

EVALUATION OF FACTORS CAUSING DELAY IN BUILDING CONSTRUCTION PROJECTS IN ONDO STATE, NIGERIA

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ABSTRACT

Delay in building construction projects execution is a major challenge in Ondo State Nigeria, as building construction projects delay continues to affect the industry in the State. This problem may be associated to projects' stakeholders. The shift of low performance of the Industry in Ondo state can be attributed to group related delay factors, as Client, Consultant, Contactor, Project, Design, Material, Labour, Equipment and External related factors. The purpose of this study is to identify and investigate these groups' related factors causing Building Construction Projects delay in Ondo State. Structured questionnaire was used to source the industry stakeholders' opinions and unstructured interview were used to consolidate their opinions for the data collection. Responses were analyzed and ranked using Relative Importance Index (R.I.I) method. The identified factors causing building construction project delay in Ondo State were grouped and ranked 1-15 top most influencing factors.

Keywords: Construction industry, Construction delay, Delay factors, Delay Orders Delay payment.

INTRODUCTION

The Nigerian construction industry continues to occupy important position in the nation's economy. Historically, Ondo State has witnessed numerous construction projects failures, collapsing, and delays; up to the time of this paper is still a common occurrence. This problem continues to occupy academic and stakeholders debate. Delay is not only visible in both State and Local governments' construction projects it is also a common challenge in the private building construction projects sector in the State. Building and construction industry in Ondo State is organized in sizes, small, medium and large with higher degree of availability of casual employment. Certainly in Ondo State casual employment does not contribute to building construction project delay but it can be sensitive to delays if casual workers are not available. The quandary is that Contractors in Ondo State have a reputation of failing to meet owner's needs, complete the project on time and within the budget. Delay is costly; risky and complex as it affects the project time, quality and budgets. Continuing occurrence of delays in building construction projects in Ondo state can be attributed to a combination of several factors. Indigenous contractor are not properly organized, inexperienced, unskilled, poor management, and the way biddings and selection of contractors are organized seems to combine with other substantial set of interrelated complex problems.

In building construction projects in Ondo State delays occur at every stage of construction pr life cycle. Construction projects start experiencing delays from the conception, planning, implementation and construction process to completion. Amu and Adesanya, (2011) identified 3407 civil engineering projects handled in South Western Nigeria, Out of these

projects only 24 were completed on time, 1571 were delayed and 1812 were abandoned. South Western Nigeria is divided into six States; Ondo State is one of them. However, their studies combined all projects in them without distinction or boundary. Ondo State is divided into 18 Local Governments and all the 18 Local Governments were covered in the study. 100 Construction projects combining both State, and Local Governments including privately financed building construction projects were investigated. From the observation none of these projects was completed on time, within the budget, and attained expected quality. Although the degree of delay varies, about 39 building construction and 12 roads, States owned projects were abandoned in all 18 Local Governments and 40 local government projects were abandoned only 9 projects were completed with extension of time and money including privately financed projects. Nearly, all construction projects in Ondo State are considered sick because they were delayed more than three weeks. Presently some of ongoing building construction and road projects are few months behind schedule: some have been delayed over a year and some of them were totally abandoned and revisited again. Delaying a project more than three months can be costly and risky, taking into consideration the costs of materials and equipment or technology involved. The process of constructing life physical project is always complicated as it involves more than one party, division of work, a long period of time to complete and handover. Puspasari, (2006) indicated that Delay occurs in every construction project but the magnitude of these delays varies considerably from project to project. Some projects are only a few days behind the schedule: some are delayed over a year. According to (Sambasivan and Soon, 2007) about 17% of government contract projects in Malaysia are considered sick, which means they were delayed more than three months or abandoned completely. Odusami and Olusanya, (2000) identified that most projects executed in Lagos metropolis experienced an average time overrun of 51% on their predetermined durations. Agaba (2009) attributes delay in construction projects to poor designs, specifications, and management associated problems and supervision.

CONSTRUCTION DELAY

According to the literature word "delay" can be defined as the postponement of events or break down of a task. Delay can be described as an act that is not properly implemented within the stipulated period of time thereby extending beyond time allocated.

Stump, (2000) defined delay as an act or event that extends beyond the time required to perform a task under a contract. Aibinu and Jagboro, (2002) defined delay as a situation, where a contractor and the project owner jointly or severally contribute to the non-completion of projects within the original stipulated or agreed on contract schedule. Besides that, the delay of project is described as project slipping over its planned schedule and is considered as a situation that is normally occur during execution of construction projects.

A construction project is commonly acknowledged as successful, when it is completed on time, within budget and in accordance with the specifications and stakeholders' satisfaction (Majid, 2006). Project success can be defined as meeting owners' needs, goal and project objectives as prescribed in the project plan, also a pronounced successful project means that the project has accomplished its technical performance, maintained its schedule, and remained within budgetary costs.

