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ABSTRACT

The structured building practice in Nigeria started in 1930's till date is faced with a great deal of difficulties arising from lack of personnel, resources, hardware and asset improvement, to inaccessibility (or poor usage) of uniform regulations, standards for building operations. This paper evaluates failures in public project management practices in Nigeria building industry with specific reference to commercial buildings. Minna, Nigeria was adopted as the study area with the use of questionnaire as research instrument to source for data from targeted respondents. Findings shows the main causes of project failures to include; challenges of delay of payment to contractors resulting from governments bureaucracy; increase in the scope of work without corresponding increase in budget estimate and selection and award of contract based on lowest bidder and not on experience and competency impacts project success and eventually become abandoned. To mitigate this growing trend of project failure and abandonment in Nigeria, this paper suggests an improved private partnership investment and involvement to be harnessed and maintained in Nigeria building sector; contracts should be awarded based on merits, and there should be strict adherence to the existing building codes for proper implementation.

Keywords: abandonment, building industry, commercial buildings, failure, public project, project management

INTRODUCTION

Application of advanced project management methods and techniques is known to have a big impact on public institutions. Arnaboldi et al (2004) observed that application of project management strategy in the public sector was as a result of pressure on governments to abandon bureaucratic organization in favour of decentralized structures. According to Pinto (2013) a successful project comes in on schedule, on budget, achieves all the goals originally set for it and is accepted and employed by the clients for whom the project is intended. The continuous abandonment, delayed or failure of development projects is so outrageous in developing countries such that Nigerian has remained one of the countries in such difficulty (Ayodele & Alabi, 2011; Kotangora, 1993; Osemenan, 1987). The impact of this continual abandonment of projects and construction failure is gross on the aesthetics of the built environment, value and development of real properties and the economy. However, in line with the set objectives of this study, evaluation

of the factors that impact project management practice and how such impact contribute to public commercial building project failure and abandonment in Nigeria will guide further discussion in this study.

In Nigeria, the implementation of modern project management tools, methods and techniques is still not well established in the public sector, this results into failure and abandonment of public buildings and the failure of their contractors in performing their duties concerning the budget, specifications and deadlines of the projects awarded. Abandonment can be termed as the act of discontinuing the activities associated with a given developmental project or maintenance exercise within a given time frame with no intention of returning back to the development (Spelman, 1993).

LITERATURE REVIEW

Since the inception of project management, there has been an increasing interest in knowing the difference between what makes project succeed and what makes project fails and in some cases abandoned. Different studies examined what and why project failed. For instance, the short fall in meeting a clients' project expectation either with regards to completion-time, quality and cost by a contractor is adjudged project failure. Other researchers such as Nzekwe, et al., (2015); Elsokhn and Othman(2014) and Othman (2013) shared this same opinion. Meanwhile, in the view of Otim et al., (2016) project failure could be due to improper planning and poor management of resources. O'Flaherty (1993) while reflecting on property development projects suggest that project failure could arise from the failure of an owner or developer ceasing to provide the required maintenance management to a developed property.

Whilst some projects are considered successful, others are found to fail to meet their objectives. Cleland and Kocaoglu (1981) while referring to factors contributing to project success posited that various forms of conflict arise during a project which makes the ability to manage conflict as one of the key project success factors. As it is imperative to manage conflict in projects, thus, the selection of project manager for project management is supposed to include conflict management which is crucial to project success. In line with this view, Verzuh (2012) highlights the importance of the project manager's selection and the use of risk management techniques to prevent project failure. Although, the selection of a competent project manager and conflict management is important to project success, it could be argued that they are not the only variables to be considered. It has therefore been realized that other factors could be involved.

The aforementioned rationale for project success thus led to constant search for critical success factors among researchers commenced. Among these are Kerzner (2013) who stated that project success also depends on the behavior of the top management of the parent organization and the customer's organization and not just on the actions of the project manager and his team. Meanwhile, Shtub et al. (1994) found that some of the important factors influencing project success are: definition and understanding of the project mission and goals support of top management, project planning and control, consultation with the client or project user, human relations, communications, technical competencies of the project team's members, use of adequate technology, and management of contingencies.

