

FACTORS CONFRONTING QUANTITY SURVEYING PRACTICE: THE CASE OF NIGERIA

Abstract

Purpose – Since the challenges confronting a system is better addressed when known and understood, this paper reports the findings of a study that investigated the factors confronting professional quantity surveying using Nigeria as a case.

Design/Methodology/Approach – A questionnaire was developed and **pre-tested** as the instrument for collecting data. A total of sixty-four quantity surveyors practicing in Lagos, Port Harcourt and Enugu completed the questionnaire out of a non-probabilistic sample of 100. Severity Index and Spearman Rank Correlation Coefficient were employed in data analysis.

Findings – The outcome revealed that the top five factors perceived to be confronting the profession include poor marketing of the profession, opposition from engineers, the dominance of multi-national companies which do not have quantity surveying as a distinct profession in their country of origin, widespread corruption in Nigeria, professional incompetence of some quantity surveyors. Furthermore, the two categories of respondents - professional quantity surveyors and probationers – agree in their ranking of the factors confronting the profession. The ranking of the seventeen factors, between the two categories of respondents was tested using Spearman's rho. The result showed that the difference in perception of professional members of the Nigerian Institute of Quantity Surveyors (NIQS) and the probationers with regard to factors confronting the quantity surveying profession is not significant at $p < 0.01$. These findings are then discussed in the light of previous works, and implications for both academics and professionals within the quantity surveying profession were highlighted.

Originality/value – This study has highlighted the key issues to consider as stakeholders attempt to advance the course of quantity surveying and construction cost management profession.

Keywords: Challenges, Practice, Profession, Quantity Surveying, Confront

Paper Type: Research

Introduction

A profession according to Sidney Webb and Beatrice Webb (1917) cited in UK Competition commission report (1977) is a vocation founded upon specialized education training, the purpose of which is to supply objective counsel and service to others, for a direct and definite compensation, wholly apart from expectation of other business gains. Seeley and Winfield (1999), posits that quantity surveying as a professional practice has been in existence at least in the United Kingdom since 1785 with Henry Cooper and Sons' operation in Readings. Today, the quantity surveying profession has experienced developmental changes from

measurement oriented background to the current position where a quantity surveyor is accepted as a financial specialist and adviser in the construction industry of those countries where his expertise is recognized (Nkado, 2001). Anago (2000) opined that the construction cost management capability of the quantity surveyor is catalytic to economic development of the Nigeria.

In spite of this, it appears that the surveyor's role in the procurement of constructed assets has been challenged at one time or the other in different national construction settings. Ndanusa (2004) writing from a Nigerian perspective opines that quantity surveying more than any other profession among the built environment profession is facing numerous challenges which must be tackled head-on if our future will be guaranteed. ." Smith (2004) opined that it is inevitable that documentation and data will be increasingly automated to the point where measurement and other technical processes will require minimal intervention. Reports show that there is a shortage of professional quantity surveyors in North America, Australia and the Middle East (Hannah *et al*, 2008; Smith, 2008).

Does this imply that the challenges Ndanusa (2004) wrote about are imaginary? Perhaps stemming from his limited experiential knowledge? Do professional quantity surveyors in Nigeria agree that their project cost management skills would soon be made redundant by disruptive technology and other factors? These questions inform this **preliminary** study. The aim of this research is to assess the relative seriousness of the confrontational factors posed by a number of issues to quantity surveying in Nigeria as the basis for a further research aimed at the development of a conceptual business model for **sustaining and enhancing** quantity-surveying practices. The specific objectives includes determining the extent of agreement among quantity surveyors about the factors confronting the profession, isolating the most serious factors in Nigeria, **examining the response of quantity surveying professionals to these issues. This paper contains findings with regard to the first two objectives.**

Review of related literature

Conceptual foundations

The confrontational factors construct resonates with the broad field of strategic planning. The Balance Score Card Institute (2013) defines strategic planning thus:

“It is an organisational management activity that is used to set priorities, focus energy and resources, strengthen operations, ensure that employees and other stakeholders are working towards common goals, establish agreements around intended outcomes/results, and assess and adjust the organisation's direction in response to a changing environment. It is a disciplined effort that produces fundamental decisions and actions that shape and guide what an organisation is, who it serves, what it does, and why he does it with a focus on the future.”

