

APPRAISAL OF DISPUTE RESOLUTION STRATEGIES FOR CONSTRUCTION PROJECTS IN NIGERIA

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ABSTRACT

Purpose: The study evaluated dispute resolution approaches for construction disputes with a view towards exploring their applicability and effectiveness in achieving a long lasting resolution for construction disputes in Nigeria.

Design/methodology/approach: An exploratory questionnaire survey approach was adopted in which 55 valid responses were received from 120 target respondents which included Builders, Architects, Quantity Surveyors, and Engineers. This gave an overall response rate of 46%. Data collected were analysed using frequency counts, mean score, standard deviation and Mann Whitney U test.

Findings: Findings reveal that poor communication and interpersonal skills, delay in payment, and poor workmanship in that order were the three top rated factors responsible for disputes in the construction industry; while cultural differences, project uncertainty, and error in contract documents were the least three rated factors in that order. Additionally, negotiation, mediation, and adjudication were the three most effective strategies for resolving disputes in the industry.

Research limitations/implications: This study had one obvious limitation. It was carried out in two cities rather than the whole country. Although, it can be generalised to other parts of the country, it may only serve as triangulation to studies in other parts of the globe.

Practical implications: The study recommended that mutual trust and understanding among all project participants at all project stages should be encouraged to create a forum for resolving conflicts at an early stage. The study notes that with increasing complexity of construction projects in Nigeria, disputes occur as a result of factors identified. However, there are very effective dispute resolution strategies or mechanisms for those construction disputes.

Originality/value: The study established key factors responsible for disputes in the Nigerian construction industry and level of effectiveness of strategies for resolving conflicts in the construction industry from Nigeria's perspective.

Keywords: Conflicts; Nigeria; project management; resolution approaches.

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1. INTRODUCTION

Construction contracts have been marred by disputes and these have taken a toll on time, efforts, and human resources. The success of a building project depends on a number of variables; one of which is the way the building team approach disputes on the project. Construction contracts contain a set of conditions, organisational and logistic efforts that attempt to cover all unforeseen occurrences and ambiguities that may lead to disagreement or disputes during a construction project, yet not all eventualities are prepared for in the original contract. Disputes are therefore likely to arise under the best circumstances, even where every possibility has been potentially eliminated (Maggi and Staiger, 2015). Construction process is a function of many interwoven and complimenting variables resulting in a large and complex contractual framework. Complex construction can likewise often result in contractual ambiguities giving rise to complex disputes. According to Williamson (2007), all complex contracts are unavoidable and do not necessarily provide sufficient contingencies for events that may happen in the course of contract execution. The author argued that notion of incomplete contracts suggests that when circumstances arise which are not accounted for in the original agreement, individuals will need to negotiate revised terms which address the newly uncovered contingency. These renegotiations may lead to calculated effort by one party to take advantage of the vulnerabilities of the other's trading partner in the hopes of achieving a more favourable bargain that could lead into disputes.

The concept of Alternative Dispute Resolution (ADR) which many see as alternative to the traditional court-based system is used to describe the use of a third party to assist parties to a conflict in arriving at a voluntary, consensual, negotiated settlement (Gould, 1998). According to Raji, Mohamed, and Oseni (2015), its entry into Nigerian construction industry can be traced to the provisions for dispute resolution processes as provided for under the Constitution of the Federal Republic of Nigeria, 1990 (as amended) and the Arbitration and Conciliation Act 1990 (now Arbitration and Conciliation Act Cap A18 Laws of Federation of Nigeria (LFN, 2004 as amended). Be that as it may, and despite the availability of dispute resolution mechanism as enshrined in the constitution of Nigeria, majority of construction projects in Nigeria have ended in disputes severing parties' cordial relationship painstakingly built up over a period of time and have equally impacted the supply chain and substantially adding to the cost of contracts (Ogunsanmi, 2013).