In spite of possibilities of project success observed in both private and several public projects, around the world, there seems to be a widespread of project failure and abandonment across Nigeria especially in the building sector. Osemenan (1987) reported that Nigeria has become the "world's junk-yard of abandoned and failed projects worth billions of naira. Kotangora (1993) asserted that in Nigeria, there are about 4000 uncompleted or abandoned project belonging to the Federal Government of Nigeria with an estimated cost of above N300 billion (\$834M). The building and construction industry plays a very dominant role in the economy of any nation (Nwachukwu and Emoh, 2011). A healthy economy usually experiences an increase in building and construction activities, but in a depressed economy, the incidence of project abandonment and construction failures tends to be more prevalent. Because of the significance contribution of building any deficiency or shortcoming in its effective provision will hamper not just a sector but will cut across several sectors (Ayodele and Alabi, 2011), hence, building abandonment diminishes the values of developed properties located close and within an area.

In Nigeria, different variables have been showed for undesirable situation in administration of construction in Nigeria, the most striking being poor project investigation and administration. Be that as it may, the idea of overseeing construction project is profoundly inserted in the conventional building procurement framework. This is even as rising project management strategies for construction projects produce new sorts of difficulties for construction specialists. The achievement of any project in the construction system in the public and private sectors depend to a great extent on the projects manager's idea on staff procurement and control, strict observance of time, cost, material, and quality and environmental constrains. Again, overseeing complex, multi-disciplinary projects in a developing nation displays some unique issues with constant changes.

Alinaitwa, (2008) asserted that lack of proper and in-depth feasibility studies; inadequate supervision and faulty designs are the leading cause of project failures. In a related submission Othman, (2013) and Benjamin, (2006) attributed project failures to misappropriation of project funds. Other cause of project failure and abandonment include but not limited to under estimation by contractors (Chitkara, 2005); poor planning and management (Otim, Alinatiwe, Tindiwensi, & Kerali, 2016, chitkara, 2005); inflation leading to huge variations (Tushabomwe, 2006); lack of adequate professional training (Tushabomwe, 2006); poor communication between project team and client/stakeholders (Otim et al. 2013: Love et al. 2011); source of project finance (Nguyen et al, 2013; Idoro & Patunola-Ajavi, 2009; Alinaitwa, 2008); poor monitoring and tracking of project deliverables (Alinaitwa, 2008); poor perfoemnce of subcontarctors (Nguyen et al, 2013), Challenges of government Bureaucracy (Ling et al, 2010). Otim, Alinatiwe, Tindiwensi, & Kerali. (2016)and Akindoveni (1989)qualitatively reasoned that some of the causes of project abandonment and construction failure in Nigeria are deaths of client, inability of client to attract fund and lack of good planning. Studies conducted by Idoro & Patunola-Ajayi, (2009); social and political systems and cultural blocks was recognized as barriers to successful project planning and execution in Nigerian public sector.

Evidence from literature suggests that specific studies relating to project failure and success factors in public commercial building projects in Nigeria are less frequent and rare. Existing studies have been restricted to non-specific public projects. Whilst, numerous factors could be critical for the failure and success of public building projects; it might be argued that some could be similar to failure or success factors for specific projects while others could be generalize to all kinds of projects. For instance, project manager leadership, project team technical background, top management support, clear definition of objectives and goals, and project planning and control could either be generic or specific to a project type. Meanwhile, others could be related to company's innovation culture and experience. However, existing studies are not very conclusive about the relative importance of the factors they have identified in relation to public commercial building projects.

RESEARCH METHODOLOGY

Following the review of literature, it was cleared that there is need to evaluate the success factors of project management practices with particular reference to commercial buildings compared to success rate of other types of projects or if they have different relative importance. In order to answer the research question posed in this paper, a descriptive survey approach was used to obtain quantitative data on expert's opinion on the implementation of project management tools and techniques on public commercial buildings in Minna, Nigeria. A questionnaire was sent to the professionals with responsibilities in project management, with the purpose of investigating the factors that determine failure in commercial public building projects and the variables or possible success factors.

The respondents were asked about what they perceived is responsible for public building project failure and the relationship they believed exist between project management practices and the variables or possible success factors in those projects. The surveyed respondents were mainly asked questions about their background on questions such as level of education, area of specialization etc. Other questions were measured on quantitative scales such as rating from 1 (Completely ignorant) to 5 (Very knowledgeable) and Likert scale five point (i.e. from strongly agree to strongly disagree) rating scale. The other questions asked from the respondents were about the level of their knowledge of project planning techniques and tools; the level of utilization of the identified project planning techniques and tools; what they perceived prevents their organisation effectiveness in managing project and achieving success; and to describe how they classify their projects in the past five years. In addition, the respondents were asked to rate the factors rate some listed factors that have impacted their project success rates in the past from 1(low) to 5 (high). About twenty three factors were identified from the literature and categorized into three namely: planning, human and implementation factors. The data collected were collated and analyzed using SPSS. The computation of the mean was done using the weighted average formula below:

