

**BENCHMARKING QUANTITY SURVEYORS' SERVICE QUALITY IN
CONVENTIONAL AND SUSTAINABLE BUILDING PROJECTS IN LAGOS
STATE, NIGERIA**

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ABSTRACT

This study assessed Quantity Surveyors' services in the delivery of conventional and sustainable building projects in Lagos State; evaluated the service quality performance of Quantity Surveyors in the delivery of conventional and sustainable building projects in the study area and benchmarked the service quality performance of Quantity Surveyors in the delivery of conventional building projects with that of sustainable building projects in the study area. This was with a view to enhancing the service quality of Quantity Surveyors in Lagos State, Nigeria.

Primary data were collected using two sets of questionnaire. The first, administered to practising Quantity Surveyors in Lagos State was used to collect data on Quantity Surveying services provided in both conventional and sustainable building projects. The second set of questionnaire administered to clients' organisations was used to obtain data on service quality performance of Quantity Surveyors in the delivery of conventional and sustainable building projects. Data analysis was carried out using mean ranking analysis, student t-test and gap analysis. The results showed that the top ranking services provided by Quantity Surveyors in the delivery of conventional and sustainable building projects are 'valuation of work in progress', 'final account preparation', and 'preliminary estimating and cost advice'. It also showed that there was no significant difference in the mean scores of the top ranking services provided by Quantity Surveyors in the delivery of conventional and sustainable building projects. The study however indicated that there was statistical significant difference ($p < 0.05$) in the mean score of some of the Quantity Surveyors' services specific to sustainable building projects when compared with the mean score of service specific to conventional building projects. Such

services are ‘whole-life cost assessment’, ‘cost advice on building to required sustainability standard’, ‘sustainability performance assessment’ and ‘design advice on inclusion of sustainability features’. The study further showed that while clients’ perception exceeded their expectation in the delivery of sustainable building projects, they were less satisfied with Quantity Surveyors’ service performance in the delivery of conventional building projects.

The study concluded that the service quality expectation of construction clients in the delivery of conventional building projects (mean score = 21.42) is about double the service quality expectation in the delivery of sustainable building projects (mean score = 11.70). The implication of this is that Quantity Surveyors who have all along been rendering services on conventional building projects may need to be re-trained so that construction clients may be more confident in their service provision in the delivery of sustainable building projects.

CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

The professionals within the built environment are indispensable in the attainment of sound, pleasant, healthy and well integrated environment (Aminu, 2012). They work together to achieve common goal of project delivery. Quantity Surveyors (QS) who are experts on construction cost are saddled with the responsibility of coordinating and forecasting the cost of building designs. Quantity Surveying profession at its earlier stage of development was known for expertise in building cost (Jagboro, 1999). However, there is an increased diversification of Quantity Surveying profession into new areas including engineering, contract management, project management etc. The QSs' role is essential to the overall success of other professionals involved in project delivery, their importance in the built environment cannot therefore be over-emphasised.

The demand for preservation and conservation of human resources has necessitated the need for sustainability (green) in the construction industry and this has brought about a shift from normal conventional building projects to sustainable building projects. The shift of the construction industry from the conventional paradigm towards sustainable development has received global attention in the form of "sustainable construction" (SC) (Shi *et al.*, 2014 & Zhang *et al.* 2014). Basically, SC outlines the creation and management of a healthy built environment based on resource efficient and ecological principles and aims to strike a trade-off between the economic, social and environmental (triple bottom line) dimensions of sustainability (Shen *et al.*, 2010). In a conventional building approach, designs are made with cognisance to building codes, and constructed with these codes in mind. However, "green" or "sustainable" buildings on the other

hand use key resources like energy, water, materials, and land more efficiently than buildings that are just built to codes.

With more natural light and better air quality, green buildings typically contribute to improved employee and student health, comfort, and productivity (Gregory, 2004). However, sustainable construction (green building) is often perceived as having high construction cost (Tsai *et al.*, 2014).

Adopting sustainable construction involves integrating all of the principles of sustainability into the construction activities of the project life cycle, with every stakeholder having a responsibility for carrying out sustainability practices (Hill & Bowen, 1997; Matar *et al.*, 2008). High profile reports (e.g. Egan, 2004; Academy for Sustainable Communities (ASC), 2007) have concluded that the skill base in the construction sector remain insufficient to meet the need of the new sustainable communities' agenda (Bradley *et al.*, 2010). While much had been done to increase the specialist knowledge base across the field of sustainability, the Egan report identified specific skills lacking across the built environment professions and challenged professional bodies and professional development providers to fill in the gaps (Egan, 2004).

Quantity Surveyors (QS) as cost experts in the construction industry are expected to be able to cost green buildings. It is important to ask if the training and skills acquire by Quantity Surveyors (QS) in the delivery of conventional building projects are adequate to deliver sustainable building projects. Incorporating sustainability principles into building projects starts from decision-making (Abidin, 2010). Decision and practices that will promote SC are incorporated into plan and developed to design. While efforts have been made to integrate green into construction, much attention has not been paid to green costing. Hence, it is necessary to

examine if services offered by Quantity Surveyors in conventional buildings can be benchmarked for sustainable building projects.

Sustainable building project delivery is a subset of the overall sustainability agenda. It is referred to as green building or eco-building in many SC literatures. Sustainable building utilises the life cycle concept, starting from green design, production, transportation of building materials, construction, use, maintenance, and disposal process, which minimize resource consumption and waste production (Tsai *et al.*, 2014; Verrier *et al.*, 2014). However, as the issue of service quality provided by different professionals is constantly under the spotlight, previous studies have shown that Quantity Surveyors have expertise in the delivery of conventional building projects, it is the intention of this study to benchmark the service quality of Quantity Surveyors in the delivery of conventional building and sustainable building projects.

1.2 Statement of the Research Problem

Service quality is a measure of how well the service level delivered matches customer expectations, delivering quality service means conforming to customer expectations on a consistent basis (Lewis and Booms, 1983). Few studies have been carried out in an attempt to assess the service quality of Quantity Surveyors regarding client satisfaction. The first was by Procter and Rwelamila (1999), which considered service quality of Quantity Surveyors on client satisfaction in South Africa. The second study on service quality of Quantity Surveyors was by Akinsiku (2014) who assessed the quality of service rendered by Quantity Surveyors in the delivery of conventional projects in Nigeria. The work focused on construction clients' perception of Quantity Surveyor's services by assessing conventional Quantity Surveyors' roles with a view to improving clients' perception. This approach is considered broad and not concise

enough. All the services considered were conventional services rendered by Quantity Surveyors in the delivery of conventional building projects.

Gunning (2000) also observed that there is little published on the use of formal Service Quality models in the area of Construction Management and Economics. As a fundamental factor, service quality should be considered very important for the organisation to remain afloat (Akinsiku, 2014). Quality service delivery is an important and effective factor in the

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