ANALYSIS OF STAKEHOLDER MANAGEMENT IN PUBLIC CONSTRUCTION PROJECT DELIVERY IN ABUJA, NIGERIA

ABSTRACT

The structure of the Nigerian construction industry is very complex in nature and consists of a wide range of different parties. Despite involvement of all stakeholders on construction projects in the study area projects still encounter challenges in terms of performance due to poor stakeholder management. The aim of this study is to analyze stakeholder management in construction projects in Abuja, with the view to improve construction projects performance. This study identified and examined barriers to stakeholder management in construction projects, determined stakeholder management critical factors influencing successful delivery of construction projects, and examined tools used in stakeholder management and also analyses the response strategies to stakeholder dispute. The study employed a mixed method (qualitative and quantitative) research design approach through semi- structured interviews and questionnaire. 30 construction professionals interviewed were purposively selected based on their experience. Content analysis was used to analyze information gotten from them. The study identified 25 barriers affecting stakeholder management and 14 critical factors influencing successful stakeholder management. 4 tools used in stakeholder management were mentioned and 23 dispute resolution methods were identified through interviews carried out. CSFs, barriers and tools frequency were ranked using relative importance index method (RII). Results from the interviews and the questionnaires were combined and "Poor knowledge of stakeholder management procedure" and "lack of proper stakeholder management procedures" were the more significant barriers affecting stakeholder management. Effective Communication emerged the highest ranked critical factor for successful stakeholder management. The study further posited that project meetings and communication planning are the most common techniques of stakeholder management, while stakeholder analysis and mapping were the most effective. Also dialoguing and negotiating are the major response strategies to stakeholder disputes. The study concluded that despite the informational knowledge and responses concerning the importance of effective SM, there is almost no SM implementation process as prior presented in related literature. Therefore, there is need to pay special attention to the barriers and the study recommends appropriate strategies one of which is appropriate stakeholder analysis and engagement process within consulting project management firms managing project stakeholders.

CHAPTER ONE

1.0 INTRODUCTION

1.1 Background to the Study

The construction industry exists as a significant contributor to any nation's social and financial growth. Aside from the industry's capability of work creation, different accomplishments endeavoured in construction are relevant to cultivating viable connections and improving and supporting economic sustenance. (Adeagbo, 2014).

The arrangement of the Nigerian construction industry is really multifaceted also contains an extensive variety of participants; different forms of procurement systems, different clients and contractors. The construction industry consists of building, civil and heavy engineering construction. The parties to a project are classified as the public and private customers, sub-contractors and main contractors, transnational businesses and sole proprietorships, minimum technology companies and sophisticated authorities, civil engineers and builders as well as an entire variety of construction experts associated in the industry. Construction works are usually done on a project premise and may be in an organisation or part of a construction scheme (Adamu & Kolawole, 2011).

Every construction work maintains uniqueness, and the capacity to gauge success as a by-result or by-measure is likewise project specific as well. In any case, a good outcome and execution for any project is estimated by a comparison between the outcomes (with the goals) and achievement standards like time, cost and quality (Project Management Institute, 2017). These project goals are exclusively dependent on the interests of the stakeholders whether predominantly involved in the project or otherwise (Atkinson, 1999).

In order to advance the conduct of the industry, several project management tools have been adopted in the industry, one of such is stakeholder management. Stakeholders comprise of all participants of the project team as well as all involved bodies which are either internal or external to the organisation. As stated by the Association for Project Management (APM, 2017), Stakeholder management is the methodical recognition, examination, development as well as execution of activities aimed towards engaging with stakeholders.

The stakeholder management concept was adopted in project management by Cleland (1986) and was categorized into external and internal. Examples of internal stakeholders are the project sponsors, project group members and project managers based on their level of participation in the various parts of the project. However, external stakeholders are known as clients, contractors as well as connected state mechanisms (Project Management Institute, 2017). Different stakeholders may have competing expectations that might create struggles in the development of the project. They may likewise impose some forms of impact on the project, its output, as well as the project team so as to attain a range of results that fulfil tactical commercial goals or supplementary requirements. (Dagli, 2018)

Ajayi *et al.* (2010) recognized dissimilarity amongst project participants as a significant cause of project ineptitude in Nigeria. Molwus (2014) developed a framework for stakeholder management in construction projects with data from projects found within the United Kingdom.

This study looked into the tools used in stakeholder management, identify and assess barriers to stakeholder management in construction developments in Abuja, Nigeria. This research work also determined factors influencing the stakeholder management in construction projects and suggests strategies of managing stakeholders in order to accomplish successful project objectives.

1.2 Statement of the Problem

Success is the ultimate aim of every construction work and stakeholder management remains important in the successful delivery of construction projects. Effective conclusion of construction projects depends on reassuring the confidence of participants all through the life span of the construction work (Toor & Ogunlana, 2009). Since construction projects are multifaceted and filled with uncertainties, managing the stakeholders is a challenging task. It is crucial to recognise adequate tactics and methods of stakeholder management in order to accomplish project objectives. In Nigeria, implementing a plan for a project is not an assurance of project success. Quite a lot of projects still become unsuccessful once stakeholders are inappropriately managed. On the word of Abdu-Lawan (2016), projects stayed deferred for a relatively extensive period as a result of unsolved disagreements concerning two vital stakeholders involved in the project. Disagreements happening on the projects can be as a result of a number of stakeholders requiring the understanding of crucial factors for stakeholder management as well as obstacles to stakeholder management. The work effectiveness of the stakeholders is negatively impacted by the clashes as well as disagreement on site.

According to Wang &Huang (2006), effective relationships among key stakeholders assist in achieving successful delivery of any construction project. Though, stakeholders may be involved at the commencement of every construction project, without proper management, success cannot be achieved. Managing construction project stakeholders has been a challenge globally (Winch, 2010). Rowlinson *et al.* (2010) affirmed that the matter of stakeholder management was scantly considered; the client was accustomed to making decisions on development instead of referring extensively to the major players and stakeholder management and relationship management were still in their infancy in the construction industry.

El-Gohary *et al.*(2006) stated that stakeholder management has been rarely incorporated in the construction sector. The construction industry has importunately recorded a pitiable amount of stakeholder management to date compared to other sectors (Chinyio & Olomolaiye, 2010). Onarinde (2011) highlighted that the construction industry of Nigeria is yet to completely gain from the advantages of stakeholder management on site. The negative effect of stakeholders' actions is one of the key difficulties being experienced by construction projects in terms of performance and this, if left unmanaged, turns out to be a threat (Forsman, 2017).

What can be deduced is that stakeholder management in Nigeria is lacking in so many ways and this may be due to disagreements and negligence on the part of some of these stakeholders (Chinyio & Olomolaiye, 2010). Construction projects within Abuja are not yet free from repeated occurrence of obstructions due to poor stakeholder management. This study thus asserts that there are looming barriers that need to be straightened in so doing suggesting strategies to enable project success through awareness of critical issues associated with the stakeholder management.

1.3 Research Questions

This study's research questions are:

i. What remain the barriers affecting stakeholder management in construction project development?
ii. What tools and techniques are currently being used for stakeholder management in construction projects in Abuja?
iii. What are the factors influencing stakeholder management in construction projects
iv. What are the response strategies necessary to manage stakeholders' disputes?

1.4 Aim and Objectives

The aim of the study is to assess stakeholder management in construction projects in Abuja, with a view to improve projects' performance delivery. The following are the objectives pursued:

i. To assess the barriers to stakeholder management.
ii. To examine various tools being used for stakeholder management within projects in the construction industry.
iii. To examine critical factors influencing the stakeholder management successful delivery of construction projects.
iv. To assess strategies for managing stakeholder disputes.

1.5 Justification for the Study

Over the years studies have been carried out concerning stakeholder management. Dominic *et al.* (2015) carried out research on combative concerns on improper stakeholder management in certain main road construction projects in Anambra State, Nigeria. Oyeyipo *et al.* (2019) took a more optimistic route in researching factors promoting stakeholder management in the built environment.

Despite various researches conducted on stakeholder management, in practical sense, projects in the study area still experience instability in the stakeholder management process. Therefore, there is a need to investigate further on stakeholder management in Nigeria context.

This study would contribute to the body of knowledge in addressing the influence of stakeholder management on construction project delivery. It would serve as a guide to construction professionals (architects, quantity surveyors, engineers, project manager) on effective stakeholder management and engagement. The findings of this study would assist the government and construction experts concerning methods of stakeholder management and appropriate tools and the influence of the concept on project delivery from planning stage to handing over stage.

Identifying stakeholder management is a crucial part of project management that promotes the appropriate utilization of the concept that assist project managers and firms to ensure the delivery of projects that are suitable and gratifying to the stakeholders. This study would assist in identifying the tools and techniques applied in stakeholder management within the Nigerian Construction Industry and the key barriers affecting the professionals practicing it. The results of this study are going to serve as a measure for encouraging additional implementation as well as tackling the difficulties recognised.

1.6 Scope of the Study

This study focused exclusively on building and civil engineering construction projects within Abuja with exception of heavy engineering, oil and gas. The choice of the study area is based on the fact that Abuja is among the cosmopolitan areas in Nigeria with an increasing array of experts in the construction industry and has numerous existing building developments. The location is also selected because of its proximity and ease of access for the researcher. The research emphasis is on the construction practitioners within the consulting project management firms. Only internal stakeholders such as the project team, the administration and managers were considered because they participate directly in the project executions as opposed to external stakeholders.

CHAPTER TWO

2.0 LITERATURE REVIEW

2.1 Concept of Stakeholders

Several studies have been conducted on the concept of stakeholders. For instance, Olander & Ladin (2008) characterized project stakeholders as individuals or an association of individuals who have a personal stake in the achievement of a project and the setting in which the project functions. He additionally denoted them as, delegates of dissimilar and diverse investments that are meant to be impacted throughout the various phases of the development from the initial stage to delivery both decidedly and adversely. Walker *et al.* (2008) stated that stakeholders are persons or parties that foster an interest or certain forms of entitlements or ownership in the project, and are able to improve or be influenced by, either the work or the outcome of the work. According to the Project Management Institute (2017), stakeholders are people or associations that can be efficiently affianced with a project or people who the project's implementation or accomplishment can affect their personal investments. Takim (2009) characterizes stakeholders as the individuals who can impact the actions/eventual outcomes of the project, whose livelihood or environs remain decidedly or adversely influenced through the project, in addition to getting immediate as well as backhanded advantages out of the situation. He restricted these to five classifications to be specific: customer, contractor, end-clients, consultant, and the local area of the project. Winch (2010) categorised stakeholders as participants who are able to bring about or discern they will experience an immediate advantage or disadvantage to the outcome of the project. Li *et al*. (2012) characterized stakeholders as "the individuals that are able to impact the project cycle or potential outcome, whose livelihood are decidedly or adversely influenced by the project and who get immediate and circuitous advantages or drawbacks". Hence, construction project stakeholders can be defined as people or groups/associations who have a few parts of right or ownership in the project and can effectively add to it; or will bring about or legitimately foresee that they will incur

an immediate advantage or disadvantage as a result of either the works in the course of the project or the end-result of the project. The next section discusses the various types of stakeholders.

2.2 Types of Stakeholders

Calvert (1995) stated that there are two kinds of stakeholders, that is, internal as well as external. According to Nilson (2014), internal stakeholders are those people or bodies in a business such as workers, proprietors, investors and the board who have a shared interest in the organisation. Internal stakeholders are those in the administration, marketing specialists, designers, buyers, manufacturers, sales assemblers, while external stakeholders are the clients/consumers, wholesalers, governments, suppliers, communities, laws and regulations. (Karim, *et al.,* 2007) opines that the internal stakeholders incorporate workers, board members, organisation owners, benefactors and volunteers. Any individual who adds to the organisation's interior capacities can be viewed as an internal stakeholder. Then again, external stakeholders comprise of clients, customers, business associates, suppliers and investors. Potential clients may even be considered as external stakeholders. External stakeholders likewise comprise of the societies in which you run your business and the legislatures that get your business taxes. Any individual who is influenced by your organisation; however, who doesn't add to internal activities is an external stakeholder.

David & Bryan (2010) observes that managing the internal stakeholders of an organisation take account of warranting being engaged with the organisation's purposes, value and respects the organisation's customs and having a mind to be a significant member of the association. These components enhance internal stakeholder enthusiasm, consequently amplifying effectiveness. It is dependent on top management to assure that internal stakeholders are respected and well-regarded. Instead of abruptly making alterations without prior information to stakeholders, stakeholders need to be aware of their stand and how a project will impact them.

Donaldson & Preston (1995) observes that external stakeholders are a body of individuals such as a client, supplier, or loan specialist that impacts and is affected by a company yet isn't a member of the organisation. He likewise stipulates that depending on the circumstance a few classes of stakeholders here and there are external at times. They are external when they don't participate straightforwardly in the project management executions, when they just set up prerequisites about what they need or what they can give. When the concept of external stakeholder is plainly explained and they are distinguished in a particular project, project managers need to reach out to them cautiously to have the option to answer their necessities and prerequisites and set up restriction to the project limits to accomplish the goal subjectively and within the designated resources. it would be recommended to incorporate all levels of stakeholders in a data framework which permit them to bring up issues and concerns yet in addition which assist them with understanding what is doable or not, and to expect some form of discontent.

Another classification of stakeholders may be indirect or direct as well as outside and inside stakeholders (Smith & Love, 2004); also primary or secondary stakeholders (Buchholtz & Carroll, 2008). Individuals who participate majorly in the organisation and on projects concerning the organisation in such a way that they are indispensable are referred to as primary stakeholders. On the other hand, secondary stakeholders are partners that impact or are impacted by the organisation's work but do not remain vital to the longevity of the organisation (Karlsen, 2008). Stakeholders differ in the level of importance to the project work, some can be extremely crucial to the development of the work while others not so much (Calvert, 1995). Certain stakeholders remain dedicated to participate in the project and accomplish specific obligations by official agreement while the others do not possess constricted responsibility or official disposition (Smith &Love, 2004; Buchholtz & Carroll, 2008). Dissimilar categorisations state the qualities of validity,

authority, and urgency. Authority is a chance for stakeholders to allow others to execute actions on the project. Validity is the recognition of the demeanour of participants in terms of social beliefs as well as regulations.

2.3 Importance of Stakeholders

One important question in the discourse of stakeholders is their levels of importance to a project. (Karlsen, 2002). It addressing this question, two schools of thought have arisen A few scholars associated to the earliest school contend that management ought to endeavour to fulfil the nominal necessities of minimal stakeholders and to fulfil in the best way the requirements of loyal and well-connected stakeholders (Savage *et al.,* 1991). They exhort that even though customers, end clients, contractors, line organisations, suppliers and community establishments are equivalent with regards to causing issues and vulnerability for the project, customers and end clients are the significant stakeholders (Karlsen *et al.,* 2008). Consequently, the external stakeholders or on the other hand the individuals who are not effectively engaged with the task extension are particularly more significant. In this school, effective PM implies effective political management too (Cleland & Ireland, 2002). Yet, different scholars promoting the subsequent school exhort that; all stakeholder goals should be equated. They assert that providing equivalent significance to all participants as the most ideal approach towards successful project delivery (Donaldson & Preston, 1995). Coinciding with this line of thought, every one of stakeholders' necessities will be upheld however must conform to public relations. They affirm that the achievement of a venture is connected to the influence of the associations with all individuals from the project's stakeholder network (Bourne & Walker, 2006). It is a significant issue up to the point that stakeholders have been categorised in various phases and point of views. The connections become more constraining due to stakeholder classification (Karlsen *et al.*, 2008).

2.4 Stakeholder Management

Stakeholder management tactic made strides after R. Edward Freeman promoted the term and idea as an essential administration approach for business. Stakeholder management (SM) assumes a basic and vital part in project execution in complex projects (CPs) as a major achievement factor (Beringer *et al*., 2012). SM doesn't simply zero in on single participants, conversely signifies all stakeholders' impact on each other in multifaceted interactions of several, and possibly reliant stakeholders (Beringer *et al.*, 2012). Remarkably, stakeholders' associations in their own way are additionally a basis of project intricacy (Debrie & Raimbault, 2016). Intricacy can be seen as a primary reason for precariousness and hazard in projects, also it has an effect on the entire execution of the project if members disregard confronting the matters all along (Floricel *et al*., 2016). These members are known as stakeholders. The intricacy of the projects necessitates efficient methodologies as well as suitable strategic management abilities to oversee stakeholders to accomplish the foremost incentive concerning project execution (Mok *et al*., 2015).

Earlier research contributed an impressive input to the concept and system of managing and connecting with stakeholders in projects which can be seen as multifaceted. Williams *et al*. (2015) analysed the organisational design of online stakeholders' networks in the planning phase of a huge projects that were exceptionally intricate in light of the fact that it was entrenched in an organization of stakeholders who were either assisting or restricting the project. Aaltonen *et al*. (2015) tried to propel the discernments of stakeholder difficulties within complex activities through zeroing in on the planning phase of projects. The studies exhibit the way stakeholder elements—including stakeholder impact procedures, SM procedures and project conditions—are influenced by the connections amid stakeholders' impact, SM actions and the project's conditions.

Albeit extensive literal researches are essential, there remains no past written survey on SM research with regards to CPs.

Mok *et al*. (2015) carried out a research on SM studies that zeroed in just on massive construction projects. Eskerod *et al*. (2015) analysed project SM by evaluating a hypothesis independent of the project management field to propel understandings of this subject. Notwithstanding, they accentuated the centre of contention that the existing operational structures are unfit to tackle the expanded intricacy confronting project groups and project managers.

