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PREVENTION OF CONFLICT IN CONSTRUCTION INDUSTRY CONSIDERING; ORGANIZATION, CONSULTANCY FIRM, CONTRACTUAL FIRM AND THE PROFESSIONALS PERSONNEL IN NIGERIA

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ABSTRACT

Frequent occurrence of conflicts in the construction industry among professional colleagues has been a serious brouhaha in the construction sector of this nation Nigeria. This research was carried out with the aim of developing plans to prevent conflict in the construction industry among organizations, consultancy firms, contractual firms and professionals with the objective of recognizing the causes, forms, and impacts on construction projects. In order to achieve the stated objectives, a well-structured questionnaire and interview was used across some construction industries and construction organizations in Nigeria. A total of 150 questionnaires were distributed to some organizations, consultancy firms, contractual firms and professionals in the construction industry. One hundred and twelve number [112] of them were returned and answered, which gave a responses rate of 74.7%. Data collected from the interview were analyzed using content analysis the questionnaires' responses were analyzed using descriptive statistics and the data were represented on bar charts and tables in which the factors were ranked by their mean item score. From the data analyzed, contractual, payment and land dispute were ranked the main forms of disputes in construction projects with mean scores of 4.66, 4.51 and 4.50 respectively. Lack of understanding and agreement on the type of contract, differing site conditions and breach of contract with mean score of 4.65, 4.61 and 4.56 respectively were identified as the major causes of disputes. Also delay in delivery, which slows down work and damages team relationships were ranked the paramount impacts of disputes on construction projects represented with mean scores of 4.79, 4.67 and 4.61 respectively. Hence, respondents suggested understanding contractual

document before proceeding into agreement, designing contract conditions that are fair to all parties and maintaining a good relationship between the clients, professionals and workers with mean scores of 4.74, 4.72 and 4.70 respectively has the major ways of preventing disputes in construction projects. With the above result, It was suggested that, organizations, consultancy firm, contractual firm and construction professionals needs to fundamentally re-examine their work processes, policies and procedures during the planning stage of any project and as well as relationship if dispute is to be prevented in construction industry. Therefore, these findings serve as a basis of preventing disputes in construction projects so as to reduce its destructive impacts on construction projects.

Key words: Conflict, Construction Industry, disputes, prevention, Organization, Consultancy firm, contractual firm. : SA= strongly agree, A= Agree, N= Neutral, DA= Disagree, SD= strongly disagree, NR= Number of respondents, TS= Total score, MIS= Mean Item Score, SI= Significant index

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1. INTRODUCTION

During the pre-project management era in Nigeria, the construction industry was plagued with several abandoned projects as a result of disputes which lead to the loss of valuable time and money and foreign investment by lack of involvement of other nations. Projects were abandoned due to conflicts and claims which were unavoidable thus led to unresolved dispute within the equitable time frame. Though conflict seem to be inevitable, it is crucially important to prevent the risks associated with disputes in projects, Literature shows that a high percentage of disputes in construction projects can be reduced through the identification of conflict forms and causes [1, 2]. Hence, identification of the various forms and causes of dispute in construction will assist to proffer a welcoming strategy that can be adopted to prevent the rate of dispute occurrence in construction industry.

Considering construction projects by their complexity and procurement in an unsettled environment, it is necessary to identify and understand conditions that contribute to disputes which without doubt will enhance its reduction in productivity. Presently, there are literatures on dispute resolution, however studies on strategies that can be adopted to prevent dispute in construction industry have not been widely covered. This study was conducted to find out strategies that can be adopted to reduce disputes in Nigeria construction industry.

