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Causes and Impacts of Inaccuracy in Contract Documents in Construction Industry In Nigeria

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Abstract
The poorenactment remnants anunexplainedunruly in the buildingbusinessbesidesnumber of errorsconsumesfrequentlycommanded to the hindrance of regulars. Construction ae manufacturing be edificebefore certain categories of structureenergiescompleteconvincedphasesformerlystructure is accomplished. The initial of the platforms is designs and bills of quantities. Onstrategyphase, the developmentpointsconnecting to charge, period and excellence has to be appropriatelyoccupiedattention to the errors. Aim of the research was to determine the error in documentation in contracts at the construction industry in Nigeria and the objectives of the research stayed to identify factors affecting error in contract documents, to determine the sources of error in indenturepermits, to evaluate the impact of error in contract documented and to investigate appropriate solution to mistakes in agreementpapers. The samples size for the research stayed eighty respondents (80). Respondents which were accumulated from 4 respondents of the 20 construction firms in Lagos – State. The data composed were examinedby means of Statistical Package for Social Science (SPSS). There is poor communication among the construction professionals which creates an error in construction project and insufficient funds affect the construction of project. Insufficient project manager experience, inadequate experience of documentation mangers and documentation preparation period.
Keywords*: Construction, Contract, Document, Errors and Industry*

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I. INTRODUCTION

The poorenactment remnants anunexplaineddelinquentfashionable the building manufacturing thennumber of errorstakes frequently ran to the hindrance of consumers(Love et .al2011). The situationpartakeslikewisecontrolledtowardincomerelegationaimed atoutworkers, disagreements, damage of assurancethenstatus for mentorsbesidesultimatedissuasion of stashestrendybuildingschemes. Numerousfeaturesconsumeremaineddrewtowarddeprivedplanrecital (frequentlyrestrainedhiprelations of cost, time and quality) neverthelessdistinguishedbetween them remainfaults in buildingagreementpapers. Nearvalidate the importance of faults in bondpapers, Okuntade (2014) mentioned that mistakes in agreementpermitsexplanationaimed atextra than 82% of altogetherbuildingfaultsdedicated. Ade-Ojo and Babalola (2013) stated that blunders in agreementpermits are the corefeaturestroubling the price and periodroutine of constructionschemes. Commonly, these leashrestrictionsstanddevotednearapiecekind of predeterminedtechniquebesidesyieldstoodfamiliarby way ofreputablemedianstrendy the buildingbusiness. Regularsneed to acceptaccomplishedschemes that remain of in heightsuperiority, insideinexpensive and on though. Buildingspecialists such as Designers, Engineers, Quantity Surveyors, Builders andlikewiseServicerstakenot at allchoice than to fulfillby the client'srequirements. The aptitude of the schemesquad to meet these contradictorythenelementarynecessitiesbelow the undefinedarrangementatmosphereremainsa task.The conditionremainspoorertrendy Nigeria for, notwithstandingclassifyingthose mistakes in agreementpermits are mid the significantreasons of deprivedschemeroutine, instructionstightfitting the reasons of mistakes in bondpapersstandactualuncommon. Babalola and Idehen (2011), obviouslyspecified that faults in agreementpapers, strategyfaultsbesidesoversightsstand the keydetailsbuilding projects stayinundatedperdisagreements, wildernesses, disparity, schemerejection, in additionincomesideliningaimed atservicers, damage of assurance and reputation aimed atmentors and ultimatecaution of asset in building projects amid others. Adeojo and Babalola (2013) likewise mentioned that faultshipagreementpapersremain the detailsaimed at the non-completion of buildingschemeshappeningperiod (or unrestrained), to price and excellence. Pardonremnantsunexplainedcutting-edge these revisions, though, remain the reasons of the mistakes in bondpapers that donatetoward the recognizedhitches.Buildingengineering; remainthe situationconstructionbeforeextrakinds of structuredrivesfinishedsureperiod'searlierstructure is accomplished.

The original of the steps is that of the plans and the bill of quantities. Onstrategyphase, the planpurposesconnecting to price, period and excellencetake to be correctlyengagedupkeep offaults, such as redundanttrappingsbeforeblundersthrough the projectphasesfrequentlyprimeneardistendeddifficultiesadvanced (Williams, 2010). Countless of the reasons of deprivedschemeroutine, that is, cost, time and quality, can be drawn to approximatelytypes of mistakesthroughout the projectprocedure (Williams 2010).

II. LITERATURE REVIEW

Types of Design error

Design error is classified into six categories. Which include flawed, lapse, non-conformance, progression, management and others will be debated in point with reverence to the types of errors under each of them.