2.5 Stakeholder's Relationship Management

Relationships can be referred to as associations or individuals experience with each other and its effects are more impactful when it is prominent that they are mutual necessities and investments in the connections. Project relationships are the connections amongst every project stakeholder collectively in diverse content as well as setting (Bourne & Walker, 2006). Stakeholder relationships are able to create accord within the society and possible partnerships towards improving project delivery (PMI, 2017). Time may also be seen as a crucial part as regards a relationship. Existing actions in relationships are influenced by both the past and the future. Further, encounters, promises and expectations underlie the communications. Each relationship is exceptional in its substance, its dynamics by the way it advances, and what it means for the individuals in question. However, the challenging query does not exclusively concern the relationship between projects and stakeholders, yet in addition all the more significantly how adequately they are connected (Mouritsen & Thrane, 2006). Literature reviews concerning relationships have indicated that there exist various sorts of project-built connections. Project relationships may exist as partners in ownership, sponsorship, partners in planning and execution, social growth and execution (Anderson, 2003). Connections may identify as open market

coordination, participation or joint effort (Khalfan *et al*., 2007) and simplistic reliance, profound reliance, simplistic relationship, profound association (Jin & Ling, 2005).

Karlsen *et al.* (2008) identified five distinct kinds of project stakeholder relationships as far as their cooperation and incorporation qualities include: classical market, open and direct, third party, and partnering as well as integrated team. Equivalent to the diverse categorisations; stakeholder relations is possibly supported in the two distinct philosophical viewpoints. To comprehend the connections amid stakeholders, it is important to study whatever makes the connection significant. In what way are stakeholders' connections significant? What is the most viable and substantial way to oversee stakeholder connections? Which stakeholder remains the most essential to the project? And what kind of relationship is influenced to improve the outcomes? The outcomes depend on acknowledging these pressing questions collectively (Karlsen, 2002). Looking at the first viewpoint, it states "the effective management of the connections amid the projects and its stakeholders remains a significant basis to the success of the project" (Jergeas *et al*., 2000). The purpose responsible for the connections clarifies the demeanour and comprehension of stakeholders' effect and impact to the project delivery (Payne *et al*., 2005). Every participant ordinarily is invested in the project in their own way and this could possibly cause various needs and clashes (Karlsen *et al*., 2008). Owing to project achievement, it remains critical to realize a manner of functioning inside an association's social and political world to guarantee that both the project association and its stakeholder network towards addressing their issues (Pinto, 2010). The social and political aspect of PM and SM is extremely substantial. The project which disregards the structure of relationship with political partners may before long experience disregard or resistance to its targets (Cleland & Ireland, 2002). Furthermore, stakeholder fulfilment is a

believing, an insight and a propensity that depends on the proceeding with the connection between the stakeholder and the project (Barkley & Saylor, 2001).

Hence, it remains fundamental to assemble great relations amongst the stakeholders that are distinguished for crucially being responsible for the outcomes. In the other viewpoint, basic to every stakeholder connections is an establishment of respectability, morals, and dependence. Respectability suggests genuineness, ethics, principles, decency, dedication to current realities, and earnestness. Morals are the teachings that involve the knowledge of uprightness and incompetence in any circumstance. Dependence is a side-effect of trustworthiness and moral lead. It is significant for any relationship and is important to guarantee utmost cooperation of all partners in a project (Barkley & Saylor, 2001). It is a thought that to accomplish connections that function smoothly, the teams must build up a foundation of trust while connecting with each other (Karlsen *et al*., 2008). Dependence is a stipulating concept thereby if an apprehension in the connections is brought up; dependence becomes a way to curb it (Mouritsen & Thrane, 2006). In spite of the fact that trust is a significant factor, stakeholder connections are identified with numerous elements, for example, project stakeholder mentalities and practices, culture, as well as project situations. Connections are effectual and distinctive throughout the project lifespan. It is vital to generate power and influence in connections. In contending that, albeit, political partners are vital due to their desperation, yet PM and SM frameworks are not exclusively evolved to respond to them. The stakeholders that could be political, unique, or potentially pessimistic, are not all that much. Their assumptions are explicit and vastly brief majority of the time. Subsequently, project managers should attempt to assemble important methodology in order to create fulfilment amongst them. The foundation and situation of project establishment; and the project involvement, inventive

methodology, as well as relational abilities of project managers and the organisation's management are extremely vital in the execution of these approaches.

2.6 Tools and Techniques for Stakeholder Management

According to Molwus (2014), certain tools and techniques were recognised as beneficial for implementing SM in construction practices. These are design charrette, contingent valuation method, Delphi technique, strategic needs analyses and stakeholder cycle. They are elaborated thus:

Design Charrette:

A charette is a sequence of discussions done at the pre-design phase of projects with the purpose of acquiring and incorporating the involvements and offers of the project stakeholders towards the subsequent design of the project. The purpose of the charrette is towards recognising every design connected concerns built out of the stakeholders' viewpoint as well as ascertaining clarifications and everything is offered as a statement to direct the eventual plan of the project (Sutton & Kemp, 2006). It may utilize a fluctuating amount of time, which may be subject to the type and size of the project, degree of knowledge of the stakeholders involved as well as resources accessible. The span of a design charrette could perhaps cut across about twelve hours to two or more days. The charrette forums need certain human as well as material input in order to achieve effectiveness, these comprise; a coordinator, a memo for the meeting(s), project outlines together with guidelines, site plan, and so on. The duty of the coordinator who is usually required to not be associated with the design is extremely significant in lieu of the achievement of charrette. Members at the design charrette ought to be drawn from the following: individuals from the design team, project owner or knowledgeable spokesperson(s), spokespersons of applicable invested committees, consumers/inhabitants if not the same as the owners, any pertinent experts, and so on.

Contingent Value Method:

This remains a generally recognised technique in environmental economics and town architecture for assessing the fiscal worth of resources and/or structures that are not supposed to be sold (Portney, 1994). It tries to attain a mutual base amidst the organisation and its stakeholders through attaining the total economic value (TEV) that constitutes the direct use value (DUV) plus non-use value (NUV) regarding the tendered project. DUV refers to the economic worth namely: access fees, adjacent property value, and persons who utilize with the exception of issuing payment intended for the service directly while the NUV is the standard incapable of being achieved within the market that consist of the future use potential as well as existence value of the asset. The entire monetary worth hence, is the quantity derived from the direct use value plus the non-use value (TEV=DUV+NUV). In advance to these, the worth of the project is measured in double proportions on the part of the consumers' viewpoint. Before the beginning of the project, the customers' willingness to pay (WTP) is measured; however, willingness to accept (WTA) is evaluated once the project is finalised. WTP refers to the extent to the amount the consumer is ready to proffer in lieu of the work established by the project, on the other hand, WTA is extent to the amount the consumer is ready to receive for not gaining from the provision of the project.

The elementary stages included in CVM are:

i. Development of a theoretical market;

ii. Procuring proposals

This was utilized to achieve stakeholder bargain for structural developments (Fonta *et al*., 2007) and has been confirmed as being an extremely valuable technique particularly aimed at connecting with as well as fortifying the backing of construction partners at the initial phases of the project while the asset verdict is being prepared.

Delphi Technique:

This is a method for attaining stakeholders' interests/contributions in the preparation of planned project design. It promotes interaction and correspondence amid project stakeholders and supports integration of stakeholders' interests by representation of the various interest bodies which emanate from diverse qualifications and backgrounds.

The Delphi method typically occurs in a round of three stages encompassing diverse groups of sets in every one of the stages (Orndorff, 2005). Similar series of inquiries (appraisal tool) is given to the members (participating stakeholders) who are sufficiently knowledgeable regarding anything they need to do and what is essential within all three sequences. The Delphi system is typically anticipated to create a concurrence or a completely fresh (substitute) bid for the development of the project. The Delphi Method has been applied for infrastructural investment settlements (Orndoff, 2005).

Strategic Needs Analysis:

The strategic needs analysis revolves around implementing seminars as well as forums to organise statistics regarding stakeholders' requirements concerning the construction work and examining them via software (strategizer) to resolve an ideal strategy or approach (Smith & Love, 2004). The strategic needs analysis method consists of five key phases:

i. Gathering of material to realise the scope of the issue (preliminary information workshop);

ii. Deliberate as well as examine the problem,

iii. Generate options for problem solution,

iv. Select an ideal option,

v. Propose the application of the selection reached from the seminar actions.

In a research dedicated to stakeholder management during the initial stages of projects, Smith & Love (2004) looked into the practise of strategic needs analysis around the time the orientation phase of the project to include stakeholders in ascertaining and suggesting a variety of tactical course of action for a planned development.

Stakeholder cycle:

Bourne (2005) generated a technique known as the stakeholder management cycle for recognising, visualising and mapping stakeholder effect on projects. The stakeholder cycle is comprised of five stages:

First stage – recognition of stakeholders;

Second stage – rank the stakeholders;

Third stage – visualize the stakeholders;

Fourth stage – appoint the stakeholders; and

Fifth stage – observe the results.

The stakeholder cycle can be useful for stakeholder identification and appointment in project management. This has been verified in construction projects (Yang & Shen, 2014).

Public hearing:

Public hearing represents a process of uniting stakeholders to talk about various observations and opinions, discuss diverse interests and recognise common objectives in construction projects. It could additionally pose useful in choosing rights, responsibilities and measures aimed at reaching conclusions in the project (Rowe & Frewer, 2005). While public hearing has been confirmed advantageous in stakeholder engagement, it is potentially challenging unless appropriately executed. Public hearing encompasses engaging the overall public with each other with the entirety of main stakeholders of the project in a nonexclusive meeting in which opinions are easily and

analytically expressed and apprehended in the project's ultimate structure (Li *et al*., 2012). This stands typically valid for developments of community interests.

2.7 Barriers to Stakeholder Management

As stated by Newcombe (2003), stakeholders interrelate over the project in two ways: traditionally and politically. These two ways collectively inflict instrumental barriers on stakeholder's engagement development. Barriers may originate out of the absence of knowledge amongst the external stakeholders group in reverence to obtainable proposals thus bringing about marginalisation of residents (Ihugba & Osuji, 2011). Overlooking the interim goals of the public stakeholders and being heedful towards the long term goals of the project may likewise create community dispute. Lack of adequate resources or inadequate distribution of time and resources can produce substandard results, intent opposition from the participants or construction associations with regards to engagement (Olander & Ladin, 2008). The absence of recognisable project management furthermore creates absence of liability as well as limpidity in the course of work. This could possibly avoid complexity in creating validity (Beaumont & Loopmans, 2008). Barriers may likewise emanate from the engagement and membership approach regarding the relationship, information channel, availability and ease of access of the stakeholders, quality of relations and situation of projects (Kivits, 2013). Blood (2013) identifies compartmentalisation, lack of baseline data, accumulative consequence of incremental development, stakeholders' exhaustion, breach amid community outlook and governmental demands as looming issues prompting unsuccessful stakeholders' engagement in mining projects. From these comprehensive subjects, the research classifies administrative, environmental, informational, legal, and statutory problems as having an impact on the management of stakeholders.

The effective stakeholders' management in construction project delivery has a pronounced influence on the positive result of a project (El-Naway *et al.* 2015). The success of building projects is reliant on the capacity to be able to cope with different personalities with incentives in the project. In the period of the construction process, it must be understood that participants (stakeholders) in construction projects have substantial concern and prerequisites in the project. Bal *et al*. (2013) upheld that an efficiently managed stakeholder engagement procedure increases the value of the performance of such projects and also the economic sustainability of the project. Such engagement procedure breeds a progressive connection amid stakeholders. There are nonetheless advantages which mount up as a result of stakeholder management and engagement; stakeholders retain improved means of information, enhanced understanding of the construction market situation, advancement of stakeholder character, affable connections, understanding of stakeholders' importance and prerequisites, understanding and extenuation of risks as well as uncertainties. While some of the factors have structural inclination, others are related to project environment, communication, contractual, and regulatory matters (Ekung *et al.* 2014). Additionally, Ihugba & Osuji (2011) revealed that obstacles that affect the external stakeholders' community ascend out of absence of understanding and knowledge of the concept. Olander & Landin (2008) maintained that being more mindful towards the long term goals of projects at the disadvantage of the short term goals of community partners can likewise create communal opposition. The authors additionally indicated that inadequate distribution of time and resources may likewise pilot sub-optimal result, and significant opposition.

Zarewa(2019) looked into certain factors recognised by a number of scholars as follows: Abdu-Lawan (2016) mentioned : Social multiplicities(language hindrances), absence of teamwork from Stakeholders, user's actions, discrepancy amid stakeholders, inadequately structured stakeholder

gatherings, allocating similar responsibilities to numerous stakeholders at the same time, employing a stakeholder to occupy the duty of a different partners within the same project and allocating the new stakeholder leadership of the previous stakeholder, unproductive information distribution system; Partial stakeholder documentation and appointment/consultations; Absence of an individual precisely given the duty of SM; a deficiency of significant established ranking system between two participants.

Buertey *et al.* (2016) recognised: Stakeholders' incapability to partake in dialogues, Absence of stakeholder participation, Stakeholders being unable to enhance significant issues in meetings, stakeholders not getting enough credit for the worth, lack of willpower towards essentials and prospects of stakeholders and insufficient recognition as well as appointment of all stakeholders.

Chinyio & Olomolaiye (2015) acknowledged: Insufficient investigation of which ways project judgements could have an impact on stakeholders and reciprocally; poor connections regarding external stakeholders; stakeholders being wary of one another; Absent communication methods; lack of willingness to identify or work together with opposing participants; Stakeholder disregard; lack of consideration for various groups of stakeholders; lack of detection of possible conflict regions; distribution of wrong information to participants; Suspicions from stakeholders towards one another; Nonexistence of unconcealed and constant communication procedure and Absence of objectivity and fair play, for every stakeholders.

As stated by Eyiah-Botwe1 *et al.* (2015) Project Manager's lowly understanding of SM, Modification of project setting and failure to conclude a stage, last minute scope alterations, numerous stakeholders operating with each other newly, project budget upturn, scope and value variations, differences in stakeholders, interruptions in the construction process, Scant stakeholder

recognition, engagement and analysis also lack of a proper stakeholder management practice are essential elements to be deliberated.

Molwus (2014) postulates that: Absence of stability in stakeholder management practice; Absence of distinct clarification or consensuses regarding the person(s) that ought to stay in charge of stakeholder management are challenging factors. According to Mok *et al*. (2013), Participation of too many stakeholders can hinder effective stakeholder management.

2.8 Critical Factors Influencing Stakeholder Management Successful Delivery of Construction Projects

Construction works which contain the entirety of essential stakeholders remain undeniably bound to prevail successfully (Zucker, 2017). Magassouba *et. al* (2019) states that, stakeholder participation in project documentation, organisation, operation and observation improves the possibility of a project's favourable outcome in addition it remains a suitable approach towards accomplishing organisational targets. A successful project means the efficiency and usefulness regarding the project in addition emphasises upon the numerous stakeholders participating, along with the eventual outcomes, or project remunerations (Hidding & Nicholas, 2014). Critical success factors (CSFs) can be referred to as actions and processes which require certain tactics and attention with the purpose of guaranteeing effective handling appropriate to stakeholders within an infrastructural development (Forsman, 2017). Yang *et al.* (2009) explained CSFs as far as stakeholder management is concerned as "certain practices and/or actions with require attention with the aim of adjusting stakeholders' inclinations in addition guaranteeing that projects remain pushed ahead". Yang *et al.* (2009) examined key critical success factors then positioned the main three: 1. overseeing stakeholders with communal obligations, 2. Investigating the participants' prerequisites and imperatives towards infrastructural development 3. Speaking with as well as

drawing in stakeholders with communal duties. Ogwuleka (2013) suggests strategic target management and dealing with the cycle of planning and design as a CSF. Ihuah *et al*. (2014) distinguishes a skilled project group as the most significant CSF. Tung (2014) induced that connecting with and advancing great relationships as well as forming clear explanations of project missions are critical components. Molwus (2014) speculated that sufficient attainment of data on stakeholder qualities and project features, completing in-depth stakeholder examination, understanding stakeholder elements and compelling stakeholder commitment influence the effect of SM on developing project achievement. Forsman (2017) shows that connecting with stakeholders appropriately; understanding stakeholder preferences and foreseeing the impact of stakeholders precisely to look for their support for the project are significant impacts in project achievement and execution.

According to Garbharran *et al*. (2012) the four COMs Critical success factors are those contributions to the project management structure that unswervingly upturn the chances of attaining project success. Nguyen *et al.* (2004) classify and assemble CSFs under four groups which are known as the 'four COMs'- comfort, competence, commitment and communication.

