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EXTENSION OF TIME (EoT) CLAIMS SUBSTANTIATION AND ASSOCIATED ISSUES IN COMPLEX-MULTI STAKEHOLDERS' BUILDING CONSTRUCTION CONTRACTS

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ABSTRACT

In complex and multi-stakeholder construction projects, delays and disruption are commonplace. Delays trigger the request for Extension of time (EoT) to enable adequate time for the project to be completed. Substantiating the need for EoT is a difficult task and requires a lot of effort. The administration of EoT claims come with a lot of issues to the clients and the contractors. The purpose of this study is to assess the factors for substantiating Extension of time (EoT) claims and the common issues associated with (EoT) in complex-Multi Stakeholders' Building Construction contracts. This study adopted a well-structured questionnaire administered on construction professionals in consulting and contracting organisations, via electronic means and using snowball sampling techniques in Abuja and Lagos state, Nigeria. With a response rate of 39.60% and an instrument reliability index of above 0.70, the gathered data were analysed using appropriate descriptive analytical tools. It was found that the major documents and records that have the level of importance for substantiating claims for extension of time are; time impact analysis showing the potential impact of the changes before carrying out the changes, change of work notices, claim register, programme updates, minutes of the daily, weekly, and meetings, and daily progress reports. The major disputed issues associated with claims for extension of time in construction contracts are concurrent delay, The absence of notice of delay by the contractor as required by the contract, eligibility of time extension claim, inadequate effort in mitigating the delay and poor demonstration of the impact of the delay event to the project schedule. Regular training and continuous professional development is required to enhance the skills and expertise of project administrators/managers for effective claim administration and management.

I. INTRODUCTION

Globally, the construction industry is known for facing delays in the delivery of developmental projects. Delays in construction project delivery have remained a single most frequent phenomenon in the construction sector [1-3]. [4] posits that the construction sector has the lowest rate of meeting contract deadlines amongst the industrial sector, especially in emerging nations. This situation has been responsible for the high level of risks and uncertainty in the construction sector compared to other industries. Furthermore, the unique nature of construction projects, their complexity, intense time of designs, multiple stakeholders, construction methods and process [5-6], contributes to the worsening poor time performance of construction projects in the sector. In complex projects with multiple stakeholders (client, consultants, contractors, subcontractors, suppliers, among others), the success of the project lies in how well-emerging issues are taken seriously and managed by the project management team. Stakeholders' satisfaction and meeting of

project objectives depend on effective management of a project to meet key project performance parameters.

According to [1], cost, time, quality and health and safety are key project controlling features that impact project delays. The occurrence of delays in the delivery of large-multi stakeholder projects is a central cause of cost overrun, an extension of time, disputes, arbitration, litigation, loss of revenue and projects, among other issues. A critical determinant of construction project performance is timely completion. The time as well as the cost and quality performance of construction projects are the basis for declaring a project successful [7-9]. According to [10], time performance is used to benchmark project performance assessment as well as serve as a symbol of the project's organization efficiency. While considerable efforts have been made to avoid delays, it has remained a global epidemic on construction projects, and the Nigerian construction industry has received its fair share. In Nigeria, a large proportion of construction projects (public and private) experience delays with the consequence being time and cost overruns, disputes, abandonment, ideal resources, negative social impact [11]. One of the reasons for the invocation of the extension of time (EoT) clause is delays.

Delays in the execution of construction activities may trigger the need to apply Extension of time (EoT) to enable adequate time for the project to be completed. EoT claims emanate from delays that evolve from unforeseen events or situations for which provisions are made in most standard forms of contract, for claims for an extension in the initially agreed project completion deadline [12]. Contractors generally leverage the extension of time clause in building contracts to avoid the liability of paying for damages for liquidated damages due to failure to meet the contract completion date original contained in the signed contract. There is always a list of "relevant events" in most standard forms of contract that give the contractor the right to apply for an extension of time. It is also expressly provided in most contracts that claim for delaying events timely [5].