Although several works (Aniekwu, 1995; Adams, 1997; Ogunsemi and Aje, 2006; Oyesola and Odeku, 2014) have all established the need for dispute resolution in Nigeria, very little exists on empirical diagnosis of factors responsible within the Nigerian construction industry as well as effectiveness of dispute resolution strategies for construction disputes. This is the intent of this study. The aim of this study is therefore to evaluate the existing dispute resolution approaches available for construction disputes with a view towards exploring their applicability and effectiveness in achieving a long lasting resolution for construction disputes in Nigeria. The specific research objectives are to: (1) assess factors responsible for disputes within the construction industry; and (2) examine effectiveness of dispute resolution strategies for construction disputes in Nigeria.

2. REVIEW OF RELATED LITERATURE

2.1 The Nigerian construction industry

The economic performance of any nation can be rated by the provision of basic infrastructure through its construction industry. For most developing economies like Nigeria, the construction industry has been a major contributor to the nation's gross domestic products (GDP) providing infrastructure that drives the economy and jobs for the teeming populace. Its dominance in Nigeria's economy from post-independence years of 1960s to 1980s contributing over 70% to GDP (Planning Committee on the Nigerian Construction Policy, 1989) made it one of the nation's strategic assets in national development (Oladapo and Onabanjo, 2009). However, its contribution to GDP has remained consistently low shrinking from 5.8% in 1981 to a mere 1.4% in 2011 (VETIVA, 2011) resulting in low productivity, job loss, and poor performance. Moreover, it is reported that more than 70% of construction projects executed in Nigeria suffers from cost and time overruns irrespective of whether the client is private or public and regardless of the project size (Oke and Ogunsami, 2011). Clearly these had ultimately induced low satisfaction rates among clients and concerned stakeholders and exacerbated cases of disputes in the industry.

2.2 Causes of disputes in construction industry

The term "conflict" and "dispute" have been used interchangeably in the literature. However, it needs to be pointed out that they are two distinct concepts. According to Kumaraswamy (1997), conflict is a serious disagreement between two or more parties. It can however be prevented from degenerating into dispute which is characterised by protracted disagreements or unsettled claims. From the perspective of the construction industry, Kilian and Gibson argued that dispute is seen as a problem or disagreement between the parties that cannot be resolved by on-site construction project managers. The emphasis on 'jobsite' or 'on-site' carries the inherent assumption that disputes firstly are seen as occurring on site then escalating upwards through the organisational hierarchy.

Many authors have examined the causes of dispute in construction projects execution. Mitropoulos and Howell (2001) stated that contractual dispute stem from a combination of uncertainty and the limited ability of people to think and communicate. They suggested that, there are three basic factors that drive the development of disputes. First is the high degree of uncertainty arising from complexity of projects, second are imperfect contracts, and third is the opportunistic behaviour of many parties who try to take advantage of one another in the competitive market place. The study by Diekmann, Giraldo, and Abdul-Hadi (1994) outlined three groups of factors responsible for disputes in the industry. The first comprises project uncertainty, uncertainty arising from pre-existing conditions, outside forces and their complexities, which cause change beyond the parties' expectations. The second which are process problems include problems in the contracting process including incomplete scope definitions, unrealistic operations (with regard to cost or completion date) and poor performance in the execution of work. The third is peoples' issues and comprise issues and problems that arise between people as a result of poor interpersonal skills, poor communications, lack of responsiveness and unethical or opportunist behaviour. Agu (2012) had argued that disputes can be traced to failure of one of the parties to a contract, one of the professional advisers or some other party connected with the contract to do their work efficiently, to express themselves clearly or to understand the full

implication of instructions issued or received by them. Against this background, it is perhaps unfortunate to argue construction related disputes exacerbated by projects disruptions and delays have brought unimaginable cost and negative impact to the nation's economy.

