

Appraisal of Challenges of Stakeholder's Management in Construction Projects in Nigeria

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World over, construction processes are faced with problems of poor stakeholders' management, and this has affected cash flow systems and delivery of many projects. Thus, this study aimed to examine the challenges of stakeholder's management in construction projects with a view to suggesting measures for minimising these challenges. A quantitative technique was adopted in this study. A total of 100 questionnaires were administered to the major construction professionals that participated in Central Bank of Nigeria (CBN) intervention projects using the stratified sampling technique. These professionals include the Engineers, Quantity Surveyors, Project Managers, Construction Managers, Contractors, Consultant and other stakeholders in the construction industry. A response rate of 82% was received which was deemed valid for analysis. It was found that the major challenges of stakeholder management were: civil unrest and lack of political stability, change in bye-laws and regulations, delays in site handover, delays in inspection and approval, financial problems and non-adherence to specification. The measures to minimise the challenges of stakeholder management were: analysing conflicts and conditions among stakeholder, understanding area of stakeholder's interest and encourage team work and collaboration amongst stakeholders. The research recommended inclusion of adequate project planning and programming from inception to completion stage of projects and proper monitoring and feedback mechanism, to avoid delays, inflation, claims and conflict.

Keywords: Construction projects, Stakeholder management, project success and project management.

Introduction

In this new global economy, stakeholder engagement is increasingly becoming a part of construction project practice in delivering excellent project outcomes. Stakeholder identification is a critical component of the initial scoping phase and should occur before an engagement plan is formulated and consultations begin (Doloi, 2011). Project stakeholder is a person or group of people who have a vested interest in the success of project and the environment within which the project operates (Karlsen *et al.*, 2008). Construction projects under special intervention involved both internal and external stakeholders, who are actively involved in the project, or whose interests may be positively or negatively affected, because of project execution (Jergeaset *al.*,

2000). Farinde & Sellars (2012) described internal stakeholders as people who have legal contact with the client and also those gathered around the client on the demand side (employees, customers, end-users and financiers) and on the supply side (architect, engineers, contractors, trade contractors and material suppliers). The external stakeholders comprise of private and public actors. The private actors are from the local residents, landowners, environmentalists, and archaeologists, whereas the public actors are from regulatory agencies, and local and national government. Managing multiple stakeholders and maintaining an acceptable balance between their interests are crucial to successful project delivery (Celand & Ireland, 1999; Karlsen, 2002). In the execution of any project, especially in

construction, there are so many different interests that need to be taken into consideration. The representatives of these interests are those that are referred to as project stakeholders (Olander & Landin, 2005). Stakeholders are individual or group who can affect or be affected by the actions, decisions, policies, practices or goals of the organization (Karlsen *et al.*, 2008).

Olander & Landin (2005) conducted a study in Gaza strip and found out that the construction has a poor record of stakeholder management during the construction process. And thereafter recommended a study for stakeholder's management needs and their impact on construction projects, in order to build a framework for managing stakeholders in the construction industry. A similar study was conducted in Ghana by Emmanuel (2015) on stakeholder management role in Ghana Education Trust fund (GETFund) Polytechnics projects delivery; and it was discovered that stakeholders play major role in project performance (such as time, cost overruns, scope, variation, non-completion, abandonment and poor payment schedules). However, Emmanuel (2015) thereafter, recommended further research on the relationship between the stakeholder's roles and project performances. In Nigeria for instance, CBN special intervention projects are scattered all over the country with different problems of stakeholder's management. Helen *et al.*, (2015) outlined the problems of stakeholders' management as poor implementation and non-adherence to conditions of contract; communication gap among key players; poor planning and programming. Conflict among communities, stakeholder's need and expectation; problem of conflicting demand and interest among professionals and lack of teamwork.

Previous research in this area focused on stakeholder management role (Emmanuel, 2015); stakeholder's management needs

and their impact on construction project (Olander & Landin, 2005); stakeholder identification (Doloi, 2011; Farinde & Sellars, 2012). These studies did not provide clear indication on the challenges of stakeholders' management in construction projects. In view of this, the study seeks to answer the following questions: What are the current challenges of stakeholder's management in construction projects in Nigeria? What are the possible means of mitigating the challenges of stakeholder's management in construction projects in Nigeria?