Assessing and adjusting an organisation's direction in response to environmental changes calls for evaluating four different things, namely the organisation's strengths, its weaknesses, available market opportunities, and barriers to the achievement of the organisations strategic goals. This is popularly called SWOT analysis in the strategic planning literature. SWOT analysis involves examining an organisation's context in terms of its strengths and weaknesses and zooming out to identify opportunities and threats in its external operating environment (Valentin,2005).

This strategic planning body of knowledge (Shojaei, Taheri and Mighani,2010; Jeyaraj, Muralidharan, Senthilvelan and Deshmukh,2012) informed that an organisation's strengths are the tangible, intangible attributes internal to the organisation which confers distinctive competence on the organisation. It is a superior capability that makes the organisation more competitive than its peer's. The weaknesses of the organisation on the other hand are the characteristics which place the firm at a disadvantage in relation to competitors. Like strength, they are internal to the organisation and organisations must find a way of making its weaknesses irrelevant to thrive in a competitive world. The opportunities and the threats are external to the organisation. Opportunities are external chances to achieve organisational bottom lines. Threats are external environmental variables that could constrain the organisation from achieving its strategic goals.

The research reported here was interested in the identification of the variables that pose challenge to the advancement of quantity surveying profession in Nigeria. These variables evidently include "weaknesses" component of the SWOT analysis construct. Hence, confrontational factors to quantity surveying practice in Nigeria as used in this paper covers both the weaknesses and threats components of the SWOT analysis tool. It should however be noted that all weaknesses and threats can be largely surmounted.

The Quantity Surveying Profession in Nigeria

According to Odusami (2000), the profession of quantity surveying was brought into Nigerian by the Britons - our colonial masters. A number of Nigerians who trained in the UK as quantity surveyors came together to form the Nigerian Institute of Quantity Surveyors in 1969. The profession is statutorily recognized in Nigeria (Ogunsemi, 1999).

Alluding to some other works, Onwusonye (2013) lists the services of the quantity surveyor to cover the following:

- a) preliminary cost advise/feasibility report
- b) cost planning
- c) advising on contractual methods
- d) advising on selection of other consultants
- e) preparing tender documents
- f) obtaining or negotiating tenders
- g) reporting on tenders received or package deal/design and build offers
- h) evaluating construction works
- i) preparing expenditure statements for tax accounting purposes.
- j) Periodic financial reporting
- k) Technical auditing
- l) Assessing replacement value for insurance
- m) Project management related services
- n) Giving expert evidence in arbitration
- o) Preparing defending against construction contract claims.

The desire of quantity surveyors in Nigeria to go beyond the provision of these services on building projects is evident from the vision of the Nigerian Institute of Quantity Surveyors as follows:

"To take responsibility for Total Cost and Procurement Management for the achievement of clients objectives in all types of capital projects and developments from conception to commissioning and maintenance, in all sectors of the economy to the attainment of sustainable national development and goals."

However, there are indications from some quarters within that quantity surveying community in Nigeria that the profession is confronted with barriers (Omole, 2000; Mogbo, 2002). We begin with similar researches outside Nigeria.

Previous Studies on factors confronting quantity surveying practice

The future of the quantity surveying profession has been the focus of stakeholders in different climes where the profession is accepted as a distinct professional field. For example as far back as 1971, the Royal Institution of Chartered Surveyors, RICS, published a report titled "The Future Role of the Quantity Surveyors"(Ashworth & Hogg,2007).The report identified the provision of construction project financial management and cost consultancy services as the distinctive skill-sets of the quantity surveyors. Two decades later, according to Ashworth and Hogg (2007), the RICS released another report with the title "The Core Skills and Knowledge Base of the Quantity Surveyor." Over a decade ago, yet another report provided by the RICS (1998) predicted that in the next ten years, technology will almost completely deskill the profession. The report suggests that construction advisers particularly quantity surveyors who rely heavily on their technical skills to win work, must find a strategic role that will enable them to add value to projects. These reports show that the UK quantity surveying profession has always prepared to evolve with changing conditions. Is this true of other countries including Nigeria?