Types of Delay in Construction Projects

Tumi et al., (2009) described types of construction delay in four categories and they are:

- i) Non-excusable delay**
- ii) Excusable delay**
- iii) Compensable delay**
- iv) Non-compensable delay**
- v) Non-excusable Delay**

Non-excusable Delay is said to be caused by the main contractors or subcontractors deliberate actions. These types of delays may be associated with low productivity, improper project planning and scheduling, poor site management and supervision, wrong construction methods and technology, frequent breakdown of equipment, unreliable subcontractors or Material suppliers. Majid, (2006) indicates that, this type of delay presents no entitlement to a time extension or delay damages for the contractor either proved or not, the contractor cannot be compensated. He went further to show that client, could demand for liquidation damages if the contractor failed to complete the job on time and within the budget.

i) Excusable Delay

Excusable delay is not attributable to the contractor's actions alone may equally include unforeseen events such as weather, poor soil investigation report by consultant showing the same underground level stratum while there are differences. These types of events are beyond the contractor's control, the negligence could be attributed to consultants and the employer. Excusable delay, when identified, contractors are entitled to a time extension and compensations if the completion date is affected. This type of delay can also have an impact on critical activities which need a more detailed analysis to be calculated and determined whether additional time extension is needed.

ii) Compensable Delay

Compensable delay is caused by client's actions, Fugar and Agyakwah-Baah, (2010) indicated that Client related delay actions includes, decision makings, late instructions to start work, changes in scope of work, design and delay in progress payment. An excusable, compensable delay usually leads to a schedule extension and exposes the owner to financial strain claim damages by the contractor (Soon, 2010). However, the contractor may incur additional indirect costs for both extended field office and home office overhead if the contractor is not liable for other unsettled damages.

iii) Non-compensable Delay

Non-compensable delays are mostly caused by external factors mostly referred to as third parties or incidents beyond the control of the parties involved in the projects (clients and contractors or stakeholders) such as natural disaster weather, strikes, fires, change of government 'New Government Policy etc. *Wa'elAlaghbari et al., (2007) and Tumi et al., (2009)*

FACTORS CAUSING DELAY IN BUILDING CONSTRUCTION PROJECTS

Construction delay is a major challenge facing building construction projects in Ondo State. There are numbers of human created delay factors affecting building and construction projects in the State which continues to have negative impact on the industry performance and as well as the project quality. Delay is costly and unwanted as it creates communication breakdown between/among the construction parties and as well as it works against individual interests, progress of the project and stressed the project out of time and the budget. A number of studies have been carried out in both developed and developing countries in the world to identify the factors causing delay in building construction projects. Reviewing relevant literatures on building construction a number of project related delay factors were identified and grouped as follows:

- i) Client, (ii) Contractor, (iii) Consultant, (iv) Design (v) Equipment, (vi) Labour
- vii) Material, (viii) Project and (ix) External

METHODOLOGY

A Structured questionnaire and unstructured interview survey were used to seek the opinions of clients, contractors,' consultants and other Professionals and Non-professionals stakeholders in Building Construction industry on factors influencing building construction

project delay in Ondo State. The Questionnaire was designed on the basis of literature and industry performance records. Questionnaire's approach was adopted to capture the opinions of various stakeholders such as consulting firms, contracting organizations, construction projects' owners. Distribution of questionnaire and selection of participants was based on convenient random sampling, a method that erases bias from the process of questionnaire investigation because any one can be chosen to participate without affecting the population. The data obtained were analyzed using relative importance index to calculate and rank them numerically according to individual strength. The researcher believed that all identified delay factors can be assessed and measured numerically. One hundred copies (100) of questionnaires were randomly sent to selected participants: 15 for Clients/Owners, 15 for Architects, 15 for Engineers, 15 for Builders, 20 for Quantity Surveyors and 20 for Contractors to complete and comment. The belief was that the outcome of their opinions would either agree or disagree with the literature review on factors causing delay in the building construction projects in Ondo State.

Questionnaire Design and Method of Data Analysis

The structured questionnaire was divided into two parts. The first part requested for the organizational and background of participants. The second part of the questionnaire focused on factors causing delay in building construction projects in Ondo State. The respondents were asked to numerically indicate on Likert five point's scale ranging from 1 to 5. These factors are categorized to include the following nine major groups identified by Sambasivan and Soon (2007) (material, labour, equipment, design, contractor, client, project, consultant and external) related factors. A five-point Likert scale was used, on the basis of Relative Importance Index (R.I.I) Kometa et al., (1994). The higher the value of R.I.I indicates the more importance the delay factors in building construction projects. The descriptive Statistics is expressed in terms of the Relative Important Index (R.I.I) formulated using the following statistical expression:

$$\text{Relative important index (R.I.I)} = \frac{\sum w}{A \times N} \quad (1)$$

$$\text{Relative important index (R.I.I)} = \frac{5n_5 + 4n_4 + 3n_3 + 2n_2 + 1n_1}{5N} \quad (2)$$

(0 ≤ RII ≤ 1)

Where: W = weight given to each factor by the respondents (ranging from 1 to 5), N = Total number of Respondents, n = Total number of Respondents, A = Highest weight (i.e. 5 in this case), n5 = Number of Respondent for Very important, n4 = Number of Respondent for Important. n3 = Number of Respondent for moderately Important, n2 = Number of Respondent for Not important, n1 = Number of respondent Not very Important.

Table 1: Questionnaire distribution and responses

Table 1 : Questionnaire's Distribution and Responses					
Particulars/Profession	Quantity Surveyors	Architects/ Engineers/ Builders	Contractors	Owner/ Clients	Total
Number Distributed	20	45	20	15	100
Number of responses	16	33	15	10	74
Percentage of responses	80	73.3	75	66.7	74

N= 100

Table 1 show the number of randomly distributed questionnaire and a total of seventy four completed questionnaires were received, representing 74% participants in the study.