Other factors responsible for disputes in the construction industry include; variations problems, negligence in tort, and delays (Semple, Hartman, and Jergas, 1994); contract terms, payments, variations, extension of time, nominations, and availability of information (Heath, Hills, and Berry, 1994); poor management, poor communication, inadequate design, unrealistic tendering, adversarial culture, and inadequate contract drafting (Rhys Jones, 1994). Others are unrealistic expectations, ambiguous contract documents, poor communication, lack of team spirit, and failure to deal with changes and unexpected conditions (Bristow and Vassilopoulos, 1995).

2.3 Classification of dispute resolution strategies

ADR involves methods of resolving disputes other than litigation. It is a non-binding process beneficial for the disputing participants and the industry because they produce acceptable results in a cost efficient and timely manner. A number of ADR strategies are found in the literature. Below is a briefly review of some of them.

2.3.1 Negotiation

Negotiation is one of the most common forms of dispute resolution. Fisher and Ury (1991) define negotiation as a basic means of getting what you want from others. It is a back and forth communication designed to reach an agreement when you and the other side have some interest that are shared and others that are opposed. Finlay (1998) states that direct negotiation is the original, most cost effective and most reliable form of dispute resolution. Fisher and Loreleigh, (1990) maintained that negotiation would be the first port of call when a dispute occurs. Additionally, Blake, Browne and Sime (2012) opined that the process is nonbinding unless the participants produce a legally binding contract at the conclusion of the negotiation. However, negotiation needs no intervention unless the dispute is escalated to other dispute resolution processes. Direct negotiation between parties without third party assistance allows the disputants to retain their privacy and independence. Agu (2012) emphasized that the success of negotiation depends on interpersonal communication skills of the parties during the entire process. Additionally, negotiation may not be the ideal process where parties are displaying hostility between each other as it has the ability to amplify differences and confrontation. If a negotiation collapse, the next stage would be mediation (Fisher and Loreleigh, 1990).

2.3.2 Conciliation

According to the Administrative Appeals Tribunal (AAT) (2018), Conciliation is a process in which the parties to a dispute, with the assistance of a tribunal member, officer of the tribunal or another person appointed by the tribunal (the conciliator), identify the disputed issues, develop options, consider alternatives and endeavour to reach an agreement. In other words, the conciliator is the organiser but gets the disputants to agree on a procedure for conciliation. According to Agarwal (2001), conciliation is a process similar to mediation except that the conciliator can express an opinion on the merits of the case and is required to recommend a solution if the parties fail to agree. The process is likened to mediation and in some instances the definitions of both can be used comparably

with each other. However as with both process the third party (conciliator) does not make a binding decision. In the construction industry, the scope of conciliation is also much broader than mediation as the conciliator does not necessarily meet together with the disputing parties, and can provide the likely solution or advice through private conferencing (Fenn, Lowe, and Speck, 1997).

2.3.3 Mediation

According to Gould (2004), mediation is a “private, informal process in which parties are assisted by one or more neutral third parties in their efforts towards settlement” According to him, a further important factor is that the mediator does not decide the outcome; settlement lies ultimately with the parties. The author asserted that the mediator tries to reopen communication between parties and explores options for settlement. The mediator does not openly express his or her opinions on issues. Corroborating this, Folberg and Taylor (2003) had earlier opined that mediation is the process by which the participants, together with the assistance of a neutral person or persons, systematically isolate disputed issues in order to develop options, consider alternatives, and reach a consensual settlement that will accommodate their needs. However, if on the other hand, the mediator is called upon to state his or her opinion on any particular issue then he/she is clearly making an evaluation of that issue. The mediator is trained to help people settle conflicts collaboratively and has no decision-making power. The mediation takes place in a private, informal setting with a non-confrontational atmosphere. The dispute is settled only if all the parties agree to the settlement. In other words, mediation, offers a third neutral party the opportunity to facilitate negotiation between the disputants. If a settlement cannot be reached between the parties, the mediator provides his or her written, reasoned opinion.