Comfort:

The comfort factor accentuates that projects with favourable outcomes embrace the stakeholder participation in construction development. This consists of both primary stakeholders that hold a lawful connection to the project (subcontractors) and secondary stakeholders that remain indirectly involved in the project, nonetheless motivate decisions (public forums). The requirements of stakeholders have to be accomplished and influenced in a way that confirms project success (Swan & Kalfan, 2007). It is crucial that a competent project manager be selected. Malach-Pines *et al.* (2009) reflect that such a person should have practical abilities, which comprise of being an expert

on certain subject matters and possessing a profound awareness of systems, and "easy" skills, which consist of team managing, emotional intelligence, futuristic leadership and conflict control. According to Newton (2005), the accessibility of resources is an additional critical factor. A resource management strategy is essential to be established in juxtaposition with all significant stakeholders. Struggle for resources is a popular occurrence in projects. Unforeseen developments throughout the sequence of the project need to be judiciously controlled and supervised in terms of resource planning. Adequate funding must be guaranteed throughout the course of the project. A fiscal plan, which clearly considers the project activity timetable, must be generated. In conclusion, there needs to be in-depth, all-inclusive contract credentials. Every relevant stakeholder must enter into contractual agreements concerning actions and practices throughout the course of the project. Cost, time and quality limitations must be detailed to facilitate adequate performance assessment (Johnson *et al.*, 2006).

Competence:

The competence factor classifies the ensuing four aspects as being vital to fruitful project management in the construction industry. To begin with is the application of current technology. Nguyen *et al.* (2004) asserts that implementing innovative technology and exploiting it to its utmost potential has turned out to be vital in attaining a viable lead in the construction industry. The construction industry has seen noteworthy technological advancements in modern times. Choosing the suitable innovative technology and peak application is crucial to project success. Furthermore, there need to be appropriate prominence on previous experience. As stated by Haigh *et al.* (2007), unspoken information plays an important part in this regard. Additionally, project participants ought to be advised to adequately document unspoken knowledge gained from the project so as to avert errors in ensuing projects. Again, there need to be capable and experienced

teams in position, inferring that staff members need to possess the essential expertise (Picq *et al*, 2010). This necessitates an in-depth skills analysis that ought to disclose inconsistencies in skills.

Commitment:

Commitment accentuates upper management assistance, obligation to the project, well-defined goals and scope, and political backing. The assistance of upper management extends further than the setting up of finances and making resources obtainable (Whittington *et al*, 2006). Kerzner (2006) asserts that commitment to the project is really connected to a feeling of communism, instead of individuality. A situation must be generated, wherein team participants experience job gratification as well as encouragement and drive to be a member of the team. Peak participation by the project team is essential. It is important to transparently declare the aim and goals of the project while directing the project team. The goals need to be strong and the aim ought conceivably coherent so as to elude confusion. It is unavoidable that variations and fluctuations will happen throughout the development of the project. Hence, malleability and compliance remain crucial to attaining success. Lastly, governmental backing is imperative for project success, provided that a huge amount of developments are public projects. (Choi *et al*, 2008).

Communication:

Communication plays an essential part in leading, incorporating people, and making judgements for the successful delivery of a project. There need to be mutual project vision, where the project manager ascertains the benefits of every significant stakeholder and guarantees that they key into the project (Yang *et al*, 2009). According to Zwikael (2009), the minute the project goals are set and the scope elucidated, there has to be continuous inform on the advancements of the project. Development on activities allocated to persons or bodies must be supervised in order to realize the general objectives. These objectives have to be related to the appropriate members. Newton (2005)

postulates that, a thorough communication strategy is essential for adequate distribution of data. Thus, recurrent project meetings are required. Regardless of consulting with the public, local direct participation is a major component for project success. It is fitting to utilize a powerful local area member as a contact between the project supervisor and the local area (Teo & Loosemore, 2012). Lastly, legitimate handover systems should be created. This is a significant thought, given that the construction industry is in effect progressively seen as a service industry (Karna *et al*, 2009).

2.9 Response Strategies to Managing Stakeholders' Disputes

As indicated by Khekale & Funtane (2013), given the vulnerabilities engaged with a development project and the extent of assets included, it is simply normal to have conflict between parties, however these should be settled in a friendly way, without depending on a more conventional system, the bodies on occasion settle on a truce and look for autonomous intercessions.

Early arrangement carried out while matters are but new in the psyche of construction participants, aid to forestall superfluous contention as well as fights throughout the project. There is no questioning the way that when bills of quantities are precise and very much definite, time and variation overrun which may be potential reasons for conflicts being eluded. (Ekhator, 2016). As indicated by Alexander (2015) the most ideal approach to oversee troublesome partners is to recognize the key partners, build up trust, explain purpose (roles) ahead of time, decide the main driver, manage it straightforwardly and include the partner in the goal. Singh (2015) places that that abandonment, negotiation, mediation, litigation, expert assessment, adjudication and arbitration fill in as settlement of conflicts for internal stakeholders.

2.9.1 Resolution of disputes for internal stakeholders

Participants in a conflict should initially conclude either to look for goal to a contention via a non-consensual interaction, similar to lawsuit or assertion, or via further synergistic methods such as

immediate negotiation or dispute avoidance procedures. When the choice has been made, the participants should pick which way to deal with the situation, since there is no strategy that will be powerful monotonously, and in reality more than one might be utilized. (Singh, 2015)

Abandonment:

Dispute resolution for the most part expects that some avenues are bound to be adhered to in order to reach an agreement or adequate choice. Notwithstanding, during the cycle, one participant may potentially choose to stop with the debate. Despite the fact that they may not be viewed as dispute resolving methods, aversion or deserting by one participant are conceivable argument activities and remain remarkable recurrent in the construction industry. Explanations behind this are different, such as low assumptions for positive outcomes, absence of assets to seek after, business reasons, and absence of confidence or lack of involvement.

Negotiation:

Negotiation is perhaps the most well-known and economical way of resolving disputes during the course of a project, in which restriction of the argument interaction does not go beyond the participants in question. With the aim of accomplishing a decent negotiated agreement in lieu of a contention, four qualities ought to be met: reasonableness, productivity, shrewdness as well as steadfastness. Through the execution of these kinds of procedures, compromises are being developed that can go from a loss to a gain thereby deriving solutions, where all members attempt to discover better approaches to arrive at their objectives, and, simultaneously, meet the objectives of the opposition. In this interaction, parties may represent themselves that is, direct negotiation or could present a counsel or a facilitator.

Mediation and Conciliation:

Mediation might be seen as an arrangement system between disagreeing parties which is done with the assistance of a nonpartisan and autonomous intermediary. It is basically a casual interaction by which parties look for help from a free advisor for settling their disagreements. In this way, the major job of the middle person is to work with the dynamic of the parties engaged with the dispute. This is accomplished by fair-mindedly exhorting and counselling them, assisting the parties with understanding their own and their opposition's position better, investigating elective arrangements, etc. In like manner, the mediator may act as a counsel as well as a director of the debate cycle. Pacification has been utilized conversely with intervention yet will in general mean a more proactive demeanour in certain occasions. Practically speaking, the cycle of mediation or conciliation might stand to remain productive or further analytical relying upon if the expert only attempts to help correspondences amid participants or on the off chance that the individual remarks on the topic and makes recommendations towards the result.

Expert assessment:

Expert assessment or on the other hand assurance is a cycle by which parties in a disagreement generally concur on requesting that an outsider choose a specific issue. Dissimilar to mediation which is a nonbinding cycle, in any event until some arrangement might be reached, expert assurance suggests common acknowledgment of the expert choice. The utilization of this type of dispute resolution is basic in development. Not at all like the mediator who need not be a specialist (which indeed, may be a predisposition to the arbiter's opinion), the expert is by description an expert on the subject matter to manage. Choosing as well as getting this skilful professional consequently accepts a foremost significance. Immediately, the matter concerning the proficiency ought to be plainly and correctly communicated. Furthermore, the expenses as well as the program of the work to be done ought to be set up. Lastly, the expert settlement ought to be acknowledged

as the last resolve by every participant included, except if a participant additionally elects to contest it by means of assertion or lawsuit.

Adjudication:

Adjudication refers to an interaction whereby an unbiased outsider issues a settlement on certain matters which is restricting upon the participants in disagreement, except if or until updated in assertion or litigation. Under conventional assertion, the questioning parties should concede to the adjudicator who will from there on act engaged by that arrangement yet not at all like in mediation, the judge's choice doesn't need the collaboration of the parties. The distinction for expert assessment is that the adjudicator may research the conditions of the question then furthermore uninhibitedly interconnect with the participants than the expert will in general ensure.

Arbitration:

Arbitration is an official dispute resolution system bound by legal backings, where disagreements are tackled by a private mediator chosen through basic understanding, or through a private council, typically comprised of three judges, two selected using both participants individually and the third selected via basic arrangement. Arbitrators should possess fitting capabilities, minimal job expertise in addition perform fair-mindedly. Throughout the arbitration cycle, arbitrators are able to invite observers, entail well-qualified sentiments as well as call the participants to affirm, just as other proper courtroom strategies. Arbitration is non-mandatory, yet once acknowledged by the participants in dispute, an ultimate conclusion is restricting, except if a break of strategies, extortion or irreconcilable circumstance can be demonstrated, in which case the conclusion might be re-examined by a courtroom. In like manner, an official decision might be authorized through the courts on condition that, it is vital. Regardless, there exist arbitration frameworks whereby the verdict may be tendered to a court of appeal.

Litigation:

As a result of lack of accomplishment of result amongst disagreeing participants from whichever of the aforementioned structures for resolving disputes, by this stage, they can put in an application to the courtrooms. Litigation refers to situations were conflicts are managed in the official courtrooms. The method used in the courts begins with the plaintiff stating a claim and the case points of interest. At that point the respondent is allowed the chance to concede the case, argue from the case specifics or only admit receipt of the case structure. The respondent may likewise choose to make a counterclaim. The overall set of laws of every nation follows a particular case track yet it isn't uncommon that various tracks are received by the idea of the case and to the monetary sum asserted. The following stage is the path whereby the official courtroom will choose the value of the case, regarding legitimate proof, supported realities and quantum assessment... The intricacy of certain disputes in the construction world regularly expects courts to contract specialists for case appraisal. Normally, a committee of three specialists is named, one for each participant then the third assigned by the court. The statement of this committee is thus included in the interaction, yet in many nations it isn't restricting. When beginning their capacities, the specialists should act unbiased and expertly yet their job has been censured for supporting their customer's position instead of giving an autonomous assessment. Consequently, numerous reports are not consistent and don't offer certainty to the court's conclusion.

2.10 Gaps in Literature

The literature reviewed as they relate to the topic of discourse, covers several themes such as stakeholders, Stakeholders' importance, Stakeholder classification, stakeholder Management, stakeholder's relationship management and factors influencing stakeholder management, barriers of stakeholder management. However, there is a deficiency of literatures on an in-depth qualitative

research to determine and assess factors to achieve the evaluation of the influence of stakeholder management on construction projects delivery in Abuja, Nigeria. Also, not all factors have been carefully assessed concerning internal stakeholder management. This has created a gap in literature. Indeed, it is the existent gap that the research attempts to fill by contributing to the scarce literatures.

CHAPTER THREE

3.0 RESEARCH METHODOLOGY

3.1 Research Design

The study assesses the impact of stakeholder management on construction projects delivery in Abuja. To facilitate attaining the aim and the objectives of this study, the qualitative and quantitative approaches (mixed methods) were utilized in an integral way to address all parts of the study which would have ordinarily not been enough tended to by both of the methods in the event that it was utilized alone in the investigation. Various grounds are being put forward for utilizing mixed strategies methodology in research, some are:

i. Converging the information derived towards acquiring a union among qualitative and quantitative techniques, to coordinate as well as interface qualitative and quantitative information.

ii. As provision for utilizing the outcomes from qualitative information as well as quantitative information next to each other to supplement or build up one another in light of the fact that one source might be deficient,

iii. In situations whereby it is important to sum up investigative discoveries,

iv. In situations whereby it is important to clarify preliminary outcomes (Creswell, 2009; Creswell & Clark, 2011).

By utilizing the mixed methodology, the advantages of every technique can compensate for the shortcomings of one another. Mixed technique approach was embraced via semi-structured interview and questionnaire survey. The qualitative method was applied to collect primary data from construction experts in Abuja on methods of stakeholder management (SM), critical success factors (CSFs) affecting SM, barriers to SM and strategies to manage stakeholder's disputes. A questionnaire was also used to obtain thoughts of experts on various techniques and tools used for stakeholder management and barriers to stakeholder management and critical success factors influencing SM. This implies that objectives 1 to 4 were examined by merging both qualitative and quantitative methods.

3.2 Target Population

Research population is the collection of components to which the researcher plans to make a conclusion. Population is the whole group from which a statistical sample is derived. The target population for this study comprises of the experts in consulting firms in the construction field namely architects, civil engineers, quantity surveyors and project managers that are practicing in Federal Capital Territory, Abuja. The population of this professional in the study area was derived from online directories of each professional bodies in Abuja, comprise of :268 quantity surveyors , 352 Architects , 248 project managers (and builders) ,and 44 civil engineers .

From this population thirty construction experts were selected purposively based on their expertise and their participations in project management for the interview purpose. The 30 experts interviewed were 18 Quantity Surveyors, 7 Architects, 3 Civil Engineers and 2 Project Managers. Similarly, professionals that filled the questionnaire were randomly selected.

3.3 Sampling Frame

This is a part of the target population that is attainable (typically a list with data and statistics) from which a sample can be derived (Loke, 2013). For this study, the sampling frame constitutes the register of construction professionals that are located and operating within Abuja.

3.4 Sample Size

A sample size is the amount of information and figures that are really chosen from the total population (Morgan & Krejcie, 1970).

For resolve of this study, the sample frame is sub-divided containing the following number each; Architect, quantity surveyors, construction managers, engineers, project managers making up a total of 270.

According to Krejcie and Morgan (1970)

$$S = X^2 NP(1-P) \div d^2(N-1) + X^2 P(1-P) \quad \text{..... (3.1)}$$

Where;

s = sample size

X = based on confidence level 1.96 for 95% confidence was applied in this research work

d = Precision anticipated, stated as a decimal (i.e. 0.05 for 5% adopted for this research work

P = Estimated variance in Population as a decimal (i.e. 0.5 used)

N= total number of population, 912

$$S = \frac{1.96^2 \times 912 \times 0.5 \times (1-0.5)}{}$$

$$(0.05^2 \times (912 - 1) + 1.96^2 \times 0.5 \times (1-0.5))$$

$$= \frac{875.8848}{(2.2775 + 0.9604)}$$

$$S= \frac{875.8848}{3.2379} = 270.51$$

Based on this analysis 270 questionnaires were self- administered to construction practitioners in the study area. A total of 69 questionnaires were retrieved out of the 270 administered. The 69 returned questionnaires represents an effective response rate of 25.56%. A response rate of 10% is usually expected with questionnaire surveys (Hansen-Addy, 2013)

3.5 Sampling Techniques

Sampling refers to the way toward picking out a subsection of a populace with the end goal of analysis. Probabilistic and non- probabilistic were adopted in this study. Purposive sampling was utilized for this study, which can be classified under non-probabilistic sampling method for selecting experts interviewed. In purposive sampling, an example is picked dependent on the researcher's information about the populace and the actual research. The study members are picked dependent on the research's motivation. Expert sampling was utilized to establish the thoughts or appraisal of individuals with a serious level of information about the research area. Sampled participants were chosen based on their insight, connections and mastery in regards to a study's subject. Random sampling is utilized to ensure that every individual or thing regarded for the study has an equivalent chance to be picked as a component of the gathering to be contemplated. Information gathered using these methods were illustrative of the populace and were dependable.

3.6 Data Collection and Procedure

Primary and secondary information have been gathered to accomplish this research's targets. The primary information was gotten through field study that utilised a semi-structured interview, while secondary data was collected through questionnaire administered to the construction professionals on site. Both the interview and questionnaire consisted of four segments.

For the interview, the preliminary segment was designed to acquire individual data of the interviewees ranging from academic qualification to job experience to professional qualification. Apart from the preliminary segment, the barriers influencing SM, strategies in managing stakeholders' disputes', critical success factors in SM and methods and tools of SM utilized.

3.6.1 Qualitative approach

Semi-structured interviews were used to gather primary data from a selection of industry experts in Abuja to analyse barriers to SM and to examine the factors influencing stakeholder management successful delivery of projects.

In order to attain a comprehensive discernment of these two components, one-on-one interviews were organised and carried out. A series of pre-planned questions used for the interview were formulated from the reviewed literature on the barriers, critical success factors of SM, tools and techniques used for SM and on strategies to manage stakeholder from disputes. Comprehensive responses and reactions were gotten as the technique permitted the respondents to expound on the subject. The interview questions were semi-structured thereby assisting with restricting the limit of conversation in the same light permitting straightforwardness as well as giving a complete comprehension of the answers. The interview contains a comprehensive list with 11 questions ranging from individual data to stakeholder management practices.

3.7 Questionnaire Design

The questionnaires outlined for the purpose of this research comprised of four sections, A to D. The section A of the questionnaire was designed to attain the general credentials of the responders via enquiring about some basic background data so as to verify the value of the information conveyed as well as accessibility in lieu of analysis, review and evaluation. This consists of years of job expertise, profession, and highest educational degree acquired by the responder.

The section B relates to the barriers to stakeholder management. In section C, responders were asked to rate CSFs to SM. Section D was provided for the respondents to rate certain tools and techniques for SM. In each of these sections from B to D, questions were inquired on a 5-point Likert scale.

3.8 Pilot Study

Before distribution of questionnaires, a pilot study was conducted. Three project managers were incited to respond to the initial questionnaire. The purpose of the pilot study was to pre-test the appropriateness and unambiguousness of the questionnaire. There were no unfavourable remarks proposed, therefore the finalised questionnaire was equivalent to the preliminary version.