Figure 1 shows the percentage stakeholders participants (Client, QS, Arch, Engineer, Builder, and contractors) for the study. The combination of client and the professional participants provide sufficient information needed to further validate the outcome of the analysis.

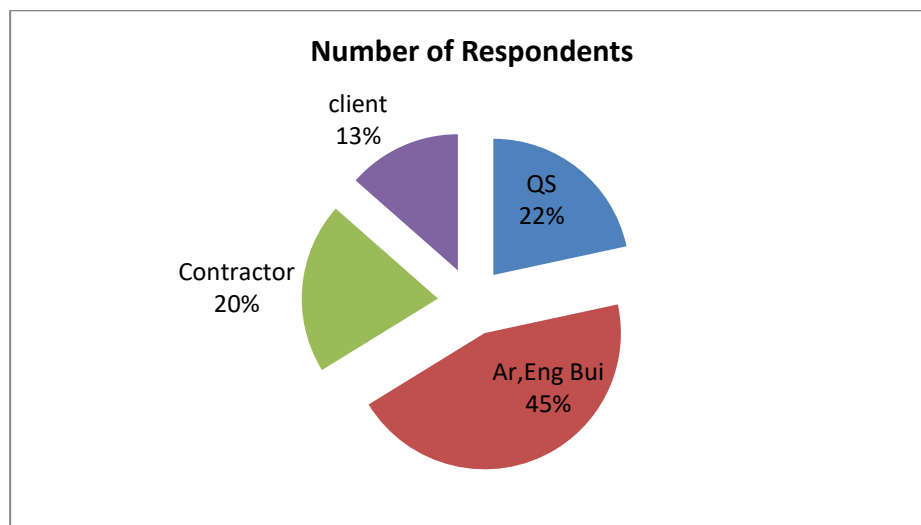


Figure 1:: Numbers of questionnaires returned by participants

Figure 2 provides the academic background of respondents. The purpose of this was to make sure that information given is enough to solve the problem at hand. The researcher believes that respondent's academic qualifications and field professional experiences are necessary..

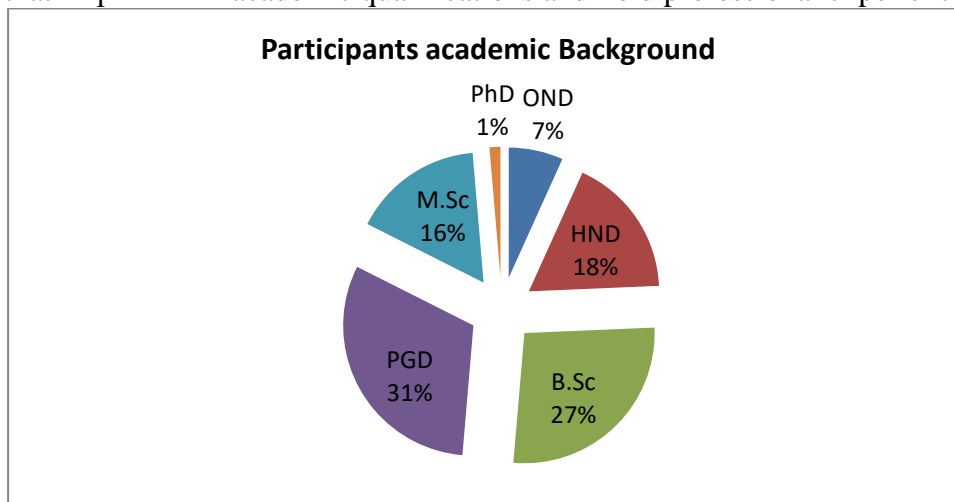


Figure2: Individual participants background qualifications

Figure 3 also shows the individual number of years' experiences, relating to individual years of experience. As can be seen from the figure 4, years of experience varies from 0 to 20years.

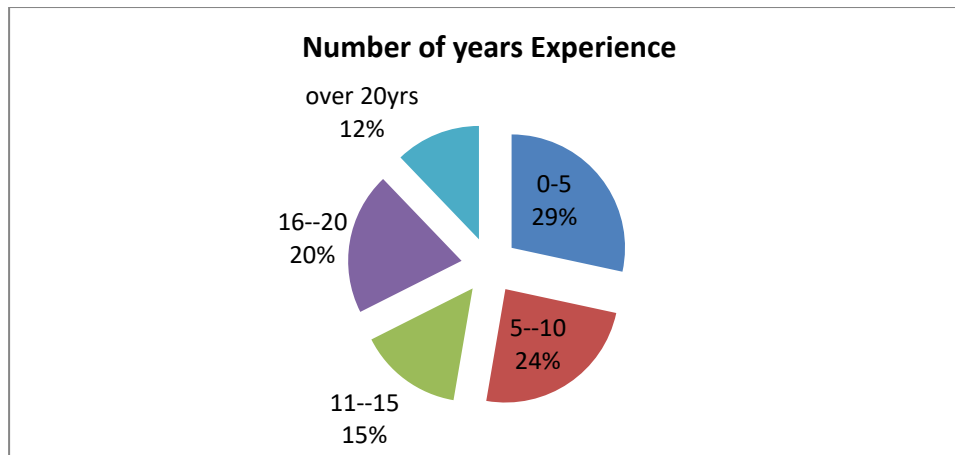


Figure 3 Respondents' Years of Experience

RESULTS & DISCUSSION

Based on the above responses, a total of eighty factors causing delay in building construction projects were identified, ranked and analyzed. In order to identify the most important factors that contributes to the causes of delay in building construction projects. Relative Important Index analysis was performed to determine the top fifteen most important influencing factors. These factors were organized to include: Client related factor; Contractor related factors; Consultant related factors; Design related factors; Labour related factor; and Project related factors as shown in Table 2.