It is essential to know that dispute has led to non-actualization of the projects construction and common problem of abandoned project in Nigeria. When a dispute is not promptly and properly resolved, it escalates and eventually requires a litigation proceeding which is extremely costly for the parties concerned [4]. Professional bodies and government has made substantial efforts particularly through the initiation of professional ethics to reduce the rate of disputes in construction industry, so as to improve project performance. Construction organizations also made efforts to enhance projects performance by implementing renovative practices, technologies and techniques fixed within concepts like knowledge management, supply chain management, lean production. Considering this, disputes continue to prevail [8]. Therefore, this research intends to proffer answers to the following research questions: What

are the various forms of disputes in construction industry, what are the causes of the disputes in construction industry, what are the impacts of the disputes on construction projects, and how can the identified disputes be prevented in construction industry

2. RESEARCH METHODOLOGY

This research was conducted using both qualitative and quantitative research approach (Mixed method). A qualitative research aims to gather in-depth understanding of a focused sample. This research approach uses an open and versatile style, and the researcher plays as much a part of the research process as the participants and also the information they supply, Quantitative research is used on large samples and statistical models [6]. Quantitative approach can give a wide range of information required for the research. A qualitative approach has been selected alongside with quantitative approach to gather in-depth knowledge and understanding of the research aim of this research. The population for the study consist of a numbers of construction firm registered with Corporate Affairs Commission (CAC), in this study, interviewed was conducted and questionnaires were administered randomly. The participants sample was based on convenience sample, where research participants were selected based on availability, readiness, willingness and ability to participate in the study. The advantage of this sample type includes: Convenience sampling is easy to conduct, with limited rules governing how to collect samples, lesser cost and time required to conduct the sample compared to other sampling technique. The method is considered appropriate to achieve research since few individual organizations are focused on within a closed sector. Convenience sampling is likewise not flawless, it can cause a number of biases and it doesn't represent the population as a whole.

The quantitative data collected through the administration of questionnaire surveys which was analysed using both statistical data analysis tools and graphical or pictorial tools with the aid of data analysis software such MS-Excel (spreadsheet) and SPSS 16 (Statistical Packages for Social Sciences) was used for coding questionnaire and data respectively. Data collected from different units was summarized into tables and charts to obtain relationships and divergences which helped the researcher draw conclusions. Means for various factors regarding disputes in each category was calculated to give the measures of central tendency and standard deviations as measures of dispersion required in satisfying the objectives of this research. Mean score was used to rank the degree of importance of the factors indicated by the respondents.

3. RESULTS OBTAINED

3.1. Qualitative Data Analysis and Results

The interview respondents were all involved in both the organization firm, consultancy firm and contractual firm in Nigeria and the interview questions were based on the set research questions of this research. A request to participate in the interview was sent to a sample of 25 professionals. A total of 16 professionals responded, giving a response rate of 64%. The various forms of dispute in construction projects, in the interview conducted, seven forms of disputes were identified. These are represented in Table 1

Table 1 The various forms of dispute in construction industry

S/N	Themes Drawn	Frequency
1.	Contractual dispute	9
2.	Land dispute	9
3.	Internal dispute	9
4.	Financial dispute	5
5.	Payment dispute	5
6.	Management dispute	2
7.	Economic dispute	2

Nine of the participants emphasizes that contractual, payment and land disputes are the various forms of dispute experienced in construction projects. Five participants identified Internal, financial and management disputes while two participants identified economic disputes are the forms of dispute experienced in construction projects. [7, 9].

3.2. The various causes of dispute in construction industry

In the interview conducted, twenty-two causes of disputes were identified. These are represented in

Table 2: The various causes of dispute in construction industry

S/N	Themes Drawn	Frequency
1.	Inadequate procurement/tendering method	6
2.	Bridge of contract	6
3.	Inadequate brief	6
4.	Poor communication	6
5.	Lack of understanding and agreement on the type of contract	6
6.	Differing site condition	6
7.	Incomplete design information	6
8.	Change order	4
9.	The absence of team spirit among members of the project	4
10.	Misplacement of priority	4
11.	Discrepancies /ambiguities in the contract documents	4
12.	Inadequate descriptions of the Preliminary Items in the BOQ	4
13.	Improper planning and site management	4
14.	Failure to use specified materials, skilled operatives and recognized methods	4
15.	Government intervention; suspension of work by approving authorities as a result of the project being differ from the approved design	3
16.	Fraud act of the party	3
17.	The parties failing to identify and dealwith issues on time	3
18.	Incomplete or inaccurate responses to problems presented by one party in the contract to another party in the contract.	2
19.	Failure of sharing risk	2
20.	Unrealistic claims for variations ofworks by contractors	2
21.	Limited resources (scarcity)	1
22.	Contractors' failure to price properly forthe works	1

Inadequate procurement/tendering method, bridge of contract, inadequate brief, poor communication, lack of understanding and agreement on the type of contract, differing site and incomplete design information condition were emphasized by six participants as the major causes of disputes in construction industry. Four participants identified change order, the

absence of team spirit among members of the project, misplacement of priority, discrepancies/ambiguities in the contract documents, inadequate descriptions of the preliminary items in the BOQ, improper planning and site management and failure to use specified material, skilled operatives and recognized methods.

