latest analysis suggests that Quantity Surveyors in Nigeria were not involved in key decision making stage in project execution, they are more involve in the technical aspect on the project management issue. Deductively, this can be interpreted to mean, that the Quantity Surveyors were not the lead consultant or projects manager whereas Table 2; suggests that most of the respondents hold managerial positions. However, Quantity Surveyors are now taking leading roles, where they become the leading consultants, project managers or prime consultants. The Quantity Surveyors else, are indeed expanding on the scope of services they provide range of services like value management, procurement, maintenance management, and facilities and assets managements.

Table 4. Response Rate on Services of Quantity Surveying Practices (N=55)

	Respondent's Frequency					
s/n	**Very often**	**Often**	**Do not know**	**Not often**	**Not at all**	**Mode**
1	35.2	40.7	13.0	9.3	1.9	Often
2	38.2	30.9	10.9	9.1	10.9	Very often
3	25.9	40.7	18.5	9.3	5.6	Often
4	38.2	30.9	21.8	7.3	1.8	Very often
5	29.6	42.6	11.1	11.1	5.6	Often
6	36.4	38.2	10.9	10.9	3.6	Often
7	29.1	27.3	18.2	16.4	9.1	Very often
8	32.1	35.8	15.1	11.3	5.7	Often
9	30.9	40.0	7.3	10.9	10.9	Often
10	40.7	31.5	11.1	13.0	3.7	Very often
11	38.2	41.8	14.5	1.8	3.6	Often
12	29.1	38.2	18.2	10.9	3.6	Often
13	30.2	34.0	22.6	7.5	5.7	Often
14	31.5	27.8	18.5	9.3	13.0	Very often
15	36.4	27.3	16.4	16.4	3.6	Very often
16	30.9	38.2	16.4	10.9	3.6	Often
17	30.9	45.5	5.5	18.2	0	Often
18	43.6	29.1	14.5	9.1	3.6	Very often
19	34.5	32.7	18.2	9.1	5.5	Very often
20	29.1	32.7	16.4	12.7	9.1	Often
21	34.5	32.7	20.0	7.3	5.5	Very often
22	40.0	30.9	20.0	7.3	1.8	Very often
23	27.3	41.8	21.8	7.3	1.8	Often
24	47.3	36.4	7.3	9.1	0	Very often
25	34.5	25.5	20.0	18.2	1.8	Very often
26	31.5	42.6	5.6	14.8	5.6	Often
27	33.3	40.7	7.4	11.1	7.4	Often
28	37.0	42.6	11.1	5.6	3.7	Often
Total	**956.1**	**999.1**	**412.3**	**295.2**	**137.7**	

However, the next stage of this research will reveal how modern or current are the Nigerian Quantity Surveyors as the services in outlined under the third category are advance techniques use by the best practice Quantity Surveyors. With specific reference to the perceptions of other professionals in the Nigerian built environment, regarding the services that the Quantity Surveyors in Nigeria provide, majority (49.5%) of the respondents believe that the Quantity Surveyors provide the services often while about 29% believe the Quantity Surveyors provide the services very often (Table 8). Table 8 also demonstrates that nearly 9% of the respondents do not know whether the Quantity Surveyors provide services or not. But almost 10% believe that the Quantity Surveyors do not provide the services often while 3.9% believe the Quantity Surveyors have never provided the services before. The architects and engineers and other professionals in the Nigerian built environment believe that the performance of 24 of services by the Quantity Surveyors is quite often (services that their models equal to 2).

Table 5. Perceptions of other professionals on the services of QS (N=85)