GROUPS OF FACTORS	FACTORS CAUSING DELAY	R.I.I	RANK
Client related factors	Delay in progress payment	0.762	1
	Inadequate fund allocation	0.735	2
	Change orders	0.705	3
	Suspension /stop work by owner	0.681	9
Contractor related factors	Incompetent project team	0.705	3
	Poor site management and supervision	0.697	6
	Inadequate contractor experience	0.686	7
	Ineffective project planning and scheduling	0.686	7
Consultant related factors	late in approving major changes in the scope of work by consultant	0.681	9
	Delay in reviewing and approving design documents	0.678	11

Design related factors	Insufficient data collection and survey before design	0.676	14
	Design changes by owner or his agent during construction	0.676	14
Labour related factor	Unqualified/inadequate skilled labour	0.678	11
Project related factors	Complexity of the project	0.700	5
	Original contract duration is too short	0.678	11

i) **Delay in progress payment scored 0.765 on Relative Important Index (R.I.I):** The result indicates that delay in progress payment is ranked as the first factor causing delay in building construction projects in Ondo State. Contractors expect advance payment and monthly progress payments from the client. It shows that contractors cannot cope with the expenses when the payments are delayed, thus the work progress is affected and cash flow to support construction expenses is grounded. Most public work projects in Ondo State under both the State and local Governments are affected by this factor. As a result the contractor cannot make any progress (he or she is hanging).

ii) **Inadequate fund allocation scored 0.735 on (R.I.I)** Inadequate fund allocation is ranked second factor causing delay in building construction projects in Ondo State. Sufficient budget fund allocation is necessary for building construction projects in order to complete the project on time; the contractor may not be able to complete the project if he/she is not financially sufficient or surplus to loan the client in order to complete the project on time

iii) **Change orders by clients during construction (R.I.I= 0.705) :** Frequent interference of clients by way of making major changes to the design requirements, such as working drawing during execution can cause unnecessary delay. This factor is considered as the third most important factor influencing building construction project delay in Ondo State.

iv) **Incompetent project team (R.I.I= 0.705):** Among the top fifteen most important factors causing delay in building construction projects, incompetent project team is scored 0.705 and ranked third as above amongst most important factors causing delay in building construction projects in Ondo State. Assembling project team without adequate experience contribute to building construction project delay in Ondo State.

v) **Complexity of the project (R.I.I = 0.700):** Complexity of projects scored 0.700 and ranked as the fifth most important factors causing delay in building construction projects in Ondo State. This problem is associated with larger projects that are generally more complex.

vi) **Poor site management and supervision (R.I.I = 0.697):** Poor site management and supervision were ranked the sixth most important factor influencing/ causing delay in building construction projects in Ondo State. This type of variable can be associated with both the client and contractors weakness in area of site planning management, implementation and controls. Completing project on schedule realistically reflects on both the project manager and contractor's ability to organize and control the site operations, allocate resources and manage the flow of information amongst the construction team brilliantly. Failure to respond to issue on time may affect the overall work progress.

vii) **Inadequate contractor experience (R.I.I= 0.686)** Contractor's inexperience is ranked the seventh most important factors causing delay in building construction projects in Ondo State. This problem is attributed to the policy of how contractors are being selected with a little bit of corruption acts.. Politicians bid for contract and win and sell the contract to

another contractor with little or no experience on the technical knowhow to execute the project. This is a common problem in Ondo State. Contractor with little experience has little regard for management skills, contract plans, contract duration, cost control, over all site management and resource allocation, apparently leads to deficiencies thus leading to delay.

viii) **Ineffective project planning and scheduling (R.I.I= 0.686):** Ineffective project planning and scheduling scored 0.686 and also ranked 7th as shown. This explains that Contractors are often fail to come out with a practical and workable “work programme” at the initial planning stage. In Ondo State most contractors executing building construction projects do not implement Network Analysis Programme or CPM. This is big challenge for indigenous contractors because they are familiar with work study programming system. The consultant can only check and reviews the work programme schedule submitted to her by the contractor based on work done experience. Improper planning at the initial stages of a project manifests throughout the project. Participants considered Ineffective project planning and scheduling the seventh most important factor causing delay in building construction projects in Ondo State.

ix) **Late in approving major changes in the scope of work by consultant (R.I.I= 0.681):** Late in approving major changes in the scope of work by consultant scored 0.681 and ranked 9th as one of most important factors causing delay in building construction projects in Ondo State. This problem is seen as inability of consultants to approve or give instructions on time to effect the changes required to proceed.

x) **Suspension /stop work by owner due to lack of funding (R.I.I= 0.681):** Owners stop or delay paying the contractors on time for the on-going construction work, is ranked the ninth the most important factors causing delay in building construction projects in Ondo State.

xi) **Delay in reviewing and approving design documents (R.I.I= 0.678):** Delay in reviewing and approving design documents is ranked 11th amongst the Top 15 as the most important factors causing delay in building construction projects in Ondo State.

