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Barriers to Effective Stakeholder Management in the Delivery of Multifarious Infrastructure Projects (MIPs)

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Abstract: Effective Stakeholder Management (ESM) has been identified as one of the key requirements for successful project delivery by several scholars. This study, aimed at improving the chances of achieving successful Multifarious Infrastructure Projects' (MIPs) delivery in Nigeria, was conducted through literature review, questionnaire survey and Relative Importance Index (RII) method of data analysis. The study identified 39 barriers to ESM in the delivery of MIPs in Nigeria, evaluated their respective impacts on projects' delivery and ranked the barriers in ascending order of their respective impact levels. Failure to understand stakeholders' needs and expectations, uncooperative attitude of stakeholders, failure to identify key stakeholders, failure to identify potential conflict areas, project manager's poor knowledge of stakeholder management (SM), late identification of stakeholders, issuance of incorrect information to stakeholders, lack of stakeholder engagement/involvement, conflicts between stakeholders, misunderstanding of roles by stakeholders, lack of fairness and equity for all stakeholders and lack of continuity in SM process were ranked as the ten top barriers ,in descending order, with highest levels of impact against ESM in MIPs delivery. The study also provided MIPs managers with an insight on the barriers to address/focus on in order to achieve ESM in the delivery of their projects. The study concluded that there was need to pay special attention to the above barriers due to their high impact level on ESM and improve current approaches to stakeholder management in MIPs delivery in order to improve the success rate of the projects. The study recommends development and effective implementation of an appropriate strategy for handling stakeholder management in the delivery of MIPs and other projects.

Keywords: Effective stakeholder management, multifarious infrastructure projects and stakeholders.

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1. Introduction

Multifarious Infrastructure Projects (MIPs) comprise many sub-projects which require thousands of people to work. Their delivery involves more stakeholders, with multiple views and opinions, different goals, interest, stake and influence, than normal projects. MIP for the purpose of this study refers to one large complex infrastructure project comprising at least three different types of projects (e.g. one project comprising building, civil engineering and services sub-projects) that costs at least N5billion or more and involves numerous stakeholders in its delivery.

The large number of stakeholders and work packages involved in the delivery of MIPs due to their sizes makes their management more complex than those of small conventional projects because Fox and Miller (2006) were of the view that as a project increases in size, the challenges associated with managing relationships among its sub-projects grow more intricate. It is therefore important to identify all stakeholders involved in the delivery of MIPs with their respective interest, influence, power and perception about the projects and manage them effectively in order to achieve successful delivery of the projects. Retfalvi (2014) discovered that ability to effectively identify and manage project stakeholders improves chances of successful project execution and organisational success significantly. Project Management Institute (PMI) (2013a) defined a project stakeholder as an individual, group, or organization that may affect, be affected by, or perceive itself to be affected by a decision, activity, or outcome of a project, program, or portfolio and stakeholder management as "*the systematic identification, analysis and planning of actions to communicate with and influence stakeholders*" respectively.

Several studies were conducted on relationship between Stakeholder Management (SM) and project delivery. Eyiah-Botwe1 et al (2015) discovered that Effective Stakeholder Management (ESM) is essential in achieving stakeholder satisfaction and project success targets while Chinyio and Olomolaiye (2015) discovered that ineffective stakeholder management will reduce probability of successful project delivery due to conflicts between stakeholders and dissatisfaction with project

outcomes. Another study by Eskerod and Jespen (2013) discovered that carrying out a project as planned was not a guarantee for success as the project may still fail if stakeholders are not sufficiently managed. Work at the site of an MIP in one of the states in north western region of Nigeria was discovered by Abdu Lawan (2016) to have been suspended for quite a long time due to inability to resolve conflict between two major stakeholders of the project. Lack of effective SM at the early phases of Lekki Toll Road Concession Project in Lagos was identified as the cause of refusal of some motorists to pay road tolls by Infrastructure Concession Regulatory Commission (2012) while Ibrahim et al (2006) identified ineffective SM as risk associated with successful PPP projects in Nigeria.

The foregoing discourse clearly highlighted the need for identification of factors that influence SM in project delivery. Yang et al. (2009) discovered that there are critical success factors (CSFs) that can directly or indirectly ensure stakeholder management success. The author also opined that there are equally significant barriers and challenges which militate against successful stakeholder management in construction projects' delivery.

It has however been observed that despite identified negative impacts of ineffective SM on project success, not much efforts were made to identify and address factors militating against ESM in project delivery particularly in developing countries like Nigeria. Eyiah-Botwe1 et al. (2015) observed that while many studies have considered Critical Success Factors (CSFs) for stakeholder management, not much has been done on Critical Barrier Factors (CBFs) to ESM in developing countries. Critical success factors (CSFs) for stakeholder management have been described as, activities, practices and considerations that can directly or indirectly ensure successful stakeholder management (Eyiah- Botwe1 et al. 2015). The same authors described critical barrier factors (CBF) to ESM as factors militating against the achievement of successful stakeholder management and project set targets of cost, time and quality.