2.3.4 Mini-trial

According to Edelman (1989), a Mini-Trial is a judicially-supervised, non-binding proceeding where counsel for parties in a pending dispute conduct limited discovery and then present a summary of their case before the judge and representatives of each party. After the initial representation, experts of facts may be called following which the management enters with a view towards coming to consensus. It is mostly applied in very complex construction and infrastructure projects where the client or its representatives may not be aware of the real situation on ground and the consultants may not be aware of the needs and priorities of the parties to the dispute on ground (Dighello, 2000). It is to be noted as asserted by that it is purely a voluntary and non-judicial process whereby the top management team of each party meets to resolve a disputes. It combines evaluative and elements which includes involving top management in the settlement process, limiting the time of the mini-trial, conducting an informal hearing, holding non-binding discussions, and receiving comments from a neutral adviser (Edelman, 1989). The duration of minitrials is usually short and completed within one to three months. The hearing is informal and lasts only one or two days. This aims to inform the top management executives of each party about issues and positions underlying the dispute quickly.

2.3.5 Dispute resolution boards

According to Peña-Mora, Sosa, and McCone (2003), the Dispute Resolution Board (DRB) is a panel of three standing neutral advisors chosen by both the client and the contractor prior to initiation of construction. Usually, the panel would conduct routine site visits to monitor progress of work, while at the same time assists in the resolution of any outstanding thorny issues. This is to avoid possible escalation to a dispute level that might

have adverse effects on the project schedule, budget and quality. According to Gould (2006), this is a major challenge and one that is key to success as opposed to waiting for a dispute to arise. Potential candidates for the board must be identified and appointed. Establishing the board can take some considerable time and therefore cannot be left until the project is underway. Board members must be impartial and have wide ranging expertise with excellent communication and management skills. It is also imperative that board members are available for the duration of the project to deal with matters promptly. A dispute board should be appointed at the commencement of a project and stay in place until its conclusion. The function of the Board should be to 'nip in the bud' problems before they develop into disputes.

2.3.6 Arbitration

According to Levin (1998), arbitration is the ADR technique most similar to litigation. The author added that instead of presenting a case to a judge or jury, summary presentations are made by both sides to one or a panel of neutral arbitrator(s) which is selected by the contract parties. The arbitrators will have a good knowledge and experience in construction management principles, and this is considered one of the major benefits of arbitration (Levin, 1998). It is to be noted however that many of the same procedures used in litigation, such as discovery and preliminary motions, are used in arbitration. Agu (2012) also found that the rules of evidence used in arbitration depend on the prior agreement between the parties. It may take a long time, same as for a litigation process, and may even be costlier. What makes it attractive is the mutual agreement by the parties, appointment of the arbitrator; privacy and confidentiality (Boulle, 1996).

Arbitration has obvious benefits over litigation. For instance, successful arbitration can offer advantages over court action such as confidentiality as the hearings are a private determinative process and the findings are not published. Other benefits include flexibility and convenience while process is final, binding and heard by a single or panel of experts in the relevant field. However, there are some who believe it is quickly losing its appeal as an informal, fair, and swift process. Researchers such as Harmon (2004) indicates that arbitration is becoming a slow laborious process akin to litigation in terms of procedure and cost without the safeguard of litigation. In addition, Hobbs (1999) had argued that some of the challenges in arbitration include the fact that it is associated with prolonged delays in selecting arbitrator panels, hearing dates and places, and in getting ready for arbitration hearings. As such, researchers are of the opinion that hearing times are increasing and discovery procedures are becoming much like litigation.