Lateness in approving design documents delays a project from taking off. If the design documents details are not available to the contractor at the beginning of construction planning stage, the contractor may not be able to proceed especially when client appointed his/her own contractor, if the consultant does not support the selection of the contractor he/she may delay design documents details to discredit or create confusion between the contractor and client.

xii) **Unqualified/Inadequate skilled labour (R.I.I=0.678):** Unqualified/inadequate skilled labour is a supply of labour related factor scored 0.678 and ranked 11th as one of the Top 15 most important factors influencing building construction delay in Ondo State. Difficulties in finding qualified and experienced labour to fill the available skill jobs is another challenge in all local government areas in the State. Those qualified skilled labours are not residing in Ondo State. To find them is always very difficult.

xiii) **Original contract duration is short (R.I.I= 0.678)** Original contract duration is short scored 0.678 and also ranked 11th on the ranking. Table as one of the most important factors causing delay in building construction projects in Ondo State. This challenge is associated with Network system for planning, time and cost of projects. Even if the original contract duration for the project is adequate the contractors may not complete the project as scheduled due to poor procurement management and implementation.

xiv) **Insufficient data collection and survey before design (R.I.I= 0.676)** This factor is associated with project design related problem, scored 0.676 and ranked fourteen (14th) Top 15 most important factors causing delay in building construction projects in Ondo State. Sometimes project design team do not have adequate planning skill and site investigative data is not available to them. This is a big challenge in Ondo State construction projects. It is important that geological survey data is available to the project design team. When contractors come across unforeseen conditions not mentioned in contact documents they may

be forced to stop work and review the design work, correct and seek for client/consultant approval. Due to this, process delay may occur at any length (Compensable delay).

xv) **Design changes by owner or his agent during construction (R.I.I= 0.676):** Design changes by owner or his agent during construction is associated with Design related factor, scored 0.676 and also ranked 14th on the Table of the Top15 most important factors causing delay in building construction projects in Ondo State. This challenge is associated with project planning and the project design management. Figure 5 shows the complete Top 15 the most important factors causing delay of building construction project in Ondo State including the R.I.I. scores and rankings. Some of the scores and rankings are identical but the total variables as shown on Top 15 related delay factors is 15 in number.

Figure 4.1 shows the total scores and ranking of Top 15 most important factors influencing/causing delays in building construction projects in Ondo State.

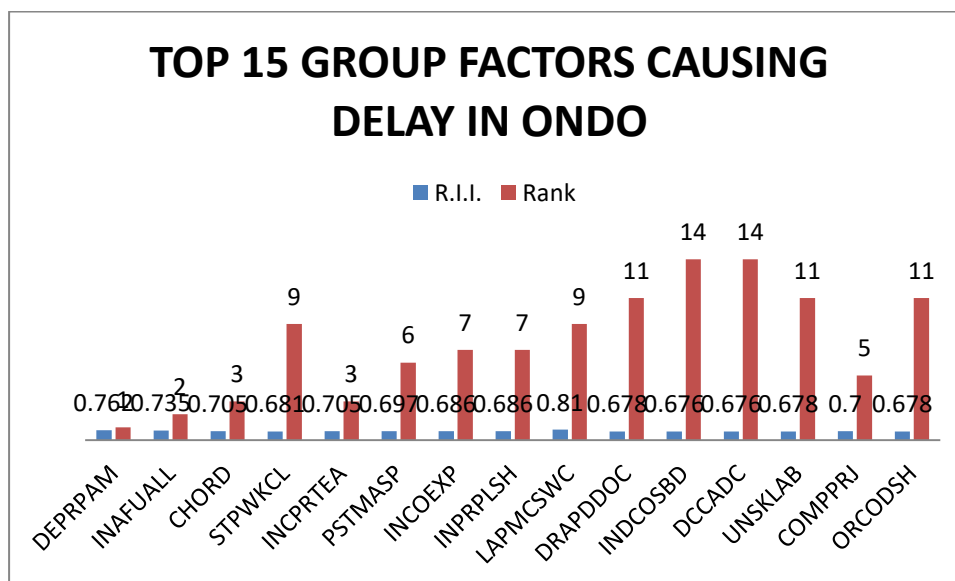


Figure 4.1 indicates the Fifteen (15) Top Group Factors influencing delays in Ondo State.

- 1) DEPRPAM: Delay in progress payment
- 2) INAFUALL: Inadequate fund allocation
- 3) CHORD: Change orders
- 4) STPWKCL: Suspension /stop work by owner
- 5) INCP RTEA: Incompetent project team
- 6) PSTMASP: Poor site management and supervision
- 7) INCOEXP: Inadequate contractor experience
- 8) INPRLSH: Ineffective project planning and scheduling
- 9) LAPMCSWC: late in approving major changes in the scope of work by consultant
- 10) DRAPDDOC: Delay in reviewing and approving design document
- 11) INDCOSBD: Insufficient data collection and survey before design
- 12) DCCADC: Design changes by owner or his agent during construction
- 13) UNSKLAB: Unqualified/inadequate skilled labour
- 14) COMPPRJ: Complexity of the project
- 15) ORCODSH: Original contract duration is too short

CLIENT RELATED FACTORS

Twelve related factors were identified and ranked according to their weights. Four out of twelve factors were identified as influencing factors causing building construction project delay in Ondo State. These four (4) factors were ranked among the Top 15 factors critical factors causing project delay in Ondo State and others were discarded. The purpose of Client related factors were to seek the opinions of clients and also make them realize the importance of their own contributions to the study. Figure 4.1 shows the ranking of client factors causing delay and level of their influence. As can be seen Twelve related factors were identified and investigated, only four factors met the strength of Top15 influencing delay in building construction project in Ondo State, this includes progress payment which scored the highest 0.762 and ranked 1 on the table. This also shows the inadequate fund allocation scores 0.735 the second and ranked 2 on the table. While the third the Change Orders scored 0.705 and

third and Suspension/Stop work by owner' scored 0.681 ranked 9 amongst the Top 15 most important factor influencing building construction project delay in Ondo State.