3.9 Method of Data Analysis

For the questionnaire survey, descriptive analysis that includes RII, means score and frequency were calculated and inferential analysis using statistical package for social sciences (SPSS v21) as well as Microsoft Excel, 2016 The mean score values and RII values were calculated thus:

$$\text{Mean Score} = \frac{\textit{ranking x no who chose ranking}}{\textit{Total no of respondents}} \quad \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots \quad (3.2)$$

$$\text{Relative Important Index (RII)} = \frac{\sum P_i U_i}{}$$

$$A \times N \qquad \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots (3.3)$$

Where;

P_i = respondent rating of factors,

U_i = Number of respondents placing identical weighting/rating on factor

A = Maximum point on the likert scale (5 under this circumstance)

N = Sample size.

When ranking the RII rates, the element having the maximum RII value is ranked 1st, it proceeds according to this sequence until the least element. As stated by Mbamali (2012), RII rates are construed as thus:

RII<0.60: Infers element has minimal rating.

0.60≤ RII ≤ 0.8: Infers element has top ranking.

RII ≥ 0.80: Infers element has really high ranking.

The respondents' assessments were analyzed to attain their RII values via the formula

$$RII = \frac{5n1 + 4n2 + 3n3 + 2n4 + 1n5}{5N} \qquad \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots (3.4)$$

Where n1 = frequency of respondent for very high, n2 = frequency of respondents for high, n3 = frequency of respondent for moderate, n4 = frequency of respondents for low, while n5 = frequency of respondent for not relevant.

The interview (qualitative data) collected was analysed thus:

Content analysis was utilized for gathering and sorting out data in a normalized arrangement to make derivations about the attributes and importance of literature and other recorded material. Content analysis is utilized in this research due to its attention on human correspondence. Content

analysis offers applicable appropriateness and importance for research which is fitting for dissecting interview outcomes. (Forsman, 2017)

Coding was used to link and relate factors found within the reactions given. The strategy of this study was to assemble information from interviews, investigate the findings and generate a guideline of techniques that can be utilized to oversee construction projects in Abuja. In coding, a lot of text information from the interview results were assembled into an effective number of groupings that address comparable implications.

Qualitative content analysis is far from only checking words and expressions, but in addition inspects language strongly to characterize a lot of text information from the interview results into an effective number of classes that address comparable implications (Forsman,2017)

CHAPTER FOUR

4.0 RESULTS AND DISCUSSION

Data was obtained through both the questionnaire and interview survey. The analysis was carried out individually thus:

4.1 Qualitative Analysis

4.1.1 Demographic information of the respondents

Table 4.1 and fig 4.1 show the subtleties of interviewees' responses for the research. By far most of respondents were quantity surveyors, having a 60% presence with 23.3% being architects, 10% civil engineers. In addition, 6.7 % were project managers. All the experts interviewed had more than five years' working experience with construction, with 71% of architects, 67% of structural engineers and 55.6% of quantity surveyors having more than 10 years' expertise with the construction industry. This can be ascribed to the point that it requires substantial amount years to acquire sufficient expertise as well as a decent standing which would empower an individual to consult or attempt projects with high demands. Relating to the level of education, 43% of architects were bachelor's degree holders whereas 57% were master degree holders, 100% of civil engineers were bachelor degree holders, 50% of project managers had bachelor's degrees and the other 50

% had masters degrees, 61% of quantity surveyors were bachelor's degree holders while the other 39% were bachelor's degree holders. Response rate shown thus:

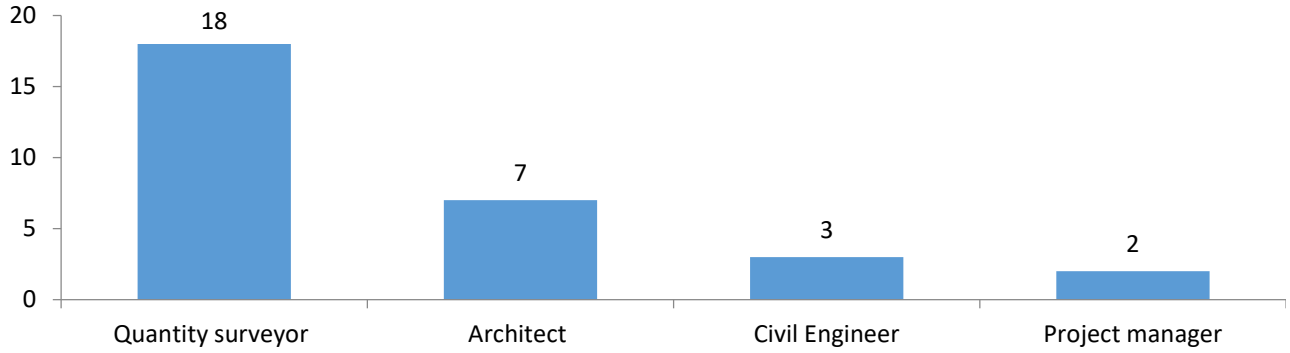

Fig 4.1 Demographic characteristics of Interviewees

30 respondents interviewed were as follows: 18 quantity surveyors (QS1-18), 7 Architects (AR1-7), 3 civil engineers (CE1-3), 2 Project Managers (PM 1-2).

Table 4.1: Demographic characteristics of Interviewees

s/n	Interviewee code	Designation	Year of experience	Educational qualification
1	QS1	Quantity surveyor	12	B.Sc
2	QS2	Quantity surveyor	20	M.Tech
3	QS3	Quantity surveyor	12	M.Sc
4	QS4	Quantity surveyor	5	B.Tech
5	QS5	Quantity surveyor	8	B.Tech
6	QS6	Quantity surveyor	20	M.Sc
7	QS7	Quantity surveyor	11	B.Tech
8	QS8	Quantity surveyor	12	M.Tech
9	QS9	Quantity surveyor	6	B.Sc
10	QS10	Quantity surveyor	5	B.Sc

11	QS11	Quantity surveyor	12	M.Sc
12	QS12	Quantity surveyor	25	M.Sc
13	QS13	Quantity surveyor	14	M.Tech
14	QS14	Quantity surveyor	7	B.Sc
15	QS15	Quantity surveyor	8	M.Sc
16	QS16	Quantity surveyor	5	M.Sc
17	QS17	Quantity surveyor	5	B.Sc
18	QS18	Quantity surveyor	17	M.Sc
19	AR1	Architect	7	M.Tech
20	AR2	Architect	10	M.Sc
21	AR3	Architect	12	M.Sc
22	AR4	Architect	5	B.Sc
23	AR5	Architect	11	M.Tech
24	AR6	Architect	19	M.Sc
25	AR7	Architect	25	M.Tech
26	CE1	Civil Engineer	6	B.Tech
27	CE2	Civil Engineer	10	B.Sc
28	CE3	Civil Engineer	11	B.Sc
29	PM1	Project Manager	8	M.Sc
30	PM2	Project Manager	5	B.Sc

4.1.2. Barriers Affecting Stakeholder Management

Table 4.2 presents different barriers and factors mentioned by the interviewees in their process of discussing the topic. Nine interviewees(QS1,QS15,AR2,AR7,PM1,QS6,QS17,AR1,AR4) stated 3 barriers each. 18 interviewees (QS2-5, QS7-14,QS16, AR3,5,6, CE3, PM2) mentioned 2 barriers each while 3 interviewees(QS18,CE 1, CE 2) stated only one barrier each. A total of 66 responses where gotten; only 25 factors were derived due to repetition of some variables in their discussion by respondents.

Table 4.2: Barriers Affecting Stakeholder Management

S/No	Interviewee code	Designation	Barriers mentioned
1	QS1	Quantity surveyor	1. Delay in payment 2. Lack of proper stakeholder management procedure 3. partial stakeholder involvement
2	QS2	Quantity surveyor	1. Cost of materials delivery 2. Variation in contract form
3	QS3	Quantity surveyor	1. False and incorrect information given to stakeholders 2. Poor knowledge of stakeholder management
4	QS4	Quantity surveyor	1. Lack of Human resources training 2. Lack of corporation from client
5	QS5	Quantity surveyor	1. Time constraints 2. Inconsistency in allocating stakeholder roles(Swapping roles within stakeholders)
6	QS6	Quantity surveyor	1. Lack of proper conflict resolution techniques 2. Lack of proper stakeholder management procedure 3. Lack of corporation from client
7	QS7	Quantity surveyor	1. Additional works 2. Lack of proper stakeholder management procedure
8	QS8	Quantity surveyor	1. Lack of proper stakeholder management procedure 2. Disagreements amongst stakeholders
9	QS9	Quantity surveyor	1. Poor knowledge of stakeholder management 2. False and incorrect information given to stakeholders
10	QS10	Quantity surveyor	1. Misinterpretation of stakeholder participations

			2. Unqualified personnel tasked with the role of stakeholder management
11	QS11	Quantity surveyor	1. Lack of proper conflict resolution techniques 2. Lack of corporation within stakeholders
12	QS12	Quantity surveyor	1. Unqualified personnel tasked with the role of stakeholder management 2. Poor knowledge of stakeholder management
13	QS13	Quantity surveyor	1. Unqualified personnel tasked with the role of stakeholder 2. Delay in payment
14	QS14	Quantity surveyor	1. Location of construction project 2. Clients interfering with stakeholder management process
15	QS15	Quantity surveyor	1. Unfair treatment of stakeholders 2. Cultural differences 3. Corruption
16	QS16	Quantity surveyor	1. Cultural differences 2. Poor knowledge of stakeholder management
17	QS17	Quantity surveyor	1. Lack of consequent stakeholders' meeting 2. Inconsistency in role allocation(swapping roles within stakeholders) 3. Too many stakeholders claiming seniority
18	QS18	Quantity surveyor	1. Poor knowledge of stakeholder management
19	AR1	Architect	1. False and incorrect information given to stakeholders 2. Lack of corporation within stakeholders 3. Corruption
20	AR2	Architect	1. Lack of Human resources training 2. Corruption 3. Time constraints
21	AR3	Architect	1. preferential treatment amongst stakeholder 2. Lack of corporation within stakeholders
22	AR4	Architect	1. Disagreements amongst stakeholders 2. partial stakeholder involvement 3. Too many stakeholders claiming seniority
23	AR5	Architect	1. Too many stakeholders involved in same project 2. Too many stakeholders claiming seniority
24	AR6	Architect	1. Unfair treatment of stakeholders 2. Too many stakeholders involved in same project
25	AR7	Architect	1. Lack of proper stakeholder management procedure 2. Poor knowledge of stakeholder management 3. Location of construction project

26	CE1	Civil Engineer	1. False and incorrect information given to stakeholders
27	CE2	Civil Engineer	1. Lack of consequent stakeholders' meeting
28	CE3	Civil Engineer	1. Lack of consequent stakeholders' meeting 2. Additional works
29	PM1	Project Manager	1. Too many stakeholders claiming seniority 2. partial stakeholder involvement 3. Cultural differences
30	PM2	Project Manager	1. Lack of corporation within stakeholders 2. Lack of corporation from client

The study revealed that the lack of proper stakeholder management procedure is an immensely cited barrier to stakeholder management as well as Poor knowledge of stakeholder management. 5 amongst the 30 professionals that were interviewed pointed out these two factors as affecting the success of stakeholder management. Ranked as the following prominent barriers are lack of consequent stakeholders' meeting, false and incorrect information given to stakeholders, lack if corporation within stakeholders, and too many stakeholders claiming seniority with 4 mentions from the 30 respondents. Ranking third were corruption, cultural differences, lack of corporation from clients, unqualified personnel tasked with SM and partial involvement of stakeholders which were cited by 3 responders each. Fourthly, delay of payment, unfair treatment of stakeholders, additional works, time constraints, location of construction project, lack of proper HR training, inconsistency in role allocation, misinterpretation of stakeholder participation, disagreements amongst stakeholders, too many stakeholders involved in managing same project and lack of proper conflict resolution techniques were ranked all with 2 mentions each. The least ranked were Variation, preferential treatment within stakeholders and clients interfering with SM process having been mentioned just once individually.

Lack of proper stakeholder management procedures:

The vast majority of the interviewees that discussed this spoke about SM methods such as stakeholder identification and stakeholder engagement. Amongst the architects that were questioned, one of them mentioned lack of proper stakeholder analysing and monitoring as limitations. The respondents, however, confirmed that inappropriate stakeholder identification, engagement and analysis impact the SM procedure through being compelled to reevaluate, appraise and reallocate interests, roles and duties. Likewise, the respondents maintained the viewpoints that conditional to the essential strategy applied to manage stakeholders, the procedure can be extremely straightforward and appropriately accomplished. Taylor (2015) portrayed stakeholder engagement as collecting and sharing data, managing concerns and complaints from stakeholders, estimating their effect and significance, conveying to and fro through different strategies, and more, plainly featured its significance to accomplishing effective management of stakeholders. To guarantee an effective project, project group should distinguish in addition connect every partner, seeing that majority of projects fizzle after execution not because of improper execution but instead due to poor stakeholder consultation and engagement (Buertey *et al*., 2016)

Poor knowledge of stakeholder management:

Five interviewees additionally referenced poor knowledge of SM as a significant roadblock for effective SM. Interviewees declared that SM cycle can't be improved if the professional in charge of the project doesn't comprehend, can't effectively do it or isn't prepared to accept it. One of the quantity surveyors underscored "It is beyond the realm of imagination to expect to do what you don't have the foggiest idea how to do! It's truly basic; you can't effectively practice what you don't have mastery in". Different interviewees were of the position that it is vital that construction experts like architects, quantity surveyors and structural engineers that employ project

management should have gone through proficient, extensive and legitimate tutelage to execute the work viably. Since doing the cycle of SM without sufficient information may fill in as a detour to the interaction subsequently blocking the accomplishment of the task. The interviewees concurred that lack of knowledge on SM influences project association, project advancement, causes difficulties, may have legitimate ramifications and has results on the whole SM measure. EyiahBotwe1 *et al* (2015) highlighted PMs' poor knowledge as a key vital barrier affecting the effectiveness of stakeholder manager. Zarewa (2019) suggests that Project Manager's poor knowledge of SM, has unswerving connection with value of SM in any project outcome because a project manager is not able to efficiently manage stakeholders lacking appropriate understanding and expertise.

False and incomplete information

Apart from affecting effective stakeholder management, false and incorrect information given to stakeholders could also have other consequences like- unfavorable results that can be conflicting to the mission of the project. As it can be expected in any project information that is not correct, delayed or doesn't correlate can become a critical barrier to effective stakeholder management. One of the quantity surveyors interviewed stated that "it is important to ensure confirmation of information to enable smooth operations." An architect was of the opinion that each stage of construction should have the appropriate communication tactic towards achieving success in project delivery. A project can undergo inadequate SM and difficulties in its delivery if information provided for its stakeholders was inaccurate, well-timed or suitable. (Chinyio & Omolaiye, 2015). Fig 4.2 shows lack of proper stakeholder management procedures as a top barrier which was mentioned by 5 interviewees (AR 7, QS1, 6, 7, 8). Another high ranking barrier mentioned is poor knowledge of stakeholder management with equally 5 mentions (AR7, QS3, 9, 12, QS18). Other

high ranking barriers include lack of consequent stakeholders' meeting, false and incorrect information given to stakeholders, lack of corporation within stakeholders, too many stakeholders claiming seniority ranking second with 4 mentions each. The least ranking barriers are- variation in contract form, preferential treatment amongst stakeholder, clients interfering with stakeholder management process being mentioned by only QS2, AR3, QS14 respectively.

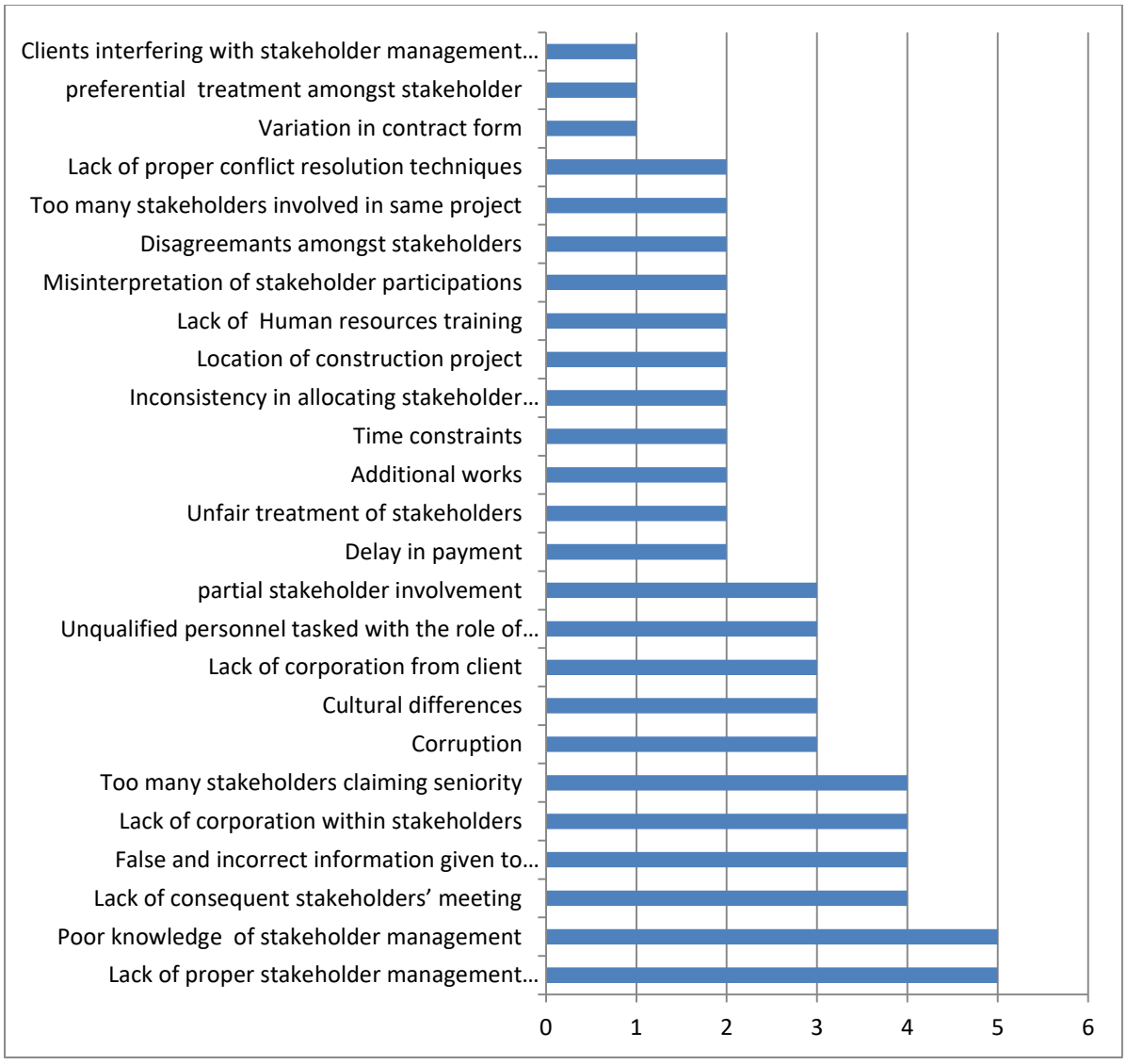

Fig 4.2 Barriers to SM

4.1.3 Critical Success Factors influencing SM

Every respondent was approached to state in their utmost judgment and expertise what they thought were the best and significant critical success factors to effective SM. Every one of them stated one critical success factor.