While there is a lot of extant literature on the causes of delays, effects of delays, time overrun and cost overruns [13-19,1,4], only a very few of them have focused on the extension of time in construction projects [5, 20-24]. Extension of time in construction contracts is an area that is understudied in Nigeria specifically and in other developing countries generally. The purpose of this study is to assess the factors for substantiating Extension of time (EoT) claims and the common issues associated with (EoT) in complex-Multi Stakeholders' Building Construction contracts. The specific objectives towards meeting the study aim are; (i) to assess the level of presentation of documents and records to back up claims for extension of time, and (ii) to assess the major issues in disputes with claims of EoT. The perspective of the Consultants and Contractors would be sought on this very important topic, as they are key to every construction contract.

This study will help contractors to know the required documents and records to provide success in their claims for extension of time. It will impact the knowledge of the contractor as regards the issues surrounding EoT claims and administration. Most assessment of EoT is carried out by the Quantity Surveyors. This study will assist the Quantity surveyors to ascertain whether the contractors have submitted the required documents to substantiate their claims for delays. The study also adds to the few existing studies on EoT in Nigerians and by extension of Developing countries of Africa.

II. LITERATURE REVIEW

II.1 PROJECT COMPLETION TIME AND EXTENSION OF TIME CLAIM

In a construction contract, it is the obligation of the contractor to proceed regularly and diligently with the works to the best of his endeavours. This is critical to prevent or avoid delay in the progress of the works and to any negative impact on the project completion date. Unless expressed, time is always of the essence in most construction contracts. This means that "the obligation to perform by the date stated or agreed is essential to the contract" [21].

It is recognized by most construction contracts that the completion date might be delayed by unexpected or unforeseen events or circumstances. When these delays occur, the impact of the risks is borne by either the employer or the contractor. To cushion the effects of the risks, an 'extension of time clauses' is usually provided to enable completion on a new date to be set [21]. Extension of time is described as the situation where the construction period is extended due to delays caused by the contractor, employer or his agents. When an extension of time is granted, the employer would not be entitled to liquidated and ascertained damages (LAD) until such a new date is elapsed.

II.2 TYPES OF DELAYS FOR EXTENSION OF TIME CLAIM AND COMPENSATION

The four major categories of delays identified in the literature are; Critical or non-critical, Excusable or non-excusable, compensable or non-compensable, and concurrent or non-concurrent [25].

Critical or non-critical: This type of delay may or may not impact the project completion date. Critical delays are those that impact the project completion date. Critical delays modify and affect the progress of work to the extent the completion date is exceeded. According to [20], delays that occur on the critical path of a project that consequently impacts the completion date is known as 'critical delay'.

Non-critical delays are those whose occurrence does not impact or modify the project milestone dates or completion date [25, 5]. Delays that does not occur on the critical path of the project with no consequent effect on the overall project completion date is known as non-critical delays [26].

Excusable or non-excusable: According to [27], non-excusable delays results from the contractors' action or inaction. This type of delay is attributed to the contractor because the events are within the sphere of his control, and no extension of time nor compensation will normally be granted to the contractor [20, 2]. The category of these delays is mismanagement, poor scheduling, errors or mistakes in construction, breakdowns of equipment and machines, and problems related to staffing [28]. Excusable delays are classified into; non-compensable or compensable excusable delays. The non-compensable excusable delays are caused by events that are beyond the control of the contractor and the employer; usually unforeseen circumstances [27, 20]. [29] listed things like 'Force Majeure, 'Acts of God', materials and labour shortages which are beyond the expectation of the employers and the contractor; as examples of non-compensable excusable delays. On the other hand, the compensable excusable delays are caused by the employer (owner) and not the contractor. [27] identified defective designs changes request from the client, difficult site

conditions, and failure of the client to give access to the site to the contractor; are some of the events that give rise to compensable excusable delays. A compensable excusable delay entitles the contractors to both extensions of time and compensation. While, non-compensable excusable delays entitles the contractors to an extension of time but with no compensation for delays costs [28, 5].