Three participants identified government intervention, fraud act of the party and parties failing to identify and deal with issues on time. Two of the participants emphasized that inaccurate response to the problems presented by one party to another party in the contract, failure of sharing risks and unrealistic claims for variation of works by contractors. One of the participants pointed out limited resources (scarcity) and the contractor's failure to price properly for the works. These are causes of disputes in construction projects [12, 13]

3.3. The various impacts of dispute on construction projects.

In the interview conducted, seven impacts of disputes were identified. These are represented in Table

Table 3 The various impacts of disputes on construction projects

S/N	Themes Drawn	Frequency
1.	Delay in delivery	11
2.	Leads to variation; It affects cost due to unstable price of materials Damages team relationship	11
3.	Rework and reallocation cost for equipment, materials and labour	11
4.	It slows down work	3
5.	Loss of company's reputation/ Loss of professional reputation	3
6.	Loss of company's reputation	2
7.	Loss of professional reputation	2

Eleven participants identified delay in delivery, leads to variation and damages team relationship as the impacts of disputes on construction projects. Three participants identified Rework/reallocation cost for equipment, materials and labour and. It slows down work while two participants identified loss of company's reputation and loss of professional reputation as the impacts of dispute on projects [1, 2, 3]. The various strategies to prevent disputes in construction projects.

In the interview conducted, seven strategies of preventing disputes in construction projects were identified. These are represented in Table 4.4.

Table 4 The various strategies to prevent disputes in construction projects

S/N	Themes Drawn	Frequency
1.	Designing contract conditions that are fair to all parties (allocating projects risks fairly to all parties)	8
2.	Understanding contractual document before proceeding into agreement	8
3.	Proper planning and organisation of payment and schedule	8
4.	Payment as at when due	5
5.	Maintaining a good relationship between the clients, professionals and workers	5
6.	Engaging the organisation professionals	3
7.	Engaging the organisation trained artisans/labours Engaging the organisation trained artisans/labours	3

Design contract conditions that are fair to all parties, understanding contractual document before proceeding into agreement, proper planning and organisation of payment and schedule were identified by eight participants as the methods of preventing disputes in construction projects, payment as at when due and maintaining a good relationship between the clients, professionals and workers were identified by five participants while three participants identified engaging the organisation professionals and engaging the organization trained artisans/ labours as the methods of preventing disputes in construction projects [10]

Table 5 Response Rate for the Questionnaire Returned

S/N	Professional Group	Sent No.	Received No.	% of Response
1.	Clients' organisation	40	22	55%
2.	Contracting firm	50	44	88%
3.	Consulting firm	60	46	76.7%
	Total	150	112	74.7%

4. RESPONDENTS BACKGROUND

Respondents were asked series of questions about their background. The questions intend to gather information about the type of a company they work for, field of work and years of experience within the construction industry.

4.1. Company Type

Respondents were asked to identify the type of company they were working for. It was grouped into three main groups; Clients 'organisation, Contracting firm and Consulting firm. The Consulting firm gave the highest response percentage of 41%, contracting firm has 39% and client's organization 20% as shown in figure 1.