PM1, PM2, CE1, AR5, QS11, QS17 all asserted that:

"Effective communication is a critical factor for successful stakeholder management. A proper and efficient communication system goes a long way for a successful SM process. "

AR2, 4, QS6, 13 related that:

"Understanding and working with stakeholders' needs is a most effective critical success factor"

QS7, 16, AR1, 7 stated that:

"Proper identification of stakeholder roles makes achieving a successful stakeholder management process more effective"

QS1, 8, 18 explained that:

"Project coordination creates a very efficient working environment thereby making stakeholder management process more operative"

QS2, 4, 5 stated that:

"Proper Engagement of stakeholders in all construction activities is a critical factor to successful stakeholder management"

Other Critical Success factors that were mentioned are: Assessing strengths and weaknesses of stakeholders(QS3,12), Analysing conflicts amongst stakeholders(CE3) ,A competent Project team(QS9), Clear definition of project mission(QS10), Clear definition of construction

ethics(QS15), Abiding to construction ethics(AR6), Supportive attitude towards stakeholders(CE2) ,Promoting good relationship(QS14).

Table 4.3 Critical Success Factors Influencing SM

S/no	Interviewee code	Designation	Critical Success Factors Mentioned
1	QS1	Quantity surveyor	Project coordination
2	QS2	Quantity surveyor	Proper Engagement of stakeholders
3	QS3	Quantity surveyor	Assessing strengths and weaknesses of stakeholders
4	QS4	Quantity surveyor	Proper Engagement of stakeholders
5	QS5	Quantity surveyor	Proper Engagement of stakeholders
6	QS6	Quantity surveyor	Understanding and working with stakeholders' needs
7	QS7	Quantity surveyor	Proper identification of stakeholder roles
8	QS8	Quantity surveyor	Project coordination
9	QS9	Quantity surveyor	A competent Project team
10	QS10	Quantity surveyor	Clear definition of project mission
11	QS11	Quantity surveyor	Effective communication

12	QS12	Quantity surveyor	Assessing strengths and weaknesses of stakeholders
13	QS13	Quantity surveyor	Understanding and working with stakeholders' needs
14	QS14	Quantity surveyor	Promoting good relationship
15	QS15	Quantity surveyor	Clear definition of construction ethics
16	QS16	Quantity surveyor	Proper identification of stakeholder roles
17	QS17	Quantity surveyor	Effective communication
18	QS18	Quantity surveyor	Project coordination
19	AR1	Architect	Proper identification of stakeholder roles
20	AR2	Architect	Understanding and working with stakeholders' needs
21	AR3	Architect	Proper Allocation of stakeholder roles
22	AR4	Architect	Understanding and working with stakeholders' needs
23	AR5	Architect	Effective communication
24	AR6	Architect	Abiding to construction ethics
25	AR7	Architect	Proper identification of stakeholder roles

26	CE1	Civil Engineer	Effective Communication
27	CE2	Civil Engineer	Supportive attitude towards stakeholders
28	CE3	Civil Engineer	Analysing conflicts amongst stakeholders
29	PM1	Project Manager	Effective communication
30	PM2	Project Manager	Effective communication

It was found that Effective communication was the most mentioned followed by proper identification of stakeholders and understanding and working with stakeholders' need with 4 mentions each.

Ensuring Effective Communication:

This factor positions most noteworthy among the CSFs stated, the majority of the interviewees concurred that it is significant for correspondence to be successful, genuine, predictable and deliberately executed. One of the project managers mentioned a project she recently just completed which had a consistent communication schedule that was proficiently maintained and insisted "that was one reason things went easily in that specific task". Another PM expressed that "there is need for shared regard among the participants and customers to impact great and valuable communication". Peter (2017) declared that persistent consultation and open correspondence with all stakeholders and parties is one of the means to guarantee that stakeholder teams and individuals are viably overseen and drawn in on the project.

This is an incredibly pivotal critical success factor as communication is crucial for maintaining the commitment, everything being equal. As indicated by Weaver (2007), project managers ought to be profoundly gifted arbitrators and communicators appropriate for overseeing individual

stakeholders' expectations and making a positive culture change within the general association. Bourne (2010) further proposes that viable planning and carrying out the correct explicit communication technique for every one of the project stakeholder(s) is considered as quite possibly the main job the project manager does and can be often tedious.

Proper Identification of Stakeholders:

Another CSF the respondents unanimously stated is the need to guarantee appropriate identification and recognition of participants. One of the quantity surveyors expressed that "the primary inquiry to investigate is-who are the stakeholders? In what way are they categorised? Before actually mentioning stakeholder management." It is important to appropriately distinguish stakeholders. Another quantity surveyor relates that cautiously recognizing and recording the project partners before the beginning of construction work is profoundly significant. A hypothetical design for identifying stakeholders should have affirmation for a participant's capacity to affect the validity of association among other participants and the top priority of the stakeholders' demand so much that a clear identification of the construction stakeholders is achieved (Jepsen & Eskerod, 2009).

Understanding and Working with Stakeholders Needs:

This was another highly mentioned CSF amongst the interviewees. All the interviewees that mentioned this expressed that the construction industry is complex and stakeholder needs are diverse and not all stakeholders have same needs and desires at the end of the day. Therefore it is important to identify those needs, understand the needs and work with the needs in order to ensure effective stakeholder management. Understanding stakeholders' needs creates an easy access to developing effective management. One of the architects stated that "one stakeholder might have solely financial needs while the other is just in need of good services, the process can be quite

challenging but it is very important to know". Yang *et al*. (2009) recognized investigating stakeholders' needs and imperatives to projects as one of the critical success factors to consider in managing stakeholders. Additionally, Olander & Landin, (2008) recognized four variables influencing the effectiveness of SM procedure: Investigation of the participants' responsibilities and necessities remained a prominent factor

Fig 4.3 reveals effective communication had the highest amount of mentions with 6 amongst 30 responses. Positioning next to it were; proper identification of stakeholders and understanding and working with stakeholders' need which were highlighted 4 times each.

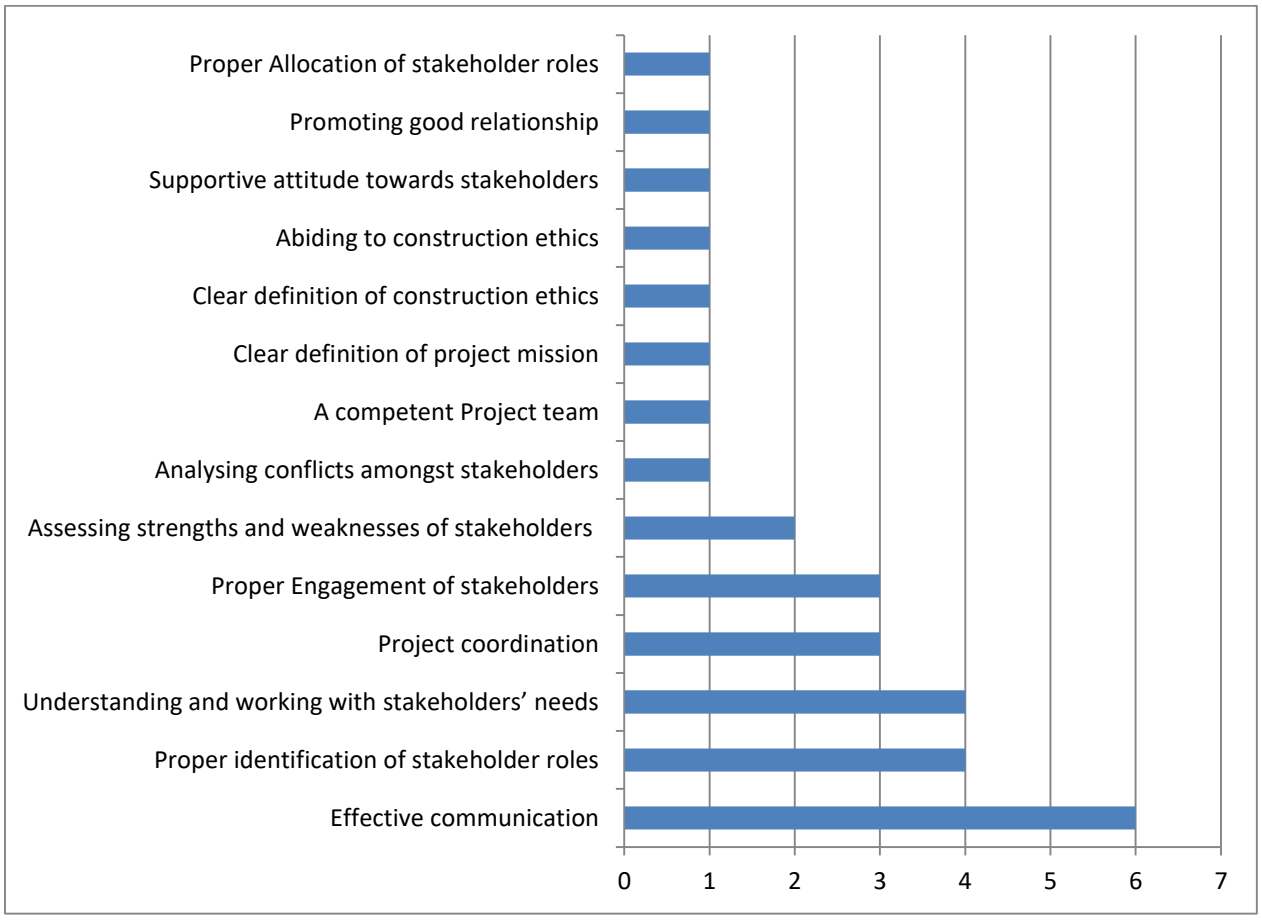

Fig 4.3 Critical Success Factors Influencing SM

4.1.4 Tools and Techniques used in Stakeholder Management

In order to examine the tools/techniques used in stakeholder management, the interviewees were asked to shed some light on the method of stakeholder management being used or that has been used in their most recent projects. The tools mentioned can be seen in table 4.4.

QS1,5,7,10,16,18, AR2,3,5, CE1 insisted that although they have been in projects where stakeholder management has been carried out and they have an outright knowledge of the concept, presently, SM has not been prioritized in their most recent projects.

QS 2, 3, 9, 12, 15, 17, AR4, 7, CE2 inferred that project meetings are usually being conducted as a method of stakeholder management in their most recent projects

QS6, 11, 13, 14, PM1, AR1 all stated that communication planning is being used as a method of stakeholder management in the projects they are working on presently

QS4, 8, CE3 mentioned survey approach (as a means of determining stakeholder interest) as a tool for stakeholder management being implored in their various recent projects.

AR6, PM2 all stated that stakeholder analysis and mapping were used in their most recent work.

The most popular technique amongst the interviewees was project meetings with nine mentions(QS2,3,9,12,15, 17, AR4, AR7, CE2) followed by communication plan mentioned by six interviewees(QS6,QS11,QS13,QS14,AR1,PM1). The two least mentioned were Stakeholder Analysis and Survey Approach. Aside these, ten interviewees stated that no technique was employed which in essence agrees with the top barriers mentioned, that is, lack of proper SM procedure and Lack of knowledge of SM.

Project meetings:

Meetings are being organized in the course of a project either at the beginning stage or during the project continuum in order to determine and analyze different viewpoints of various stakeholders. This method is the most popularly mentioned amongst the interviewees having nine mentions.

One of the respondents stated that “Meetings are being held to hear everyone out and to equally arrive at a common goal”. Molwus (2015) ranked public hearing as the most effective stakeholder technique. Gatherings ought to be held with specialists and the project groups to characterize the necessary commitment level of every stakeholder. This data can be utilized to set up the stakeholder management plan. (Singh, 2015)

Communication plan:

One of the project managers said, “A communication plan is adopted to unite all communication channels in order to make execution of other plans easier”. Other interviewees further emphasized how communication is the foundation on which other stakeholder management techniques thrive. This agrees with the study of Dakas (2014) which states after interviews that; Communication was distinguished by all the delegate of the organizations as the main device that could be utilized in overseeing partners just as advancing connections between the partners. The techniques for communication recognized for every partner in the communications management are used during engaging SM. (Singh, 2015).

Table 4.4: Tools and Techniques used in SM

S/No	Interviewee code	Designation	Techniques
1	QS1	Quantity surveyor	No exact technique was used
2	QS2	Quantity surveyor	Project meetings
3	QS3	Quantity surveyor	Project meetings
4	QS4	Quantity surveyor	Survey approach to determine stakeholder interests
5	QS5	Quantity surveyor	No exact technique was used

6	QS6	Quantity surveyor	communication plan
7	QS7	Quantity surveyor	No exact technique being used
8	QS8	Quantity surveyor	Survey approach to determine stakeholder interests
9	QS9	Quantity surveyor	Project meetings
10	QS10	Quantity surveyor	No exact technique was used
11	QS11	Quantity surveyor	Communication plan
12	QS12	Quantity surveyor	Project meetings
13	QS13	Quantity surveyor	communication plan
14	QS14	Quantity surveyor	communication plan
15	QS15	Quantity surveyor	Project meetings
16	QS16	Quantity surveyor	No exact technique was used
17	QS17	Quantity surveyor	Project meetings
18	QS18	Quantity surveyor	No exact technique was used
19	AR1	Architect	Communication plan
20	AR2	Architect	No exact technique was used
21	AR3	Architect	No exact technique was used
22	AR4	Architect	Project meetings
23	AR5	Architect	No exact technique was used
24	AR6	Architect	Stakeholder analysis and mapping
25	AR7	Architect	Project meetings
26	CE1	Civil Engineer	No exact technique was used
27	CE2	Civil Engineer	Project meetings
28	CE3	Civil Engineer	Survey approach to determine stakeholder interest

29	PM1	Project Manager	Preparation of communication plan
30	PM2	Project Manager	Stakeholder satisfaction approach

Fig 4.4 shows the ranking of each technique mentioned by the interviewees. It can be derived from the figure that one-third of the interviewees did not or have not carried out proper stakeholder management in their most recent project.

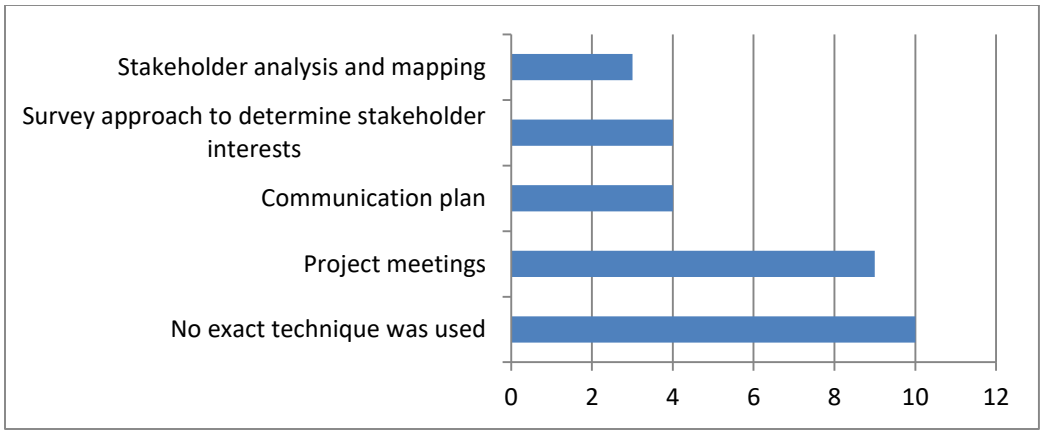

Fig 4.4 Interviewees' Responses to Tools and Techniques Used for SM

4.1.5 Response Strategies to Stakeholders' Disputes

Interviewees were asked to state in their opinion what they thought the most effective response strategies to stakeholder disputes were. Sixteen interviewees mentioned 3 strategies each, while fourteen interviewees mentioned two strategies each. In table 4.5, it can be seen that a total of seventy-six responses were given. Twenty-three strategies were derived due to repetition within interviewees. Seven interviewees (QS1, 3, 16, 18, CE2, 3, AR7) mentioned that it was important to ensure timely dialogue in order to build and ensure trust within stakeholders. Five interviewees (QS7,17 , AR1,5, 6) stated that proper negotiation and mediation was of topmost importance. Another five interviewees (QS2, 17, 18, AR7, PM2) stated that identifying threats and underlying problems were important response strategies to stakeholder disputes. These response strategies are the top three mentioned by the interviewees. At the bottom of the list are : taking account of

stakeholder with higher stakes, encouraging fairness, kind regards, encouraging stakeholders to focus on achieving the goals of the project, emphasizing on needs and expected benefits for clients with just two mentions each.