Concurrent delas: This results from delay events (say two or more) that occur at the same time. It is difficult to determine the party that is responsible for concurrent delays. This type of delay could be attributed to the client, contractor and/or third-party; examples include inclement weather, force majeure among others [5]. [21] posit that the responsibility for concurrent delays is shared by the client and contractor. Where a concurrent delay is established, the extension of time due to the contractor's delay should not be reduced. Any additional cost incurred by the contractor as a result of the delays by both the client and the contractor, the amount recoverable as compensation by the contractor should be to the extend he is able to identify separately the additional costs caused by the client delay and those by the contractor delay [21].

Concurrent delays are used as a defensive tool by both the client and contractors against each other. The interest of the client is to collect liquidated and ascertained damages (LAD), while that of the contractors is to avoid the payment of LAD [29]. Litigation is the ends point of unsettled several issues emanating from concurrent delays [30, 27].

Figure 1 shows the summary of the various types of delays in a construction contract. It is a modification of the work by [20].

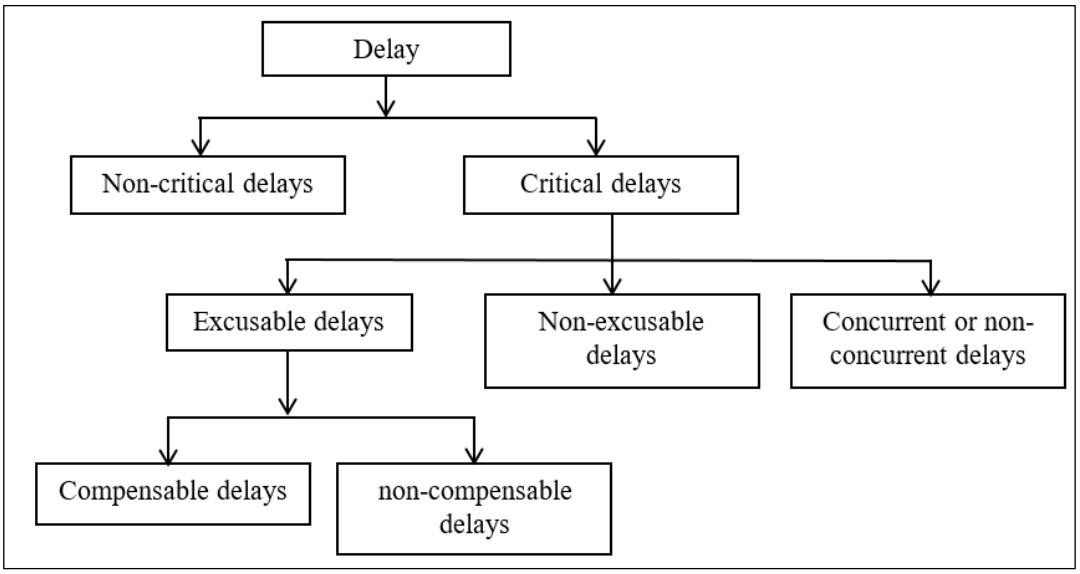

Figure1: Types of delas.
Sources: Modified from Maritz and Prinsloo [20].

II.3 BACKING OF CLAIMS FOR EXTENSION OF TIME

Extension of time for a project may be requested and considered under several different valid circumstances. However, not in all cases that delays claims are approved as an extension. In a construction contract, it is critical to keep records of claim events; emails, change requests, documents, scheduling [31].

Claims for extension of time are backed-up by certain specific supports documents that are paramount. Substantiation of reasons for delays that will guarantee the contractor/subcontractors to seek for time extension requires certain conditions, and they include the followings according to [31]:

i. A notice of the precise issues that triggered the delays
ii. List of activities that are affected by the delays- usually obtained from the project schedule
iii. The precise number of days/calendar days representing the time being claimed
iv. Photographs, images, sketches or other forms of illustration form supporting the delayed events
v. Suggestions/recommendations given to the project manager/contract administrator
vi. A clear description of actors taken by the contractors to avert or reduce other delas.
vii. Alternative ideas/solutions that were presented to the project manager
viii. Communications between the design team and construction team or among the project teams on issues relating to the delays evens and associated problems.