The Australian Institute of Quantity Surveyors (AIQS) commissioned a market research study aimed at a better understanding the issues facing the profession in that region (McGaw, 2008). The findings of the study identified the reactive cost monitoring (instead of cost controlling) role played by the profession as an issue of concern to be addressed. Mbachu and Frei (2011) developed the Strategic Health Index as a tool for diagnosing the strategic health of the Australasian cost management profession. Their work reveals lack of flexibility and versatility of service as weaknesses.

Writing from a South African perspective, Pearl (2004) posited that the so-called distinctive competencies of the quantity surveyors could be learned easily by non-quantity surveying professionals. He goes further to show that when projects are not traditionally procured, these non-quantity surveying professionals perform the quantity surveyor's traditional roles. According to him, the only claim of superiority over the non-quantity surveying professional would be in the quality of services delivered to clients by professional quantity surveyors. Unfortunately, however, he argues that clients within the South African environment perceive the profession to be delivering inferior services. The easy to learn nature of the quantity surveyor's competencies by allied professions and the poor quality of services are evidently barriers to the South African quantity surveying profession. Chong, Lee and Lim (2012)

investigated the quantity surveying profession in Malaysia. Barriers isolated include fee competition, apathy towards the adoption of information technology, competitions from other professionals that deliver similar services or one - stop professional services.

The foregoing review shows the sustainability of the profession has been of interest to stakeholders in other countries. The review shows that limited work has focused on the existence of confrontational factors and barriers to the quantity surveying profession in Nigeria. The available work on this subject within the local construction literature are perused and synthesized with what the global quantity surveying literature has to say on the subject. The outcome of the literature synthesis is a list of seventeen factors listed in Table

Factors confronting Quantity Surveying Practice in Nigeria

Unlike the UK, the professional body in Nigeria, the Nigerian Institute of Quantity Surveyors has not commissioned any research into the current condition or future of the profession in Nigeria. Neither is there any evidence of empirical research into the factors confronting the profession as we have in countries like Australia and Malaysia as seen above. However a number of notable figures within the quantity surveying profession have expressed concerned in the past about the issues militating against the profession. The identified issues are discusses below.

Information 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 learnt 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 in order to protect the profession.

Conservatism

Jagboro (2004) draws our attention to another issue in 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.

Opposition from Engineers

Oduami (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 UK argues 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 welcomes 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 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.

Following the release of the Revised Scale of fees for construction Industry professional in April 1996, which mandated quantity surveyors to prepare bills of quantities for electrical, mechanical and civil engineering works; the Nigerian Society of Engineering published the following: "In a move to counter the quantity surveyor who are bent on taking over engineering valuation from engineers, council has resolved that hence forth all engineering design should include BOQs." In the light of this, it is opined that opposition from engineers is a challenge to quantity surveying in Nigeria.

Poor Marketing of the profession

Another issue identified in the literature as a confrontational factor is the poor awareness of the profession. Ajanlekoko (2004) submitted 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. Anecdotal evidence suggests that quantity surveyors are perceived by clients as adding cost to project delivery.

Esenwa (2000) stated that the Nigerian society, although fairly enlightened is still limited in the awareness of the duties of the quantity surveyors. The input of professional quantity surveyors is not sought - even by the government - in the formulation of the annual budgeting exercise. The foregoing are serious image problems emanating from a poor marketing of the profession. Poor marketing of the quantity surveying profession is therefore listed as one of the strategic issues in professional quantity surveying.