 $\overline{\mathbf{x}} = \underline{\Sigma \mathbf{f} \mathbf{x}}$

Where: $\overline{\mathbf{x}} = \text{mean}$

x = points on the Likert's scale (1, 2, 3, 4 and 5)

f = frequency of respondents' choice of each point on the scale

To obtain the relative importance index of some of the questions in the questionnaire, computation of the relative importance index (RII) for each item of interest, using the formula below:

$$RII = \underline{\Sigma fx} * \underline{1}$$

$\Sigma f = k$

Where k = maximum point on the Likert's scale (in this case, k=5)

Ranking of the items under consideration were done based on their RII values. The item with the highest RII value is ranked first (1) the next (2) and so on. Interpretation of the RII values is as follows:

RII < 0.60, item is assessed to have low rating

 $0.60 \leq \text{RII} < 0.80,$ item assessed to have high rating.

RII \geq 0.80, item assessed to have very high rating.

RESULTS AND DISCUSSION

The questionnaire was send to forty (40) professionals within Minna metropolis involved in project management practices and twenty-**Table1.** *Respondents' level of education*

nine (29) responses were received. This response was considered acceptable because the sample represented 72.5% of the population as samples of 10 to 20 % of the population are generally acceptable. The sampling error was 10 % which is the maximum error usually admitted. Thus, the sample being representative implies that all professionals in the built environment found in Minna metropolis were proportionally represented. Table 1 shows that fifteen (15) of the respondents are Master's degree holders which represent 53% of the sampled population, (12) 41% are bachelor degree holders. Doctorate degree and OND had 1 each which represents 3% of the respondent while none of the respondents has either HND, GCE/O'Level A'Level or qualification representing (0%).

Level of education	Frequency	Percentage %
GCE O/Level	0	0%
A Level	0	0%
OND	1	3%
HND	0	0%
Bachelor's Degree	12	41%
Master's Degree	15	53%
Doctorate degree	1	3%
Others	0	0%
TOTAL	29	100%

According to Figure 1, Thirteen (13) out of the sampled population are specialized in Architectural practice which is representing 46% of the sampled population; three (3) (11%) specialized in building practice; seven (7) (25%) practice engineering while two(2) respondent each practice estate management and quantity survey (7%). Only one respondent specialized in project management (4%).



Figure 1. Respondents area of specialization

Table 2 shows the types of project the respondents have undertaken it can be seen that 4.8% of the respondents have been involved with health related construction projects; 30.7% have been involved with Housing and commercial construction projects; 16.1% have been involved in the construction of education buildings; 12.9% have been involved with office building projects; and 4.8% have been engaged in Industrial building projects.

Type of Building Projects		Source		Frequency	Percentage	
	Fed.	State	LGA	Private		%
Health	-	-	-	3	3	4.8%
Housing	9	2	-	8	19	30.7%
Education	5	1	-	4	10	16.1%
Office	6	1	-	1	8	12.9%
Commercial	10	3	1	5	19	30.7%
Industrial	-	-	-	3	3	4.8%
Total	31	7	1	23	62	100%

Table2.	Percentage	of Types	of Building	Projects	Undertaken	by Respondents
	1 01 001110000		<i>cj <i>zmmcmm<i>cmmcmmcmmcmmcmmmmmmmmmmmmm</i></i></i>	1.0,0000	0.11010.101110.11	<i>c j</i> 1 <i>c o p o n c o o n c o o n c o o o o o o o o o</i>

From the twenty-nine (29) respondent drawn from the sampled population, Table 3 shows that project success ranked 1^{st} with relative importance index(RII) value of 0.662; challenged projects ranked 2^{nd} with RII value of 0.655 and impaired projects ranked 3^{rd} with RII

value of 0.574. However, successful and challenged projects have high rating as their RII value fall within the range ($0.6 \le \text{RII} < 0.8$). Impaired projects on the other hand have low rating as its RII value fall within the range (RII < 0.6).