A summary of the guidelines for ensuring that claims in construction contracts are kept to a minimum is shown below. This guideline is as developed by [32].

i. Admissible and factual evidence such as photographs, videos, memos, drawings, minutes of meetings, memos, among others are under record keeping. This record should be kept, maintained and organised in such a way that ensures the smooth facilitation of construction contract administration.
ii. Preservation of contract parties' rights. Written notice of potential claim events should be served, especially within the time stated in the contract conditions.
iii. Pro-activeness of the parties: being proactive is a conscious attitude by either the contractor or clients to quickly respond to complaints or potential threats to the project completion date. Proactive actions facilitate the administration and management of projects.
iv. Having a sound knowledge of the contract; is an aspect that is mostly ignored by contractors. Effective delivery of

the project to specifications requires a clear understanding of the obligation and responsibilities contained therein. The onus is on the contractor to comply completely with the contract requirements, more especially claim and variation clauses, among others. The contractor must adhere to contract provisions, as failure to do so will mean loss of chances to successfully claim for EoT.

v. Adequate planning and scheduling are key for projects to be delivered successfully. Sufficient Planning ensures that resources are effectively utilised and managed. Events that will impact the critical path should be properly monitored. A regular update of the programme of work is required by parties.

vi. Proper attention to change requests/orders that will cause extra cost is required. Sound negotiation skill is required to effectively execute a change order [5].

Substantiating EoT claims requires detailed record keeping. [33] recommended for the establishment and maintenance of a good documentary control by the contractors; this will enable a huge amount of both hard-copy and electronic records to be available to the planning team and project managers/ contract administrators. The type of records to be kept according to [33] includes the following. the contractor estimate, contractors costing system and reports, internal management reports, ad-hoc studies and reports on profit and loss, records of bonuses, timesheets, updates of programmes, applications for payment, labour allocation returns and all labour reports and returns, and other relevant records to how the breakdown of labour hours used and the progress achieved [33].

[24] highlighted documents and records that are required to prepare well-substantiated claims for extension of time, and they are contained in Table 1.

Table 1: List of required records to establish properly substantiated claim.

S/Nr	Record description
1	Baseline schedule
2	Method of construction identifies the works that are intended to be executed by subcontractors.
3	Planned manpower and machinery resources
4	Programme updates
5	Notices for delay
6	Programme revisions indicate changes and their required resources and the impact on the contract completion date.
7	Delay analysis
8	Time impact analysis shows the potential impact of the changes before carrying out the changes.
9	Cause and effect analysis for each delay disruption event.
10	Productivity analysis reports
11	Minutes of the daily, weekly, and meetings.
12	Minutes of any special meeting
13	Change of work notices
14	Daily progress reports
15	Weekly progress reports
16	Monthly progress reports
17	Claim register
18	Delay events log

Source: [24].

II.4 DISPUTED ISSUES ASSOCIATED WITH EXTENSION OF TIME CLAIMS

A lot of studies exist on construction management literature regarding primary causes of disputes [34-35]. Extension of time claims is among the major causes of disputed issues in the construction industry [36]. One of the common causes of disputes in construction is EOT claims [37]. Similarly, the study of [38] indicates that claims evolving from delays and disruption top the major sources of disputes in construction contracts.

[5] identified the top five major disputed issues in construction projects as; concurrent Delay, Eligibility of time extension claim, Failure by the contractor to comply with the contractual requirement for EOT application, Inadequate effort in mitigating the delay, and Poor demonstration of the impact of the delay event to the project schedule. It is obvious that the commonly disputed issues in the construction contract, especially between clients and contractors are an extension of time. What these further means is that no construction contract can begin and end with claims or other issues to be disputed. Eleven most disputed issues associated with an extension of time claims as identified from the study of [5] is shown in table 2.

Table 2: Disputed Issues Associated with EoT Claims.

S/N	variables
1	Concurrent Delay
2	Eligibility of time extension claim i.e. the permissibility of any specific delay event for justifying a project time extension
3	Failure by the contractor to comply with the contractual requirement for EOT application
4	Inadequate effort in mitigating the delay
5	Poor demonstration of the impact of the delay event on the project schedule
6	Permissible period of time extension
7	Conflicting interpretation of contractual provisions
8	The absence of notice of delay by the contractor as required by the contract
9	The choice of method for evaluating the delay
10	Global Claim
11	Conflicts on the ownership of float

Source: [5].

