



Assessment of Factors Affecting Stakeholder Management in Nigeria Construction Projects

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ABSTRACT

Managing multiple stakeholders and maintaining an acceptable balance between their interests are crucial to successful project delivery. Several factors impede the management of stakeholders for sustainable construction projects. This study assessed 86 factors affecting stakeholder management which was sub grouped into 12 main factors. The study employed the use of questionnaires. Data gotten was analysed using reliability analysis, Mean Item Score and correlation matrix. The study found out that management, conflict and marginalization factors are significant factors to be considered and improved upon in future construction projects.

Keywords: Construction, Factors, Management, Projects, Stakeholders

1 INTRODUCTION

Construction projects are traditionally divided into series of operations undertaken by different individuals or groups who may have different levels of interest in the project (Heravi et al., 2015). Therefore, the process of design and execution of construction projects constitutes a complex system which involves collaboration and negotiations among many stakeholders. Managing multiple stakeholders and maintaining an acceptable balance between their interests are crucial to successful project delivery (Takim, 2009; Jurbe, 2014).

Disagreement among stakeholders during the implementation of projects adversely affects the ability of the management teams to deliver the construction project within the time and allocated budget and expected degree of quality. These disagreements are often caused by inappropriate identification and management of the different stakeholders involved (Olander and Landin, 2005).

Conflicting objectives among the project stakeholders impede the achievement of best value in construction projects (Aapaoja and Haapasalo 2014).). Karlsen (2002) considered poor management of stakeholders to be a recipe for potential and serious challenges that are often associated with construction projects. These problems include factors such as incessant change order in scope of work, poor definition of work and scope, poor allocation of scarce resources to projects, poor communication, conflicts and controversies which are majorly the origin of delays and attendant time and cost overruns.

Despite several contributions on management of stakeholders in the construction industry, several studies point towards critical success factors hence boycotting the root problems that contribute to poor stakeholder management (Jergeas et al., 2000; Chinyio and Akintoye, 2008; Olander and Landin, 2008; Yang et al., 2009; Jepsen

and Eskerod, 2009; Li et al., 2011). Contributing factors also appear limited in literature (Karlsen (2002), thereby considering more in-depth studies to be done in this area as stipulated by (Golder and Gawler, 2005).

Therefore a need arises to assess the factors that affect stakeholder management on construction projects in Nigeria.

2 METHODOLOGY

A Quantitative research approach was adopted for this study. The scope of the study was limited to North Central Nigeria and higher institutional construction projects were the focal point of the study. Internal stakeholders within the eight (8) sampled institutions in the study area were selected using stratified and purposive sampling techniques. 210 questionnaires were self-administered on the respondents while 170 were returned giving an 81% response rate which was very suitable for the study.

Data gotten for the study was analyzed using Mean Item Score, reliability analysis and correlation matrix. The results were discussed and conclusions were drawn for the study.

3 RESULTS AND DISCUSSION

A reliability analysis was done to check the internal consistency and reliability of the data. The Cronbach's Alpha coefficient of 0.70 (DeVellis, 2003) was used as the indicator. Table 1 shows that the alpha value of 0.842 is greater than 0.70 which suggest a very good internal consistency reliability for the scale.

TABLE 1: RELIABILITY ANALYSIS

Cronbach's Alpha	Cronbach's Alpha Based	N of Items
0.836	0.842	10



TABLE 2 FACTORS AFFECTING STAKEHOLDER MANAGEMENT

Coding	Factors	Mean	Std. Dev.	Rank
OGF	Management factors	3.77	0.67	1
COS	Conflict management factors	3.76	0.63	2
COF	Communication factors	3.72	0.61	3
MGF	Cost factors	3.65	0.61	4
STE	Relationship factors	3.65	0.67	5
CMF	Contractual factors	3.63	0.60	6
STR	Stakeholder requirements	3.61	0.61	7
REF	Organization factors	3.61	0.55	8
CTF	Stakeholder Engagement	3.58	0.69	9
MAR	Marginalization	3.24	0.85	10

Table 2 showed the factors affecting stakeholder's management on construction projects. Management related factors ranked first with a mean item score of 3.77, followed by conflict management factors with a mean of 3.76. Next in line was communication factors and cost factors with mean scores of 3.72 and 3.65 respectively. This is in agreement with the findings of Aaltonen and Kujala (2010) that conflicts have a resultant effect on stakeholder management which affects the overall success of a project. However marginalization factor ranked least with a mean of 3.24. This particular factor adds contribution to knowledge that agrees with Golder and Gawler (2005) that gender is an important factor to be considered in stakeholder management as this affects the performance of a project.

The results in Table 3, 4 and 5 give a detailed breakdown of the most significant factors that affect stakeholder management which calls for attention for future construction projects.