Table3. Classification of projects undertaken within the last five years by respondents

Grade	Weighing fr	equer	ncy of	respor	se (f)	Σf	Σfx	Х	RII	Rank
	1	2	3	4	5			_		
Successful Projects	1	7	5	14	2	29	96	3.310	0.662	1 st
Projects Challenged	1	8	5	12	3	29	95	3.276	0.655	2^{nd}
Projects Impaired	7	8	2	10	2	29	83	2.862	0.574	3 rd

1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly Agree

Twenty-five (25) (86%) out of the 29 respondent admitted to having used one or two of project management techniques/tools at one point or the other in the execution of their projects while the remaining four (4) (14%) stated otherwise.



Figure 2. Percentage of respondents' use of project management techniques/tools

From Table 4, Bar chart tools is ranked 1st as the project management tools that the sampled population have knowledge of, Critical Path Method (CPM) is ranked 2nd; Line of Balance, Project Management software (Microsoft project etc) are ranked 3rd,Link Bar Chart is ranked 4th; Graphical Evaluation and review technique (GERT) is ranked 5th while Program Evaluation Review Technique (PERT) is 6th.

Table4. Respondents Knowledge of Project Planning Techniques and Tools

	Wei	ghiı re	ng Fr spon	requer se (x)	ncy of					
Techniques/Tools	1	2	3	4	5	Σf	Σfx	X	RII	Rank
Critical path method (CPM)	2	5	6	4	8	25	86	3.440	0.688	2^{nd}
Program evaluation review technique (PERT)	4	5	3	7	6	25	73	2.920	0.584	6 th
Bar Chart	0	4	5	6	10	25	97	3.880	0.776	1^{st}
Line of Balance	2	7	4	3	9	25	85	3.400	0.680	3 rd

Link Bar Chart	2	2	13	3	5	25	82	3.280	0.656	4 th
Graphical Evaluation and review technique (GERT)	1	5	12	3	4	25	79	3.160	0.632	5 th
Project Management software (Microsoft project etc)	3	4	7	2	9	25	85	3.400	0.680	3 rd

Table 5 shows that Project Management software (e.g. Microsoft project), critical path method Program Evaluation Review Technique (PERT) and Graphical Evaluation and Review Technique (GERT) has a high rating as the project planning tool/techniques that is most utilized ($0.6 \le \text{RII} < 0.8$) while Bar Chart, Line of Balance and Link Bar Chart has low rating in terms of level of utilization (RII < 0.6).

Table5. Level of Utilization of Project Planning Techniques/Tools by Respondents

	Weighing frequency of									
Technique/Tool		response (f)				Σf	Σfx	X	RII	Rank
	1	2	3	4	5					
Critical Path Method (CPM)	5	4	7	8	5	29	91	3.138	0.628	3^{rd}
Program Evaluation Review Technique (PERT)	3	4	9	7	6	29	96	3.310	0.662	2^{nd}
Bar Chart	8	3	9	2	7	29	84	2.897	0.579	5^{th}
Line of Balance	6	8	5	3	7	29	84	2.897	0.579	5^{th}
Link Bar Chart	6	3	12	4	4	29	84	2.897	0.579	5^{th}
Graphical Evaluation and Review Technique	7	4	6	6	6	29	87	3.000	0.600	4^{th}
(GERT)										
Project Management software (e.g. Microsoft	1	7	4	6	11	29	106	3.655	0.731	1^{st}
Project etc										

l = Don't know the method, 2 = Never use, 3 = occasionally, 4 = frequently, 5 = Always

Project Management software (e.g. Microsoft project) is ranked 1st, Program Evaluation Review Technique (PERT) is ranked 2nd, Critical Path Method (CPM) is ranked 3rd, Graphical Evaluation and Review Technique (GERT) is ranked 4th, Bar Chart, Line of Balance and Link Bar Chart were ranked 5th.



Figure 2. Respondents level of project management techniques/methods implementation

To ascertain if the implementation of the outlined project management tools/techniques or method is yielding the required or desired result; the effectiveness of implementation was also under studied. Two (2) respondent representing (7%) of the sampled population admitted that the implementation of project management methods/techniques in their organization has been poor; seven (7) (24%) said it has been inconsistent in their organization; Eight (8) (27%) said it has been adequately implemented in their organization while six (6) (21%) each, responded that it has been very good and excellent in their respective organizations. From table 6, the relative importance index (RII) of

the analyzed response shows that all the listed barriers to Effective Implementation of Project Planning Techniques/Tools has high rating (0.6 \leq RII < 0.8) except limited knowledge in application of appropriate project management techniques that has a low rating (RII < 0.6). However, frequent budgetary changes and constraints due to changes in government, is ranked 1st as the barrier that has the highest influence on effective implementation of project planning techniques/tools. Next to it is Reordering of priorities or diversion of funds as time progresses which ranked 2nd, then, Management lapse and effective contract agreements and awards ranked 3rd.