It is in view of the foregoing that this study investigated and identified barriers to ESM and their respective levels of influence (ranking) on SM in the delivery of MIPs in at least one state from each of the six geo-political zones of Nigeria and its Federal Capital Territory (FCT) with the aim of providing information that could be used to prevent or minimise incidences of ineffective stakeholder management and its associated impact on the projects' delivery. Findings from the study will also guide and improve SM in MIPs delivery in addition to contributing and increasing knowledge on the subject. The aim of the study is achieved through answering the following research questions:

1. What are barriers to ESM in the delivery of MIPs in the six geo-political zones of Nigeria and FCT?

2. What is the level of influence (ranking) of each barrier on SM in the projects' delivery?

2. Literature Review of HSR

2.1. Multifarious Infrastructure Projects

MIPs have been described differently by different institutions and scholars. The UK Parliamentary Office of Science and Technology (2002) described MIPs as large-scale projects of national importance such as new trunk roads, airports, ports, power stations, and so forth while scholars such as Flyvbjerg et al. (2003), Fox and Miller (2006) and Bekker (2008) referred to them as mega-projects, macro-projects and/or super projects. The projects, which have significant impact on the socio-economic development of countries all over the world (Bekker, 2008), are always in continuous demand due to increasing global population, aging infrastructure, increasing urbanisation and so forth. The projects which are mostly massive in size and complex in nature usually attract huge investment in their procurement and involve numerous stakeholders often with conflicting interests in their delivery. These stakeholders include clients, consultants, contractors, sub-contractors, financial institutions, end users, government agencies, media, the regulators such as the local and national authorities, local community groups, and other independent groups with special interests in their delivery.

Conflict between and among MIPs participants often occurs in the course of the projects' delivery due to divergent interests of the numerous participants and stakeholders involved in the projects' delivery. Fox and Miller (2006) were of the opinion that potential for conflicts between and among project stakeholders depends largely on the project's scope and environment. Three major conflicts likely to occur between and among MIPs' stakeholders in the course of the projects' delivery, which include internal conflicts, conflicts in sponsor - contractor relationship and conflicts over resources, were identified by Fox and Miller (2006). The potential negative impact of each of these conflicts on the projects' delivery has made it imperative for MIPs' managers to handle issues associated with their stakeholders with utmost caution.

Involvement of different organisations in MIP's delivery; impact of social, economic, and political environment on the MIP (that is whether this environment is supportive or hostile to the project); government regulations and changes thereto which may enhance or constraint achievement of an MIP's objectives; added to the complexity of managing MIP's delivery especially as it relates to stakeholders.

2.2. Stakeholders

Stakeholders in construction projects such as MIPs can, according to Chinyio and Olomolaiye (2015), be classified into five main groups: clients, consultants, contractors and external parties. Clients, consultants and contractors can be grouped together as internal stakeholders, while the remaining parties are considered external stakeholders. Stakeholders can also be classified as primary or secondary. Other works however disagreed with earlier stakeholder conceptualisations and categorisations for uncertainty and suggested that a difference should be made between stakeholders, stake watchers and stake keepers (TeyeBuertey et al., 2016). In terms of classification, stakeholders are those who have a tangible and real stake in a project. Stake watchers, in turn, do not actually have a stake themselves but they guard the interests of actual stakeholders. Examples of stake watchers are unions and community pressure groups. Botchway (2001) postulated that stake keepers are autonomous regulators, such as governments, regulatory agencies and certification organisations, who have no stake but have influence and control. This study, while

appreciating the above classification, aligns itself with classification by Chinyio and Olomolaiye (2015).

Newcombe (2003) postulated that construction projects such as MIPs have, by their nature, diverse stakeholders who play various roles and responsibilities in a project's delivery which can affect or be affected by the project outcome. These stakeholders need to be managed effectively for a successful project delivery as meeting project stakeholders' satisfaction and needs is, according to Project Management Institutes (2013), a measure of project success. Moreover, Mok et al. (2013) discovered that mega construction projects such as MIPs pose management challenges due to complex stakeholder interrelationships and conflicting interests; dynamics and growing capacity leading to high project uncertainty and governance by a stringent multi-role administrative structure leading to high public attention and controversies.

Researchers have suggested several approaches to SM. Lock (2007) recommended identification of stakeholders, gathering information about the stakeholders and analysing their influence as a systematic approach to SM while Bourne and Walker (2005) adopted stakeholder circle approach which involves identification of stakeholders, prioritisation, visualisation, engagement and monitoring effect of their involvement. Chinyio and Olomolaiye (2015) stated that stakeholder management can be carried out in many ways including evaluating needs and expectations of stakeholders in relation to main project goals. Whatever approach is adopted in managing a project's stakeholders, it is important to ensure that they (stakeholders) are effectively managed. .

The importance of SM to successful project delivery highlighted above has made some scholars to investigate and discover factors that could influence SM in project delivery. Yang et al. (2009) confirmed 15 Critical Success Factors (CSFs) for stakeholder management for developing countries while Hammad (2013) identified 23 CSFs for the Gaza strip construction industry. Other studies by Chinyio and Akintoye (2008), Olander and Landing (2008), Jepsen and Eskerod (2009), and Li et al. (2011) have also identified and studied critical success factors (CSFs) for stakeholder management in construction projects.