Erroneous Design Error: The categories of mistake here are blunders that transpire when afeaturehappeningplan is created on erroneousevidence. These comprisetrendy error, lapse in bills of quantities, inaccuracythenfault in stipulations.

Errors from Trendy: Errors are cutting-edgeprocedure of absentstuffs and misplaceddeliberation of approximatelyvitalsubstances in the project. These faultswhitethornreason the papersnon to be intelligent to transport the determination of the scheme. Similarly, this sort of mistakemains to rights for delay of period and reimbursement of charges aseffect of the further time essential to accurate the errors. Stylish error as a kind of mistake is shared in papersfashioned in Lagos state of Nigeria (Dosumu & Adenuga, 2013).

Blunders and lapse in the bills of quantities: Conferring to Dosumu & Adenuga (2013) oversightsthenuncertaintieskind of mistake are actualmutual in buildingcertification in Lagos state of Nigeria. Nevertheless, the inspiration of this category of mistakes on the schemebe contingenthappening the obtaining of the agreementdesignatedaimed at the implementation of the plan.

Miscalculations: Inaccuraciesdevourstood in procedure of accumulationspanscomposed to brand a full, on plansbesidestoo in the method of trappings, deductions, reproductionthenpartition as the situationnarrates to statistics in the bills of quantities. This faulttrendymethod of mathematicsthenvaluingfaultsremainactualevery day in bills of quantities in Nigeria (Dosumu & Adenuga, 2013).

Lapse: This category of mistakehappensonce some databeforefeatures of projectstayabsent. This denotestowardsupplementaryopinionsbeforeparticularswanted and misplaced or improperrecords on the illustrations.

Supplementaryopinionsbeforeparticularswanted: Extrainterpretationsbeforeparticularsdesirablestand the tiercegroup of non-conformances in the garageillustrations. The pamphletsnecessityadditionalfactsnearremainvibrantthencomprehensibleoutstandingnear the obscurity'strendy the presentcondition of the documents. This is since, the permitsprepare not handover the material to the servicers for buildingdeterminationsevidentlysufficientby way of they ought.

Non-conformance: These forms of mistakeariseonceclose are characteristics of projector elsepapers that prepare not adapttowardsrecognizedinstructions. Non- conformance of paper tomerchantstatistics, non-conformance of paper to design cunnings, non- conformance of paper to client'sprinciples, non- conformance of paper to cypher/SMM, non- conformance of paper to law e.g., conformance to Nigerian produces, non-conformance of paper to constructionguidelines.

Non-conformance of paper to merchantfacts: The errors may be unpaid to unsuitability of apparatus, outmodeddescription and unsuitableconstituents. This category of blunders may interruption the planthenincreasesitscharge as a consequence of the disparityguidelines. The situation is vital that the purchaser has to supportmerchants at the initialpoint of the proposal. Prematurecontribution of the merchants in the paper'sprocedure can assistance the trendy to decrease such mistakes.

Non-conformance of file to projectcontrols: Eachvocationtakesapproximatelynormalcast-offaimed atitsintentions. Disappointment to followtoward these cunningsresolveeffecttrendydesecration of the cyphers and catastrophe of the schemeused for that career. This kind of fault is frequently the consequences of absence of involvement of the trendy, sloppinessbeforeburden of period.

Non- conformity of paper with client's standards: Developmentstypicallytwitchthroughanannouncement of what the scheme is around; the situationareas, choice, necessities, actionstowardthebilleted, and the expansion of the construction documents. The client sets the option, brilliance and the inexpensive of the project. The planned project is specified a comprehensiveexplanation to gain what it is altogethernearby, the conveniences and servicesobligatory, the period the scheme is wanted and the charge (AIA, 1994).

Non-Conformity of paper to Code/SMM: Dosumu & Adenuga (2013) finished this discoveryamongst others that non- conformance to projectcyphers is one of the sorts of mistakes in Lagos state of Nigeria. Rendering to AIA (1994), the construction code is the maincontrollingdegree for the project of structures. This remainssince it delivers the essentialprojectrestrictions for a hugequantity of project and buildingfacts. Non-compliance with the building code in construction papers is an indication of inattention on the fragment of the designer. Discontent to

imitate to the code at the commencement of the project will consequence in design adjustmentfar along and resolveinterruption the scheme.

Non-conformance of paper to the rule: This is the kind of mistake that originates from non-conformance to the rule used for convincedsorts of plans and trades.

Procedure: These are sorts of fault that befall as a consequence of the course of groundwork of papers. Kinds of mistake in this admirationcomprise: CADD hitches, non- conformity of paper to enlistingnormal, dimensional mistakes, faults in signsthencondensations.