TABLE 3: MANAGEMENT RELATED FACTORS

Management Related Factors	Mean	Rank
Inadequate Planning, coordinating and programming	3.92	1
lack of wide and deep knowledge / understanding of the concepts of project and stakeholder management by stakeholders	3.86	2
Poor feedback mechanism	3.77	3
Poor strategies to manage stakeholder responsibility	3.71	4
Lack of technical capacity and support on the part of the stakeholders	3.69	5
stakeholder competencies	3.66	6
Decision making problems	3.66	7
Difficulty in identifying stakeholders	3.59	8
Lack of ability to understand the implications of the project	3.55	9
non - existence of formal / systematic process of project stakeholder management	3.55	10
lack of knowledge about stakeholder groups and their expertise	3.54	11
inability to clearly identify the attitudes of stakeholders either positively or negatively towards the project	3.53	12

The results in Table 3 showed the management related factors that affect stakeholder management. Inadequate planning, coordinating and programming, lack of wide and deep knowledge / understanding of the concepts of project and stakeholder management by stakeholders, Poor feedback mechanism most affect stakeholder management in management related factors with a mean score of 3.92, 3.86 and 3.77

TABLE 4 CONFLICT RELATED FACTORS

Conflict Related factors	Mean	Rank
poor approaches in solving conflict and controversies among stakeholders	3.86	1
poor implementation and non adherence to conflict contract condition by project stakeholders	3.84	2
Consequences of mismanagement of stakeholders	3.67	3
different perceptions of the same issue	3.53	4
Analyzing conflicts and coalition among stakeholders	3.33	5

The conflict related factors in Table 4 showed that there are poor approaches in solving conflicts amongst stakeholders which ranked 1st with a mean score of 3.86, followed by poor implementation and non-adherence to conflict contract condition by project stakeholders, Consequences of mismanagement of stakeholders, different perceptions of the same issue, and Analyzing conflicts and coalition among stakeholders with mean scores of 3.86, 3.84, 3.67, 3.53 and 3.33 respectively. The findings agree with Olander and Landin (2005) and Jurbe (2014) that disagreements amongst stakeholders can have adverse effect on construction project as a whole.

TABLE 5: MARGINALIZED RELATED FACTORS

Marginalization Factors	Mean	Rank
Poor incentives and benefits	3.73	1
influence of the stakeholders	3.52	2
Type of stakeholder (indigenous, foreign, etc)	3.31	3
sensitivity of stakeholders	3.30	4
social and economic characteristics of the stakeholder.	3.28	5
the position of the stakeholders in the project	3.21	6
discrimination of gender	3.12	7
status of stakeholders	3.05	8
potentials of men and women in the stakeholder group	3.05	9
gender inequalities	3.01	10
volume of allocation of task to men and women	3.01	11
Gender differences	2.91	12

As seen in Table 5, poor incentives and benefits, influence of the stakeholders, type of stakeholders, sensitivity of stakeholders, ranked highest with mean scores of 3.73, 3.52, 3.31 and 3.30 in that order. However, volume of allocation of task to men and women, Gender

differences ranked the least with mean scores of 3.01 and 2.91 respectively. These are new findings and are lacking in the findings of Yogita (2016), hence call for consideration for future projects.

TABLE 6 CORRELATION MATRIX OF FACTORS

Inter-Item Correlation Matrix											
Factors	M G F	C M F	C O F	C O S	R E F	C T F	S T R	O G F	S T E	M A R	
Management factors	1	0.6	0.4	0.3	0.2	0.2	0.3	0.2	0.2	0.2	0.2
Conflict management factors	0.6	1	0.6	0.3	0.2	0.3	0.3	0.3	0.3	0.3	0.2
Communication factors	0.4	0.6	1	0.5	0.4	0.4	0.3	0.3	0.3	0.3	0.1
Cost factors	0.3	0.3	0.5	1	0.6	0.3	0.3	0.3	0.4	0.4	0.2
Relationship factors	0.2	0.2	0.4	0.6	1	0.6	0.4	0.4	0.4	0.4	0.3
Contractual factors	0.2	0.3	0.4	0.3	0.6	1	0.7	0.4	0.3	0.3	0.3
Stakeholder requirements	0.3	0.3	0.3	0.3	0.4	0.7	1	0.4	0.3	0.3	0.3
Organization factors	0.2	0.3	0.3	0.3	0.4	0.4	0.4	1	0.5	0.4	0.4
Stakeholder Engagement	0.2	0.3	0.3	0.4	0.4	0.3	0.3	0.5	1	0.4	0.4
Marginalization	0.2	0.2	0.1	0.2	0.3	0.3	0.3	0.4	0.4	0.4	1

Table 6 showed the correlation matrix of the variable factors. 12 major factors were analyzed. From the result it can be seen that the value of 1.0 is above 0.70 which was used as the indicator. This implies that there is a strong significant relation among the variables and that these factors studied affect stakeholder management.

4 CONCLUSION

The study concluded that management related factors, conflict, communication and cost factors have a significant effect on the stakeholder management of construction projects. However, a new contribution to knowledge is being made on additional factor such as marginalization factor which is lacking in other studies. These factors call for serious considerations for future construction projects.

In order to improve the management of stakeholders on projects, the study recommended that a management support group should be put in place to manage stakeholders, adherence to conflicts contract conditions



and consideration of gender in stakeholder analysis. These will improve construction performance for future projects.

This study is part of a doctoral research and hence further research in the aspect of developing a model that will curb these factors assessed to enhance project success, is in view. The researcher acknowledges the efforts of the supervisory committee which contributed to the success of this paper.

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