Yang et al (2009) in their work, discovered that there are challenges associated with the processes of stakeholder management that are militating against Effective Stakeholder Management (ESM) in project delivery. It is therefore important to identify these challenges and/or factors that could militate against ESM in project delivery.

2.3. Factors Militating against Effective Stakeholder Management in Project delivery

Previous studies have identified challenges and factors militating against ESM, with different levels of impact, in project delivery. These factors were discovered to fall into two categories. The first category comprises factors directly militating against ESM while the second category consists of factors that could either enhance or militate against ESM depending on how they are handled in managing a project's stakeholders. A summary of factors in the two categories as identified by Abdu lawan (2016), Chinyio and Olomolaiye (2015), Eyiah-Botwe1 et al. (2015), Hammad (2013), Molwus (2014), and Mok et al. (2013) is given in Table 1. It can be observed from the table that some factors have been identified by more than one author, probably, due to their respective levels of influence (ranking) on SM. For example, inadequate identification of stakeholders was identified by majority of the authors because ESM cannot be achieved without adequate identification of all stakeholders.

3. Research Methodology

The study was conducted in three stages. The first stage involved extensive literature review from which a draft list of factors militating against effective stakeholder management in project delivery, as identified by various scholars (Table 1), was drawn. The identified factors were reduced to 39 barriers to ESM after careful analysis and discussions with experts on major constraints to ESM in project delivery. A questionnaire survey was then conducted to evaluate the impact of each barrier against ESM in MIPs delivery on the basis of a 5-point Likert Scale where 1 represents Very Low Impact, 2 represents Low Impact, 3Moderate Impact, 4 High Impact and 5Very High Impact. The Relative Importance Index (RII) for each factor was then calculated and ranked accordingly. Discussion and analysis of the results followed thereafter after which final conclusions and recommendations were made.

Questionnaire survey was used due to the study's large population and scattered location of the respondents which made it difficult and expensive to use other methods such as interview. Kumar (2011) argued that a researcher has no option but to use questionnaire survey if respondents are scattered over a wide geographical area. The author also argued that the method provides greater anonymity and increase the likelihood of obtaining accurate information in some situations where sensitive questions are asked. The Relative Importance Index (RII approach was on the other, used to rank the barriers because the approach, according to Johnson and LeBreton (2004), best fits the purpose of a study of this nature and aids in finding the contribution a particular variable makes to the prediction of a criterion variable both by itself and in combination with other predictor variables.

3.1. Survey Design

The questionnaire is made up of three sections. The first section comprised introduction of the study and definitions of an MIP, stakeholder and stakeholder management in the context of the study. The second section contained participants' information that was eventually used in categorising the participants into groups while the last section contained the barriers evaluated by the respondents on the basis of their respective levels of impact against ESM using the 5 point Likert Scale described above.

3.2. Questionnaire Administration

The questionnaire was purposely administered to selected respondents considered competent to provide required data because full population of the study is too large for survey to be possible. This decision was supported by findings of Fellows and Liu (2015) which stated that where full population of a study tends to be far too large for a survey to be possible, it is usual for surveys to employ sampling such that the size and structure of the sample are sufficient to yield enough reliable data for inferences to be drawn about the population at a required and specified level of confidence. The respondents included stakeholders, who

have been involved and/or associated with the delivery of MIPs in Nigeria and some academics, with requisite knowledge and experience in line with the views of Kumar (2011) and Fellows and Liu (2015). Kumar (2011) argued that a researcher should only go to those people who in his/her opinion are likely to have the required information and willing to share it with the researcher while Fellows and Liu (2015) postulated that the real issue, after identifying data required for a study and sources of the data, is to determine which person is at an appropriate position to provide data required for the study.

The questionnaires were distributed to 125 stakeholders actively associated with the delivery of MIPs in one state from each of the six geo-political zones and Federal Capital Territory of Nigeria and some academicians. The stakeholders included clients/clients' representatives, contractors/contractors' representatives, consultants, project managers, architects, engineers, quantity surveyors, builders, end users, etc, with requisite knowledge and experience, while the academicians specialised in areas related to project delivery such as project procurement, construction management, project management, architecture, quantity surveying, engineering, building, etc.

Table 1. Factors Militating Against Effective Stakeholder Management in Project Delivery

