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IMPLEMENTATION OF ADR TECHNIQUES IN PUBLIC CONSTRUCTION PROJECTS IN NIGERIA

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Abstract: Disputes in the construction industry have been attributed to several factors and categorized in various ways by many researchers. Despite the considerable amount of knowledge accumulated by many researchers on dispute causation and management, disputes still continue to prevail in the construction industry and cause disharmony in the construction process with significant costs. This study aims at assessing the implementation of Alternative Dispute Resolution (ADR) techniques in the Nigerian public construction projects. An extensive literature review and questionnaire survey was carried out in order to achieve the aim of the study. The causes of disputes on public construction projects were identified and the ADR techniques that are effective in resolving disputes on public construction projects were also examined. The study found variation to the scope of work as the leading cause of disputes and adjudication as the ADR technique that brings about a final resolution of disputes on public construction projects. It was also revealed that public clients do not define the scope of work adequately before embarking on construction projects. However, the study recommends that adequate attention be given to clients' requirements so as to define the scope of work accurately before embarking on public construction projects.
Keywords: ADR, construction industry, dispute resolution, public client.

1.1 Introduction

Today's construction projects are becoming more complex and more capital intensive. Governments of developing countries of the world are responsible for the provision of infrastructural facilities to its citizens. Many researchers have however found that these projects are delivered late by contractors and disputes have been found as a major cause of such late deliveries. Disputes have also been found as a cause of cost overruns on construction projects. Disputes in the construction industry have been attributed to many factors and categorised in various ways by many researchers. Despite the considerable amount of knowledge accumulated by many researchers on dispute causation and management, disputes still continue to prevail in the construction industry and cause disharmony in the construction process with significant costs.

The need for effective management of disputes on construction projects in Nigeria cannot be overemphasized. The construction industry in Nigeria forms an integral part of the nation's

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economy and it was the dominant contributor to Nigeria's GDP in the 1960s to the 1980s as it accounted for about 70% of the GDP (Planning Committee on the National Construction Policy, cited in Oladapo and Onabanjo, 2009). The Nigerian construction industry continues to occupy an important position in the nation's economy Aibinu and Jagboro (2002). Construction activities in Nigeria are increasing daily due to the importance of its products to humanity. The industry provides the basic requirements of shelter, water, power supply, roads, schools, hospitals and drainage; hence its performance has a great effect both on the economy and social conditions of the citizens. The industry is therefore a very strategic one to Nigeria's development efforts Oladapo and Onabanjo (2009).

2.1 Nature of Work Undertaken by Public Clients in Nigeria

Construction makes a major contribution to national socio-economic development by building the infrastructure and productive facilities (Wells 1986; Ogunbiyi, *et. al* 2014). The Nigerian public client is responsible for the provision of infrastructural facilities for its citizenry, and this in particular involves construction of houses, roads and bridges, airports and seaports to mention but a few. However, Kotangora, (1993) cited in Ayodele and Alabi (2011) found out that there are about 4000 uncompleted or abandoned project belonging to the Federal Government of Nigeria. There have also been so many other projects abandoned by the state and local governments as a result of one problem or the other which arose in the course of project execution. The situation after the study has not been different as many researchers have also revealed that delays and abandonment continued to exist in project delivery in Nigeria. This indicates a failure of governments to meet the delivery of infrastructural projects to its citizens as planned. Disputes have however been found by some of these researchers as one of the reasons for this problem.

2.2 Dispute Resolution

A dispute has been described as a situation which arises when one party makes a claim or assertion which is rejected by the other party and that rejection is not accepted by the party who made the claim Kumaraswamy (1998). According to Totterdill (1991), most construction disputes originate from an event on the site, which must have caused an additional cost and a delay to the progress of an item of work. It may also expose an earlier problem or may be a cause of a later problem. Disputes therefore arise as a result of the interactive nature of human relationships. However, despite the considerable amount of knowledge accumulated by many researchers on dispute causation and management, disputes

still continue to prevail in the construction industry and cause disharmony in the construction process with considerable costs Love *et. al* (2010).