III. MATERIALS AND METHODS

This study adopted a well–structured online questionnaire developed from the review of relevant literature. The objectives were to assess the level of presentation of documents and records to back up claims for extension of time and to assess the major issues in disputes with claims of EoT. The study covered Lagos and Abuja which are the two major areas that house the highest numbers of construction-based organisations in Nigeria. Experienced construction professionals that have attained managerial level, and working with consultants and contractors were sampled using snowball sampling techniques, as they are a key to project delivery in the construction industry. The Questionnaire was used for this study because covers wider audiences at an economical cost within a shorter time. Online means of questionnaire survey helps to avoid hard-copy paper questionnaires; it is eco-friendly [39].

The questionnaire used was designed into three sections. The first section garnered information on the demographic

characteristic of the respondents. Information gathered in this section served as a quality check to those obtained from other sections. The second section collected information on the role of documents and records in substantiating claims for extension of time, and the third section collected data on the major issues in disputes with claims of EoT. The questionnaire was based on a 5-point Likert scale in which 1 = lowest score/rating and 5=highest score/rating. The respondents were required to rate the variables on documents and records to substantiate claims for extension of time based on level of importance in obtaining approval of the request for EoT, and the variables on the major issues in disputes with claims of EoT were based on level of frequency of occurrence.

The population of 3888 construction organisations in Lagos and Abuja were obtained from the study of [40]. From the sample size determination Table in [41], 3888 is closer to 4000, and the corresponding sample size is 351. Three hundred and fifty-one questionnaires were administered to the target participants using the snowball sampling technique via Google form electronically. The snowball sampling technique is based on referrals and it can increase sample response rate [42-43]. The sampling method adopted in this study was informed by the inability to reach all the experienced target participants by self or physical means. Leveraging the benefits of the chain of referrals of snowball sampling method, a total of 139 responses (88 from Lagos, 51 from Abuja) were received after 12 weeks survey period, and this was deemed fit for analysis. This represents a response rate of 39.60% which is above the range suggested by [44].

The gathered data were analysed using descriptive statistics such as frequency, percentage, and mean score. The Cronbach's alpha test was used to determine the reliability of the research instrument and the internal consistency of responses. As can be seen in Table 3, the Cronbach's alpha coefficients obtained are above 0.70 suggested by [45-46]. This implies high instrument reliability and quality of data. The methodological flow chart is shown in Figure 2 below.

The cut-off points for determining the level of importance or significance as obtained from [47] is detailed below;

i. 90 to 100% = very high importance
ii. 70-89% = High importance
iii. 50 -69% moderate importance
iv. 30 to 49% = little importance
v. 1 to 29% very little importance.

Table 3: Reliability Evaluation.

Case Processing Summary				**Reliability Statistics**	
		N	**%**	**Cronbach's Alpha**	**No. of items**
Cases 1: the role of documents and records in substantiating claims for extension of time	Valid	139	100.0	0.727	18
	Excluded[a]	0	0		
	Total	139	100.0		
Cases 2: the major issues in disputes with claims of EoT.	Valid	139	100.0	0.821	11
	Excluded[a]	0	0		
	Total	139	100.0		

Source: Authors, (2021).