S/N	Author	Factors
1	Abdu Lawan (2016)	Language barrier; Cultural differences; Uncooperative Attitude of Stakeholders; Client's Attitude; Conflicts between Stakeholders; Lack of Periodic Stakeholder Meetings; Assigning one task to two stakeholders; Appointing a stakeholder to take over the responsibility of another stakeholder in the same project and making the new stakeholder to be the leader of the older stakeholder; ineffective communication system; Limited stakeholder identification and engagement/consultations; Lack of a person specifically assigned with the responsibility of SM; Lack of clear demarcation of levels of authorities of two stakeholders.
2	TeyeBuertey et al. (2016)	Stakeholders' inability to participate in discussions; Lack of stakeholder involvement; Stakeholders lack of capacities to contribute meaningfully in discussions; Non acknowledgement of value of stakeholders; Non determination of requirements and expectations of stakeholders; Inadequate identification and engagement of all stakeholders.
3	Chinyio and Olomolaiye (2015)	Inadequate analysis of how project decisions would affect stakeholders and vice versa; Inadequate engagement with external stakeholders; Mistrust on the part of stakeholders; Non-existent communication process; Failure to recognise or cooperate with adverse stakeholders; Stakeholder neglect; Failure to consider wider collection of stakeholders; Non Identification of potential conflict areas; Issuance of incorrect information to stakeholders; Mistrust on the part of stakeholders; Lack open and ongoing communication process; Lack of fairness and equity, for all stakeholders; Lack of stakeholder analysis during the entire life cycle of project for the purpose of gaining knowledge about the potential influence various stakeholders have at different stages; Non-Early identification of stakeholders; Lack of engagement with stakeholders; Stakeholders perception of correctness or otherwise of information given to them.
4	Eyiah-Botwe1 et al. (2015)	Project Manager's poor knowledge of SM; Change of project location and inability to sign off a phase; Late scope changes, Having several stakeholders working together for the first time; Project cost increase; Scope and quality changes; Changes in stakeholders; Project delays; Inadequate stakeholder identification, engagement and analysis; Absence of formal stakeholder management process.
5	Hammad (2013)	Hiring a project manager with high competency, transparent evaluation of alternative solution, ensuring effective communication between the project and its stakeholder. In addition, setting common goals and objectives for the project, exploring the stakeholders' needs and expectations were identified as challenges. Their impact is thus dependent on the active or otherwise management of the factors.
6	Molwus (2014)	Lack of continuity in stakeholder management process; Lack of clear definition or agreement as to who should be responsible for stakeholder management.
7	Mok et al. (2013)	Involvement of numerous stakeholders.

3.3. Ranking Approach

Relative Importance Index (RII) was used to assess and rank each barrier to ESM on the basis of respondents' scores collected from the survey using the formula given below.

$$RII = \frac{\sum W}{A * N} \quad (1)$$

Where,

W = weight given to each attribute by the respondent (1 to 5).

A = the highest weight (in this case is 5)

N = total number of respondents

RII Value ranges from 0 to 1. The higher the RII value a barrier has, the higher its ranking and level of impact against ESM.

4. Results

The results of the study are detailed below.

4.1. Received Questionnaire Response

Sixty five (65) out of the one hundred and twenty five (125) questionnaires distributed, which represented 52%, were returned and used for analysis. The returned questionnaires were considered adequate for the study because a comparative analysis on response rate in academic studies by Baruch (2014) discovered an average response rate of between 53 - 55.6%. Another study by Matthews (2007) recommended between 40 - 50% response rate while Idrus and Newman (2002) considered any questionnaire response in the range of 20% to 30% to be adequate for research in construction industry.

4.2 Respondents' Profile

The respondents' profiles on the basis of their roles in MIPs' delivery, professional calling, sectors of employment and years of experience are given in Figures 4.1, 4.2, 4.3 and 4.4.

4.3. Respondents' Profiles on the basis of Roles in MIPs' Delivery

The breakdown of the respondents on the basis of their roles in MIPs delivery is as shown in Fig. 1

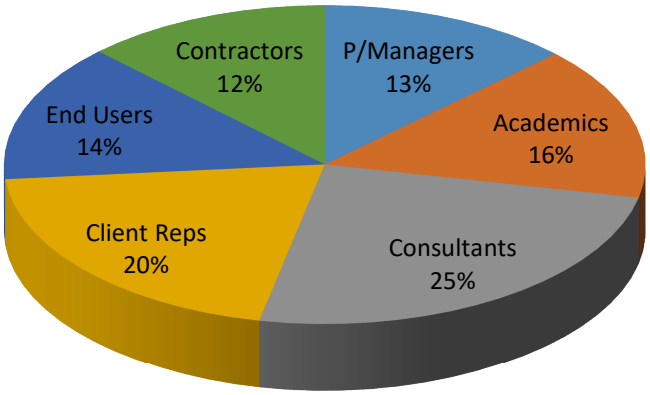

Fig. 1. Breakdown of respondents on the basis of roles played in MIPs delivery

Note: P/Managers: Project Managers, Academics: Academicians, Client Reps: Client Representatives

4.4. Respondents' Profiles on the basis of Professional Calling

The professional callings of the respondents are shown in Fig. 2.

4.5. Respondents Profile on the Basis of their Sector of Employment

The breakdown on the basis of their sectors of employment, as shown in Fig. 3, is made up of seventeen from the public sector, thirty seven from the private sector and eleven from the educational sector.

4.6. Respondents Profile on the Basis of their Years of Experience

Fig. 4 shows that 27 respondents with 25-30 years working experience constituted majority of the respondents while those with 10-15 and 20-25 years' experience had the least number of 4 respondents respectively. Respondents within 5-10 years and 15 - 20 years ranges contributed 10 responses each while 6 respondents fall within the 0-5 years 0f experience bracket.