2.3.7 Adjudication

Adjudication refers specially to a procedure by which a neutral adjudicator is empowered and required by contract to make summary binding decisions about disputes arising under that contract without following litigation or arbitration procedures (Brown and Marriott, 1993). Agu (2012) supported this by saying that disputants agree beforehand that they will be bound by the opinion of the expert and that this decision is binding on the parties in the interim, until a further decision by a court of law or arbitration is reached. In comparison with mediation and conciliation, adjudication is a better means to resolve disputes on site by speedy decision (Latham, 1994). It is because mediation or conciliation requires the parties to reach their own settlement which takes relatively longer time. Plunkett (1995) has referred the adjudicator as 'expert adjudicator' and adjudication as 'expert adjudication'. The author had examined the role of expert adjudicators and made comparison between adjudication and arbitration. Expert adjudication is a quicker and less

expensive means of resolving disputes than a conventional arbitration. However, expert adjudication involves a less thorough investigation than the normal form of arbitration. In addition, the parties who agree to accept the opinion of an expert adjudicator may subject to the risk that the expert adjudicator can be wrong. Since the adjudicator owes a duty to the parties to act with reasonable care and skill in making a decision, he or she may require the parties to expressly agree to immune him or her from breach of duty in the appointment agreement.

This study investigates the effectiveness of these dispute resolution strategies in resolving disputes in the Nigerian construction industry.

3. METHODOLOGY

In line with the purpose of this research which focused on investigation of construction disputes in the Nigerian construction industry, exploratory and survey design approaches were adopted for the study. This involved an in-depth review of related literature on the concept of dispute and its resolution strategies; and the use of structured questionnaire to solicit opinion from target respondents in the Nigerian construction industry in two strategic cities of Abuja, the nation's administrative capital and Port Harcourt, the oil capital. Sixty (60) on-going construction projects (Abuja=30, PH=30) were purposively identified for the survey. One representative of both the contractor and the consultant for each project was purposively selected to give a total of 120 sample units. Target respondents were mainly Builders, Quantity Surveyors, Architects and Engineers. Efforts were made to ensure that all respondents are professionally registered with their respective professional bodies. This was to ensure that they are professionally qualified with adequate experience in dispute matters in the construction industry.

A copy of the questionnaire was first drafted and scrutinised by industry experts and academics before 120 copies of the questionnaire were distributed to respondents. Respondents were asked questions relating to factors responsible for dispute in the industry as well as effectiveness of measures in place for resolving disputes. Fifty-five (55) valid responses were received giving a response rate of 46%. A five point Likert scale of 1=strongly disagree, 2=disagree, 3=slightly agree, 4=agree and 5=strongly agree was used to measure respondents' rating of factors responsible for disputes; while the scale of 1= very low, 2 = low, 3 = moderate, 4 = high, 5 = very high was used to measure the level of effectiveness of disputes resolution strategies. Data collected were analysed using descriptive and inferential statistics. Accordingly, frequency count was used to analyse the respondents' demographics while mean and standard deviation were used to analyse the two objectives of the study. Mann Whitney U test was used to analyse the hypothesis postulated for the study. The mean score (MS) for each variable was established and ranked to determine significant variables.

4. PRESENTATION AND DISCUSSION OF FINDINGS

4.1 Sample characteristics

As noted earlier, 55 valid responses out of 120 copies of the structured questionnaire distributed were received. A cross tabulation analysis of location of projects and categories

of respondents is shown in Table 1.

Table 1: Distribution of respondents into categories

Location	Category of respondents		
	Contractors	Consultants	Total
Abuja	24	10	34
Port Harcourt	14	7	21
Total	38	17	55

It shows that out of 60 copies distributed to each of the two strategies cities, 34 responded from Abuja, while 21 responded from Port Harcourt. It however shows that 24 respondents or 71% of copies received from Abuja were from representatives of contractors while 14 or 67% of respondents from Port Harcourt were from the consultants. This is expected as there are usually more workers from the contractor's components of the project team than the consultants.

Table 2 however shows the breakdown of respondents in terms of job description. It indicates that architects were the highest number of respondents at 16, followed by Quantity Surveyors at 14, Builders at 13 and Engineers at 12. It is safe to conclude from the result that construction professionals were evenly and proportionately represented in the survey. It is also observed that there were more respondents across the professional divide that participated from Abuja. This is expected as there are arguably more projects and the corresponding construction professionals in the nation's capital on account of the massive construction activities going on in the city.