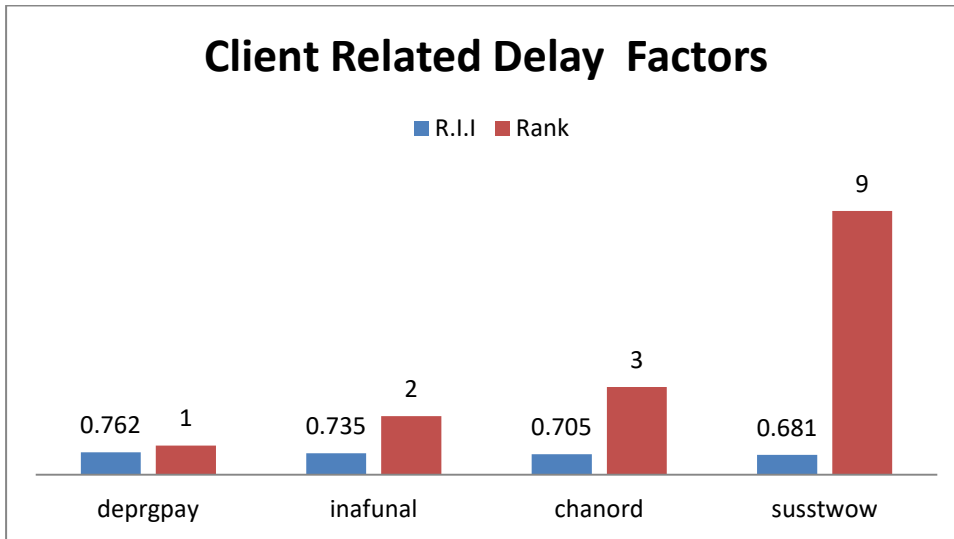


Figure 4.1: Client identified influencing factor causing building construction delay.

- 1) deprgpay: Delay in progress payment
- 2) inafunal: Inadequate fund allocation
- 3) chanord: Change orders
- 4) susstwow: Suspension/stop work by owner

CONSULTANT RELATED DELAY FACTOR

Eight consultant related delay factors were identified and only two out of the eight were ranked amongst the Top 15 most influencing factors causing building construction delay in Ondo State. These include: Delay in approving major changes in the scope of work by consultant which scored 0.681 and ranked 9 and Late in reviewing and approving design documents scored 0.678 and ranked 11. The other identified factors that were ranked below the Top 15 most important influencing factors were stepped down or eliminated from the lists. Figure 4.2 shows the only two factors that met the research standard.

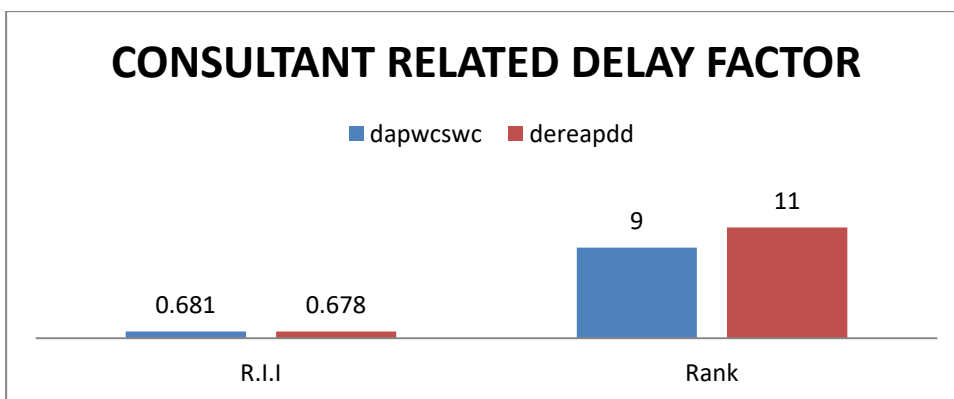


Figure 4.2: Consultant identified influencing factor causing building construction delay.

- 1) dapwscwc: Delay in approving major changes in the scope of work by consultant
- 2) lrapdoc: late in reviewing and approving design documents

CONTRACTOR RELATED DELAY FACTOR

Ten influencing related delay factors were identified and investigated, calculated and ranked; only four (4) factors met the research standard as set for amongst the Top 15 most important influencing factors building construction projects delays in Ondo State. And, they are

‘Incompetent project Team scored 0.705 and ranked 3, Poor site management and supervision scored 0.697 ranked 6, Inadequate contractor experience scored 0.686 and ranked 7 and Ineffective project planning and scheduling also scored 0.686 and ranked 7. The others investigated factors scored below the research standard and fell outside the Top 15 most important influencing factors, we eliminated them. Figure 4.3 shows only the four (4) Contractors related delay factors that met the research standard.