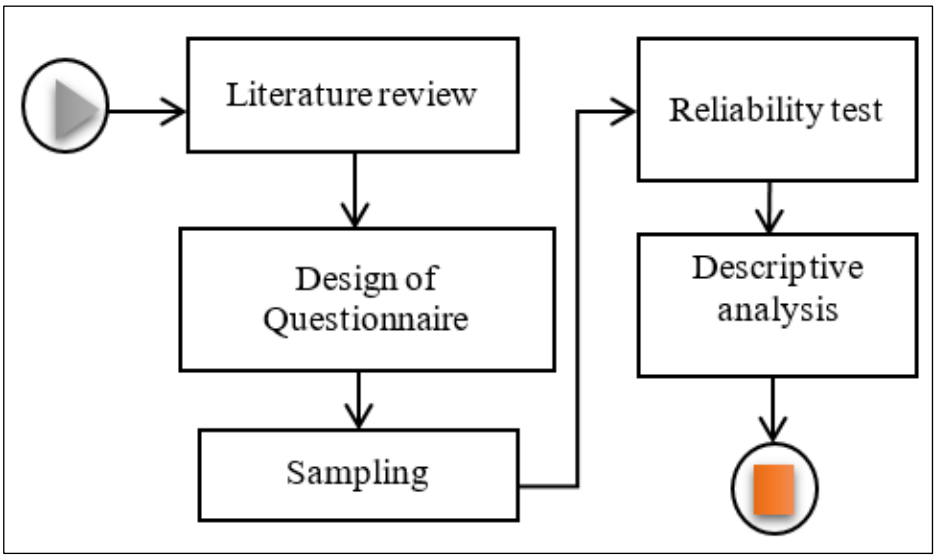

Figure 2: Methodological flow chart.
Source: Authors, (2021).

IV. RESULTS AND DISCUSSIONS

IV.1 RESPONDENTS BACKGROUND DETAILS

The results of the analysis of the data gathered on respondents background information are shown in Table 4. It can be seen that 38.85% of the respondents work with consultants, while 61.15% work with contractors' organisations. This shows a fair representation of the two major players in contract administration and management. The professional composition shows that 23.02% are Architects, 10.07% are builders, 38.85% are Engineers, and 28.06% are Quantity surveyors. This shows a fair representation of the major professions engaged by construction organisations. In terms of the rank/positions

occupied by the respondents, 32.37% are project managers, 26.62% are contract managers, 10.79% are works managers, 12.95% are production managers, and 17.27% are site managers. This reflects considerable experience and knowledge possessed by the respondents. The average working experience of the respondents is about 11. 34 years. This shows a considerable length of time to gain adequate experience and knowledge and attainment of managerial positions in the industry.

The educational qualification shows that 10.79% have HND, 8.63% have PGD, 43.88% have B.Sc/B.Tech., 35.25% have MSc./M.Tech., and PhD is 1.44%. The professional status of the respondents shows that 86.33% of them are chartered members of the respective professional bodies, and only 13.67% are yet to obtain their professional qualifications. The participants have the requisite education and are professionally qualified to participate in the subject of this study.

Table 4: Respondents background characteristics.

Variables	Classification	F	Per cent
Organisational category	Consultants	54	38.85
	Contractors	85	61.15
	TOTAL	**139**	**100.00**
Participants professions	Architect	32	23.02
	Builders	14	10.07
	Engineers (Civil/structural & Services)	54	38.85
	Quantity Surveyors	39	28.06
	TOTAL	**139**	**100.00**
Position/rank	Project managers	45	32.37
	Contract managers	37	26.62
	Works managers	15	10.79
	Production managers	18	12.95
	Site managers	24	17.27
	TOTAL	**139**	**100.00**
Years of experience	0-5years	11	7.91
	5-10years	35	25.18
	11-15 years	55	39.57
	16-20 years	23	16.55
	21-above	15	10.79
	TOTAL	**139**	**100.00**
Highest Educational Qualification	Higher National Diploma (HND)	15	10.79
	Postgraduate Diploma (PGD)	12	8.63
	Bachelor of Science/technology (B.Sc./B.Tech)	61	43.88
	Master's Degree (MSc./M.Tech.)	49	35.25
	Doctorate (PhD)	2	1.44
	TOTAL	**139**	**100.00**
Professional status	Chartered member	120	86.33
	Probationer	19	13.67
	TOTAL	**139**	**100.00**

Source: Authors, (2021).

IV.2 THE ROLE OF DOCUMENTS AND RECORDS IN SUBSTANTIATING CLAIMS FOR EXTENSION OF TIME

The result of the analysis of the data gathered on the documents and records for substantiating claims for extension of time is shown in Table 5. It can be seen that the top six (6) of these documents and records for substantiate claims for extension of time-based on level of importance in obtaining approval of the request for EoT are; Time impact analysis showing the potential impact of the changes before carrying out the changes (mean=4.53), Change of work notices (mean=4.53), Claim register (mean=4.52), Programme updates (mean=4.51), Minutes of the daily, weekly, and meetings (mean=4.47), and Daily progress reports (mean=4.46). While the least required are; productivity analysis reports (mean=4.25), Weekly progress reports (mean=4.25), Cause and effect analysis for each delay disruption event (mean=4.24), Delay events log (mean=4.24), Notices for delay (mean=4.22), and Method of construction identifies the works that are intended to be executed by subcontractors (mean=4.14).

