



APPRAISAL OF CHALLENGES OF STAKEHOLDERS' MANAGEMENT IN CONSTRUCTION PROJECTS IN NIGERIA

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ABSTRACT

The construction industry worldwide has a poor record of stakeholder management during the construction process. This ineffective stakeholder management affected cash flow system of projects and eventually deterred the success of project delivery. Therefore, the paper aimed at establishes factors that cause challenges of stakeholders' management in construction projects. To accomplish the aim, survey questionnaire was adopted as a result of fragmentation and diversification in the construction industry. The questionnaire was designed in five (5) point Likert scale format with closed ended questions. A total of 100 numbers of questionnaires was distributed to Engineers, Quantity surveyors, Project Managers, Construction Managers, Contractors, Consultant and other stakeholders in the construction industry. Only 82% of the questionnaire distributed were filled correctly and returned which was used for the analysis. The descriptive analysis was used to analyse the data obtained from the responses of the respondents. The results obtained from analyses shows the major factors that causes challenges to stakeholder management as civil unrest and lack of political stability, change in bye law and regulations, delay in site handover, delay in inspection and approval, financial problems and non-adherence to specification. In addition, major mitigating measures to reduce challenges of stakeholder management were analysing conflicts and conditions among stakeholder, understanding area of stakeholder interest and encourage team work and collaboration among stakeholders. Thereafter the paper recommended that there should be adequate project planning and programming right from inception to completion stage of project to avoid delays, inflation, claims and conflict. In addition, project manager should encourage proper monitoring and feedback mechanism.

Keywords: Stakeholder, 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 order to deliver 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 (Dolo, 2011). Construction industry as a sector of nation's economy has different stakeholders with wide range of interests that need to be managed (Farinde and Sellars, 2012). A special intervention construction project which involves different stakeholders is more likely to be successful, especially in the long-term, if it takes into consideration the expectations of these stakeholders and endeavours to meet their needs. These stakeholders are recognized as internal and external participants who are actively involved in the project, or whose interests may be positively or negatively affected as a result of project execution (Jergeas, 2000). According to Farinde and Sellars (2012) internal stakeholders are people who have legal contact with the client and those clustered 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 are comprised 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, 1999; Karlsen, 2002). In the execution of any project, especially in construction projects, 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 and Landin, 2005). Stakeholders refer to individual or group who can affect or be affected by the actions, decisions, policies, practices or goals of the organization (Karlsen *et al.*, 2008). 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 (Rodney, 2007). For example, CBN special intervention projects in Nigeria are scattered all over the country with different problems of stakeholders thereby resulted in the followings: poor implementation and non-adherence to conditions of contract; in ability to communicate to the different levels and categories of key players (communication gap); poor planning and programming; conflict among communities where projects located, stakeholder's need and expectation not mate; problem of conflicting demand and interest among professionals and lack of teamwork in project execution and management during construction projects (Helen *et al.*, 2015). Olander and Landin (2005) conducted a study in Gaza strip and founded that the construction industry worldwide has a poor record of stakeholder management during the construction process and thereafter recommended that there is a need to study stakeholders' needs and their impact on construction project in order to build a framework for managing the stakeholder in the construction industry. In addition, a study was conducted in Ghana one valuation of stakeholder management role in Ghana Education Trust fund (GETFund) Polytechnics projects delivery in Ghana by Emmanuel (2015) using a mixed method approach of qualitative and quantitative surveys and outlined that stakeholders play major role in project time, cost overruns, scope, variation, non-completion, abandonment and poor payment schedules. Thereafter, Emmanuel (2015) recommended that adequate research should be conducted on the relationship between the stakeholder roles and project performances in order to establish the realistic strategy to reducing the challenges of stakeholder role. However, in line with these recommendations from previous studies and the challenges faced by the CBN special intervention projects across the country with the stakeholders like traditional rulers, communities, contractors, end-users and others are the motivating factor for this research work. In view of this the study answered the following questions:

What are the factors that cause the challenges of stakeholder's management in construction projects in Nigeria?

What are possible means of mitigating the challenges of stakeholder's management in construction projects in Nigeria?

Stakeholders in Construction Projects

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, etc. (Chinyio and Akintoye, 2008). The number of stakeholders involved or interested in the project can dramatically increase the complexity and uncertainty of the situation. Figure 1 is illustrated some of the most typical stakeholders. Each stakeholder usually has different interests and priorities that can place them in conflict or disagreements with the project (Yang *et al*, 2009). Each of these influence the course of a project at some 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.