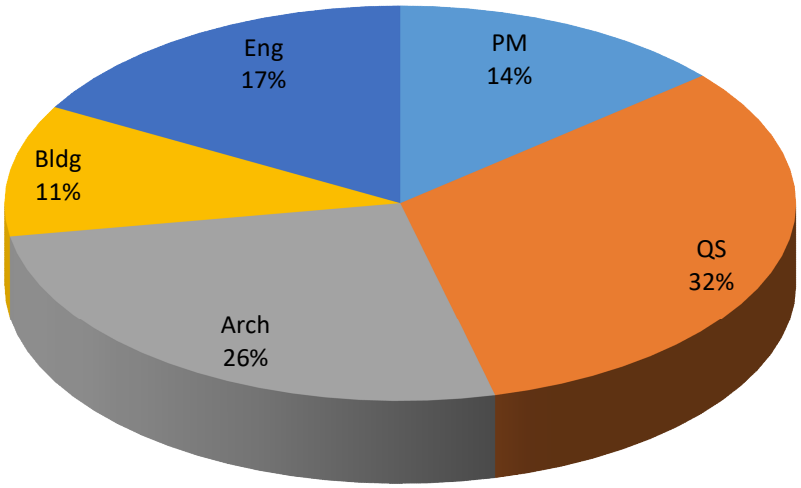

Fig. 2. Breakdown of respondents on the basis of their professional callings

Note: PM: Project Managers, QS: Quantity Surveyors, Arch: Architects, Bldg: Builders, Eng: Engineers

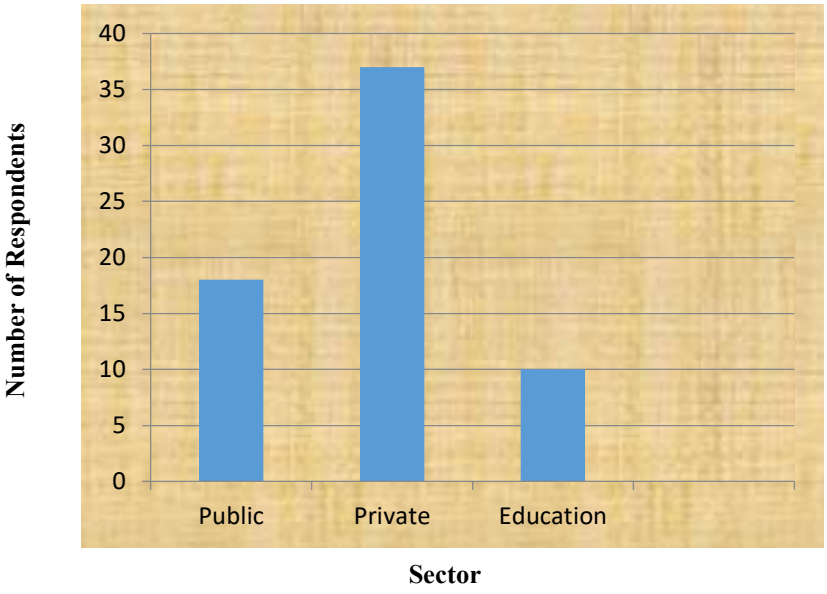

Fig. 3. Respondents profile on the basis of their sector of employment

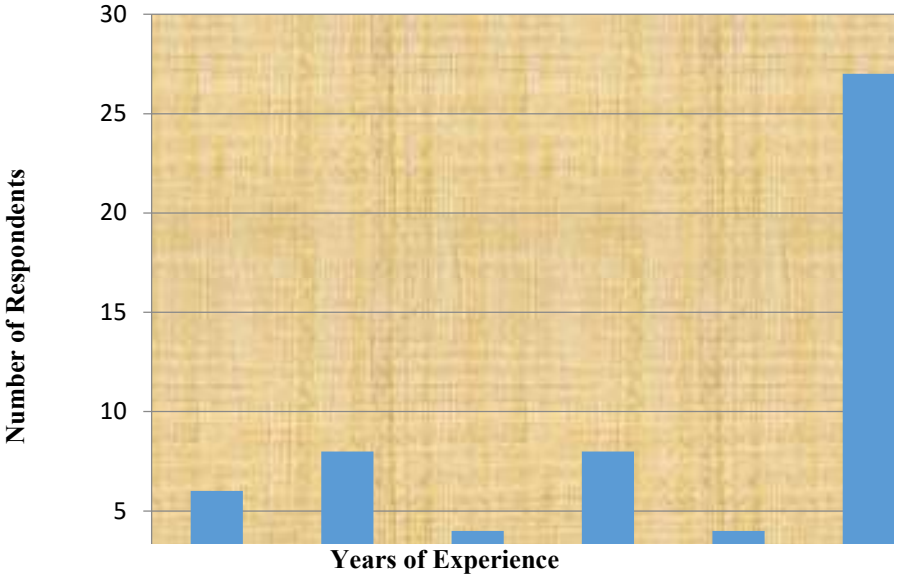

Fig. 4. Respondents' profile on the basis of their sectors of employment

4.7. Survey Results

Survey participants evaluated the impact of each barrier against ESM in project delivery on the basis of a 5-point Likert Scale where 1 represents Very Low Impact, 2 represents Low Impact, 3 Moderate Impact, 4 High Impact and 5 Very High Impact. Result of their evaluation is contained in Table 2.