Widespread corruption

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 agent 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 (Ibid).

Adebola (2000) spoke of the disdain of quantity surveyors in the public sector. Discussing the obstacles facing the African quantity surveyor, Leeuw (2005) opined that bribery and corruption could cause a prospective appointment to be awarded to others. Considering the fact that professional quantity surveyors are responsible for protecting the financial and contractual interest of their clients, it is understood that honest professional quantity surveying services may not be welcome by corrupt, greedy bureaucrats working for the governments. Widespread corruption and professional incompetence of some quantity surveyors are militating against the profession.

Dearth of qualified lecturers

Ogunsemi (2004) posits that the quantity surveying departments in Nigerian universities is forty percent adequate in terms of staff. According to Lawal (2005), the quantity surveying programme of the Federal University of Technology, Minna is one of the best in the country, yet the students-lecturers ratio in the 2003/2004 academic session was 1:56³/₈. A recent report shows that most university departments offering quantity surveying in the country are

S/N	Issue	Meaning/Explanation
12	Shortage of competent QS graduates	Incompetence of fresh quantity surveying graduates occasioned by the general decline in the standard of education in the country.
13	Widespread corruption in Nigeria. (Omole ,2000; Leeuw ,2005)	Corrupt practices in both public and private sector
14	Professional incompetence of some professionals	Lack of skills on the part of some quantity surveyors.
15	The dominance of multi-national companies that do not have QS as a recognized profession in their country.	Same as the issue
16	Dearth of quantity surveying educators (Ogunsemi ,2004; Lawal ,2005)	Shortage of qualified surveying lecturers.
17	Competition from other professionals (Sobotie; 1999)	Professionals like management consulting firms, lawyers, accountants, taking over projects and procurement management.

Authors' summary of factors confronting quantity surveying practice in Nigeria

Research method

The population for this study was quantity surveyors who are members of the Nigerian Institute of Quantity Surveyors (NIQS) who are engaged in providing quantity surveying services in three selected cities in Southern Nigeria. These cities were Lagos, Port-Harcourt & Enugu. The choice of these cities is because over fifty percent of quantity surveying firms in Nigeria is located in these cities. Of the one hundred and fifty six quantity surveying firms listed in the NIQS directory of quantity surveying firms used for this research, one hundred of them are located in these cities.

Professional members and probationers within the Nigerian Institute of Quantity Surveyors (Oforeh, 2005) were targeted .These members possess the depth of experience of the practical work of a professional quantity surveyor to make the desired input into the study. In order to capture the perceptions of professional quantity surveyors about the issues confronting the quantity surveying practice, a three-part questionnaire was designed in line with the criteria suggested by Naoum (1999).The first section in the questionnaire captures the demographic background of the respondents. The second part of the questionnaire asks the respondent whether each of the seventeen pre-identified issues obtained from the literature are challenges to the advancement of the profession. A score of zero is assigned to the "No" answer. Respondents who answered yes to each question are further asked, to rate on a Likert scale, from not serious (rated 1) to very serious (rated 5), their self-perception of the seriousness of confrontational factor. The third part of the questionnaire is not related to the report presented here.

Descriptive statistics and two non-parametric statistical techniques embodied in the Statistical Package for Social Sciences (SPSS) were deployed for analysis - The Severity Index and Spearman Correlation Coefficient. The Severity Index method is a non-parametric technique based on the aggregate weighing of the initial frequency score of each factor (Kangwa & Olubodun, 2003). It was used to quantify the seriousness of the factors prior to ranking in descending order of severity.

It was calculated using the equation below:

$$\text{Severity index} = \frac{\Sigma(\text{Weight for each rating} \cdot \text{Frequency of response}) \cdot 100}{\text{Total number of respondents}}$$

According to Naoum (1999), the Spearman (rho) correlation is a non-parametric test for measuring the difference in ranking between two groups of respondents' scoring a number of issues, attributes or factors. Figure 1 is the summary of activities undertaken to achieve the goals of this research.