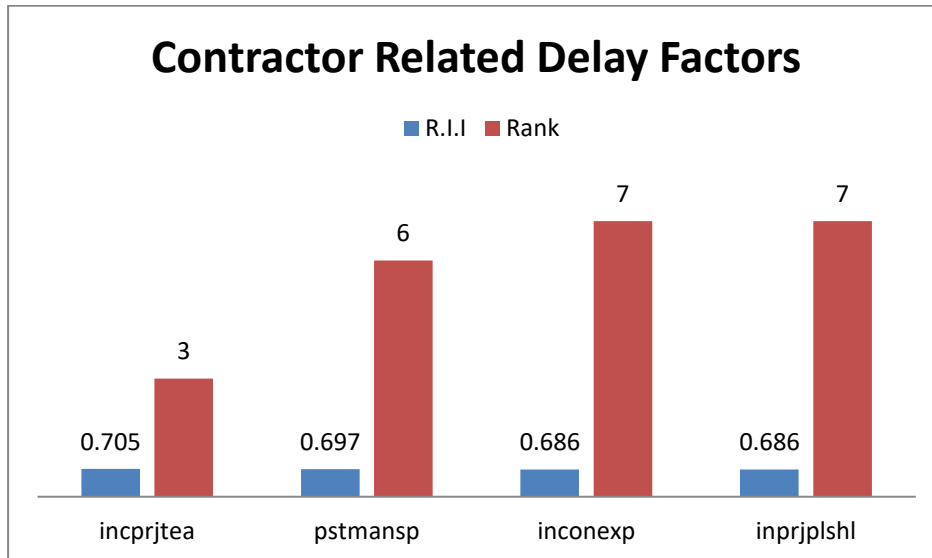


Figure 4.3: Contractor related identified delay factors.

1) incprjtea: Incompetent Project Team 2) pstmansp: Poor Site Management and Supervision 3) inconexp: Inadequate contractor Experience 4) inprjplshi: Ineffective Project Planning and Scheduling.

DESIGN RELATED FACTORS

In design area 8 identified factors were identified, only two met the criteria recognized by Top15 most important influencing factors causing building construction project delay in Ondo State. This includes: Insufficient data collection and survey before design scored 0.676 ranked 14th while Design changes by owner or his agent during construction also scored the s 0.676 and ranked 14th. The other identified factors were stepped down as they failed to meet the Top15 criteria. Figure 4.4 shows the only two (2) that met the Top 15 study.

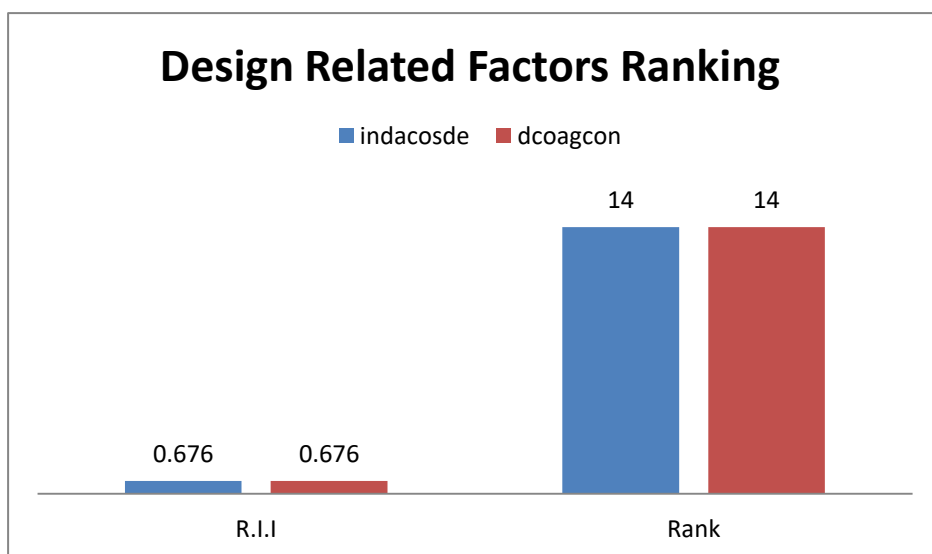


Figure 4.4: Design Related Factors.

1) Indacosde: Insufficient data collection and survey before design

- 2) Dcoagcon: Design changes by owner or his agents during construction

LABOUR RELATED FACTOR

Under Labour Related Factor, all identified factors investigated under labour related factors only one (1) factor met the standard criteria of the study which was Unqualified/inadequate skilled labour that scored 0.678 and ranked 11. Figure 4.5 shows the only (1) factor that met the criteria set by the Top 15 most important factors influencing/causing delay in building construction projects in Ondo State.

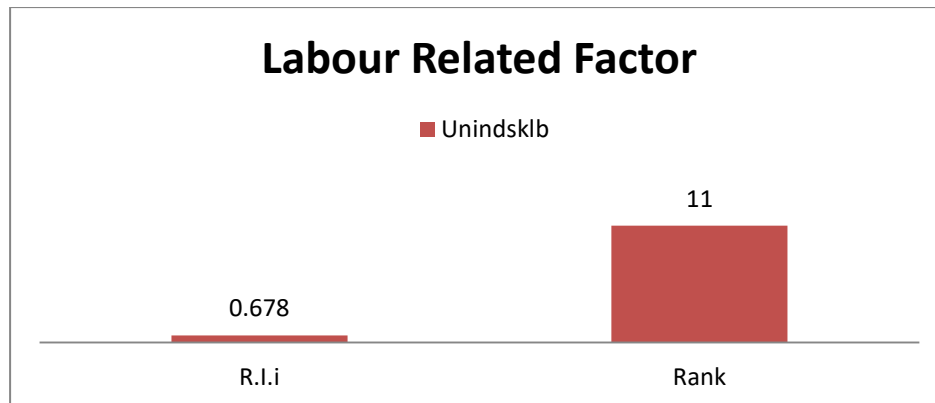


Figure 4.5: Labour Related Factor investigated.