4.8. Data Analysis

The respondents' evaluations of the barriers were analysed to arrive at their RII values using the formula given before after which the RII values were used to rank the barriers in descending order as shown in Table 3.

Table 3 shows that the Relative Importance Index (RII) values range between 0.4939 and 0.8212 while the barriers were ranked from first to thirtieth positions. It can also be seen from the Table that Failure to Understand Stakeholders' Needs and Expectations with an RII value of 0.8212 was ranked as the first barrier to ESM in MIPs delivery in Nigeria while Uncooperative Attitude of Stakeholders and Failure to Identify Key Stakeholders with RII values of 0.7970 and 0.7879 were ranked as second as third barriers respectively. Assignment of Similar Task to Two Stakeholders with RII value of 0.4939 was ranked as the thirtieth and last barrier to ESM in MIPs delivery in Nigeria.

It can also be observed from the table that some barriers have the same RII values as a result of which they were ranked in the same position. Examples of these barriers include Project Manager's Poor Knowledge of SM and Failure to Identify Potential Conflict Areas each of which was ranked as the fourth barrier to ESM in MIPs delivery due to a similar RII value of 0.7667. Other barriers that were ranked in the same position due to similar RII values include Late Identification of Stakeholders and Issuance of Incorrect Information to stakeholders each of which was ranked as the fifth barrier to ESM due to similar RII value of 0.7636. Four barriers (Incomplete Stakeholder Identification, Lack of constant communication with stakeholders, Failure to meet information requirements of all stakeholders and Lack of a person specifically assigned to handle SM) with similar RII value of 0.7061 were ranked eleventh due to the same circumstances.

5. Discussions

Findings from the study, which highlighted the study participants' perception on the level of impact of each barrier against ESM in MIPs' delivery, implied that each of the 39 barriers has different level of impact against ESM in MIPs delivery. The rankings implied that ESM cannot be achieved in the delivery of MIPs unless each barrier is given attention commensurate with its identified level of impact in stakeholder management during the projects' delivery. This in turn meant that successful delivery of an MIP may not be achieved because unexpected problems and uncertainty to a project can, according to Karsen (2002), be caused by stakeholders, if stakeholder management is not adequately addressed in the project's delivery.

The ranking of Failure to understand stakeholders' needs and expectations as the first barrier against ESM in MIP's delivery implied that ESM and successful MIP delivery will be difficult to achieve in a situation where a PM fails to understand stakeholders' needs and expectations because the manager's knowledge of what the stakeholders require and expect from the project will provide very useful information on how to manage them effectively. This can best be appreciated if the fact that stakeholders have different needs and expectations that may create clashes within a project is taken into consideration. Teye Buertey et al. (2016) argued that project team must determine stakeholders' requirements and expectation and manage their influence in relation to their requirements in order to achieve ESM and successful project delivery.

Table 2. Respondents' evaluation of barriers to ESM in MIPs delivery

Barrier	N	Respondents Evaluations				
		1	**2**	**3**	**4**	**5**
Incomplete Stakeholder Identification	65	4	5	20	21	15
Late identification of stakeholders	65	0	5	12	34	14
Failure to identify key stakeholders	65	0	9	8	22	26
Failure to recognise adverse stakeholders	65	3	7	21	19	13
Language barrier between stakeholders	65	18	14	16	11	6
Cultural differences between stakeholders	65	11	20	17	9	8
Uncooperative Attitude of Stakeholders	65	0	6	10	24	25
Limited stakeholder engagement/involvement	65	2	11	28	13	15
Lack of stakeholder engagement/involvement	65	1	2	23	19	20
Stakeholders' incapacity to participate in discussions	65	3	9	19	28	6
Failure to cooperate with adverse stakeholders	65	0	10	32	12	11
Inadequate engagement with external stakeholders	65	5	19	21	16	4
Involvement of numerous stakeholders	65	5	17	20	17	6
Assignment of similar task to two stakeholders	65	2	13	27	15	8
Failure to Identify potential conflict areas	65	5	5	4	27	24
Failure to assess levels of influence of various stakeholders	65	1	10	25	19	10
Failure to understand Stakeholders' needs and expectations	65	0	2	13	22	28
Lack of constant communication with stakeholders	65	0	4	29	22	10
Lack of open and ongoing communication process	65	2	7	22	22	12
Issuance of the same information to all stakeholders	65	9	10	19	17	10
Failure to meet information requirements of all stakeholders	65	1	4	25	26	9
Issuance of incorrect information to stakeholders	65	4	6	11	17	27
Lack of a person specifically assigned to handle SM	65	7	5	14	21	18
Conflicts between Stakeholders	65	4	5	18	14	24
Lack of Periodic Stakeholder Meetings	65	0	13	23	24	5
Misunderstanding of roles by stakeholders	65	2	5	12	35	11
Taking over roles from one stakeholder & assigning them to another	65	0	14	15	23	13
Lack of continuity in SM process	65	5	6	18	16	20
Project Manager's poor knowledge of SM	65	5	5	15	7	33
Absence of formal SM process	65	1	3	10	32	9
Failure to understand relationship between and among stakeholders	65	0	8	24	26	7
Lack of fairness and equity, for all stakeholders;	65	0	12	15	23	15
Failure to engender trust with the stakeholders;	65	3	12	12	26	12
Inhumane attitude in relating with stakeholders	65	5	13	17	9	21
Imposition of leadership on stakeholders	65	6	10	14	21	14
Nature and size of a project;	65	4	7	27	13	14
Project location	65	4	7	27	13	14
Interference in SM by client	65	1	10	16	27	11
Client's uncooperative attitude	65	2	10	11	11	31