However, disregarding the relative ranking of these variables, they all have a high influence on the success of EOT claims requests. This is premised on the range of mean score of the factors, the highest mean score = 4.53(90.50%) and the lowest mean score = 4.14 (82.73%), with an average mean score of 4.37 (87.44%). Furthermore, 66.67% (12) of the assessed variables have a high level of importance in substantiating EoT claims, while 33.33%(6) have a very high level of importance in substantiating EoT claims in construction contracts.

The result of this section supports the findings of [24, 31-32]. Record keeping and propoer documentations of events, meeting, instructions, change reques, among others are critical to the success of EoT request.

Table 5: List of required records to establish properly substantiated EoT claims.

S/No	Variables	Mean score	S.D.	Rank	Per cent	Remark
1	Baseline schedule	4.45	0.8180	7th	88.92	High
2	Method of construction identifies the works that are intended to be executed by subcontractors.	4.14	1.0915	18th	82.73	High
3	Planned manpower and machinery resources	4.43	1.1860	8th	88.63	High
4	Programme updates	4.51	1.0241	4th	90.22	Very High
5	Notices for delay	4.22	1.1167	17th	84.46	High
6	Programme revisions indicate changes and their required resources and the impact on the contract completion date.	4.40	1.0124	9th	88.06	High
7	Delay analysis	4.29	1.1258	12th	85.90	High
8	Time impact analysis shows the potential impact of the changes before carrying out the changes.	4.53	1.0857	1st	90.50	Very High
9	Cause and effect analysis for each delay disruption event.	4.24	0.9214	15th	84.75	High
10	Productivity analysis reports	4.25	1.3027	13th	85.04	High
11	Minutes of the daily, weekly, and meetings.	4.47	1.1628	5th	89.35	Very High
12	Minutes of any special meeting	4.40	1.0188	10th	87.91	High
13	Change of work notices	4.53	1.0857	1st	90.50	Very High
14	Daily progress reports	4.46	1.0513	6th	89.21	Very High
15	Weekly progress reports	4.25	0.9934	13th	85.04	High
16	Monthly progress reports	4.38	0.9356	11th	87.63	High
17	Claim register	4.52	0.9037	3rd	90.36	Very High
18	Delay events log	4.24	1.1770	15th	84.75	High

Sources: Authors, (2021).

IV.3 THE MAJOR ISSUES IN DISPUTES WITH CLAIMS OF EOT

The result of the analysis of the data gathered on the issues in disputes with claims of EoT is shown in Table 6. The top five (5) issues in disputes with claims of EoT based on their level of frequency of occurrence are; concurrent Delay (mean=4.53; SD=1.2057), The absence of notice of delay by the contractor as required by the contract (mean=4.50; SD =1.1818), Eligibility of time extension claim i.e. the permissibility of any specific delay event for justifying a project time extension (mean=4.47; SD=1.0857), Inadequate effort in mitigating the delay (mean=4.47; SD=1.1313), and Poor demonstration of the impact of the delay event to the project schedule (mean=4.44;

SD=0.9411). While the least 3 disputed issues associated with EoT claims are; the choice of method for evaluating the delay (mean=4.26; SD=0.9656), Conflicting interpretation of contractual provisions (mean=4.21; SD=1.2364), and Global Claim (mean=4.13; SD=1.3233).

Similarly, regardless of the relative ranking of the assessed variables, disputed issues associated with EoT claims have high level of occurrences in construction contracts. The mean score ranges from a maximum of 4.53 to a minimum of 4.13, and an average mean score of 4.38. Therefore, the level of occurrence of disputed issues in construction is high in the construction industry.