Construction Project Stakeholders

There are stakeholders in construction undertakings, just as there are stakeholders in other endeavours. The checklist of stakeholders in a construction project is often large and which include the clients and users of facilities, project managers, facilities managers, designers, shareholders, legal authorities, employees, subcontractors, suppliers, process and service providers, competitors, banks, insurance companies, media, community representatives, neighbours, general public, government establishments, visitors, customers, regional development agencies, the natural environment, the press, pressure groups, civic institutions, and so forth (Chinyio & Akintoye, 2008).

The number of stakeholders involved or interested in the project can dramatically increase the complexity and uncertainty of the situation. Figure 1 illustrates the typical examples of stakeholders. Each stakeholder usually has different interests and priorities that can place them in conflict or disagreements with the project (Yang *et al.*, 2009). These interest and priorities influence the course of a project at certain stage. Some bring their influence to bear more often than others. If diverse stakeholders are present in construction undertakings, then the construction industry should be able to manage its stakeholders.

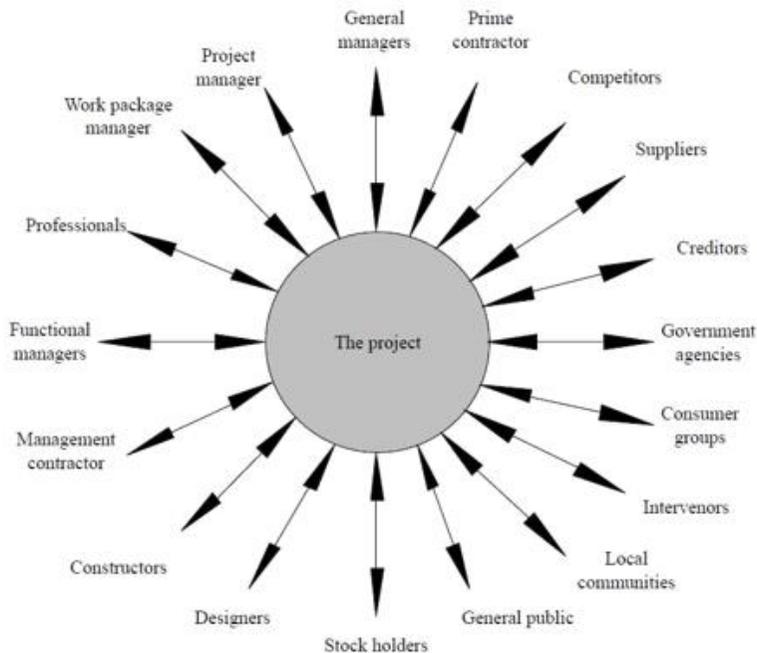


Figure 1: Different Project Stakeholders (Yang *et al.*, 2009).

Challenges of Stakeholders Management in Construction Projects

The challenges of stakeholder management in construction projects, according to Li *et al.*, (2013) are conflicts among parties, financial problems, cultural differences, contract expectation and communication gap. In another study, Yang *et al.*, (2009) highlighted the challenges of stakeholder's management as: poor monitoring and feedback mechanism, involvement in decision making, civil unrest, political stability, delay in by-laws and regulations, and obtaining support from higher authorities. Yang *et al.*, (2011) conducted a study on stakeholder in construction projects and outlined the following impediments to stakeholder management: implementation of strategy based on schedule plans, non-adherence to specification, obtaining support from higher authorities, lack of economic stability, lack of progress meeting and ensuring effective communication between a project and its stakeholder. Li *et al.* (2012) outlined the barriers to stakeholder's management as slow in decision making, poor inflow of communication and information, lack of stakeholder involvement in stakeholder in

decision making, delay in inspection and approval, quality of workmanship and political difference.

In another study, Olander & Landlin (2005) highlighted the following as relating to stakeholder management: civil unrest and lack of political stability, change in by law and regulations, delay in site handover, delay in inspection and approval, challenges relating to cultural differences, poor monitoring and feedback mechanism, and lack of progress meeting, conflict with stakeholders.

