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## [IMPACT OF STAKEHOLDERS ON THE SUCCESS OF PROJECT COST MANAGEMENT IN CONSTRUCTION INDUSTRY]

Presented by

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###### ABSTRACT

*Construction industry is important and unavoidable to the economic development of most nations in the world, stakeholders as an individual or a group of individuals who are influenced by or able to influence a project. Project cost management as a process, which is necessary to ensure that the planned development of a project is such that the price for its completion provides value for money and is within the limits anticipated. In Nigeria construction industry, the impact of stakeholders on the success of project cost management is not well understood in creating greater awareness of the value that stakeholders provide for projects. The result of this is lack of proper build team with the right skills of project cost management leading to failure of projects. A quantitative approach was adopted for this study with a well-structured questionnaire. The tools employed for data analysis were mean item score and relative importance index. The study finds out that strong relationship of stakeholders is necessary for project cost management success, project can be considered a temporary organization of stakeholders pursuing an aim together. It concluded by recommending that there should be an effective awareness of stakeholders on the success of project cost management.*

**Keywords:** construction industry, construction stakeholders, project cost management, success.

### INTRODUCTION

Allan (2010) confirmed that construction industry is important in all countries of the world since it helps to add the quality of life both through its architecture and also through the facilities it provide to users both internally and externally. According to Potts (2018), project cost management as the process which is necessary to ensure that the planned development of a project is such that the price for its completion provides value for money (VFM) and is within the limits anticipated. Project management institute (2013), confirmed that the processes involved in planning, estimating, budgeting, financing, funding and controlling cost so that the project can be completed within the approved budget.

In a study conducted by Shunnet (2008) reveals that project construction stakeholders need to organize themselves properly and identify their respective roles, the project risks and uncertainties, however for a better performance to provide an excellent service, stakeholders such as quantity surveyors, architect and engineers plays a major role among other professional involves in construction process within the built environment in terms of cost (Nissanka and Sepani, 2007). QS often refers to as cost economics is the recognized professional as cost and value consultant within the construction industry, QS have the required knowledge and expertise, therefore shoulder with the responsibility of advising the client on cost implication that may arise during the design and overall control of the cost of construction project. The engineers are all round professionals who can apply special skills and knowledge to make engineering work into practice, including advising clients on selection of suitable designs and materials. The role of architect is to interpret the client’s projects requirement into a specific design or scheme (Shunnet, 2008).

Therefore, in the Nigerian construction industry, the impact of stakeholders on the success of project cost management is not well understood. The result of this is lack of proper build team with the right skills to project cost management leading to failure of projects. In order to address this problem, the study sets out to assess the impact of stakeholders on the success of project cost management using Abuja as a case study. In a view to attain the aim of carrying out the research, the research revealed the following objectives which are: To identify and assess factors affecting success of project cost management: To identify and examine barriers to the success of project cost management: To examine possible strategies for improving success of project cost management. This research work covered the impact of stakeholders on the success of project cost management of construction industry in Abuja. The main target of the research work were construction professionals (Quantity Surveyors, Architect and Engineers) in the execution of construction projects in selected government agencies such as Federal Capital Development Authority (FCDA) and Federal Capital Territory Administration (FCTA) Abuja.

**MATERIALS AND METHODS**

According to Creswell, (2003) that the factor to be considered in selecting the best research methodology should be the influence that such method has on the research problem and objectives. This research basically employed the use of survey design method using the quantitative approach through a well-structured questionnaire to assess the impact of stakeholders on the success of project cost management in Abuja, Nigeria. Quantitative research involves studies that make use of statistical analyses to obtain their ﬁndings (Marczyk *et al,* 2005). The target respondents for this study were the principal stakeholders in the construction industry namely: Architect, Quantity Surveyor and Engineers with a population size of 75 which was distributed within FCDA and FCTA in a random manner. The sample size consists of stakeholders which a census of the total members of the population (75) was carried out and 54 was retrieved. The questionnaire was designed in a 5-point Likert’s scale format. All the data collected for this research were analyzed using descriptive method. The use of Relative Importance Index (RII) was adopted to identify and assess factors affecting success of project cost management in order to achieve objective 1. Mean Item Score (MIS) was used to identify and examine barriers to the success of project cost management and to examine strategies for improving building sustainability to achieve objectives 2 and 3.

**RESULT AND DISCUSSION**

The section of the study reports the results of analysis carried out in pursuance of Objective One. Fourteen basic factors affecting success of project cost management identified through literature review was identified and ranked according to their level of importance through the use of Relative Importance Index (RII). The rate of response and the RII score are shown in Table 1