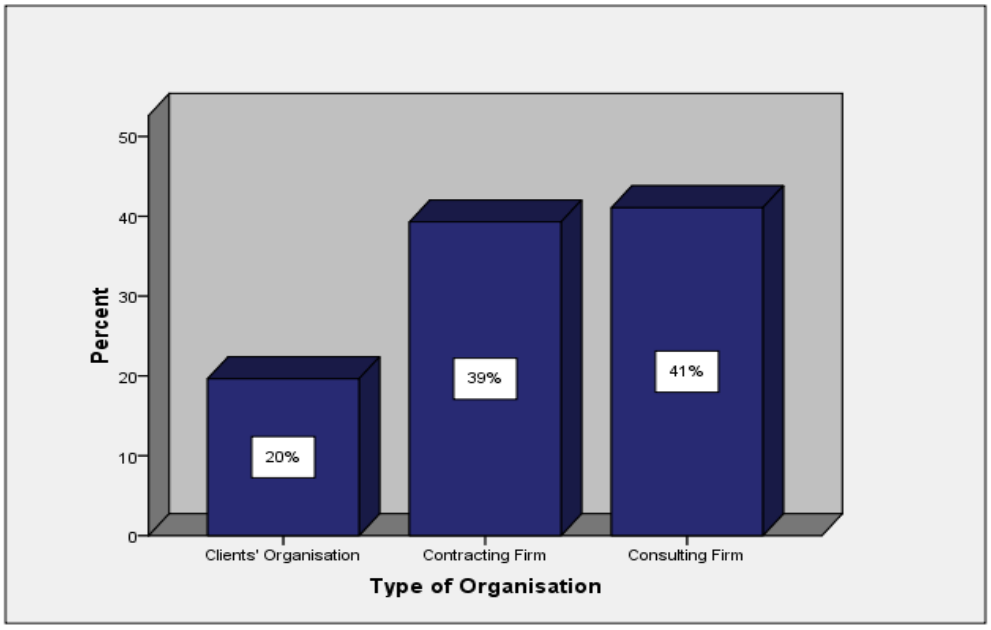

Figure 1 Category of Respondents by Type of Organization

Field of work

The field of work of the respondents was asked relating to the companies they work for. Most of respondents were project managers, quantity surveyors, contractors, architects, consultants,

managing director. Other job specified includes site supervisors, owners, and safety inspectors. Contractors had the highest percent of 25% because the site with ongoing projects was visited to know their experience regarding disputes. The results are presented in the figure 2 with their respective percentage.

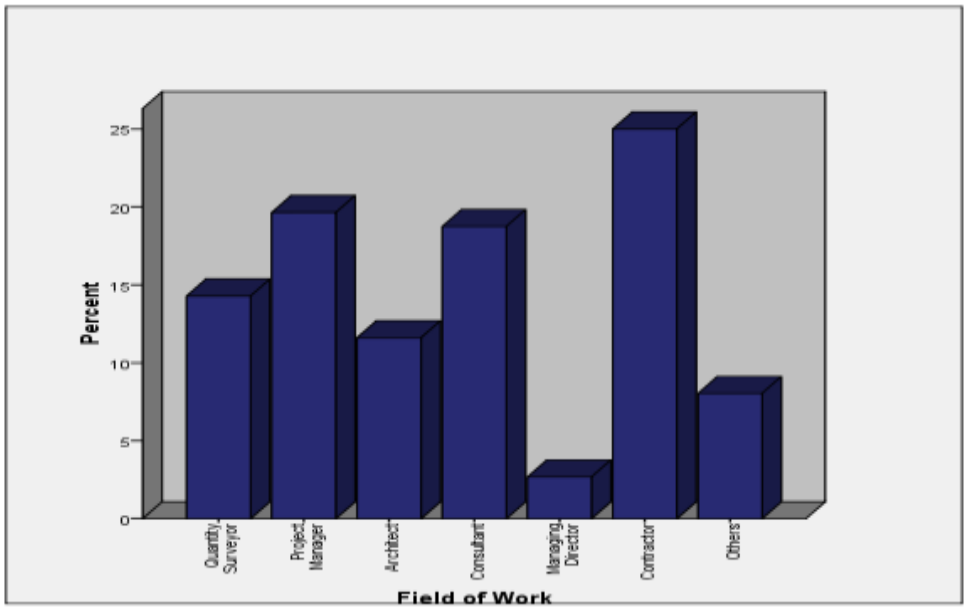

Figure 2 Category of Respondents by Field of Work

Years of Work Experience within the Construction Industry

Work experience within the construction industry shows the respondents' work experience in years within the construction industry. The numbers include all construction related work during the respondents' career and do not only reflect their current roles within their organizations. As the figure reveals, the participants had a substantial amount of experience and more than half of all respondents had over 5 years of work experience in the sector. The average experience was between 5 to 10 years.