	Weighing (f)	freque	ency o	of respo	onse					
Barriers	1	2	3	4	5	Σf	Σfx	х –	RII	Rank
Presence of discrepancy between project design objectives and the implementation capacity of the Agency/Organization/Ministry	3	4	3	17	2	29	94	3.241	0.648	6 th
Lack of continuous project appraisal	2	7	2	15	3	29	97	3.345	0.669	4 th
Management lapse and effective contract agreements and awards	3	5	5	10	6	29	98	3.379	0.676	3 rd
Limited knowledge in application of appropriate project management techniques	5	9	5	8	2	29	80	2.759	0.552	9 th
Inadequate project planning which includes the cost and scheduling as well as method for successful implementation	4	8	4	8	5	29	89	3.069	0.614	8 th
Lack of monitoring, evaluation and control mechanism to assess the progress of the project	4	4	6	9	6	29	96	3.310	0.662	5 th
Lack of specific studies undertaken to make recommendations for project appraisal	3	6	9	6	5	29	91	3.138	0.628	7 th
Frequent budgetary changes and constraints due to changes in government	2	1	5	12	9	29	112	3.862	0.772	1 st
Reordering of priorities or diversion of funds as time progresses	3	3	6	7	10	29	104	3.586	0.717	2 nd

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l = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly Agree

Based on the twenty-nine (29) respondent drawn from the sampled population as shown in the table above, project success ranked 1st with Relative importance index (RII) value of 0.662; challenged projects ranked 2nd with RII value of 0.655 and impaired projects ranked 3rd with RII value of 0.574. However, successful and challenged projects have high rating as their RII value fall within the range $(0.6 \le \text{RII} < 0.8)$. Impaired projects on the other hand have low rating as its RII value fall within the range (RII < 0.6). The factors that impact project success is grouped into three (3) categories Planning, Human and Implementation factors. Respondent's submission as indicated in Table 7 shows that: Increase in the scope of work without increase in project estimate, Challenges of delay in payment to contractors resulting from government bureaucracy, and Inadequate

monitoring and/or poorly carryout inspections ranked 1st in the categories respectively; while Escalation in total cost of project before completion time due to the economy and inflation, Selection and award of contractor based on lowest bidder and not on experience and competency and Inadequate resources (e.g. equipment/tools, expertise, time, money and materials) were ranked 2nd respectively. Ranked 3rd were Initial cost and schedule estimate are not revised when more information becomes available project, Contractor's as а incompetency leading to low performance and Changing requirements and specifications. But of the factors listed in the three categories the one that impacts project success most is Challenges of delay in payment to contractors government resulting from bureaucracy followed by Increase in the scope of work

without increase in project estimate and Inadequate monitoring and/or poorly carryout

inspections.

	Weighing Frequency of response(f)									
Factors	1	2	3	4	5	Σf	Σfx	X	RII	Rank
PLANNING FACTOR			1							
Poor project planning in terms of project requirements, materials, equipment, personnel and finance	3	5	7	8	6	29	88	3.03	0.606	7 th
Plans are not used correctly or used to guide the project forward, thus causing the project to fail	5	8	8	3	5	29	82	2.83	0.566	8 th
Initial cost and schedule estimate are not revised when more information becomes available as a project progresses	3	5	3	9	9	29	103	3.55	0.710	3 rd
Major changes in the project requirements	2	5	9	9	4	29	95	3.28	0.656	6 th
Poor or ineffective project finance arrangement	2	5	7	6	9	29	102	3.52	0.704	4 th
Insufficient working capital	5	4	3	7	10	29	100	3.45	0.690	5 th
Escalation in total cost of project before completion time due to the economy and inflation	4	1	5	12	7	29	104	3.59	0.718	2 nd
Increase in the scope of work without increase in project estimate	3	1	4	12	9	29	110	3.79	0.758	1 st
Change in pre-contract consultants such as architect	9	2	4	7	6	29	83	2.86	0.572	9 th
HUMAN FACTOR										
Challenges of delay in payment to contractors resulting from government bureaucracy	0	4	5	11	9	29	112	3.86	0.772	1 st
Selection and award of contractor based on lowest bidder and not on experience and competency	3	3	3	11	9	29	107	3.69	0.738	2 nd
Haphazard award of contracts without reference to funds availability	6	1	8	10	4	29	92	3.17	0.634	6 th
Contractor's incompetency leading to low performance	1	4	8	11	5	29	102	3.52	0.704	3 rd
Unrealistic Expectations	5	4	8	9	3	29	88	3.03	0.606	7 th
Poor or shoddy work by building professionals, consultants, etc	4	6	4	9	6	29	94	3.24	0.648	5 th
Specification of costly imported materials	5	3	5	9	7	29	97	3.34	0.668	4 th
Increase in contract sums	5	3	6	10	5	29	94	3.24	0.648	5 th
IMPLEMENTATION FACTOR			1		r		T	r	1	-
Haphazard completion of technically unsound project	6	6	6	6	5	29	85	2.93	0.586	6 th
Incorrect use of project methodology	5	8	3	11	2	29	90	3.10	0.620	5 th
Changing requirements and specifications	3	6	3	12	5	29	97	3.34	0.668	3 rd
Inadequate monitoring and/or poorly carryout inspections	4	2	3	11	9	29	106	3.66	0.732	1 st
Inadequate resources (e.g. equipment/tools,	5	3	3	6	11	29	99	3.41	0.682	2 nd