Table 4.5: Response Strategies to Stakeholders' Disputes

S/No	Interviewee code	Designation	Response Strategies
1	QS1	Quantity surveyor	1. Immediate dialogue to ensure trust 2. Imbibe corporation 3. Objective leadership
2	QS2	Quantity surveyor	1. Identify threats and underlying problems 2. Close monitoring of stakeholders
3	QS3	Quantity surveyor	1. Promoting stability 2. Immediate dialogue to ensure trust 3. Objective leadership
4	QS4	Quantity surveyor	1. Avoid conflicts 2. Kind regards
5	QS5	Quantity surveyor	1. Stern discipline 2. Avoid conflicts 3. Encourage fairness
6	QS6	Quantity surveyor	1. Create room for compromise 2. Promote stability
7	QS7	Quantity surveyor	1. Proper orientation 2. Proper negotiating and mediation 3. Close monitoring of stakeholders
8	QS8	Quantity surveyor	1. One-on-one meetings 2. Encouraging stakeholders to focus on achieving the goals of the project.
9	QS9	Quantity surveyor	1. Taking account of the stakeholder with the higher stake 2. Kind regards 3. One-on-one meetings
10	QS10	Quantity surveyor	1. Arbitration 2. Always lending listening ears
11	QS11	Quantity surveyor	1. Enforcement of rules through experience 2. Stern discipline

12	QS12	Quantity surveyor	1. Persuasion 2. Emphasizing on needs and expected benefits for client
13	QS13	Quantity surveyor	1. Close monitoring of stakeholders 2. Promoting stability 3. Project head using expertise to arrive at final decision
14	QS14	Quantity surveyor	1. Persuasion 2. Motivation
15	QS15	Quantity surveyor	1. Create room for compromise 2. Imbibe corporation 3. One-on-one meetings
16	QS16	Quantity surveyor	1. Persuasion 2. Encouraging fairness 3. Immediate dialogue to ensure trust
17	QS17	Quantity surveyor	1. Motivation 2. Identifying the threat and underlying problem 3. proper negotiating and mediation
18	QS18	Quantity surveyor	1. Identifying the threat and underlying problem 2. Immediate dialogue to ensure trust
19	AR1	Architect	1. Taking account of the stakeholder with the higher stakes 2. Proper negotiating and mediation
20	AR2	Architect	1. Project head using expertise to arrive at final decision 2. Arbitration 3. Stern discipline
21	AR3	Architect	1. Emphasizing on needs and expected benefits for clients 2. Enforcement of rules through experience
22	AR4	Architect	1. Arbitration 2. Proper orientation 3. Imbibe corporation
23	AR5	Architect	1. Encouraging stakeholders to focus on achieving the goals of the project. 2. Proper negotiation and mediation 3. Motivation
24	AR6	Architect	1. Always lend listening ears 2. Proper negotiation and mediation
25	AR7	Architect	1. Identifying the threat and underlying problems 2. Immediate dialogue to ensure trust

			3. Objective leadership
26	CE1	Civil Engineer	1. Always lend listening ears 2. Proper orientation
27	CE2	Civil Engineer	1. Creating room for compromise 2. Immediate dialogue to ensure trust 3. Enforcement of rules through experience
28	CE3	Civil Engineer	1. Immediate dialogue to ensure trust 2. Always lending listening ears
29	PM1	Project Manager	1. One-on-one meetings 2. Immediate dialogue to ensure trust
30	PM2	Project Manager	1. Persuasion 2. Avoid conflicts

4.2 Quantitative Analysis

4.2.1 Demographic information of the respondents

The results in Table 4.5 shows the background information of the respondents, indicating that majority of the sampled respondents were quantity surveyors (55%), followed by architects (29%). All respondents have above 5 years' experience, 45% have 10- 15 years' experience while 35% have 15 years and above experience. This suggests that these respondents have impressive quantities of years practicing in the construction climate, consequently, ought to have the correct responses to offer the research questions dependent on expertise.

In terms of level of education, 64% of the responders hold the majority with M.Tech/M.Sc. 23% and 13% have B.Tech and PhD respectively.

Based on the result on the background of respondents, it can hence be presumed that the populace for the investigation are exceptional scholastically and have the imperative experience to give sensible knowledge regarding the matter of this research.

Table 4.6: Demographic Characteristics of Questionnaire Respondents

Category	Classification	Frequency	Percentage
PROFESSION	Architect	20	29%
	Quantity Surveying	38	55%
	Project Manager	11	16%
	TOTAL	**69**	**100.00%**
Years of experience	5 - 10 years	14	20%
	10- 15 years	31	45%
	15 years and above	24	35%
	TOTAL	**69**	**100.00%**
Academic Qualification	B.TECH/B.SC	16	23%
	M.TECH/M.SC	44	64%
	PhD	9	13%
	TOTAL	**69**	**100.00%**

4.3 Data Analysis

4.3.1 Analysis of Barriers to SM

The RII rates were used to rank the barriers in descending order as shown in Table 4.6 which shows that the Relative Importance Index (RII) values range between 0.5188 and 0.8319. Lack of proper stakeholder management procedure ranked highest with 0.8319 RII, followed by Lack of corporation within stakeholders with RII of 0.7884. False and incorrect information given to stakeholders and Poor knowledge of stakeholder management both ranked as third barrier with RII of 0.7768. Preferential treatment amongst stakeholder with RII value of 0.5188 was ranked as the last barrier to SM in Abuja, Nigeria.

Table 4.7 Barriers of SM

BARRIERS	Respondents' Evaluations

	1	2	3	4	5	N	RII	RANK
Lack of proper stakeholder management procedure	0	1	16	23	29	69	0.8319	1
Lack of corporation within stakeholders	0	3	22	20	24	69	0.7884	2
False and incorrect information given to stakeholders	0	1	25	24	19	69	0.7768	3
Poor knowledge of stakeholder management	2	4	14	29	20	69	0.7768	3
Lack of proper conflict resolution techniques	1	0	24	29	15	69	0.7652	4
Disagreements amongst stakeholders	0	3	24	25	17	69	0.7623	5
Additional works	1	5	25	20	18	69	0.7420	6
Corruption	4	0	28	17	20	69	0.7420	6
Clients interfering with stakeholder management process	0	5	29	19	16	69	0.7333	7
Unfair treatment of stakeholders	2	8	21	19	19	69	0.7304	8
Lack of consequent stakeholders' meeting	1	2	23	19	20	65	0.7246	9

Time constraints	0	9	26	19	15	69	0.7159	10
Lack of corporation from client	4	11	15	21	18	69	0.7101	11
Unqualified personnel tasked with the role of stakeholder management	5	13	10	22	19	69	0.7072	12
partial stakeholder involvement	1	11	20	24	13	69	0.7072	12
Too many stakeholders claiming seniority	6	7	20	20	16	69	0.6956	13
Variation in contract form	7	3	23	23	13	69	0.6927	14
Delay in payment	7	14	20	10	18	69	0.6521	15
Lack of Human resources training	1	19	29	12	8	69	0.6202	16
Location of construction project	10	6	28	19	6	69	0.6144	17
Inconsistency in allocating stakeholder roles(Swapping roles within stakeholders)	9	17	20	10	13	69	0.6028	18
Misinterpretation of stakeholder participations	9	17	22	8	13	69	0.5971	19
Cultural differences	11	10	24	22	2	69	0.5826	20

Too many stakeholders involved in same project	12	17	18	12	10	69	0.5739	21
preferential treatment amongst stakeholder	6	9	20		19	54	0.5188	22

4.3.2. Analysis of Critical Success Factors influencing SM Obtained through Questionnaire

The next section of the questionnaire contained CSFs obtained from interviews and were presented to the respondents for ranking based on their influence to project delivery. Table 4.7 highlights that the Relative Importance Index (RII) values span between 0.6231 and 0.8637. A competent project team ranked highest with 0.8637 as RII, followed by proper identification of stakeholder roles with RII of 0.8608. Effective communication ranked as third barrier with RII of 0.8376. Clear definition of construction ethics with RII value of 0.6231 was ranked as the last CSF to SM in Abuja, Nigeria.

Table 4.8 Critical Success Factors influencing SM

CSFs	**Respondents' Evaluation**					**N**	**RII**	**RANK**
	1	**2**	**3**	**4**	**5**			
A competent Project team	0	0	12	23	34	69	0.8637	1
Proper identification of stakeholder roles	0	0	12	24	33	69	0.8608	2
Effective communication	0	0	16	24	29	69	0.8376	3

Proper Engagement of stakeholders	0	0	15	28	26	69	0.8318	4
Analyzing conflicts amongst stakeholders	0	0	17	27	25	69	0.8231	5
Understanding and working with stakeholders' needs	0	0	23	22	24	69	0.8028	6
Proper Allocation of stakeholder roles	2	10	12	25	20	69	0.7478	7
Assessing strengths and weaknesses of stakeholders	4	4	18	26	17	69	0.7391	8
Project coordination	2	0	28	27	12	69	0.7362	9
Clear definition of project mission	5	4	17	29	14	69	0.7246	10
Supportive attitude towards stakeholders	3	12	12	26	16	69	0.7159	11
Promoting good relationship	5	14	15	16	19	69	0.6869	12
Abiding to construction ethics	1	12	23	24	9	69	0.6811	13
Clear definition of construction ethics	8	10	25	18	8	69	0.6231	14

4.3.3 Tools and Techniques used in SM

The forth Section of the questionnaire consists of tools and techniques mentioned in the interviews. The respondents were asked to rank them based on their opinion of the most effective and

important. The RII values were used to rank the barriers in descending order as shown in Table 4.9 which shows that the Relative Importance Index (RII) values span from 0.7623 to 0.8724. Stakeholder analysis and mapping ranked highest with 0.8724 as RII, followed by Communication plan with RII of 0.7971. Ranking at number 3 is project meetings with RII of 0.7797. Survey approach to determine stakeholder interests with RII value of 0.7623 was ranked as the least effective technique amongst the 4 tools and techniques of SM.

Table 4.9 Tools and Techniques used in SM

Tools and Techniques	Respondents' Evaluation					N	RII	RANK
	1	2	3	4	5			
Stakeholder analysis and mapping	0	0	12	20	37	69	0.8724	1
Communication plan	0	1	24	19	25	69	0.7971	2
Project meetings	0	2	22	26	19	69	0.7797	3
Survey approach to determine stakeholder interests	0	0	27	28	14	69	0.7623	4

4.4 Discussion of Findings

The research work investigated barriers of SM in which 25 were mentioned in interviews. Further analyses on these barriers were made using quantitative analyses. The survey shows that Lack of proper stakeholder management procedure, Lack of corporation within stakeholders, False and incorrect information given to stakeholders and Poor knowledge of stakeholder management where the most impactful barriers to stakeholder management. While, preferential treatment

amongst stakeholder appeared to be the least impactful barrier. This coincidentally agrees with the interview rankings which had poor knowledge of SM, lack of proper SM procedures and false and incorrect information given to stakeholders as the topmost ranking barriers.it is safe to say that these barriers have been further reinforced as the most impactful barriers of SM. Fig 4.5 shows the comparison of each barrier by their percentage ranking.

Respondents further went on to rank the highest critical success factors as: A competent Project team, Proper identification of stakeholder roles, Effective communication. There's a slight difference here compared to the interview results as a competent project team was only mentioned by one interviewee, which made it rank low in the qualitative analysis. However after further scrutiny with the survey approach, it is considered the most effective and influential CSF in SM. The others- effective communication and proper identification of stakeholder roles maintained their top spots as the most influential CSFs. Fig 4.6 shows a comparison of each factors by their percentage ranking in both interview and questionnaire.

- Responses from interviews

- Responses from questionnaires

Fig 4.5 Comparison of Barriers from interview and questionnaire

- Responses from interviews

- Responses from questionnaires

Fig 4.6 Comparison of CSFs from interview and questionnaire

The average value of the interview and questionnaire values is determined in order to reach a final research verdict. Fig 4.7 shows the final ranking of the barriers affecting stakeholder management after combining both results from the interview and the questionnaire. Lack of proper stakeholder management procedure, Poor knowledge of stakeholder management, Lack of corporation within stakeholders emerged top three, while Misinterpretation of stakeholder participations, too many stakeholders involved in same project, preferential treatment amongst stakeholders emerged bottom three.

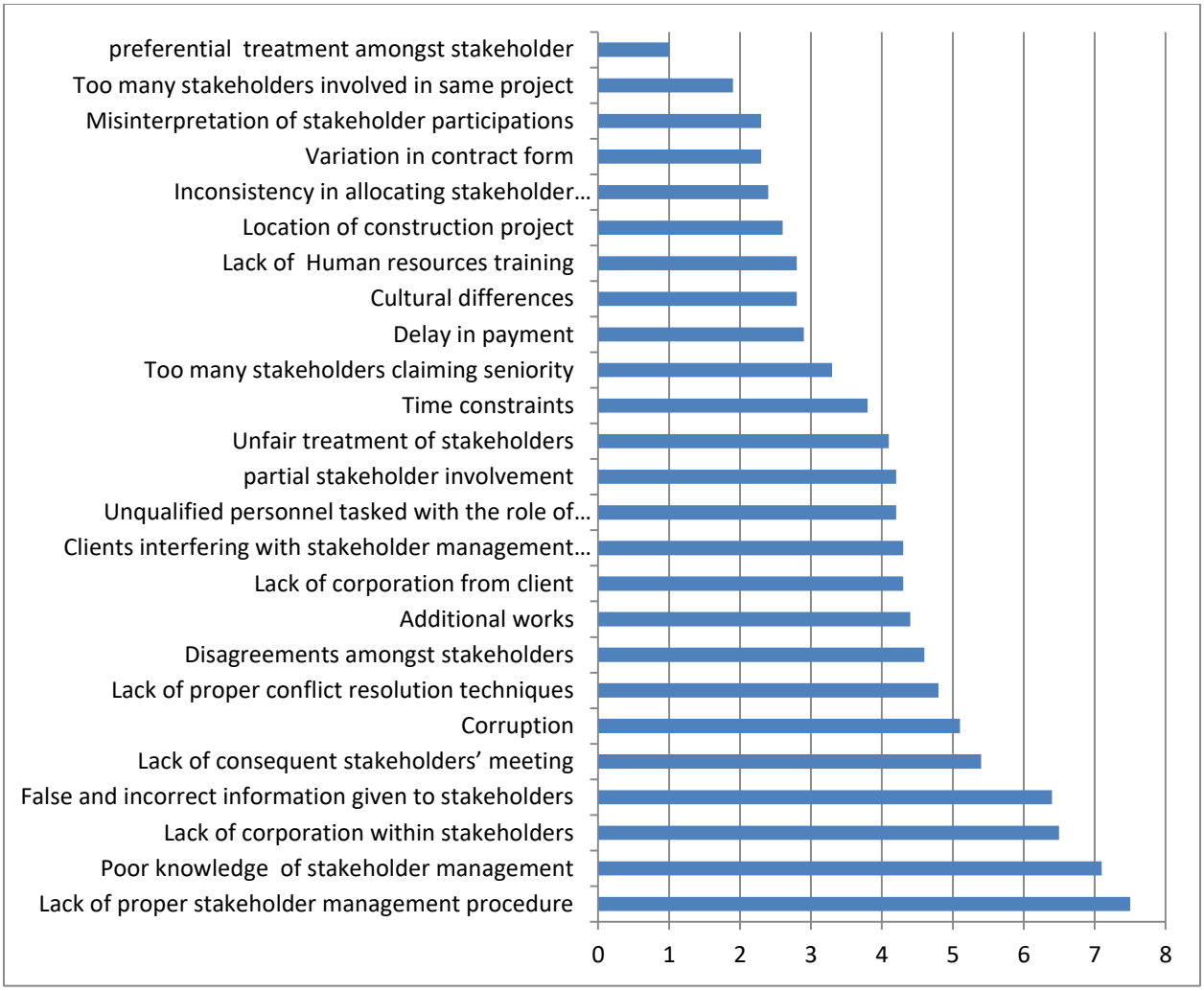

Fig 4.7 Barriers to SM

Fig 4.8 shows the final ranking of the Critical success factors influencing stakeholder management after combining both results from the interview and the questionnaire. Effective communication, Proper identification of stakeholder roles, Understanding and working with stakeholders' needs are ranked in the top three. Promoting good relationship, Clear definition of construction ethics, Abiding to construction ethics ranked in the bottom three.