Table 3. RII values and ranking of barriers to ESM in MIPs' delivery in Nigeria

Barrier	N	Respondents Evaluations					RII	Rank
		1	2	3	4	5		
Failure to understand Stakeholders' needs and expectations	65	0	2	13	22	28	0.8212	1
Uncooperative Attitude of Stakeholders	65	0	6	10	24	25	0.7970	2
Failure to identify key stakeholders	65	0	9	8	22	26	0.7879	3
Failure to Identify potential conflict areas	65	5	5	4	27	24	0.7727	4
Project Manager's poor knowledge of SM	65	5	5	15	7	33	0.7667	4
Late identification of stakeholders	65	0	5	12	34	14	0.7636	5
Issuance of incorrect information to stakeholders	65	4	6	11	17	27	0.7636	5
Lack of stakeholder engagement/involvement	65	1	2	23	19	20	0.7576	6
Conflicts between Stakeholders	65	4	5	18	14	24	0.7394	7
Misunderstanding of roles by stakeholders	65	2	5	12	35	11	0.7364	8
Lack of fairness and equity, for all stakeholders;	65	0	12	15	23	15	0.7152	9
Lack of continuity in SM process	65	5	6	18	16	20	0.7121	10
Incomplete Stakeholder Identification	65	4	5	20	21	15	0.7061	11
Lack of constant communication with stakeholders	65	0	4	29	22	10	0.7061	11
Failure to meet information requirements of all stakeholders	65	1	4	25	26	9	0.7061	11
Lack of a person specifically assigned to handle SM	65	7	5	14	21	18	0.7061	11
Interference in SM by client	65	1	10	16	27	11	0.7030	12
Lack of open and ongoing communication process	65	2	7	22	22	12	0.6970	13
Taking over roles from one stakeholder & assigning them to another	65	0	14	15	23	13	0.6970	13
Failure to understand relationship between and among stakeholders	65	0	8	24	26	7	0.6879	14
Failure to engender trust with the stakeholders;	65	3	12	12	26	12	0.6879	14
Limited stakeholder engagement/involvement	65	2	11	28	13	15	0.6818	15
Inhumane attitude in relating with stakeholders	65	5	13	17	9	21	0.6758	16
Imposition of leadership on stakeholders	65	6	10	14	21	14	0.6728	17
Failure to assess levels of influence of various stakeholders	65	1	10	25	19	10	0.6727	18
Failure to recognise adverse stakeholders	65	3	7	21	19	13	0.6697	18
Client's uncooperative attitude	65	2	10	11	11	31	0.6670	19
Stakeholders' incapacity to participate in discussions	65	3	9	19	28	6	0.6667	20
Failure to cooperate with adverse stakeholders	65	0	10	32	12	11	0.6636	21
Lack of Periodic Stakeholder Meetings	65	0	13	23	24	5	0.6545	22
Nature and size of a project;	65	4	7	27	13	14	0.6394	23
Absence of formal SM process	65	1	3	10	32	9	0.6364	24
Assignment of similar task to two stakeholders	65	2	13	27	15	8	0.6333	25
Issuance of the same information to all stakeholders	65	9	10	19	17	10	0.6182	26
Inadequate engagement with external stakeholders	65	5	19	21	16	4	0.5758	27
Project location	65	4	7	27	13	14	0.5758	27
Cultural differences between stakeholders	65	11	20	17	9	8	0.5394	28
Language barrier between stakeholders	65	18	14	16	11	6	0.5091	29
Involvement of numerous stakeholders	65	5	17	20	17	6	0.4939	30

The second ranked barrier i.e. uncooperative attitude of stakeholders may not allow ESM in MIPs delivery because lack of cooperation may result in misunderstanding, controversy and conflict between the stakeholders. Chinyio and Omolaiye (2015) discovered that construction projects, independent of their size, can become embroiled in a process of controversy and conflict without warning due to actions and/or attitude of some