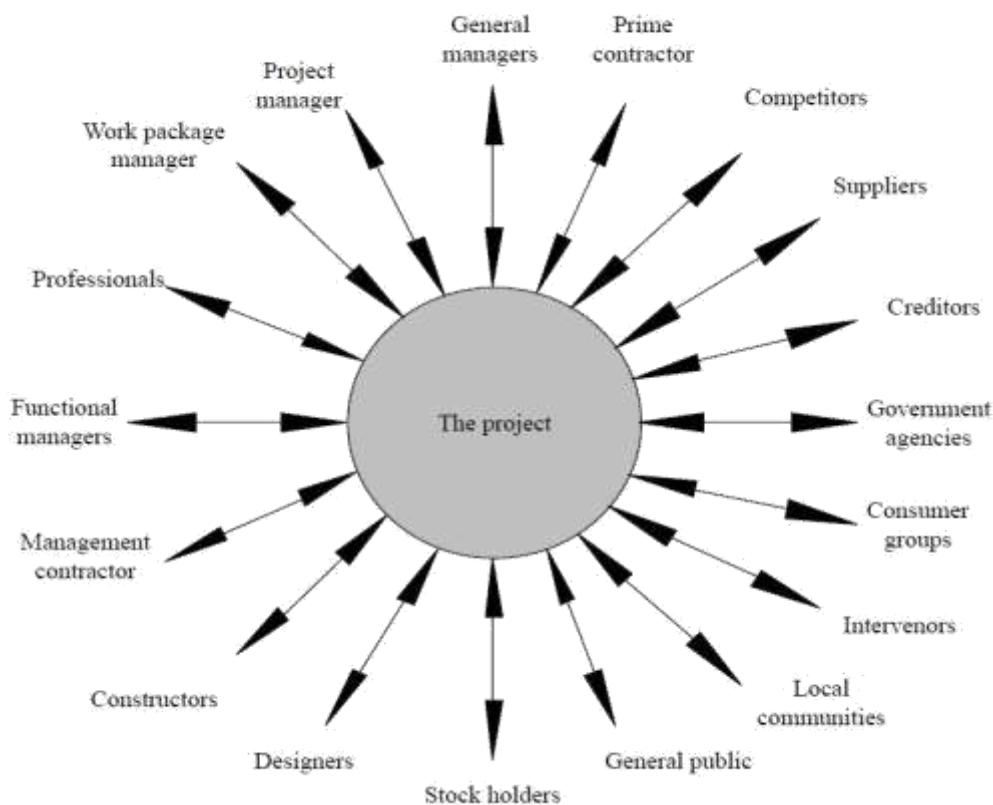


Figure 1: Different Project Stakeholders
(Source: Yang *et al*, 2009)

Stakeholder Management Processes in Construction Projects

A number of studies have been conducted to explore how to apply stakeholder management in the construction industry. Olander (2006) adopted Cleland and Ireland, (2002) in describing a project stakeholder management process in the following basic premises that could be served as a guide for the development of a stakeholder management process. The process consists of executing the management functions of planning,



organizing, motivating, directing and controlling the resources used to cope with strategies from stakeholders with the following steps: Identification of stakeholders, gathering information, identification of mission, determining strengths and weaknesses, identification of stakeholder strategy, prediction of stakeholder behaviour, and implementing stakeholder management strategy. Karlsen (2002) provided a recursive six step process of project stakeholder management, including initial planning, identification, analysis, communication, action, and follow-up. Takim (2009) proposed eight steps for managing the stakeholder process started by: Developing a stakeholder map of the project; preparing a chart of specific stakeholders; identifying the stakes of stakeholders; preparing a power versus stake grid; conducting a process level stakeholder analysis; conducting a transaction level stakeholder analysis; determining the stakeholder management capability of the R&D projects; analysing the dynamics of stakeholder interactions. Yang *et al.* (2011) puts forward similar process model centering on identifying stakeholders; gathering information about stakeholders; analysing the influence of stakeholders. But from Ward and Champman (2008) point view, the process could be managed in the following three steps identifying stakeholders; prioritizing stakeholders; developing a stakeholder engagement strategy. Yanget *al.* (2007) considered identifying stakeholder; prioritizing stakeholders, visualizing stakeholders; engaging stakeholders, and monitoring effectiveness of communication as the basic steps for stakeholder management. Yang *et al.* (2009) clarified the premises underlying project stakeholder management, which includes making deliberate efforts to use influence on project stakeholders in order to gain their contributions to the project,