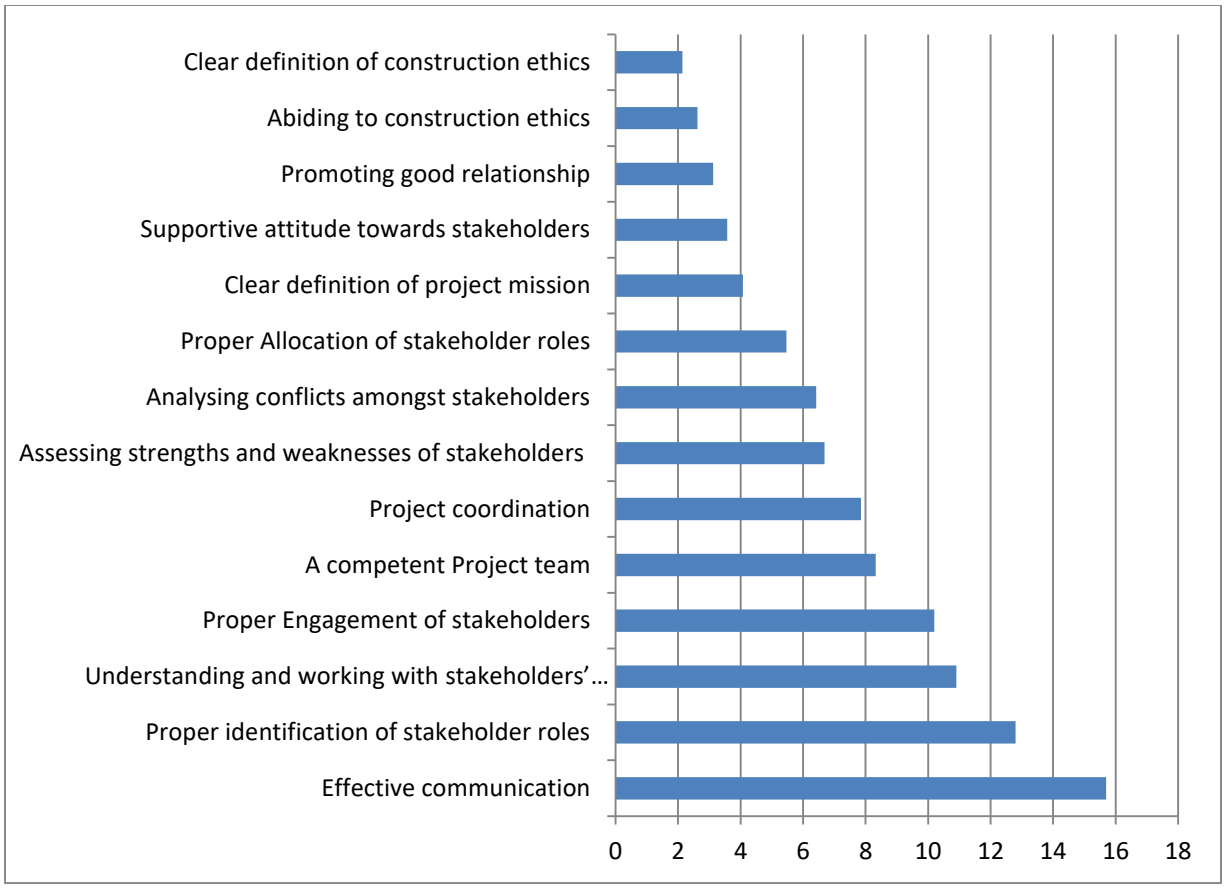

Fig 4.8 CSFs influencing SM

To further examine the tools and techniques used for stakeholder management, the last section of the questionnaire asked the respondents to rank in their opinion which stakeholder management tool was the most effective. During the interviews, the interviewees were asked to mention the tool they used more previously and frequently. About one third of the interviewees admitted they were not using any particular tool currently while most of the interviewees mentioned project meetings and communication plan. The least mentioned was stakeholder analysis and mapping. However, with further quantitative research being done, though not the most commonly used, stakeholder analysis and mapping was ranked the most effective and efficient tool for stakeholder management. Concerning the strategies for managing stakeholders' disputes, only qualitative research was carried out. It was derived that negotiation is perhaps the most well-known and cheap

way to resolve disputes in construction, whereby the control of the dispute resolution stays with the partners concerned.

Mediation might be seen as an exchange cycle between disagreeing parties completed with the assistance of an unbiased and autonomous outsider.

According to the interviewees dialoguing should be done at the early stages to enable stakeholders find trust in each other. One of the quantity surveyors stated that dialoguing also creates a safe space for all individuals and groups to share ideas and opinions thereby preventing disputes. Guaranteeing progressing and comprehensive exchange with partners generates an environment with trust and takes into consideration quicker identification and resolve to situations as they emerge. To acquire stakeholder trust, as a project manager you should show you are reliable, regard stakeholder's opinions and capacities, and fight the temptation to micromanage (Alexander, 2015).

4.5 Summary of Findings

The key findings of this study are summarized as follows:

i. The main barriers to stakeholder management are Lack of proper stakeholder management procedure and lack of knowledge of SM techniques.
ii. The most prominent critical success factor for SM is effective communication.
iii. The most popular technique for stakeholder management is Project meetings.
iv. The most effective technique for stakeholder management is stakeholder analysis and mapping.
v. The major response strategy to dispute management amongst stakeholders is dialoguing and negotiations.

CHAPTER FIVE

5.0 CONCLUSION, RECOMMENDATION AND AREA FOR FURTHER STUDY

5.1 Conclusion

This research work went ahead to analyse stakeholder management in construction projects in Abuja, Nigeria, intending to enhance the practice of stakeholder management in construction Projects.The study utilized a mixed research approach in other to determine barriers to stakeholder management, critical success factors influencing stakeholder management and to examine the tools and techniques used for stakeholder management. The research work further went on to analyze the response strategies used to manage stakeholder disputes using qualitative research.

Through qualitative and quantitative survey carried out following substantial review of literature from other research works associated with stakeholder management. This research work uncovered the view of the stakeholders on effective SM in development project. This study further disclosed the hindrances that should be handled to guarantee smooth operation of stakeholders in the construction industry. These barriers were further analysed with structured questionnaires. The barriers that were ranked the highest were: Lack of proper stakeholder management procedures, Poor knowledge of stakeholder management and, Lack of corporation within stakeholders. The study likewise examined critical success factors influencing SM, the CSFs were most prominent happened to be: Effective communication, Proper identification of stakeholder roles, Understanding and working with stakeholders' needs. Tools/techniques used for stakeholder management were further examined and it was deduced that the most popular technique used for SM was project meetings while the most effective technique was stakeholder analysis and mapping. The best response strategies to stakeholders' disputes are immediate dialogue to ensure trust, proper negotiation and mediation and identifying the threats and underlying problems.

Despite the informational knowledge and responses concerning the importance of effective SM, the study nonetheless uncovered that no complete suitable acknowledgement of the process of SM still exists as prior presented in related literature.

5.2 Recommendations for the Study

From the discoveries and conclusion, the study makes the accompanying recommendations.

Accordingly suggests that:

i. The necessity to analyze participants in construction projects in Abuja, Nigeria should be over emphasized and the process ought to be consistent and steady and ought to be remembered for all stages of development.

ii. Adequate stakeholder analysis as well as engagement procedures ought to be integrated in overseeing project stakeholders.

iii. Continuous cooperation should be imbibed upon by all stakeholders.

iv. Other development experts executing the SM practice ought to be extremely well prepared simultaneously.

v. Tactical communication ought to be suitably kept up amongst the participants and data as well as updates ought to be appropriately passed across as there ought to be a satisfactory correspondence chain for choices, ideas and grievances

5.3 Contributions to the Knowledge

Deriving out of the outcomes, the ensuing are the contribution of the research to knowledge:

i. The research work has provided a deeper understanding of stakeholder management in Abuja, Nigeria.
ii. The study has shed light into the techniques used for stakeholder management in Abuja, Nigeria.

iii. The study has amplified the understanding of the barriers and critical success factors of stakeholder management.

iv. The study provides an insight into the response strategies used to tackle stakeholder disputes.

5.4 Area for Further Research

It is however important to understand that the study has certain limitations that could impact generalization of its results. One of such limitations was the constriction of the study to a particular location in Nigeria (Abuja). Also, the research was subjectively carried out which restricts its speculation. Discoveries from the research work could in any case be utilized to lead another investigation in more extensive areas utilizing comparable or distinctive exploration strategy.

The study recommends the following for further research;

i. Further study could be conducted to determine the barriers and critical success factors of stakeholder management in heavy engineering works in Nigeria.

ii. Further research may likewise be carried out to analyze the importance of stakeholder analysis and mapping in the Nigerian construction industry.

REFERENCES

Aaltonen, K., Kujala, J., Havela, L., and Savage, G. (2015). Stakeholder Dynamics During the Project Front-End: The Case of Nuclear Waste Repository Projects. *Project Management Journal*, 46(6): 15-41.

Abdu-Lawan, G. Z. (2016). Development of Project Governance Framework (PGF) for Multifarious Infrastructure Projects (MIPs) in Nigeria. PhD thesis, Ahmadu Bello University, Zaria, Nigeria

Adamu, M., and Kolawole,B.O. (2011). The Role of Construction Industry in Arresting Rural Urban Drift in Nigeria. *Journal of Environmental Research and Policies*, 6(3): 83-94.

Adeagbo, A. (2014). Overview of the building and construction sector in the Nigerian economy. Economic Policy Research Department Nigerian Institute of Social and Economic Research, Ibadan

Ajayi, O. M., Ogunsanmi, O.E. and Ajayi, K.A. (2010). Factors affecting performance of contractors on construction projects in Lagos state, Nigeria. COBRA 2010- Construction, Building and Real Estate Research Conference of the Royal Institution of Chartered Surveyors.

Alexander, M . (2015). 7 tips to transform difficult stakeholders into project partners. Available online at www.cio.com [Accessed 15 November, 2019]

Anderson, E. S. (2003). Understanding your project organization's character', *Project Management Journal*, 34(4): 4–11.

Association of Project management (2018). *APM Body of Knowledge*, 7th Edition. Hampshire: Hobbs.

Atkinson, R., (1999). Project Management: cost, time and quality, two best guesses and a phenomenon, it's time to accept other success criteria. *International Journal of Project Management*, 17(6): 337-342

Bal, M., Bryde, D., Fearon, D., and Ochieng, E. (2013). Stakeholder Engagement: Achieving Sustainability in the Construction Sector. *Sustainability*, 5(2): 695-710.

Barkley, B. and Saylor, J. (2001). *Customer-driven Project Management: Building Quality into Project Process*, 2nd Edition, McGraw-Hill Professional, New York.

Beaumont, J., & Loopmans, M. (2008). Towards Radicalized Communicative Rationality: Resident Involvement and Urban Democracy in Rotterdam and Antwerp. *International Journal of Urban and Regional Research*, 32(1): 95-113.

Beringer, C., Jonas, D., and Gemunden, H. G. (2012). Establishing Project Portfolio Management: An Exploratory Analysis of the Influence of Internal Stakeholders' Interactions. *Project Management Journal*, 43(6): 16-32.

Blood, A. (2013). Stakeholders Engagement: Reclaiming the Balance when Economics Dominate, IAIAConference Proceeding of Impact Assessment: The Next Generation. 33rd Annual Meeting of the International Association for Impact Assessment 13 – 16th May 2013, Calgary Stampede BMO Centre Calgary, Alberta, Canada.

Bourne, L. & Walker, D. (2006). Using a visualizing tool to study stakeholder influence – two Australian examples. *The Project Management Journal*, 37 (1): 5–21.

Bourne, L. (2005). Project relationship management and the stakeholder circle, Doctoral thesis, Graduate School of Business, Melbourne, RMIT University.

Bourne, L. (2010). Beyond reporting the community strategy. Project Management Institute (PMI) Congress Proceedings. 22-24th Feb., 2010. Melbourne – Australia.

Buchholtz, A. K. & Carroll, A. B. (2008). *Business & Society: Ethics and Stakeholder Management,* 7th Edition, Thomson South-Western, Mason, OH.

Buertey, T. J. I., Amofa, D. & Atsrim, F. (2016). Stakeholder Management on Construction Projects: A Key Indicator for Project Success. *American Journal of Civil Engineering*, 4(4): 117-126.

Calvert, S. (1995). *Managing Stakeholders: The Commercial Project Manager*, McGraw-Hill, New York.

Chinyio, E. and Olomolaiye, P. (2010). *Construction Stakeholder Management*, John Wiley & Sons Ltd, United Kingdom, 1 – 12.

Choi, S.O. & Jacobson, C. (2008). Success factors: Public works and public-private partnerships. *International Journal of Public Sector Management*, 21(6): 637-657.

Cleland D. I. (1986). Project Stakeholder Management, *Project Management Journal*, 17(4): 36-44.

Cleland, D. I. and Ireland, L.R. (2002). *Project Management: Strategic Design and Implementation*, 4th Edition, McGraw-Hill, New York

Cooke-Davies, T. (2002). The "real" success factors on projects. *International Journal of Project Management,* 20(3): 185-190.

Creswell, J. W. (2009). *Research design: Qualitative, quantitative, and mixed methods approaches*, 3rd Edition, Sage publications, Thousand Oaks, CA

Creswell, J. W. and Plano Clark, V. L. (2011). *Designing and Conducting Mixed Methods Research*, 4th Edition, Sage publications, Thousand Oaks, CA

Dagli, O.B. (2018). Stakeholder Management in Project Success: Is it an Object or Subject? *PM World Journal.* 7(5): 2-6

Dakas, A. (2014). Management of project stakeholders: facilitating project success in public sector projects in Nigeria. PhD Thesis, University of Leeds, UK.

Damoah, I. S. and Akwei, C. (2017). Government Project Failure in Ghana: A Multidimensional Approach. *International Journal of Managing Projects in Business*, 10(1): 32-59.

Dao, B., Kermanshachi, S., Shane, J., Anderson, S., and Hare, E. (2016). Identifying and Measuring Project Complexity. *Procedia Engineering*, 145: 476-482.

David, B. A. & Bryan, W. H, (2010). *Corporate Social Strategy: Stakeholder Engagement and Competitive Advantage*, Cambridge University Press.

Debrie, J. and Raimbault, N. (2016). The port-city relationships in two European inland ports: A geographical perspective on urban governance. *Cities*, 50: 180-187.

Dominic, C. & Ezeabasili, A.C.C & Okoro, B. (2015). Contentious Issues on poor stakeholders management in some major road construction projects in Anambra State, Nigeria. Civil and environmental research IISTE. 7.

Donaldson, T. and Preston, L. E. (1995). The Stakeholder Theory of the Corporation: Concepts, Evidence, and Implications. *Academy of Management Review*. 20 (1): 65-91.

Ekhator J. A. (2016). Identifying Strategies for Preventing Disputes in Building Construction Projects In Nigeria. *International Journal of Science, Environment and Technology*, 5(5): 3558 – 3569

Ekung, S. & Odesola, I. (2014). Factors Influencing Construction Stakeholders' Engagement Outcome in Nigeria. *International Letters of Natural Sciences*. 20: 101-114.

El-Gohary, N. M., Osman, H. & Ei-Diraby, T. E. (2006).Stakeholder management for public private partnerships. *International Journal of Project Management*, 24 (7): 595 - 604.

El-Naway, O., Mahdi I., Badwy M., Al-Deen, A. (2015). Developing methodology for stakeholder management to achieve project success. *International Journal of Innovative Research in Science, Engineering and Technology*, 4 (11): 1051 – 1066.

El-Sawalhi, N. (2015). Factors affecting stakeholder management in construction projects in the Gaza strip. *International Journal of Construction Management*. 15(2):157-169.

Eskerod, P., Huemann, M., and Savage, G. (2015). Project Stakeholder Management—Past and Present. *Project Management Journal*, 46(6): 6-14.

Eyiah-Botwel, E., Aigbavboa, C., and Thwala, W. D. (2015). Critical Barriers Affecting Stakeholder Management in the Construction Industry. Department of Construction Management and Quantity Surveying, Faculty of Engineering and Built Environment University of Johannesburg, Johannesburg.

Floricel, S., Michela, J. L., and Piperca, S. (2016). Complexity, uncertainty-reduction strategies, and project performance. *International Journal of Project Management*. 34(7):1360-1383

Fonta, W. M., Ichoku, H. E., Ogujiuba, K. K. and Chukwu, J. O. (2007). Using contingent valuation approach for improved solid waste management facilities: Evidence from Enugu State, Nigeria. *Journal of African Economics*, 17(2): 277 – 304.

Forsman, P. A. (2017). A Study of Construction Project Stakeholders' Management Methods and the Critical Success Factors Essential for Successful Management in Stockholm Region.

Masters' Thesis Work, Project Management and Operational Development Stockholm, Sverige

Garbarran, H., Gorender, J., & Msani, T. (2012). Critical Success Factors Influencing Project Success in the Construction Industry. *Acta Structilia* 19(2): 90-180

Haigh, R.P., Pathirage, C.P. & Amaratunga, D.G. (2007). Tacit knowledge and organisational performance: Construction industry perspective. *Journal of Knowledge Management*, 11(1): 115-126.