expertise, time, money and materials)										
Frequent changes in government	5	5	5	6	8	29	94	3.24	0.648	4 th

Rating the impact of the above factors according to the various categories shows that Human factors ranked 1^{st} with all the identified sub-factors meeting the RII high rating range of $(0.6 \le \text{RII} < 0.8)$. Planning factors ranked 2^{nd} with its sub-factors meeting the RII high rating scale of $(0.6 \le \text{RII} < 0.8)$

except sub-factors such as 'Change in precontract consultants such as Architect' and 'Plans are not used correctly or used to guide the project forward, thus causing the project to fail' that rated low on the RII scale (RII < 0.6). Implementation factors ranked 3^{rd} .

Rank	Planning	Human	Implementation	Mean RII	Overall Ranking
	RII	RII	RII		
1	0.758	0.772	0.732	0.752	1^{st}
2	0.718	0.738	0.682	0.713	2^{nd}
3	0.710	0.704	0.668	0.697	3 rd
4	0.704	0.668	0.648	0.675	4^{th}
5	0.690	0.648	0.620	0.653	5 th

Table8. Ranking of factors that impact project success

It can be seen that the cases of project abandonment or failure is prominent in the Nigeria building industry and these has distorted the aesthetics of the built environment, trapped investors' resources without corresponding return on investment and created significant negative social and environment impacts. The result of this research work has reveal that project management practice has long been integrated into the Nigerian building industry but the required results has not been achieved owing to certain factors which include but not limited to: Frequent budgetary changes and constraints due to changes in government, Reordering of priorities or diversion of funds as time progresses, Management lapse and lack of effective contract agreements and awards, Lack of continuous project appraisal, Presence of discrepancy between project design objectives and the implementation capacity of the Agency/Organization/Ministry etc.

Project failure and abandonment is also occasioned ineffective by poor or communication link between the various stakeholders involved in a project because if there is, the issues of "Challenges of delay in payment to contractors resulting from government bureaucracy, increase in the scope of work without a corresponding increase in project estimate, and Inadequate monitoring and/or poorly carryout inspections" the success of such project will be hampered.

RECOMMENDATIONS

To mitigate the growing trend of project failure and abandonment we recommend that: -

- An effective communication link should be established between the various stakeholders involved in a project.
- An improved private partnership investment atmosphere should be developed and maintained in Nigeria building sector,
- Contracts should be awarded based on merits and competence
- Strict adherence to the existing building codes should be enforced by the relevant agencies.
- Adequate budgetary provisions should be made for a conceived project before its commencement.

CONCLUSION

The construction and building industry is an influential sector of any state or community because of the essential role it plays in the economy and the physical setting of that state. The industry has evolved over the years both in approach and techniques, given rise to better sophisticated products (structures). and Although great heights has been attained in the industry but a lot more needs to be done especially in the areas of information communication and strict adherence to the best acceptable practice by the various stakeholders The result of the research in the industry. conducted shows that the level of utilization of project management tools and techniques for the

execution of projects in the study area is high and that most failed or abandoned projects is the product of some factors which can either be planning, human or implementation factors. The Challenges of delayed payment to contractors resulting from government bureaucracy was identified by respondents as the factor that impacts building project success most.

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