#####<Insert Figure 1>#####

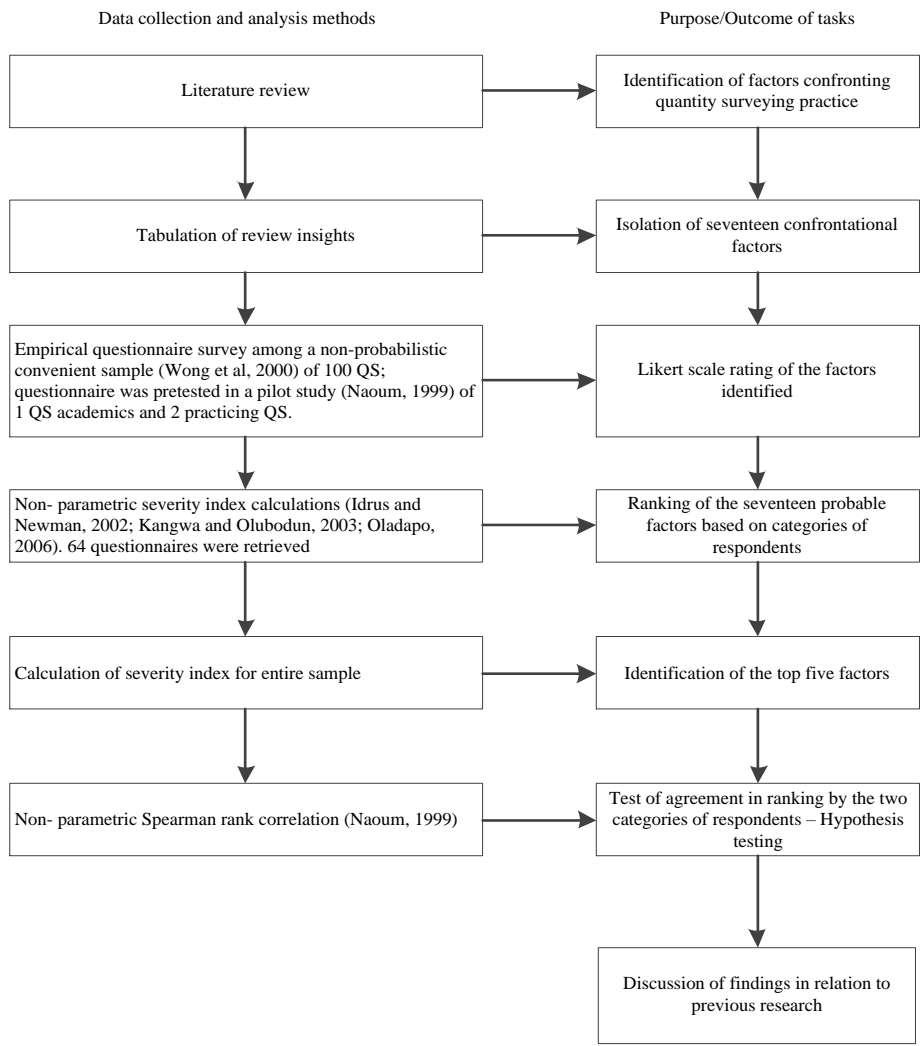


Figure 1 Research Method Flowchart

Findings

Survey responses

Out of the 100 questionnaires administered, 64 were retrieved. This represents a survey response rate of 64 %. This success rate is not common in survey research (Frei and Mbachu, 2009). The "wait and get" self-administration of the questionnaire must have contributed to achieving the response rate. Another measure taken to increase response rate includes the assurance in the covering letter that the information provided by respondents will be treated with strict confidence and that individual firms will not be identified.

probationers with regard to factors confronting the quantity surveying profession is not significant.

Note the perfect agreement in the ranking of the following factors by the categories of respondents: Poor marketing of the profession, opposition from engineers, and professional incompetence of some quantity surveyors and de-skilling of the technical function of measurement. It is also noteworthy that there is a wide difference in the ranking of contractual dominance of architects and competition from other professionals by the two categories of respondents.