Strategies to Mitigate the Challenges of Stakeholders Management

Olander and Landin (2008) argued that clear and transparent evaluation of alternative solutions for the development of a construction project based on the concerns of stakeholders would help project managers to establish the basis of trust needed for an adequate stakeholder management process. Also, El-Gohary *et al.*, (2006) pointed out that solution identification process is a cornerstone of the involvement programme as it is the first step in incorporating the stakeholder input in the

decision-making process. Some of the key strategies to mitigate the challenges of stakeholders' management according to Li *et al.* (2012), are: analysing conflicts and conditions among stakeholders, understanding areas of stakeholders' interest, encourage team work and collaboration among stakeholders, implementing the strategy based on schedule plans, frequent coordination between the parties, in another study. Chinyio & Akintoye (2008) recommended the formulation of appropriate strategy to deal with stakeholders, transport evaluation of the alternative solution based on stakeholders concern and clear information and communication channels. According to Aaltonen and Kuyala (2010) understanding stakeholders' knowledge and interest, engagement of stakeholders in the major decision making could aid in mitigating stakeholder challenges of stakeholder management. Some of the strategies for mitigating the challenges of stakeholders' management are: flexibility in the implementing strategy to deal with stakeholders' reaction, exploring the stakeholder need and expectation, systematic control mechanism, and predicting the influence of the stakeholders (Takim, 2009; Leung *et al.*, 2004; Li *et al.*, 2012).

Research Methodology

A survey design approach was employed in this research with quantitative data gathered from the respondents using well-structured questionnaires. The population of the study

were construction professionals that actively participated in the Central Bank of Nigeria (CBN) intervention projects. In order to guarantee equal representation for each of the identified groups/strata in the population, stratified random sampling method was adopted. The respondents were first categorised into different strata (Professions) before they were selected and randomly sampled accordingly. These professionals included the Engineers, Quantity Surveyors, Builders, Project Managers, Construction Managers, Contractors and Consultant in the construction industry. The questionnaire was structured in a five-point Likert scale ranging from none=1, low=2, moderate=3, high=4 and very high=5.

Table 1 shows that out of the total population size of 115 respondents identified, a total of 100 questionnaires were distributed based on Krejcie and Morgan formula. The formula revealed that the minimum numbers to be drawn from the sample is 92, at 5% limit of error and at 95% confidence level. The formula is given as:

$$S = X^2 N P (1 - P) \div d^2 (N - 1) + X^2 P (1 - P)$$

Where S = required sample size; X^2 = the table value of chi-square for 1 degree of freedom at the desired confidence level (3.84); N = Population size; P = Population proportion; d = Degree of accuracy. Only 82 were correctly filled and deemed valid for analysis and this represents a response rate of 82%.

Table 1: Demographic distribution of respondents

Respondents	Population size	Questionnaires administered	Questionnaires retrieved and valid for analysis	Percentage response rates
Engineers	15	13	11	84.61%
Quantity Surveyors	12	10	10	100%
Project Mangers	14	12	9	75%
Construction Managers	15	13	13	100%
Contractors	14	12	8	66%
Consultant	27	25	21	84%
Other Stakeholders	18	15	10	66%
Total	115	100	82	82%

The collected data were analysed by using the descriptive method (Mean Item Score {MIS} and ranking method). Data processing was done with the aid of Statistical Package for the Social Sciences (SPSS) software. The MIS was used to determine the weighted mean average of the identified challenges/factor and the premise of decision for the ranking is that the factor with the highest MIS is ranked 1st and others in such subsequent descending order.

The decision rule utilized was based on the cut of point that factors with $0.00 \leq \text{Mean Value} < 1.49 = \text{None}$; $1.5 \leq \text{Mean Value} < 2.49 = \text{Low}$; $2.5 \leq \text{Mean Value} < 3.49 = \text{Moderate}$; $3.5 \leq \text{Mean Value} < 4.49 = \text{High}$; and $4.5 \leq \text{Mean Value} < 5.0 = \text{Very High}$ (Saidu, 2016).

Results and Discussion

This section presents the results as well as discusses the results by linking them with existing literature.