	Respondent's Frequency					
s/n	**Very often**	**Often**	**Do not know**	**Not often**	**Not at all**	**Mode**
1	26.2	38.1	19.0	13.1	3.6	Often
2	35.7	33.3	16.7	11.9	2.4	Very often
3	22.6	47.6	15.5	10.7	3.6	Often
4	16.7	38.1	26.2	13.1	6.0	Often
5	25.3	34.9	26.5	12.0	1.2	Often
6	33.7	45.8	14.5	4.8	1.2	Often
7	23.8	32.5	23.8	16.3	3.8	Often
8	26.5	44.6	16.9	8.4	3.6	Often
9	24.7	43.2	18.5	7.4	6.2	Often
10	32.5	44.6	15.7	6.0	1.2	Often
11	38.3	35.8	9.9	12.3	3.7	Very often
12	32.1	38.1	20.2	7.1	2.4	Often
13	32.1	40.5	15.5	10.7	1.2	Often
14	26.5	34.9	26.5	9.6	2.4	Often
15	35.4	29.3	28.0	4.9	2.4	Very often
16	25.6	41.5	17.1	11.0	4.9	Often
17	38.1	38.1	14.3	6.0	3.6	Very often / often
18	38.1	31.0	21.4	8.3	1.2	Very often
19	36.9	26.2	22.6	13.1	1.2	Very often
20	37.8	36.6	22.0	3.7	0	Very often
21	39.3	26.2	23.8	8.3	2.4	Very often
22	37.3	34.9	14.5	8.4	4.8	Very often
23	28.9	42.2	15.7	12.0	1.2	Often
24	51.2	24.4	18.3	6.1	0	Often
25	24.1	41.0	19.3	9.6	6.0	Often
26	26.5	38.6	16.9	13.3	4.8	Often
27	40.2	39.0	11.0	6.1	3.7	Very often
28	39.8	34.9	16.9	7.2	1.2	Very often
Total	**895.9**	**1035.9**	**527.2**	**261.4**	**79.9**	

The three main services that the other professional believed, that quantity often provide are to prepare tender documents for the appointment of a management contractor or construction manager (79.5%), take measurement, price from agreed schedule of rates and agree totals with contractor (79.2%) and assist in preparation of tender and contract documents (77.1%). While the service with the least provided by the Quantity Surveyors based on the other professional understandings are Check the final amounts due to contractors, subcontractors and suppliers (54.8%), If required assist in drafting special forms of contract (60.25) and Check the amounts due to managers, contractors, subcontractors or works contractors and suppliers (61.4%)

Table 6. Summary of Table 8 (In %)

Categories	Very Often	Often	Do Not Know	Not Often	Not At All	**Total**
Cumulative Scores	895.9	1035.9	527.2	261.4	79.9	**2880.8**
Percentage	32	37	19	9	3	**100**

However, it is observed that most respondents provide all the service often or very often, whereas quite a number of services were not often or very often provided under the non-traditional approaches. In the first part of the research it was discovered that many of the respondents do not often or very often provide some of the services. However, could this be interpreted to mean that the Nigerian Quantity Surveyors have move from providing the traditional service to non-traditional services? This aspect of the findings needs to be invested further to determined the hidden factors leading to this outcome. However, Mann-Whitney Test was performed on that the data to test the statistical significant of the results, and it was found that, there is significance in the outcome except with two of the services, namely to check the final amounts due to contractors, subcontractors and suppliers (U=1933.500; z=-1.856; p=063) and Prepare alternative cost studies to assist in determining the optimum scheme for a contractor's submission (1869-.2.086.037). These outcomes confirm the findings in Table 4 above. In the Table 4 is evident that those services were the same services that the quantity services provide but with the least frequencies. Mann-Whitney is appropriate for this analysis because that data is ordinal (Hinton, Brownlow , McMurray and Cozens, 2004) and as the analysis seeks to determine if there is a different between the Quantity Surveyors' perceptions of the service provide with the perception of others construction professionals.

6. CONCLUSION

Since the purpose of this paper is to assess the services that Quantity Surveyors in Nigeria provide alongside the services of Quantity Surveyors outlined in the publication of the RICS. Therefore it seeks to determine if they provide the services or if do not, and then which of the services they do not provide. Also to create awareness on the extent to which Quantity Surveyors in Nigeria were involved in the total procurement and management of built assets. Clients have become more demanding; the regulatory framework has changed and has become more complex and sophisticated. Clients want more value added services from the Quantity Surveyors these days. It could be inferred from the outcome, that the Quantity Surveyors in Nigeria were providing the services that Quantity Surveyors provide elsewhere. Other professionals in the Nigerian built environment also believe that the Quantity Surveyors provide most of the service very often or often. However, the Quantity Surveyors need to provide more services in order to meet up with the requirements of the modern forward thinking clients, particularly on those areas that their performances were not encouraging. However, the findings of the study also bears that the various services that Quantity Surveyors provide enable the Quantity Surveyors to evaluate, monitors and control of construction resources

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