Table 2: Job description of respondents

Job description	Port Harcourt	Abuja	Total
Builders	4	9	13
Architects	6	10	16
Engineers	4	8	12
Q/Surveyors	7	7	14
Total	21	34	55

4.2 Factors responsible for disputes in Nigerian construction industry

In order to assess factors commonly responsible for disputes in the Nigerian construction industry, a taxonomy of factors was generated from the literature. Respondents were then asked to rate the factors using a five point Likert scale of 1=strongly disagree, 2=disagree, 3=slightly agree, 4=agree and 5=strongly agree. Results of analysis of the rankings are shown in table 3.

Based on an average benchmark of 3 [$1+2+3+4+5/5=3$] for a 5 point Likert scale, 11 out of 20 factors used for the survey were significantly responsible for disputes in the Nigerian construction industry. Similar approach was adopted by Chileshe and Kikwasi (2014) and Ikediashi, Ogunlana, Boateng, and Okwuashi (2012). However, poor communication management (MS=3.400), payment delay (MS=3.309), and poor workmanship (MS=3.273) were the top three rated factors by respondents. This tallied with the findings of Rhys Jones (1994), Thompson, Vorster, and Groton (2000) and Semple, Hartman and Jergas (1994). The lackadaisical attitude towards information dissemination between consultants and contractors as well as between contractors and subcontractors has

more often than not led to protracted disputes that have caused the country millions of dollars due to project delays and abandonment. On the other hand, project uncertainty, cultural difference, and error in contract documents were the least three rated factors in that order. Plausibly, there is no recorded dispute in the Nigerian industry on account of cultural difference. However, error in contract documents as well as project uncertainty have been known to results to disputes. The outcome may be due to the fact that only two cities out of many across Nigeria were used for the survey.

Table 3: Results of ranking of factors responsible for disputes in the Nigerian construction industry

Code	Causes of dispute	MS	SD	Rank	MWU	P-value
PCM	Poor communication management	3.400	0.915	1	524.0	0.066
PDL	Payment delay	3.309	0.821	2	225.2	0.115
PWK	Poor workmanship	3.273	0.977	3	441.7	0.124
CCL	Contractual claims	3.200	0.729	4	348.5	0.078
IIP	Incompatibility of interests among project team	3.146	0.938	5	440.1	0.099
DSE	Design error	3.127	0.912	6	337.1	0.223
DPD	Delay in project delivery	3.091	0.899	7	442.0	0.088
ISD	Incomplete scope definitions	3.091	1.262	8	472.4	0.055
ICD	Inadequate contract drafting	3.018	0.988	9	338.0	0.028
LTS	Lack of team spirit	3.011	0.876	10	408.1	0.057
FCU	Failure to deal with changes & unexpected conditions	3.005	1.222	11	178.2	0.140
PIS	Poor interpersonal skills	2.994	0.851	12	145.0	0.087
AOI	Availability of information	2.927	0.917	13	309.2	0.127
UOB	Unethical or opportunist behaviour	2.882	0.990	14	228.0	0.001
NPB	Nominations problem	2.112	1.114	15	415.8	0.059
NIT	Negligence in tort	1.997	0.855	16	376.8	0.091
PIT	Public interruption	1.958	0.928	17	441.8	0.244
ECD	Error in contract documents	1.944	0.883	18	225.0	0.071
CDF	Cultural difference	1.928	1.184	19	587.0	0.064
PUC	Project uncertainty	1.886	1.223	20	502.4	0.083

Note: MS =mean score; SD=standard deviation; MWU=Mann Whitney U value; P-value= significant @ >0.05

A null hypothesis was postulated to test the level of agreement between contractors and consultants on the causes of disputes in the Nigerian construction industry. The hypothesis stated that there is no significant difference in the ranking of causes of disputes within the Nigerian construction industry by contractors and consultants. Mann Whitney U test was adopted to test the hypothesis. According to Laerd Statistics (2018), it is a ranked-based non-parametric test used to compare differences between two independent groups when the dependent variable is either ordinal or continuous, but not normally distributed. The result of the analysis is also indicated in table 3. The hypothesis is accepted for all values of $p > 0.05$ while it is rejected for all values of $p < 0.05$. The result shows that the hypothesis is accepted for the 20 factors which is an indication there is a general agreement in the ranking of the factors.