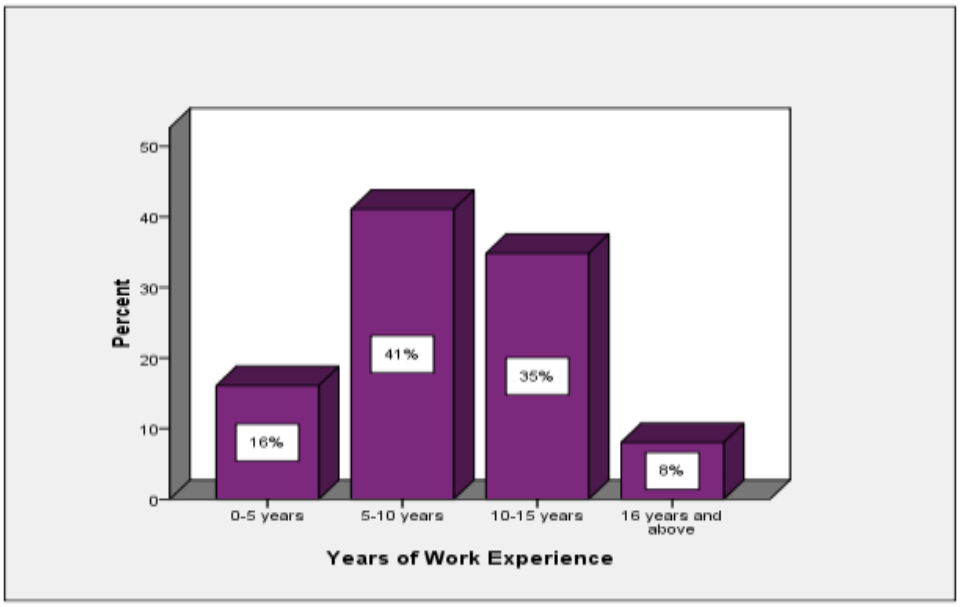

Figure 3 Category of Respondents by Years of Experience

4.2. Forms of Disputes in Construction Projects

Respondents were asked to rate the level of compliance to a listed forms of disputes in construction projects. The result in table 6 shows the total perception of respondents from the sample returned.

Table 6 Ranking of respondents' perception to the Forms of Disputes

S/N	Causes of Disputes	SA 5	A 4	N 3	DA 2	SD 1	NR	TS	MIS	SI	RANK
1.	Contractual Dispute	77	32	3	0	0	112	531	4.66	0.529	1st
2.	Payment Dispute	63	45	2	2	0	112	505	4.51	0.396	2nd
3.	Land Dispute	64	41	6	1	0	112	504	4.50	0.414	3rd
4.	Internal Dispute	58	51	3	0	0	112	503	4.49	0.306	4th
5.	Financial Dispute	59	36	10	3	0	112	485	4.33	0.710	5th
6.	Management Dispute	36	63	4	10	0	112	468	4.18	0.490	6th
7.	Economic Dispute	32	39	25	16	0	112	423	3.78	1.040	7th

Based on the result from Table 4.6, the highest complying form was the contractual dispute with the mean item score (MIS) of 4.66. The next highest with MIS of 4.51 is payment dispute, followed by land dispute with MIS of 4.50. Management dispute was ranked second to the last with MIS of 4.18and economic dispute was ranked last with MIS of 3.78 [7, 9].Referring to the research questions in chapter one, the major forms of disputes in construction projects was identified and ranked accordingly.