Cheung and Yiu (2006) identified communication obstacles, non-performance, payment, completion time and contract provisions as the root causes of disputes on construction projects. According to Colin *et. al* (1996), construction disputes are caused by payment and budget issues, performance, delayed completion, negligence, quality of work and administration of the project. Sykes (1996) stressed that misunderstandings arising from the nature of the contract and unpredictability of future events are the factors that can lead to inevitable problems in construction relationships. It is believed that the object of the contract does not exist in most cases when the agreements are signed between the parties. The contracts are usually made on promises which may be expressed or implied and either wholly or in part. There may therefore be some elements of insufficient clarity, ambiguity, contradictions and lack of foresights by the parties which may eventually lead to misunderstanding. Oladapo and Onabanjo (2009) study also identified the causes of construction disputes in Nigeria as breach of contract, professional negligence and contractual claims.

Construction projects are executory in nature and they are full of promises. They are therefore prone to the occurrence of unforeseen and unforeseeable events which may lead to disputes as the works progress. Disputants may like to contest liabilities to claim damages from one another which are not likely to be resolved amicably by the parties without resulting to external assistance. No matter what may be the causes of disputes, they remain an unfortunate feature of construction projects; the end result of which may not be pleasant to the stakeholders, considering the high capital value of the final product and the resultant narrow profit margins (Doe, 2009).

Sykes (1996) believed that the likelihood of construction disputes can be reduced by incorporating clear, unambiguous description of contractual terms and requirements and allocating risks clearly among the parties. Keely (2009) also agreed that an appropriate allocation of risks in building contracts may reduce incidence of disputes on construction projects. The study also suggests that the contractor needs to abide by limits of time for recognising claims as well as perils which may entitle him to future compensation on the project and keep adequate records of events. This would serve to reduce cases of arguments that may otherwise lead to disputing situations (Keely, 2009).

Oladapo and Onabanjo (2009) stated that the construction industry is highly litigious in resolving disputes, and had also been costly both in a financial sense and in terms of the breakdown of otherwise profitable relationships. Mark (2010) also posits that litigation and arbitration have been used extensively in resolving construction disputes. Litigation, according to the study is frequently lengthy while arbitration is as bad or even worse. Bristow (1995) stated that parties who have gone to court to resolve construction related disputes have not been satisfied with the process as there had been complaints that the process is slow, and that the judges lack expertise in the field of construction. Despite the fact that these researchers agreed that litigation is an expensive way to resolve disputes, very little literature existed on the quantification of this cost which Gebken and Gibson (2006) confirmed to be highly significant, to the extent that it may be greater than the original claim amount.

2.3 ADR in Construction Disputes

Alternative Dispute Resolution (ADR) techniques are used to describe the methods and procedures involved in either resolving disputes as alternatives to the traditional resolution mechanisms of the court or as supplementary to such mechanisms (Oddiri, 2004). The system according to Naughton (1990) was introduced by the United States of America as a means of avoiding litigation and was also intended to give a fast track method for settlement of claims and eliminate delays and the costs associated with litigation and arbitration. The system also enables disputing parties to resolve their disputes themselves, to their mutual benefits and satisfaction.

ADR is not a new technique in Nigeria as section 19(d) of the Constitution provides for settlement of disputes by arbitration, mediation, conciliation, negotiation and adjudication. Despite this constitutional provision, the construction industry had mainly promoted arbitration which had been highly adopted by every sector. However, the study by Oladapo and Onabanjo (2009) found adjudication and negotiation as the ADR methods used on construction disputes in Nigeria. This study is therefore an effort to contribute to the body of knowledge in the use of ADR in terms of cost and time taken to resolve construction disputes as well as the effect on stakeholders' satisfaction.

2.4 The Use of ADR as Techniques for Resolving Public Construction Disputes' in Nigeria

Dispute resolution in Nigeria construction industry is governed by the Nigerian law which gives the High Court's unlimited jurisdiction over commercial disputes, depending upon the monetary values involved Oladapo and Onabanjo (2009). Disputes involving small values,

i.e. from 100,000 to 1 million naira can be heard before magistrates and in some northern states, such disputes are heard in Sh'aria (Islamic) courts (World Bank, (2008) cited in Oladapo and Onabanjo (2009)). Arbitration and Conciliation Act (2004) provides statutory cover for domestic arbitrations. However, the use of ADR in Nigeria is being championed and encouraged by institutions such as the Multidoor Courthouse (MDCs) in Lagos and Abuja, the Regional Centre for International Commercial Arbitration (RCICA) in Lagos, the Lagos Chamber of Commerce and Industry and the Institute of Construction Industry Arbitrators, among others (US Department of Commerce, (2003) cited in Oladapo and Onabanjo (2009)). The aim of MDC was to support the development of commercial ADR mechanisms that can provide real benefits to the private sector, and it therefore provide court-based, cost-effective dispute resolution alternatives to litigation. The MDC provides Arbitration, Mediation and Early Neutral Evaluation (ENE) as ADR mechanisms but mediation has however proved to be the most popular form of ADR within the MDCs.