CADD – connecteddelinquent: This kind of mistake is associated to the competence of processorassistedproject and recruiting (CADD) package used and the arrangement of the CADD principles and measures. They are mostlyrelated to directionof snagsamong files and efficientcontextualrecords of other improvements; which engender errors in the buildingpapers.

Non-conformity of paper to conscriptingvalues: Giving to AIA (1994), to simplify the manufacture of buildingpapers and to brand it informal for additional people to recite and comprehend, greatestworkplaces employ certificationvalues. These values may speechfocuses such as:

1) Sketchpageextents, design, gauge, classification, and totaling
2) Markfatnessbesideswritingdimensions
3) Positionsinside the leaflets
4) Recordsthenshortenings
5) Dimensioning.

Dimensional error

Dimensioning demandskind of the preparation of building. This remainssince new gatherings can only staysituated with approbation to mustersbeforehand in place. Vital dimensioning must be statisticallydisseminated on the drawings. This is because the contractors are not foreseeable to be depending on escalating the pictures for dimensioning. This sort of mistake may sometimes development of the conclusionperiod of the development because the independent has to wait for intensification from the stylish about contrary or inappropriatemeasurement and regularlysucceeds in buildingpapersbent in Lagos of Nigeria (Dosumu & Adenuga, 2013).

Symbol and abbreviation errors: Thepractice of numeroussignsbesidesellipsescreateavailable of the essential to connect a lot of data in a limited interplanetary. According to AIA (1994), good practice proposes that these be clear early in the documents and used steadily. Also, descriptions on the drawings should be reliable with the ones used in the other parts of the construction documents such as calendar and stipulations. This type of error will lead to misperception and muddle about the documents which might lead to requests of extension of time resulting from time wasted while waiting for a response from the designer.

Coordination: These are errors that occur as a result of poor coordination during documentation. These include coordination problem between disciplines and coordination within the same discipline.

Responsibility for *Errors:*Contractor cannot be held responsible for design errors unless he was involved in the design review and provided direction of means and methods for construction to design by. Errors that stem from incomplete data or conflicting design information can be shown the responsibility of the owner. With an ill-defined scope the designer will attempt to produce a design that meets the owner's objectives and requirements. A design package will be presented for approval and if the owner does not give the designer a clear scope of work, even after an "approved for design package" is released, it then becomes the responsibility of the owner.

III. METHODOLOGY

The data was generated using the research instrument that was adopted for the study. Questionnaire that sought the opinion of the defendantshappening impact of error in agreementpapers on construction project in Nigeria was drafted and examined. Sample of eighty respondents were targeted for the research study while sixty respondents finally participated in the research. The response was analysis below exploitation Statistical Package for Social Sciences (SPSS) Version 20.0 (IBM Inc.).

IV. PRESENTATION AND DISCUSSION OF RESULT

Presentation of Result

Table 1: Descriptive and Ranking Result on factors affecting contract document

	N	Mean	Rank
Insufficient funds affect the construction of projects	60	3.2833	3rd
Poor communication among construction expertise creates an error in construction projects	60	3.2833	3rd
Time Scheduled Pressure increase the percentage of risk that might occur in construction sites	60	3.1167	4th
Frequent change in technological innovation associate to errors in contract document and reduce quality construction of buildings.	60	3.4833	1st
Heavy Workload of consultants affects the quality of contract document and execution of project.	60	3.3667	2nd
Valid N (listwise)	60		

Sources: Researcher Compilation from SPSS (version 20.0)

From table 1above shows the ranking result onfactors affecting contract document inselected construction industry, the result shows that Frequent change in technological innovation associate to errors in contract document and reduce quality construction of buildings which ranked first with mean 3.4833, Heavy Workload of consultants affects the quality of contract document and execution of project comes second in construction industry with mean 3.3667, Insufficient funds affect the construction of projects and Poor communication among construction expertise create an error in construction projects ranked third with mean 3.2833, Time Scheduled Pressure increase the percentage of risk that might occur in construction sites occur forth in ranking with mean 3.1167.This implies that the majority of the respondent proved on the opinion that the major factor affecting the factor affecting contract document in construction industry is Frequent change in technological innovation associate to errors in contract document and reduce quality construction of buildings.