4.3. Causes of Disputes in Construction Projects

The result in Table 4 reveals the total perception of respondents from the sample returned. The respondents identified lack of understanding and agreement on the type of contract with Mean Item Score of 4.65 as a paramount cause of disputes in construction project. Differing site condition was ranked second with MIS of 4.61. Bridge of Contract is ranked third with MIS of4.56. Government intervention (suspension of work by approving authorities as a result of the project being differ from the approved design) was ranked second to the last with MIS of 4.15 and Misplacement of priority was ranked last on the table with MIS of 4.13 [5, 12, 13]

These causes are significant and must be addressed properly with care to minimize, avoid or resolve amicably disputes in order to prevent it impact on construction projects. Referring to the research questions in chapter one, the major causes of disputes in construction projects was identified and ranked.

Table 7 Ranking of respondents' perception to the causes of disputes

S/N	Causes of Disputes	SA 5	A 4	N 3	DA 2	SD 1	NR	TS	MIS	SI	RANK
1.	Lack of understanding and agreement on the type of contract	74	37	1	0	0	112	521	4.65	0.497	1st
2.	Differing site condition	72	36	4	0	0	112	516	4.61	0.559	2nd
3.	Bridge of contract	68	39	5	0	0	112	511	4.56	0.582	3rd
4.	Inadequate procurement/ Tendering method	65	43	4	0	0	112	509	4.54	0.568	4th
5.	Incomplete design information	56	55	1	0	0	112	503	4.49	0.520	5th
6.	Poor communication	59	47	6	0	0	112	501	4.47	0.600	6th
7.	Improper planning and site management	54	51	6	1	0	112	494	4.41	0.637	7th
8.	Failure to use specified materials, skilled operatives and recognized methods	53	49	10	0	0	112	491	4.38	0.647	8th
9.	Discrepancies/ ambiguities in contract documents	44	63	5	0	0	112	487	4.35	0.565	9th
10.	Inadequate brief	43	64	5	0	0	112	486	4.34	0.562	10th
11.	Inadequate descriptions of the preliminary items in the BOQ	45	61	2	4	0	112	483	4.31	0.685	11th
12.	Change order	34	75	3	0	0	112	479	4.28	0.506	12th
13.	The absence of team spirit among members of the project	39	58	13	2	0	112	470	4.20	0.708	13th
14.	Government intervention;	41	52	14	5	0	112	465	4.15	0.808	14th
15.	Misplacement of priority	41	47	21	3	0	112	462	4.13	0.807	15th

4.4. Impacts of Disputes on Construction Projects

The result in table 8 shows the total perception of respondents from the sample returned.

Table 8 Ranking of respondents' perception to the Impacts of Disputes

S/N	Impacts of Disputes	SA 5	A 4	N 3	DA 2	SD 1	NR	TS	MR	SI	RNK
1.	Delay in delivery	89	23	0	0	0	112	537	4.79	0.41	1st
2.	It slows down work	75	37	0	0	0	112	523	4.67	0.47	2nd
3.	Leads to variation (It affects cost due to unstable price of materials)	68	44	0	0	0	112	516	4.61	0.49	3rd
4.	Damages team relationship	56	47	9	0	0	112	495	4.42	0.64	4th
5.	Rework and reallocation cost for equipment, materials and labours	47	61	4	0	0	112	491	4.38	0.56	5th
6.	Loss of company's reputation	48	56	4	4	0	112	484	4.32	0.71	6th
7.	Loss of professional reputation	44	53	11	4	0	112	473	4.22	0.77	7th

According to the results from table 5, delay in delivery was identified as a prominent impact of dispute in construction project with mean item score of 4.79. It slows down work was chosen next with MIS of 4.67while it leads to variation (It affects cost due to unstable price of materials) ranked third with MIS of 4.61. Loss of professional reputation was ranked last with MIS of 4.22 [1, 2]

4.5. Methods of preventing disputes in Construction Projects

Respondents were asked to rate the level of compliance to a listed methods of preventing of disputes in construction industry. Based on the results in the figure 4.9, understanding contractual document before proceeding into agreement' response tops the list of the preferred methods of preventing disputes with mean item score of 4.74, this was closely followed by designing contract conditions that are fair to all parties (allocating projects risks fairly to all parties) at MIS of 4.72. Next is proper planning and organisation of payment and schedule at MIS of 4.70. Engaging the organisation trained artisans/labours was ranked last with MIS of 4.24 while engaging organisation professionals was ranked last with MIS of 4.22 [10]