The Institute of Construction Industry Arbitrators was also formed by construction industry professionals to encourage the industry to embrace ADR in resolving disputes. However, the Nigerian Institute of Architects and the Nigerian Institute of Quantity Surveyors have provisions for the appointment of arbitrators and the conduct of arbitration in their professional practice documents. This showed that ADR is therefore not a new concept in the resolution of construction disputes in Nigeria.

Oladapo and Onabanjo (2009) concluded that although litigation and arbitration are still popular in the Nigerian construction industry despite their documented shortcomings points to the fact that ADR is yet to gain common acceptance. The study however found adjudication and negotiation as the only ADR methods in common use in Nigeria. Moreover, though the effectiveness of ADR in resolving private-sector construction disputes has been proven and its benefits uncontroverted in Nigeria, sufficient attention has however not been given to adapting ADR for use on public projects in Nigeria. Many projects are being executed by the Nigerian governments, and many of them have been faced with problems which emanated from disputes. Considering the findings of Oladapo and Onabanjo (2009) that litigation and arbitration is still very popular in the resolution of construction disputes in Nigeria, a study of the effects of ADR on public projects in Nigeria is therefore essential.

3.0 Methodology

Extensive literature review and questionnaire surveys were carried out in order to accomplish the aim of this study. The research questions are: What are the ADR techniques that are

effective in resolving disputes on public projects? What are the causes of disputes on public construction projects? The research questions and the questionnaire were refined through a pilot study comprising two practicing professional in the area of construction law and project management and two other academics with extensive knowledge in the subject area. Based on the feedback received in the pilot survey the questions were modified. A full scale survey was then conducted following the pilot test exercise (see Idowu *et. al*; 2015). Data for this study was gathered from two main sources which are secondary and primary sources. Secondary data were gathered from related literature on previous studies while primary data were gathered from fieldwork. The questions are divided into 3 parts: Part 1 consists of the general information about the respondents. Part 2 of the questionnaire was to elicit responses from the respondents on the causes of disputes on public construction works. This was adapted from Ayman (2000) and Na Ayudhya (2011). Part 3 of the questionnaire was adapted from Oladapo and Onabanjo (2009) and El-adaway and Ezeldin (2007). These studies were on ADR techniques that are effective in solving public construction disputes in Nigeria. For this study, office of the federal ministry of works, the state ministry of works and ten local government offices were identified within Lagos Metropolis in Lagos State, Nigeria. Six institutions of higher learning were also identified and a list of contractors was obtained from the federation of construction industry in Nigeria.

4.0 Results and Discussions

As shown in Table 4.1, 100 questionnaires were distributed to construction professionals in the public and contractors' organisation. Sixty eight (68) responses were returned, while only 57 questionnaires were properly filled and found usable for this study. This gave 57% response rate.

Table 4.1: Survey Return

	Number	Percentage (%)
Total number of questionnaire received	57	57
Total number of questionnaire unreturned	53	53
Total number of questionnaire distributed	100	100

Table 4.2 shows the rate at which the identified causes of disputes do occur on public construction projects in Nigeria. The table reveals that variation to the scope of works ranked highest while unrealistic contract durations ranked lowest as factors that can lead to disputes on public construction projects in Nigeria. From the table, five causes of disputes that occur more often on public projects are: variation to the scope of work, late deliveries by

contractors, violating conditions of contract, poor communication among parties and delays in progress payment by the client.