Discussion of findings

The findings of the investigation into factors confronting quantity surveying practice in Nigeria reported in this paper are reminiscent of some prominent views and related works in other parts of the world. The observation that poor marketing of the profession is the most serious factors confronting facing the profession in Nigeria corroborates the stance that professional quantity surveyors are the least popular (Ajanlekoko ,2004) and the least valued, and recognized (Onashile ,2005) within the Nigerian construction industry. Opposition from engineers who are not comfortable with the inclusion of quantity surveyors on engineering project design teams is the second most serious factor. This finding agree with Balogun's (2013) view that the practice environment of the Nigerian quantity surveying profession is characterised by hostile competition and Mogbo's (2002) submission that Nigerian engineers do not want quantity surveyors on engineering projects. This finding also agrees with the results of Chong, Lee and Lim (2012), which identified poor marketing as barrier to the quantity surveying profession in Malaysia.

The findings that professional members of the Nigerian Institute of Quantity Surveyors ranked "conservatism", the "don't rock the boat" mentality of some professionals; people within the profession unwilling on change, to innovate, the third most serious factor resonates with Mbachu and Frei (2011) who found that lack of flexibility and versatility of service as sources of threats for the Australasian quantity surveying profession. Widespread corruption is seen as the fourth most serious confrontational factor in Nigeria. This agrees with Leeuw (2005) and Ofori and Toor (2012) who includes corruption as one of the challenges of the profession in Singapore.

Contrary to expectations and the fears expressed in the past (Esenwa, 2000; Smith, 2004), this study shows that deskilling of the profession by computer-based technology is not perceived as a militating factor to the Quantity Surveying practice in Nigeria. This factor is ranked the least. This study also shows that the name tag "quantity surveyor" is not seen as a factor militating against the profession. The same is true of declining demand for bill of quantities; it is ranked "8" with 39.3% severity index.

Conclusions and Recommendation

Using pre-tested, structured questionnaire that was self-administered to a non-probabilistic sample of quantity surveyors in Lagos, Port-Harcourt and Enugu, this study sought to identify factors or issues perceived by quantity surveyor to be confronting the profession. The quality of responses received was high and the response rate adequate. Pooling the responses together and treating it as a single population of respondent generated top five factors: Poor marketing of the profession ranked, Opposition from engineers ranked, dominance of multi-national companies ranked, widespread corruption, and professional incompetence of some quantity surveyors. The first objective is therefore met. The second objective of this study was to determine the extent to which quantity surveyors agree on the factors confronting the profession. To achieve this objective, the ranking of the factors confronting the profession by the two categories of quantity surveyors - professional members and probationers were obtained. The ranks were correlated using Spearman's rank Correlation and the results of the statistical test conducted showed that there is no significant difference in the ranking by the two categories of respondents. This largely confirms the magnitude of the significance of the identified factors to the profession in the country.

This study has clearly achieved its objectives but not without limitations. This work is silent about what quantity surveyors are doing to tackle the factors confronting the profession. A future paper will present empirical evidence with regard to strategies being deployed by Nigerian quantity surveyors to combat these factors. This work has implications for academics and professionals within the quantity surveying profession in Nigeria as well as developing countries and other nations that share similar attributes with Nigeria. The Nigerian Institute of Quantity Surveyors should begin to put a robust strategic plan together to address the top factors confronting the profession as revealed in this study. There is limited documented evidence of action along this line of reasoning yet. Since the practice of the profession in Nigeria is very similar to several other emerging economies, this study provides

an insight into issues that require attention with respect to Quantity Surveying Profession in these nations. The study also sets the stage for a bigger research and provokes thoughts in practice and academia with respect to the advancement of the profession in an emerging economy.

Future research direction

Other researchers could pick any of the issues and take an in-depth look at their impact on the Nigerian quantity surveying profession.

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