Table 2:Descriptive and Ranking Result on Causes of error in construction contract document

Factors	**N**	**Mean**	**Rank**
Poor architectural drawings and specification contribute the major parts in error in contract documents.	60	3.3667	2nd
Poor implementation of electrical expertise idea constitutes to errors in contract that affect building construction.	60	3.4167	1st
Non application of mechanical expertise increase errors in contract document.	60	3.2000	7th
Non effective accountability in bill of quantity contributes to error in contract document.	60	3.3667	2nd
Consultant with low experience affect the effective and smooth construction of project	60	3.4167	1st
Poor consultancy Fees in contract document affect effective construction of building	60	3.3000	4th
Poor salary of Professionals Engaged in construction project affect effective construction project.	60	3.2833	5th
Poor project planning in of constriction project increase risk of construction projects	60	3.2333	6th
Non-identification of project risk undermine the operational activities in construction sites	60	3.3333	3rd
Valid N (listwise)	60		

Sources: Researcher Compilation from SPSS (version 20.0)

From the table 2, above show the ranking result on Sources of mistake in building contract paper in selected building industry, the result shows that Poor implementation of electrical expertise idea constitute to errors in contract that affect building construction and Consultant with low experience affect the effective and smooth construction of project were ranked first with mean 3.4167, Poor architectural drawings and specification contribute the major parts in error in contract documentsand Non effective accountability in bill of quantity contributes to error in contract document comes second as Causes of error in construction industry with mean 3.3667, Non-identification of project risk undermine the operational activities in construction sites ranked third with mean 3.3333, Poor consultancy Fees in contract document affect effective construction of building

occur forth in ranking with mean 3.300, Poor salary of Professionals Engaged in construction project affect effective construction project raked fifth with mean 3.2833, Poor project planning in of constriction project increase risk of construction projects rank sixth with mean 3.2333 and Non application of mechanical expertise increase errors in contract document ranked seventh with mean 3.200. This implies that the majority of the respondent complained that the main cause of error in construction industry is Poor implementation of electrical expertise idea constitute to errors in contract that affect building construction and Consultant with low experience affect the effective and smooth construction of project.

Table 3:Descriptive and Ranking Result on errors in contract document

Factor	N	Mean	Rank
Errors in contract expose the potential risk in construction project	60	3.3000	2nd
Errors in contract promote adequate project briefing of construction in every construction stages	60	3.2667	3rd
Errors in construction facilitate adequate communication among construction expertise.	60	3.3333	1st
Valid N (listwise)	60		

Sources: Researcher Compilation from SPSS (version 20.0)

Table 3 above show the ranking result on errors in contract document in selected construction industry, the result shows that Errors in construction facilitate adequate communication among construction expertise which ranked first with mean 3.3333, Errors in contract expose the potential risk in construction project comes second in construction industry with mean 3.3000 andErrors in contract promote adequate project briefing of construction in every construction stagesranked third with mean 3.2667. This implies that the majority of the respondent agreed on the opinion that the most error that occur in contract document in construction industry is errors in construction which facilitate adequate communication among construction expertise.

V. CONCLUSION AND RECOMMENDATIONS

Conclusion

The researchexaminesthe impact of mistakes in agreement document on building projects in Nigeria; objective identifiesfactors affecting contract documents which include poor communication among construction expertise create an error in construction projects and insufficient funds affect the construction of projects.Anotherobjective determined the causes of error in contract documents which may include Poor architectural drawings and specification contribute the major parts in error in contract documents, consultant with low experience affect the effective and smooth construction of project and non-identification of project risk undermine the operational activities in construction sites. However, it was concluded that non identification of risk contributes to errors in contract document.Lastly one of the objectives evaluates the impact of mistakes in contract papers on construction of buildings which remainidentifythose errors in contract expose the potential risk in construction project. It was concluded that errors in contract document expose the potential risk in construction of building.

VI. Recommendation

As of this findings the sources of mistake in buildingpapersstayedrevealed to remaininsufficientdevelopmentadministratorunderstanding, insufficientinvolvement of papers manager, insufficientinstruction of adviser, insufficientmentorknowledge, unsuccessful consultancy charges, insufficientpapersgroundworkperiod, deprivedpay of specialistsinvolved, substantialcapability of adviser, simultaneouspapers, deprivedcommuniqué, non- accessibility of evidence, insufficientdevelopmentshort-term, scarcestrategypreparation, non- documentation of project hazards, periodarranged pressure and project complications. Completelythese mistakescartel together to consequence in charge and periodoverproductions. It is formerlysuggested that the fillings of the strategies should be followed to, so that adjacent will be minimization of incidence errors in construction papers in Nigeria. This will beoutcome to reserves about 20.39% of agreement sum, funds of about 11.07% of contract retro and the markdown of damage of building occupantsexists. All supplementary qualitative possessions will be reduced. This unitdeliberated on reference of the outcome of this research to building industry stakeholders in Nigeria subsequentunit will depiction the influence of the study to preparation.

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