Hansen-Addy, A. (2013). An Analysis of Soft Conflict Resolution Approaches in the UK Construction Industry. *International Journal of Construction Engineering and Management*, 2(4): 106-112

Hidding, G.J. & Nicholas, J. M. (2014). Reducing IT Project Mangement Failures: Early Empirical results, *47th Hawaii International Conference on System Science*, IEEE, Waikoloa, 4305–4314.

Ihuah, P.W., Kakulu, I. I. & Eaton, D. (2014). A review of Critical Project Management Success Factors (CPMSF) for sustainable social housing in Nigeria. *International Journal of Sustainable Built Environment* 3(1): 62-71

Ihugba, B.U. & Osuji, O.K. (2011). Corporate Citizenship and Stakeholder Engagement: Maintaining an Equitable Power Balance. *Electronic Journal of Business Ethics and Organisational Studies*, 16 (2): 28 -38.

Jepsen, A. L. & Eskerod, P. (2009). Stakeholder analysis in projects: challenges in using current guidelines in the real world. *International Journal of Project Management* 27(4): 335-345.

Jergeas, G. E., Williamson, E., Skulmoski, G.J. & Thomas, J.L., (2000). Stakeholder management on construction projects. *AACE International Transactions* 12: 1–5.

Jin, X. H. & Ling, F.Y.Y. (2005). Constructing a framework for building relationships and trust in project organizations: two case studies of building projects in China'. *Construction Management and Economics*, 23(7): 685–696.

Johnson, G., Scholes, K. & Whittington, R. (2006). *Exploring corporate strategy. Text and cases*. 7th edition. London: Pearson Education.

Karim, S. B. A, Hamzah A. R., Mohamed A. B & Aini J. (2007). A review of the issues and strategies of stakeholder management in the construction industry, Management in Construction and Researchers Association (MICRA), Meetings and Conference, 28_29 Aug 2007, Shah Alam, Selangor, Malaysia. Available at: https://www.academia.edu/172847/IssuesandStrategiesinStakeholderManagement [Accessed 07 May 2019].

Karlsen, J. T. (2002). Project stakeholder management, *Engineering Management Journal*, 14(4): 19-24.

Karlsen, J. T., Graee, K. & Massaoud, M. J. (2008). The role of trust in project stakeholder relationships: a study of a construction project. *International Journal of Project Organisation and Management*, 1(1): 105-118.

Karna, S., Junnonen, J. & Sorvala, V. (2009). Modelling structure of customer satisfaction with construction. *Journal of Facilities Management*, 7(2): 111-127.

Kerzner, H. (2006). *Project management: A system approach to planning, scheduling and controlling*. 9th edition. John Wiley & Sons Publications, New Jersey.

Khalfan, M., McDermott, P. & Swan, W. (2007) 'Building trust in construction projects', *Supply Chain Management: An International Journal*, 12(6): 385–391.

Khekale, C. & Funtane, N. (2013). Management of claims and Disputes in Construction Industry Impact Factor available at www.iisr.net. [Accessed 09 May, 2019].

Kivits, R. A. (2013). Multi-dimensional Stakeholder Analysis: a Methodology Applied to Australian Capital city Airports', PhD thesis, Southern Cross University, Lismore, NSW.

Krejcie, R. V., & Morgan, D. W. (1970). Determining sample size for research activities. *Educ Psychol Meas*, 30(3): 607-610.

Li, T. H. Y., Ng, T. S. & Skitmore, M. (2012). Conflict or consensus: An investigation of stakeholder concerns during the participation process of major infrastructure and construction projects in Hong Kong, *Habitat International*, 36: 333 – 342.

Loke, Y. S. (2013). A study of causes and effects of conflict in construction industry. BSc. Project Management. University Malaysia Pahang.

Magassouba, S., Tambi, A., Alkhlaifat, B. & Abdullah, A. (2019). Influence of Stakeholders Involvement on Development Project Performance in Guinea. 9: 1111-1120.

Malach-Pines, A., Dvir, D. & Sadech, A. (2009). Project manager – project (PM – P) fit and project success. *International Journal of Operations & Productions Management*, 29(3): 268-291.

Mbamali, I. & Okotie, A. J. (2012). An Assessment of the Threats & Opportunities of Globalization on building practice in Nigeria. Department of Building, Ahmadu Bello University Zaria.

Mok, K. Y., Shen, G. Q., & Yang, J. (2015). Stakeholder management studies in mega construction projects: A review and future directions. *International Journal of Project Management*, 33(2): 446-457.

Molwus, J. J. (2014). Stakeholder Management In Construction Projects: A Life Cycle Based Framework. A PhD dissertation, Heriot Watt University, Edinburgh.

Morenikeji, W. (2006*). Research and Analytical methods for social scientist, planners and environmentalist*. Jos University Press Limited, Jos.

Mouritsen, J. & Thrane, S. (2006). Accounting, network complementarities and the development of inter-organisational relations. *Accounting, Organizations and Society*, 31(3):241–275.

Newcombe, R. (2003). From client to project stakeholders: a stakeholder mapping approach. *Construction Management and Economics*, 21(8): 841-848.

Newton, R. (2005). *The project manager: Mastering the Act of Delivery*. 1st Edition, Pearson Education, London

Nguyen, L. D., Ogunlana, S. O. & Lan, D.T.X. (2004). A study on project success factors in large construction projects in Vietnam. *Engineering, Construction and Architectural Management*, 11(6): 404-413.

Nilson, P. (2006). Managing Stakeholder Requirements in a Product Modelling System. *Computers in Industry*, 57:167-177

Ogwueleka, A. (2013). The critical success factors influencing project performance in Nigeria. *International Journal of Management Science and Engineering Management*. 6: 343-349.

Olander, S. and Landin, A. (2008). A comparative studies of factors affecting the external stakeholder management process. *Construction Management and Economics*, 26(6), 553.

Onarinde, O. S. (2011). An Assessment of Stakeholder Management in the Nigerian Construction Industry. MSc. Thesis, submitted to School of Built Environment, Heriot Watt University.

Orndoff, C. J. W. (2005). Promising new tool for stakeholder interaction. *Journal of Architectural Engineering*, 11(4), 139–46.

Oyeyipo, O., Odeyinka, H., Owolabi, J. & Ojelabi, R. (2019). Factors Promoting Stakeholder Management of Building Projects. *International Journal of Mechanical Engineering and Technology*, 10(3): 944-951

Payne, A., Ballantyne, D. & Christopher, M. (2005). A stakeholder approach to relationship marketing strategy. *European Journal of Marketing*, 39:855–871.

Peter, N. (2017). Tips for Driving Effective Stakeholder Management. Available online at https://www.inxsoftware.com/ [Accessed 15 November 2019]

Picq, T. & Melkonian, T. (2010). Opening the "black box" of collective competence in extreme projects: Lessons from the French Special Forces. *Project Management Journal*, 41(3): 79-90.

Pinto, J. K. (2010). Understanding the role of politics in successful project management. *International Journal of Project Management*, 18(2): 85–91.

Pinto, J.K. & Prescott, J.E. (2007). Planning and tactical factors in the project implementation process. *Journal of Management Studies*, 27(3):305–327.

Portney, P. R. (1994). The contingent valuation debate: why economists should care. *The Journal of Economic Perspectives*, 8(4): 3-17.

Project Management Institute (2017). *A Guide to the Project Management Body of Knowledge* (PMBOK® Guide). 6th Edition, Project Management Institute, Inc., Pennsylvania

Rowe, G., and Frewer, L. J. (2005). A typology of public engagement mechanisms. *Sci. Tech. Hum. Values*, 30(2), 251–290.

Rowlinson, S., Koh, T. & Tuuli, M. (2010). A cultural perspective to stakeholder management in the Hong Kong construction industry. *Construction stakeholder management*, Wiley-Blackwell oxford. 216-239.

Savage, G. T., Nix, T.W., Whitehead, C.J. & Blair, J. D. (1991). Strategies for assessing and managing organizational stakeholders. *The Executive*, 5(2): 61–75.

Sharma, A., Sengupta, S., and Gupta, A. (2011). Exploring risk dimensions in the Indian software industry. *Project Management Journal*, 42(5): 78-91.

Singh, G. (2015). Stakeholder Management in Construction Industry. Project Seminar Report, Department of Building Engineering and Management, School of Planning and Architecture, New Delhi.

Smith, J. and Love, P.E.D. (2004). Stakeholder management during project inception: strategic needs analysis. *Journal of Architectural Engineering*, 10(1): 22–33. 261

Sutton, S. E. and Kemp, S. P. (2006). Integrating social science and design inquiry through interdisciplinary design charrettes: an approach to participatory community problem solving. *American Journal of Community Psychology*, 38(1-2): 125-139.

Swan, W. & Khalfan, M.M.A. (2007). Mutual objective setting for partnering projects in the public sector. *Engineering, Construction and Architectural Management*, 14(2): 119-130.

Takim, R. & Akintoye, A., (2002). Performance indicators for successful construction project performance. In: Greenwood, D. (Ed.), 18th Annual ARCOM Conference, 2- 4 September, University of Northumbria Association of Researchers in Construction Management, 2, 545-555.

Takim, R. (2009). The Management of Stakeholders' Needs and Expectations in the Development of Construction Projects in Malaysia. *Modern Applied Science*, 3(5): 167-175.

Taylor, A. (2015). 5 Steps to Stakeholder Engagement. Strategic Planning and Management Insights. Available online at https://www.smestrategy.net/blog/stakeholderengagement-in-your-strategic-plan-pt-1 [Accessed 18 November, 2019]

Teo, M. M. & Loosemore, M. (2012). A New Research Agenda into Community-based Protest in Construction In: Smith, S.D (Ed) Procs 28th Annual ARCOM Conference, 3- 5 September 2012, Edinburgh, UK, Association of Researchers in Construction Management, 1135-1143.

Toor, S. R & Ogunlana, S. (2009). Construction professionals' perception of critical success factors for large-scale construction projects. *Construction innovation: information, Process, management.* 9: 149-167.

Tung, Y. H. (2014). Critical success factors for internal stakeholder management in Malaysian construction projects. Masters' thesis, Universiti Tunku Abdul Rahman, Kampar, Malaysia.

Walker, D. H. T., Bourne, L. & Rowlinson, S. (2008). Stakeholders and the Supply Chain. *Procurement Systems - A Cross Industry Project Management Perspective.* 1st Edition, Taylor and Francis Group, New York,70-100

Wang, X. & Huang, J. (2006). The relationships between key stakeholders' project performance and project success: Perceptions of Chinese construction supervising engineers. *International Journal of Project Management.* 24: 253-260.

Whittington, R., Johnson, G., & Scholes, K. (2006). *Exploring corporate strategy. Text and cases.* 7th edition. London: Pearson Education.

Williams, N. L., Ferdinand, N., & Pasian, B. (2015). Online Stakeholder Interactions in the Early Stage of a Megaproject. *Project Management Journal*, 46(6): 92- 110.

Winch, G. M., (2010). *Managing Construction projects: an information processing approach*, 2nd Edition, Wiley-Blackwell, West Sussex, UK.

Yang, J. & Shen Q. P. (2014). Framework for stakeholder management in construction projects. *Journal of Management in Engineering*. 31(4): 215-230

Yang, J., Shen, G. Q., Ho, M., Drew, D. S., & Chan, A. P. (2009). Exploring critical success factors for stakeholder management in construction projects. *Journal of civil engineering and management*, 15(4): 337-348.

Zarewa, G. A. (2019). Barriers to effective stakeholder Management in the Delivery of Multifatious Infrastructure Projects (MIPs). Journal of Engineering, Project and Production Management, 9(2): 85-96

Zucker, A. (2017). Stakeholder Management: A Key to Project Success. Available online at http://pmessentials.us/blog/ [Accessed 15 November 2019]

Zwikael, O. (2009). Critical planning processes in construction projects. *Construction Innovation,* 9 (4): 372-387.

APPENDICES

Appendix A: Interview Guide

Department of Quantity Surveying,

School of Environmental Technology,

Federal University of Technology Minna,

Niger State, Nigeria.

Dear respondent,

This is to solicit information for a Masters in Technology (M.TECH) Research project at Federal University of Technology, Minna, Nigeria. It is designed to obtain relevant information from construction personnel engaged in construction within FCT Abuja. It is part of a study titled ‘‘INFLUENCE OF STAKEHOLDER ON CONSTRUCTION PROJECTS’ DELIVERY IN ABUJA NIGERIA”

It would be highly appreciated, if you could provide the necessary information with utmost clarity and sincerity. Since the results of the research will be of immense benefit to the construction industry and the Nation in general. You are also assured of the confidentiality of the information provided and shall be used strictly for academic purposes.

Yours sincerely,

_____

Alayande, Aisha

Q/S Dept. FUT Minna

Interview questions

PART I: PERSONAL INFORMATION

The questions are with regards to:

i) Job title:

_____

ii) Your Position in the organization

_____

iii) Academic qualification

_____

iv) Professional Qualification

_____

v) Work experience (years of experience)

_____

PART II: BARRIERS TO STATEKHOLDER MANAGEMENT

a) What are the problems you face in your project with regards to Stakeholders?(barriers) (KINDLY LIST)

_____

_____

_____

b) How do these problems affect the operations of your construction project organization?

_____

_____

_____

PART III: STAKEHOLDER MANAGEMENT PRACTICE

a. What are your Response strategies to deal with the Stakeholder disputes?

_____

_____

a. What are the reactions of stakeholders to these strategies?

b. In your opinion, what is the most effective critical success factor to consider in managing the stakeholders?

c. Mention a tool/technique you are using for stakeholder management on a most recent project?

Any Other points for discussion?

Appendix B: Questionnaire

QUESTIONNAIRE

FEDERAL UNIVERSITY OF TECHNOLOGY MINNA, NIGER STATE

SCHOOL OF ENVIRONMENTAL TECHNOLOGY

DEPARTMENT OF QUANTITY SURVEYING

Dear Respondent,

This questionnaire is drawn for an academic exercise towards the fulfilment of a research study titled "**Influence of stakeholder management on construction projects delivery in Abuja**". This survey is required for the award of Master of Technology degree in the quantity surveying department of the above-named institution. Your responses and opinion shall be of great importance and will be treated confidentially.

Thank you.

Alayande Aisha

QUESTIONNAIRE ON

'INFLUENCE OF STAKEHOLDER MANAGEMENT ON CONSTRUCTION PROJECTS DELIVERY'

Instructions: Please tick (√) the option that best fits your situation.

Section A: Respondent particulars

1. Education:
   (a) HND/B. Sc ☐

   (b) M. Sc ☐

   (c) PhD ☐

2. Profession:
   (a) Architect ☐

   (b) Builder ☐

   (c) Civil Engineer ☐

   (d) Project manager ☐

   (e) Quantity Surveyor ☐

   (f) Other, Please specify……

3. Work experience: `
   (a) Less than 5 yrs ☐

   (b) 5 yrs – 10 yrs ☐

   (c) 11 yrs – 15 yrs ☐

   (d) More than 15 yrs ☐

Section B: Barriers Affecting stakeholder management

Barriers affecting stakeholder management in the construction industry have been obtained from interviews across construction firms in Abuja and are presented in the table below.
Please use this 5-item scale to rate how these barriers have affected stakeholder management according to your experience in the construction industry. Where 1 = Very low; 2 = Low; 3 = Moderate; 4 = High and 5 = Very High

S/No	**Factors Influencing Stakeholder management**	**Very high**	**High**	**moderate**	**low**	**Very low**
		5	4	3	2	1
1	Delay in payment					
2	Variation in contract form					
3	Climate changes					
4	Additional works					
5	Time constraints					
6	Cost of materials delivery					
7	Cultural deficiency					
8	Lack of consequent stakeholders' meeting					
9	Poor knowledge of stakeholder management					
10	Lack of proper stakeholder management procedure					
11	False and incorrect information given to stakeholders					
12	Location of construction project					
13	Lack of corporation within stakeholders					

S/No	Factors Influencing Stakeholder management	Very high	High	moderate	low	Very low
		5	4	3	2	1
14	Human resources					
15	Lack of constant performance of stakeholder management procedures					
16	Misinterpretation of stakeholder participations					
17	Too many stakeholders claiming seniority					

Section C: Factors Influencing Stakeholder Management Successful Delivery of Construction Projects

These critical success factors are responses obtained from semi-structured interviews of construction professionals across Abuja. Please rate the extent to which you agree that these critical success factors are influential to stakeholder management delivery, Where 1 = Very low; 2 = Low; 3 = Moderate; 4 = High and 5 = Very High

S/ No	Critical success factors	Level of agreement				
		1	2	3	4	5
1	Effective communication					
2	Proper identification of stakeholder roles					

3	Understanding and working with stakeholders' needs					
4	Project coordination					
5	Proper Engagement of stakeholders					
6	Assessing strengths and weaknesses of stakeholders					
7	Analysing conflicts amongst stakeholders					
8	A competent Project team					
9	Clear definition of project mission					
10	Clear definition of construction ethics					
11	Abiding to construction ethics					
12	Supportive attitude towards stakeholders					
13	Promoting good relationship					
14	Proper Allocation of stakeholder roles					

Section D: Tools and Techniques used in SM

The following tools were obtained from interview survey of construction professionals within Abuja. Please rate the extent to which you agree that these tools are effective in stakeholder management delivery, Where 1 = Very low; 2 = Low; 3 = Moderate; 4 = High and 5 = Very High

S/ No	SM technique used	Level of agreement				
		1	2	3	4	5
1	Project meetings					
2	Communication plan					
3	Survey approach to determine stakeholder interests					
4	Stakeholder analysis and mapping					