Construction Projects Success

Stakeholder benefits are the driver for the project and achievement of stakeholders' objectives is the driver for project success. Cooke-Davies (2002) explained three levels of success including project management success, project success and constant project success. From the base-organization viewpoint, Bal *et al.* (2013) described success as project product success (benefits), project management success (deliverables), and project success as the sum of both. From the stakeholder perspective, Young (2006) claimed that stakeholder behaviour and management of such behaviour is the key to project portfolio success. The study conducted by Keogh *et al.* (2010) on the department of health and science proves the importance of stakeholder involvement in the development of a new curriculum for its success. Toor and Ogunlana (2010) research findings on large public sector development projects moved the topic beyond the traditional iron triangle and concluded that stakeholders' perception and satisfaction is the key to project success. From the base organization's (project owner) view point, Eskerod and Huemann (2013) reconfirmed the importance of stakeholders by stating that a project can only be successful if stakeholders are first motivated and in return have contributed to the project.

Factors causes problem of stakeholder's Management in Construction Projects

According to Li *et al.* (2013) the problems in management of stakeholders are conflicts among parties, financial problems, cultural differences, and contract expectation and communication gap. Yang *et al.* (2009) further highlighted the problems of stakeholder's



management as poor monitoring and feedback mechanism, involvement in decision making, civil unrest, and political stability delay in by law and regulation. Furthermore, Yang *et al*, (2011) conducted a study on stakeholder in construction projects and outline the following impediments to stakeholder management, implementation of strategy based on schedule plans, non-adherence to specification, obtain support from higher authorities, lack of economic stability and lack of progress meeting. In addition, Li *et al*, (2012) and Olander and landlin (2005) outline 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.

RESEARCH METHOD

This study adopted a questionnaire survey approach which was used in the field of studies the sample of individuals from a population with a view towards making statistical inference about the population using the sample (Groves *et al*, 2009). It also used to pull out about public opinion, such as beliefs, perception, ideas, views and thought about some things. The questionnaire survey is mostly used for scientific purposes as it provides important information for all kinds of research fields, for example, the current situation on the ground, psychological perception and views of the population. In order to obtain the require population for this study, the stratified random sampling technique was adopted for the selection of the construction companies that participated in the CBN intervention projects based on the concept of (Creswell and Tashakkori, 2007). In addition, simple random sampling techniques were used for the selection of respondents from the strata. The questionnaire that was used to record the responses of each respondent contained mainly closed ended questions using a five- point Likert scale ranged from none=1, low=2, moderate=3, high=4 and very high=5. The scores of the respondents were computed based on the variables used in the questionnaire. However, the questionnaires were distributed to professionals in the construction industry that are actively participated in the CBN intervention projects in Nigeria with years of experiences. These are Quantity Surveyors, Architects, Engineers, Project Manager, Construction Manager, Contractors, Consultants and others Stakeholders. 100 questionnaires were distributed and only 82 questionnaires were filled correctly and returned, which represent 82% of the Questionnaires used for the analysis. The ranking method was adopted for this paper and it was conducted based on the 82% questionnaires filled correctly and returned.

Descriptive Analysis

The purpose of employing the descriptive analysis was to summarise the sample, rather than use the data to learn about the population and sample. It is also used for a brief descriptive summarising transactions contained data set, which can either represent the entire population or sample (Creswell and Tashakkori, 2007). This method was used to describe the data set in terms of measuring the central tendency and dispersion or variance. The measurement of central tendency included the middle, and the average, while volatility measures include standard deviation (or difference), and the minimum and maximum variables. The descriptive analysis encompasses the mean, standard deviation,



variance and standard error means. In this research, descriptive analysis was used to present means and standard deviation values as well as frequency counts on the data. The mean value was used to ranked the respondents' opinions or responses obtained.

FINDINGS AND DISCUSSION OF RESULTS

The results obtained from the descriptive analysis was summarized in Table 1. The class range was obtained from the five point Likert scale adopted in obtaining the data.