Table 4.2: Causes of Disputes on Public Construction Projects in Nigeria

Causes of Dispute	Mean	Rank
Variation to the scope of work	4.10	1
Late deliveries by contractors	4.11	2
Violation of condition of contract	4.05	3
Poor communication among parties	4.00	4
Delays in progress payments by the client	3.95	5
Poor evaluation of completed works	3.90	6
Poor quality of completed works	3.90	6
Insufficient working drawings' details	3.79	8
Main contractor's financial problems	3.74	9
Inaccurate bill of quantities	3.68	10
Accuracy of project cost estimates	3.68	10
Bureaucratic problems	3.32	12
Unforeseen underground problems	3.21	13
Third party delays	3.11	14
Economic conditions	3.05	15
Unrealistic contract durations	3.00	16

Table 4.3 shows the frequency at which ADR techniques are used on public construction projects in Nigeria. The table indicates that negotiation ranked highest, followed by arbitration and mediation while mini trial ranked lowest.

Table 4.3: ADR Techniques on Public Construction Projects in Nigeria

ADR Techniques	Mean	Rank
Negotiation	3.90	1
Arbitration	3.05	2
Mediation	3.00	3
Conciliation	2.68	4
Adjudication	2.47	5
Dispute review/resolution board	1.90	6
Mini trial	1.58	7

Table 4.4 shows the ranking of ADR techniques in bringing about final resolution of disputes on public construction projects in Nigeria. Adjudication ranked highest while mediation ranked lowest as ADR techniques that will finally resolve disputes on public construction projects in Nigeria.

Table 4.4 ADR that will lead to a final resolution of disputes on public construction projects in Nigeria.

ADR Methods	Mean	Rank
Adjudication	3.63	1
Arbitration	3.58	2
Mini trial	3.42	3
Dispute review/resolution board	3.37	4
Negotiation	3.32	5
Conciliation	3.26	6
Mediation	3.16	7

The response rate of the questionnaire survey is 57%. Most of the respondents had more than five years of experience reflecting that most of them are experienced and have a considerable knowledge of construction projects. From the list of causes of disputes, the analysis revealed variation to the scope of work as the most frequent cause of disputes on pubic construction projects. This is closely followed by late delivery of completed projects by the contractors. Violating conditions of contract, poor communication among parties and delay in progress payments made by the client are other factors that also lead to disputes on such projects. Other factors such as poor evaluation of completed projects, poor quality of completed projects, insufficient working drawing details, main contractors' financial problems and inaccurate bill of quantities are also found as significant causes of construction disputes on public projects in Nigeria. Unrealistic contract duration was found as the least factor that will cause disputes on public construction projects.

The findings of this study were synthesised with the previous studies that are related to the subject matter of the study. The findings under research question one were synthesised with Ayman (2000) and Na Ayudhya (2011) studies. Ayman (2000) survey on causes of delay on public construction projects in Jordan revealed design, change orders, weather, site conditions, late deliveries, economic conditions, and increase in quantity of work as the main causes of dispute and consequently delay the construction schedule. Na Ayudhya (2011) findings on common related disputes on public construction projects in Thailand found the

following as the causes of disputes: (i) violating the conditions of the contract, (ii) insufficient work drawing details (iii) delays in the progress payments by the owner, (iv) poor evaluation of completed works (v) inaccurate bill of quantities and (vi) unrealistic contract durations.

These findings are similar to Na Ayudhya (2011) result. The present study also have some findings such as change in work order, late deliveries of work and therefore agrees (to a great extent) with previous studies on this finding. On research question two, the findings from this study revealed negotiation and arbitration as the most frequently used ADR on public projects' disputes. This finding slightly differs from Oladapo and Onabanjo (2009) study that found adjudication and arbitration as the most frequent ADR techniques used on construction projects in Nigeria. However, negotiation, arbitration and mediation ranked highest respectively while mini trial ranked lowest on the frequency at which ADR techniques are used on public construction projects in Nigeria.

5.0 Conclusions

This paper assessed the causes of delay on public construction projects as well as the ADR techniques used on construction projects in Nigeria. The construction industry and the public construction projects in Nigeria are discussed. The perspective of the professionals within the construction industry based on the questionnaire survey revealed negotiation and arbitration as the most frequently used ADR techniques on public projects' disputes in Nigeria. Adjudication ranked highest while mediation ranked lowest as ADR techniques that will finally resolve disputes on public construction projects in Nigeria. It should be noted that effective outcomes of dispute resolution may not be readily attainable even with the use of the most effective techniques.

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