PROJECT RELATED FACTORS

Under project related factors six related factors were identified and investigated. Out of these, only two met the criteria adopted by the study for the Top 15 the most important influencing factors causing building construction delay in Ondo State. The two factors are Complexity of the project scored 0.700 ranked 5 while the second Original contract duration too short scored 0.678 and ranked 11th. The rest identified factors were discarded because of their weights scores and ranking Figure 4.5 shows the only two factors met the criteria standard set by the study.

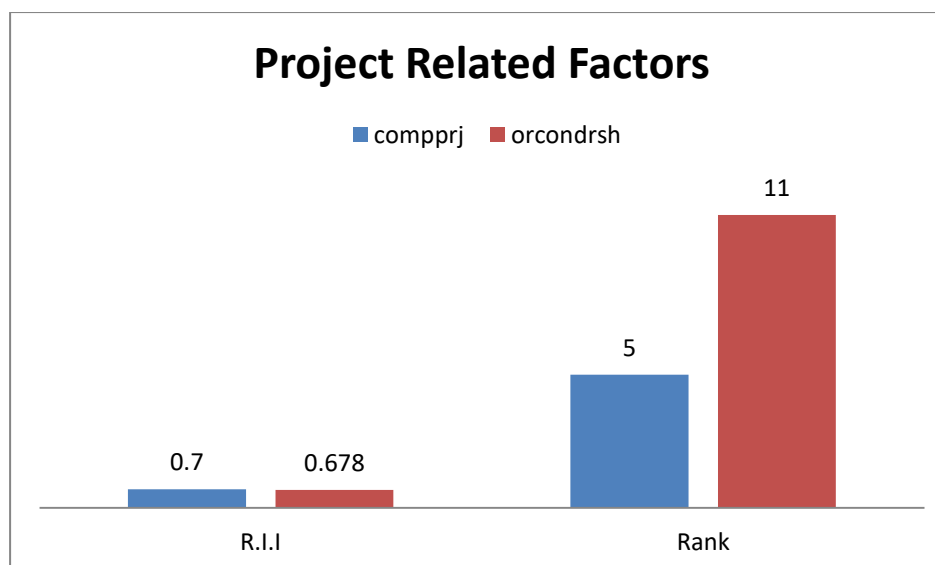


Figure: 4.6 Project related factors identified..

- 1) compprj:: Complexity of the project 2) orcondrsh; Original contract duration is too short

4.8 MATERIAL RELATED FACTORS For material related factors category nine related factors were identified and examined. The results showed that none of these are factors met the Top15 criteria or classifications. It means all material related factors are not part of the delay problems in Ondo State.

4.9 EQUIPMENT RELATED FACTORS

Six equipment related factors were identified and investigated. The scores and ranking of these factors were found outside the Top15 most important influencing factors causing building construction project delay in Ondo State. It shows that equipment does contribute to construction delay in Ondo State

4.10 EXTERNAL RELATED FACTORS

External related factors were also exploited, 14 external related factors were identified and investigated to see if they had influence in building construction delay in Ondo State. All the 14 related factors were calculated using R.I.I index and ranked accordingly. The result shows that none of these factors was within the rank of Top 15 the most important influencing factors causing delay in building construction project in Ondo State. The result does not previous study It shows that external related factors do not have any influence on construction delay in Ondo State.

CONCLUSION

Achieving project completion within the budget, time, quality and meeting client needs is the fundamental and essential criteria for any successful project in Ondo State. Contractors in Ondo State do not usually meet these criteria. The study has identified Top 15 most important influencing related factors causing building construction project delay in Ondo State. From the literature review fifty delay related factors were identified while this study identified Top 15 most important influencing related factors causing building construction project delay in Ondo State. These include: Delay in progress payment, with relative importance index 0.762 ranked 1, Inadequate fund allocation scored 0.735 ranked 2, Change Orders scored 0.705 ranked 3 Incompetent project team also scored 705 ranked 3, Complexity of the project scored 0. 700 ranked 5, Poor site management and supervision scored 0.697 ranked 6 , Inadequate contractor experience scored 0.686 ranked 7, Ineffective project planning and scheduling scored 0.686 also ranked 7 as above, Suspension/stop work by owner scored 0.681 ranked 9, Late in approving major changes in the scope of work by consultant scored 0.681 also ranked 9 as above, Delay in reviewing and approving design documents scored 0.678, ranked 11, Unqualified skilled labour scored 0.678 also ranked 11, Original contract duration is too short also scored 0.678 score and ranked 11, Insufficient data collection and survey before design scored 0.676 ranked 14 and Design changes by owner or by his agents during construction also scored 0.676 ranked 14 As can be seen few of the identified scored the same the same figure and ranked the same thing. These factors are shown in figures 1-7 respectively. The study concluded that building construction project delay in Ondo States is generally caused these identified related factors. The study concluded that without addressing these Top15 the most important influencing factor causing building construction project delay early stage during planning, building construction project delay will continue to occur in Ondo State.

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