Demographic profile of the respondents

Table 2 shows that 39% of the respondents had HND certificate and 31.7% had BSc degree. However, 24.3% had Master's Degrees and 4.88% had PhD certificates. This implied that the respondents that participated in this study have full knowledge of the subject matter. In addition, 21.9% of the respondents were Quantity Surveyors; 18.3% were Construction Managers; 17.07% were Architects; 14.63% were Engineers and only 12.20% were Project Managers.

The results indicated that the respondents had 6- 25 years of experiences in the construction projects. The results also show that 29.27% of respondents were mostly involved in construction activities; 21.95% were involved in pre-contract activities; 20.73% were involved in operation of construction projects; and 17.07% were involved in maintenance activities. This shows that the respondents are actively involved in the production, maintenance and management of construction projects.

Table 2: Demographic profile of the respondents

S/N	ITEMS	NUMBER	PERCENTAGE (%)
1	ACADEMIC QUALIFICATION		
	HND	32	39.02
	BSC	26	31.71
	MSC	20	24.39
	Ph.D	4	4.88
	Total	82	100%
2	PROFESSIONS		
	Quantity Surveyors	18	21.95
	Builders	13	15.85
	Architects	14	17.07
	Engineers	12	14.63
	Project Managers	10	12.20
	Construction Managers	15	18.30
	Total	82	100%
3	RESPONDENTS EXPERIENCES		
	0-5 Years	15	18.29
	6-10 Years	12	14.63
	11- 15 Years	18	21.95
	16 -20 Years	10	12.02
	21- 25 Years	14	17.07
	25 Years and Above	13	15.85
	Total	82	100%
4	SERVICES OF RESPONDENTS		
	Pre Contract	18	21.95
	Construction	24	29.27
	Operation	17	20.73
	Maintenance	14	17.07
	Others	14	10.98
		Total	82

Challenges of stakeholder's management in construction projects

Table 3 shows that civil unrest and lack of political stability, change in by-laws and regulation, delay in site handover, delay inspection and approval and financial problems, were the challenges ranked 'very high' with MIS of 4.72, 4.68, 4.63, 4.6 and 4.57 respectively. This implies that the aforementioned factors are the main challenge of stakeholder's management in construction projects. Furthermore, the result also shows that non-adherence to specification, slow in decision making, cultural differences, poor monitoring and feedback mechanism, lack of progress meeting, conflict and analysing the change of multiple stakeholder engagement and the relation were the challenges ranked 'high' in stakeholder management in construction projects, with MIS of 3.85, 3.84, 3.82, 3.79, 3.69, 3.64 and 3.6 respectively.

However, the followings factors were ranked low: effective communication,

frequent engagement of stakeholders and setting common goal and objective of the project as factors causes challenges of stakeholder's management in construction projects with the mean score of 2.65, 2.74, and 2.85 respectively. These results corroborate the findings of Yang and Shen (2014) who found out the following factors as the major problems of stakeholders' management: civil unrest, poor monitoring and feedback mechanism, change in by law and regulations, delay in site handover and financial problem are the factors that causes problems in management of stakeholder. In addition, the results are in line with the findings of Yang *et al.*, (2009) that effective communication, conflict among the stakeholder, lack of economic stability, slow in decision making and evaluation of the alternative solution based on stakeholder concern are major factors that are challenges militating against stakeholders' management.

Table 3: Challenges of stakeholder management in construction projects

Variables	Mean Item score	Std. dev	Ranking
Civil unrest and lack of political stability	4.72	0.79	1
Change in by law and regulations	4.68	0.845	2
Delay in site handover	4.63	0.864	3
Delay in inspection and approval	4.6	0.956	4
Financial problems	4.57	0.818	5
Non-adherence to specification	3.85	4.583	6
Slow in decision	3.84	1.223	7
Cultural differences challenges	3.82	1.002	8
Poor monitoring and feedback mechanism	3.79	1.055	9
Lack of progress meeting	3.69	0.97	10
Conflict with sake holder	3.64	1.148	11
Analysing the change of multiple stakeholder engagement and the relation	3.6	1.211	12
Evaluating stakeholder satisfaction in terms of pre-contract expectation	3.48	1.143	13
Stakeholder involvement in decision making	3.46	1.516	14
Lack of economic stability	3.45	1.33	15
Obtain support from higher authorities	3.39	1.344	16
Reduce the uncertainty	3.28	1.414	17
Setting common goal and objective of the project	3.01	1.198	18
Transportation evaluation of the alternative solution based on stakeholder concern	2.85	1.437	19
Communication with the engaging stakeholder properly and frequently	2.74	1.518	20
Ensuring effective communication between the projects and its stakeholder	2.65	1.193	21