Table 1: Class range of Mean Value

Mean Range	Likert Scale
$0.00 \leq \text{Mean Value} < 1.49$	None
$1.5 \leq \text{Mean Value} < 2.49$	Low
$2.5 \leq \text{Mean Value} < 3.49$	Moderate
$3.5 \leq \text{Mean Value} < 4.49$	High
$4.5 \leq \text{Mean Value} < 5.0$	Very high

Source: Kasimu (2016)

Demographic Profile of the Respondents

S/N	Items	Number	Percentage (%)
Academic Qualification			
	HND	32	39.02
	BSC	26	31.71
	MSC	20	24.39
	Ph.D	4	4.88
	Total	82	100%
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%
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%
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	100%

Source: field work 2017

Table 2 above shows that 39% respondents that partake in this study have HND certificate and 31.7% have BSc degree. However, 24.3% have Msc certificate and 4.88% have Ph.d certificate. This implied that the respondents that participated in this study have the full knowledge of the subject matter. In addition, 21.9% of the respondents are quantity surveyors and 18.3% are construction managers. Architects are 17.07% and engineers are 14.63% with only 12.20% of project managers. This implied that the respondents are professionals that are in charge of construction projects with different background of knowledge of construction projects. The result obtained from the demographic profile of respondents shows that majority of respondents have experienced in construction project. The results indicate that the respondents have 6- 25 years of experiences in the construction projects. Furthermore, the result further shows that 29.27% of respondents are mostly involved in construction activities and 21.95% of the respondents are involved in pre-contract activities. 20.73% of the respondents are involved in operation of construction projects and 17.07% are involved in maintenance activities. This shows that the respondents are actively involved in the production, maintenance and management of construction projects.

The result of Factors Causes the Challenges of Stakeholder's Management in Construction Projects

The factor causes challenge to stakeholder's management were obtained from the previous researches in section 2.3 and were evaluated to determine the major factors causes impediment to stakeholder management in construction projects. However, the result obtained were shown in Table 2.

Table 2: Factors cause challenges to stakeholder management in Construction Projects

Variables	Mean 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 result obtained from Table 2 shows that civil unrest and lack of political stability, change in by law and regulation, delay in site handover, delay inspection and approval and financial problems were ranked very high as factors that causes challenges to stakeholder management in projects with mean score of 4.72, 4.68, 4.63, 4.6 and 4.57 respectively. This implies that the aforementioned factors are the main factors causes challenge in 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 ranked high as factors that causes challenges in stakeholder management in construction projects with the mean score of 3.85, 3.84, 3.82, 3.79, 3.69, 3.64 and 3.6 respectively. This indicated that the factors outlined above are factors that causes impediment to stakeholder management in construction projects. 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 stakeholders management in construction projects with the mean score of 2.65 2.74 and 2.85 respectively. Yang and Shen (2014) conducted a study and established that the followings cultural differences, 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 causes poor management of stakeholder.

The Mitigating Measures to Reduce Challenges of Stakeholder's Management

The mitigating measures to reduce challenges of stakeholder's management were evaluated to establish the possible means of reducing the challenges as shown in Table 3.

Table 5: Measures of reducing challenges of stakeholder's management

Variables	Mean score	Std. dev	Ranking
Analysis conflicts and conditions among stakeholders	4.68	1.182	1
Understanding areas of stakeholders 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
Managing stakeholder with corporate social predicting the influence of the stakeholders	2.47	1.332	15
	2.41	1.311	16

Source: Fieldwork (2017)

The result obtained in Table 4 shows that 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 mean score of 4.68, 4.62, 4.57 and 4.5 respectively. This implied that the aforementioned measure are major means of reducing challenges of stakeholder's management in construction



projects. In addition, frequent coordination between the parties, formulate appropriate strategy to deal with stakeholders, transparent evaluation of the alternative solution based on stakeholder's concern, clear information and communication channels and assessing stakeholders were ranked high with mean score of 3.73, 3.68, 3.66, and 3.59 respectively. However, the result also shows the followings predicting the influence of the stakeholders, managing stakeholders with corporate social and systematic control mechanism were ranked lowest with mean score of 2.41, 2.47 and 2.65 respectively. This implied that the aforementioned mitigating measures above have little impact in reducing 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) 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.

CONCLUSION

The paper concluded that the followings: 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 are the major factors that causes challenges of stakeholder's management in construction projects. Furthermore, the followings: analysing conflicts and conditions among stakeholders, understanding area of stakeholder's interest and encourage team work and collaboration among stakeholders are the most significant mitigating measures to reduce the challenges of stakeholder's management. Therefore, the paper suggested the followings: There should be adequate project planning and programming right from inception to completion stage of project to avoid delays, inflation, claims and conflict. In addition, project manager should encourage proper monitoring and feedback mechanism. Social interaction among the stakeholder to share knowledge, skills and information about the projects should be encouraged. The top management of the organisation/firms should establish project implementation strategy that will be all inclusive for stakeholders. And also encourage teamwork and collaboration among the stakeholder for effective projects delivery. Further research should be conducted on the impacts of the stakeholder's management practice on project performance.

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