stakeholders. The ranking of failure to identify key stakeholders as the third barrier underscored the importance of effective management of key stakeholders to ESM and MIPs delivery. Miller and Oliver (2015) postulated that it is important to identify key stakeholders in order to understand how much power they have to either facilitate or hinder a project with a view to prioritising them for specific action. These authors added that it is important to not only identify key stakeholders, but also to develop plans to ensure that they (key stakeholders) fulfill their functional position based on the project team's identification of their position and influence in the stakeholder map. Watt (2014), in his work, argued that if key stakeholders, who can make or break the success of a project, are not happy nobody will be happy even if all the project deliverables and objectives are met. The fourth ranked barrier, failure to identify potential conflict areas will not allow stakeholders managers to develop measures to prevent and/or address the conflicts when they occur in order to achieve ESM in MIPs delivery while the seven ranked barrier, conflicts between stakeholders will certainly not make ESM in MIPs delivery easy because it is a well-known fact that no meaningful achievement can be recorded in a conflict situation. Conflict of authority between some role players of a Large Infrastructure Project (LIP) contributed to the failure of the project (Zarewa et al., 2018). The likely impacts these two barriers may have on ESM have made authors such as Jepsen and Eskerod, (2009), Yang et al. (2009), and Chinyio and Akintoye (2008) to consider identifying and analysing possible conflicts and coalitions among stakeholders as well as effective resolution of conflicts among stakeholders as a CSFs for ESM.

Late identification of stakeholders ranked as the fifth barrier to ESM in MIPs delivery by this study was closely related to another barrier, incomplete identification of stakeholders ranked eleventh by the study. The possible impact of these barriers could have on ESM and MIPs delivery had been discovered by Pacagnella Júnior et al. (2015), who stated that incomplete stakeholder identification will not allow stakeholder managers to know all persons, groups or organisations that may impact on or be impacted by a decision, activity or result of the project, and analysing and documenting all relevant information regarding their interests, level of engagement, interdependencies, influence, and potential impact on the success of the project. The same authors argued that the first process for managing stakeholders in a project should involve identifying all persons, groups or organisations that may impact on or be impacted by a decision, activity or result of the project. The fourth ranked barrier, Project Manager's poor knowledge of SM, has direct relation with quality of SM in any project delivery because a project manager cannot effectively manage stakeholders without appropriate knowledge and skills. A study by Eyiah-Botwe1 et al (2015) on the importance of a PM's appropriate knowledge to achieving ESM identified PMs' poor knowledge as a major Critical Barrier Factor for an effective SM. The authors further argued that a person cannot practice something he is not an expert in.

Issuance of incorrect information to stakeholders also ranked fifth could not only impact against ESM in MIPs delivery but could also result in stakeholders taking undesired action that will be inimical to the overall objective of the MIP. A project can also, according to Chinyio and Omolaiye (2015), experience an ineffective SM and challenges in its delivery if information given to its stakeholders was not correct, timely or appropriate. Lack of constant communication with stakeholders, failure to meet information requirements of all stakeholders and lack of open and ongoing communication process ranked eleventh and thirteenth respectively are associated with ineffective communication between stakeholders which could cause hinderance to not only ESM but also to successful MIP delivery. Communicating with stakeholders properly and frequently (instituting feedback mechanisms) has been identified as CSF for ESM by Yang et al. (2009) while Peter (2017) argued that continuous consultation and open communication with all stakeholders and groups is one of the steps to ensure that stakeholder groups and individuals are effectively managed and engaged within project.

Lack of stakeholder engagement/involvement and limited stakeholder engagement/involvement were ranked as the sixth and fifteenth barriers that could hinder ESM in MIPs delivery. Full stakeholder engagement/involvement was regarded by many authors and researchers as a major success factor in construction projects. Zarewa et al. (2018) discovered that development of briefs for Large Infrastructure projects (LIPs') in consultation with relevant stakeholders resulted in identification of the LIPs stakeholders; affording end users opportunity to make input on how they wanted the LIPs; minimsing changes/complaints from stakeholders and gaining their support. TeyeBuertey et al. (2016) who argued that, to ensure a successful project, project team must identify and engage all stakeholders, observed that most projects fail after implementation not due to poor execution but rather due poor stakeholder consultation and engagement. The description of stakeholder engagement by Taylor (2015) as gathering and sharing information, dealing with concerns and grievances from stakeholders, measuring their impact and importance, communicating back and forth through various methods, and more, clearly highlighted its importance to achieving ESM.

6. Conclusion

This study provided empirical insight into barriers hindering ESM and their levels of impact on SM in MIPs' delivery in Nigeria. Both the study and its timing were considered apt in view of the numerous stakeholder management challenges MIPs encounter in their delivery, which at times lead to their failure. The study findings indicated that there are barriers with different levels of impact that inhibit effective stakeholder management in MIPs delivery. The findings will enable MIP managers and other stakeholders associated with the delivery of MIPs to understand barriers hindering ESM in the projects delivery and develop strategies for overcoming the barriers.

The study contributed to knowledge by increasing understanding of barriers to ESM in MIPs delivery and their respective levels of impacts. The study recommends the development of an appropriate strategy for handling stakeholder management in the delivery of MIPs and other projects in view of the identified importance of ESM to successful project delivery. It is however important to note that the study has some limitations that may affect generalisation of its findings. One of such limitations was the restriction of the study respondents to people who have

participated in the delivery of some MIPs in selected locations in Nigeria and academicians who specialised in areas related to project delivery in Nigeria. Findings of the study could, however, still be used to conduct another study using similar or different research method.

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