Source: Fieldwork (2017)

The mitigating measures to reduce challenges of stakeholder’s management

The results in Table 4 reveal the major mitigation measures for stakeholders’ challenges were: analysis of conflicts conditions among stakeholders, understanding areas of stakeholder’s interest, encourage teamwork and collaboration among stakeholders and implementing the strategy based on schedule plans are the mitigating measures to reduce challenge of stakeholder’s management with MIS of 4.68, 4.62, 4.57 and 4.5 respectively. This implied that the aforementioned measures are major means of reducing the challenges of stakeholder’s management in construction projects. In addition, frequent coordination between the parties, formulate appropriate strategy to deal with stakeholders, transport evaluation of the alternative solution based on stakeholder’s concern, clear information and communication channels and assessing

stakeholders, were ranked ‘high’ with MIS of 3.73, 3.68, 3.66, and 3.59 respectively.

However, the results also show the followings predicting the influence of the stakeholders and systematic control mechanism were ranked lowest with MIS of 2.41, 2.47 and 2.65 respectively. This implied that the aforementioned mitigating measures have ‘little’ impact in mitigating the challenges of stakeholder’s management in construction projects. The results are in line with the findings of Yang *et al.* (2011) and Achman (2013) who affirmed that teamwork and collaboration among stakeholder, understanding areas of stakeholder interest, clear information and communication, development of appropriate strategies, systematic control and analysis conflicts and conditions among stakeholders are the means of mitigating the challenges of stakeholder management.

Table 4: Measures for minimising the challenges of stakeholders’ management

Variables	Mean Item Score	Std. dev	Ranking
Analysing conflicts and conditions among stakeholders	4.68	1.182	1
Understanding areas of stakeholder’s interest	4.62	1.234	2
Encourage team work and collaboration among stakeholders	4.57	1.284	3
Implementing the strategy based on schedule plans	4.5	1.306	4
Frequent coordination between the parties	3.73	1.216	5
Formulate appropriate strategy to deal with stakeholders	3.68	1.28	6
Transport evaluation of the alternative solution based on stakeholders concern	3.67	1.232	7
Clear information and communication channels	3.66	1.465	8
Assessing stakeholders	3.59	1.226	9
Understanding stakeholders knowledge and interest	3.49	1.329	10
Engagement of stakeholders in the major decision making	3.42	1.365	11
Flexibility in the implementing strategy to deal with stakeholders reaction	3.4	1.201	12
Exploring the stakeholder need and expectation	3.38	1.297	13
Systematic control mechanism	2.65	1.441	14
predicting the influence of the stakeholders	2.41	1.311	16

Source: Fieldwork (2017).

Conclusion and Recommendations

Construction processes are faced with problems of poor stakeholders’ management, and this has affected cash

flow systems and delivery of many project. This paper evaluated the challenges of stakeholder’s management in construction projects with a view to suggesting strategies

for mitigating the challenges of stakeholder management in construction projects.

The paper concludes that the major challenges of stakeholder's management in construction projects are: civil unrest and lack of political stability, change in by law and regulations, delay in site handover, delay in inspection and approval, financial problems and non-adherence to specification.

It can also be concluded that the mitigating measures for the challenges of stakeholders' management are: analysing conflicts and conditions among stakeholders, understanding area of stakeholder's interest and encourage team work and collaboration among stakeholders. Based on these conclusion, the paper recommends adequate project planning and programming from inception to completion stage of project in order to avoid delays, inflation, claims and conflict.

It is also recommended that project managers should always encourage proper monitoring and feedback mechanism, social interaction among the stakeholder to share knowledge, and skills and information about the projects should be encouraged.

Further research could focus on the impacts of the stakeholder's management practice on project performance.

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