4.3 Ranking of level of effectiveness of dispute resolution strategies

To examine the level of the various dispute resolution strategies for construction related disputes in the Nigerian construction industry, a list of 10 strategies were identified from literature and first piloted to determine their levels of applicability. Seven of them were found to be common in the Nigerian construction industry. They were therefore subjected to the views of respondents. Results of analysis is shown in Table 4.

Table 4: Results of ranking of level of effectiveness of dispute resolution strategies

Code	Approach	Contractors		Consultants		Average	
		mean	rank	mean	rank	mean	rank
RS01	Arbitration	3.725	1	3.845	1	3.785	1
RS02	Mediation	3.191	2	3.156	2	3.174	2
RS03	Adjudication	3.121	3	3.110	4	3.116	3
RS04	Conciliation	3.088	4	3.118	3	3.103	4
RS05	Negotiation	3.002	5	3.005	5	3.004	5
RS06	Mini-trial	2.441	7	2.952	6	2.697	6
RS07	Dispute resolution board	2.652	6	2.002	7	2.327	7

Results indicate that arbitration is the most effective strategy in the Nigerian construction industry as it is ranked first by both contractors and consultants. As noted earlier, arbitration almost follows all the procedures of litigation, the only difference being that, instead of presenting cases to a judge or jury, summary presentations are made by both sides to one or a panel of neutral arbitrator(s) which is selected by the contract parties. Mediation was ranked second by both groups while adjudication was rated overall third, even though it was rated third by contractors and fourth by consultants. However, use of dispute resolution boards, mini-trial, and negotiations were the three least rated strategies in that order by respondents. This may not be unconnected with the fact that the recommendations from these are not binding on parties. For example, where negotiation fails, parties are encouraged to go to arbitration.

5. CONCLUSION AND RECOMMENDATIONS

Construction contracts are complex; disputes are therefore likely to arise under the best circumstances, and even where every possibility has been potentially eliminated. This study examined factors responsible for disputes in the industry as well as the level of effectiveness of resolution strategies using Nigeria's perspective. Data collected from 55 respondents in two major cities of Abuja and Port Harcourt were analysed using descriptive statistics and Mann Whitney U test.

Finding reveal that poor communication management, payment delay and poor workmanship were the top rated factors commonly responsible for disputes in the Nigerian construction industry while project uncertainty, cultural difference, and error in contract documents were the least three rated factors in that order. Besides, it was also discovered that arbitration, mediation and adjudication were the most effective resolution strategies for disputes while use of dispute resolution boards, mini-trial, and negotiations were the three least rated strategies in that order by respondents. Meanwhile, the result of hypothesis postulated for the study showed that there is no significant difference in the ranking of the causes of disputes in the construction industry by respondents when grouped under consultants and contractors.

The study has noteworthy contributions to theory and practice. For instance, more is now known about the most common factors that trigger disputes in the industry. Besides, since disputes are inevitable, stakeholders can intensify the use of arbitration, mediation and adjudication since according to this study, they are the most effective in the resolution of disputes in the industry. It is therefore to be noted that resolving dispute more quickly will mean higher productivity in the construction industry. This is because construction disputes generally cost money, take time and ultimately bog down parties' cordial relationship painstakingly built up over a period of time and impacts the supply chain.

This study has one obvious limitation. It was carried out in two cities rather than the whole country. Although, it can be generalised to other parts of the country, it may only serve as triangulation to studies in other parts of the globe.

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