The finding in this section is in line with the report of (Yusuwan and Adnan, 2013). It was reported that concurrent delays, extension of time claim eligibility, contractors' failure to comply with contractual requirements for requesting EOT, among others. Extension of time claims comes with a lot of issues, and the need to request EoT is premised on events that impact project completion, and disputes in construction are linked to EoT claims [34-35, 37-38].

Table 6: Disputed Issues Associated with EoT Claims.

S/No	Variables	Mean score	S.D.	Rank
1	Concurrent Delay	4.53	1.2057	1st
2	Eligibility of time extension claim i.e. the permissibility of any specific delay event for justifying a project time extension	4.47	1.0857	3rd
3	Failure by the contractor to comply with the contractual requirement for EOT application	4.40	1.3062	6th
4	Inadequate effort in mitigating the delay	4.47	1.1313	4th
5	Poor demonstration of the impact of the delay event on the project schedule	4.44	0.9411	5th
6	Permissible period of time extension	4.35	1.0826	8th
7	Conflicting interpretation of contractual provisions	4.21	1.2364	10th
8	The absence of notice of delay by the contractor as required by the contract	4.50	1.1818	2nd
9	The choice of method for evaluating the delay	4.26	0.9656	9th
10	Global Claim	4.13	1.3233	11th
11	Conflicts on the ownership of float	4.37	1.0163	7th

Sources: Authors, (2021).

V. CONCLUSIONS

The purpose of this study is to assess the factors for substantiating Extension of time (EoT) claims and the common issues associated with (EoT) in complex-Multi Stakeholders' Building Construction contracts. This study adopted a well-structured questionnaire administered on construction professionals in consulting and contracting organisations, via electronic means and using snowball sampling techniques in Abuja and Lagos state, Nigeria. Interesting findings were made and discussed.

The study found that the major documents and records that have a high level of importance for substantiating claims for extension of time are; time impact analysis showing the potential impact of the changes before carrying out the changes, change of work notices, claim register, programme updates, minutes of the daily, weekly, and meetings, and daily progress reports. The major disputed issues associated with claims for extension of time in construction contracts are concurrent delay, The absence of notice of delay by the contractor as required by the contract, eligibility of time extension claim i.e. the permissibility of any specific delay event for justifying a project time extension, inadequate effort in mitigating the delay and poor demonstration of the impact of the delay event to the project schedule.

Effective contract management is at the centre of the successful delivery of construction projects. Contractors should have a formidable team to ensure that there is a proper understanding of all facets of the projects, including contract conditions and provisions. Proving delays responsibility and substantiating extension of time claims requires a lot of effort and knowledge of contract management. Efforts should be made to ensure that records for claim events are recorded and regularly updated. Contractors should ensure that they work as efficiently and effectively as possible to avoid delays on the critical paths that will impact the project completion date. This is because any critical delays will delay the entire project delivery time and the client will be entitled to a deduction of LAD on a weekly or monthly basis depending on the provision of the contract.

Regular training and continuous professional development are required to enhance the skills and expertise of project administrators/managers for effective claim administration and management. Recording keeping and proper documentation is a critical skill needed for effective contract administrations. Every built environment professionals should learn it. Communication, analytical and problem-solving skills are also needed by the contractors and other construction teams; for the efficient and effective delivery of construction projects.

The outcome of this study is critical to the success of the project managers/administrators who are vested with the responsibility of ensuring that projects are delivered within the planned schedule and critical delays are avoided by all means. Clients and their agents will also benefit from this study, as they have a role to play in ensuring that projects are delivered on time without delays that are attributed to design changes, payment issues, among other issues related to their activities. This study will also add to the few existing bodies of knowledge on an extension of time claims administration and delays management in developing countries.

This study is limited by a geographical boundary (Lagos state and Abuja), and the sample size may not be representative enough to enable the generalisation of the results. Caution should be taken in generalisation of the outcome of this study. Based on these, A similar study is therefore advised in other regions or states or developing countries, this will enable provide more reports for comparison. A critical question that requires an answer 'is what percentage of time extension is contributed by the contractors and clients and their agents'? The relationship between client and contractors-specific delay factors on the completion date of construction projects requires investigation.

VI. AUTHOR'S CONTRIBUTION

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