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Table 1: Factors affecting success of project cost management** | |  |  |  |
| **S/No.** | **Factors** | **RII** | **Rank** | **Decision** |
| 1 | Expertise of consultants | 0.82 | 1st | very important |
| 2 | Design completion | 0.80 | 2nd | very important |
| 3 | Scope of construction | 0.76 | 3rd | important |
| 4 | Project duration | 0.75 | 4th | important |
| 5 | Method of construction | 0.75 | 4th | important |
| 6 | Market condition | 0.74 | 6th | important |
| 7 | Site constraint | 0.72 | 7th | important |
| 8 | Number of project team | 0.72 | 7th | important |
| 9 | Type of structure | 0.71 | 9th | important |
| 10 | Type of client | 0.70 | 10th | important |
| 11 | Anticipated variation | 0.69 | 11th | important |
| 12 | Buildability | 0.68 | 12th | important |
| 13 | Clients financial situation | 0.67 | 13th | important |
| 14 | Complexity of project | 0.64 | 14th | important |
|  | *Average* | *0.73* |  | important |
| ***Source****: Researcher's Data Analysis (2020)* | |  |  |  |

Table 1 reveal the relative importance index (RII) of factors affecting project cost management which shows that two (2) factors are very important such as “expertise of consultants” and “design completion” with RII value of 0.82 and 0.80 respectively but the most important factor affecting project cost management is expertise of consultants with RII of 0.82.

Ten (10) barriers to the success of project cost management were identified through literature review and were ranked according to their level of severity using Mean Item Score. The rate of response and the MIS score are shown in Table 2

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Table 2: Barriers to the Success of project cost management** | |  |  |  |
| **S/No.** | **Barriers** | **MIS** | **Rank** | **Decision** |
| 1 | Teams lack of general expertise | 4.52 | 1st | Very Severe |
| 2 | Absence of clear planning for project objective | 4.51 | 2nd | Very Severe |
| 3 | Complex project objective | 4.51 | 2nd | Very Severe |
| 4 | Unclear project goals and objective | 4.51 | 2nd | Very Severe |
| 5 | Inaccurate planning for payment of contractors | 4.42 | 5th | Severe |
| 6 | Variance between owner and contractor in defining their project cost | 4.40 | 6th | Severe |
| 7 | Dislike or distrust of control systems | 4.40 | 6th | Severe |
| 8 | Poor skills in scheduling and controlling | 4.38 | 8th | Severe |
| 9 | Inaccurate plan for contract deliveries | 4.37 | 9th | Severe |
| 10 | Lack of clearly defined team members roles | 4.25 | 10th | Severe |
|  | *Average* | *4.43* |  | Severe |
|  | ***Source****: Researcher's Data Analysis (2020)* |  |  |  |

Table 2 reveal the Mean Item Score (MIS) of barriers to the success of project cost management which shows that the four (4) barriers are very severe such as “teams lack of general expertise”, “absence of clear planning for project objective” “complex project objectives” and “unclear project goals and objective” with MIS value of 4.52, 4.51, 4.51 and 4.51 respectively but the most severe barrier to the success of project cost management is “teams lack of general expertise” with MIS of 4.52.

Table 3 shows the Strategies for Improving success of project cost management, in order to analyze them the Mean Item Score was employed to rank the eight (8) factors.

**Table 3: Strategies for Improving success of project cost management**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **S/No.** | **Strategies** | **MIS** | **Rank** | **Decision** |
| 1 | Build a project team with the right skills | 4.55 | 1st | Most Effective |
| 2 | Develop a planning and controlling process | 4.52 | 2nd | Most Effective |
| 3 | Develop a shared understanding between owner and contractor about control system and contract deliveries | 4.50 | 3rd | Most Effective |
| 4 | Develop a control system that is accurate and trusted | 4.46 | 4th | Effective |
| 5 | Experience and analytical ability of project personnel | 4.42 | 5th | Effective |
| 6 | Effective schedule management plan | 4.27 | 6th | Effective |
| 7 | Commitment of a high management | 4.22 | 7th | Effective |
| 8 | Established clear performance measures | 4.12 | 8th | Effective |
|  | *Average* | *4.38* |  | Effective |

***Source****: Researcher’s Data Analysis (2020)*

Table 3 revealed the Mean Item Score (MIS) of strategies for improving success of project cost management which shows that three (3) strategies are most effective such as “build a project team with the right skills”, “develop a planning and controlling process” and “develop a shared understanding between owner and contractor about control system and contract deliveries”. with MIS value of 4.55, 4.52 and 4.50 respectively but the most severe barrier to the success of project cost management is build a project team with the right skills with MIS of 4.55.

**CONCLUSSION AND RECOMMENDATION**

Based on the results of the research, it was concluded that the very important factor affecting project cost management was expertise of consultants and design completion but the major factor is expertise of consultant. Four barriers to the success of project cost management are very severe: teams lack of general expertise, absence of clear planning for project objective, complex project objective and unclear project goals and objective. The most effective strategy was build a project team with the right skills. It can therefore be finally concluded that the impact of stakeholders on the success of project cost management in Abuja is significant and very important and plays a key role for the successful delivery of construction project. The source of data for conducting this study was literature review. Current related literature was consulted and successfully processed and analyzed.

It is recommended that the identified factors are to be considered in order to improve project cost management because they are very important “expertise of consultant” “design completion” and consequently must be taken into account in any project cost management. The study also shows that building a project team with the right skills is the most effective strategies in improving project cost management and there should be an effective awareness of stakeholders on the success of project cost management.

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