Table 9 Ranking of respondents' perception to the methods of preventing disputes

S/N	Methods of preventing Disputes	SA 5	A 4	N 3	DA 2	SD 1	NR	TS	MIS	SI	RNK
1.	Understanding contractual document before proceeding into agreement	83	29	0	0	0	112	531	4.74	0.44	1st
2.	Designing contract conditions that are fair to all parties (allocating projects risks fairly to all parties) to unstable price of materials)	81	31	0	0	0	112	529	4.72	0.45	2nd
3.	Proper planning and organisation of payment and schedule	78	34	0	0	0	112	526	4.70	0.46	3rd
4.	Maintaining a good relationship between the clients, professionals and workers	72	38	2	0	0	112	518	4.63	0.52	4th
5.	Payment as at when due	58	41	13	0	0	112	493	4.40	0.69	5th
6.	Engaging the organisation trained artisans/labours	43	53	16	0	0	112	475	4.24	0.69	6th
7.	Engaging the organisation professionals	44	49	19	0	0	112	473	4.22	0.72	7th

5. CONCLUSIONS

5.1. Forms of disputes in construction projects

This study has identified seven forms of disputes in construction projects from the interviewed conducted with respondents in the construction industry. The identified forms was therefore used in structuring questionnaire for the thesis The research undertaken on the forms of disputes in construction industry for the respondents in the interviewed conducted and questionnaire returned were ranked based on their mean score which pointed out contractual, payment and land dispute as the main forms of dispute in construction projects. Management and economic dispute were ranked last. Hence, identifying the forms of dispute has served as a basis in which disputes can be prevented in construction projects.

5.2. Causes of disputes in construction industry

Analysis of the results obtained from the interviewed conducted identified twenty-two causes of disputes; fifteen first ranked causes were used for` the structured questionnaire to affirm the findings to a larger sample size. This identified causes such as lack of understanding and agreement on the type of contract, differing site condition, bridge of contract, inadequate procurement/tendering method and incomplete design information were ranked between one to five in the questionnaire analysis and results. The first ten ranked causes in the interview analysis results are almost in conjunction with the ranked results in questionnaire analysis results. Hence, identifying the causes of disputes has served as a basis in which disputes can be prevented in construction projects.

5.3. Impacts of disputes on construction projects

Analysis of the results obtained from the interviewed conducted and questionnaires administered showed the level of impact in which conflict has on construction projects observing dispute has a negative force. Delay in delivery, Slows down work, Damages team relationships and leads to variation; It affects cost due to unstable price of materials were ranked the paramount impacts of conflict on construction projects. The first four ranked causes in the interview analysis result are almost in conjunction with the ranked results in the questionnaire analysis result. Hence, identifying the impacts of disputes has served as a basis in which disputes can be prevented in construction projects.

5.4. Prevention of disputes in construction projects

Methods of preventing disputes includes understanding contractual document before proceeding into agreement, designing contract conditions that are fair to all parties (allocating projects risks fairly to all parties), proper planning and organisation of payment and schedule were ranked has the major ways of preventing disputes in construction projects in both the interview and questionnaire analysis results. Therefore, these findings serve as a basis of preventing disputes in construction project so as to reduce its impacts on construction projects.

6. RECOMMENDATION

Based on the research conducted the following recommendations were proposed:

- Parties to a contract should understand contractual document before proceeding into agreement.
- Designing contract conditions that are fair to all parties; allocating projects risks fairly to all parties.
- Proper planning and organization of payment and schedule by both clients and contactors.
- Maintaining a good relationship between the clients, professionals and workers
- Payment as at when due.
- Professionals should engage organizational trained artisans/labors.
- Clients should engage the organization professionals in executing project.
- It is suggested that firms, professionals and clients need to fundamentally re-examine their work processes, policies and procedures as well as relationship if dispute is to be prevented in construction industry.

REFERENCES

[1] Ashworth, A. (2012). Contractual procedures in the construction industry. Harlow: Prentice Hall. England.

[2] Chan, E.H.W. and Suen, C.H, (2005). "Dispute Resolution Management for International Construction Projects in China, Management Decision", 43(4), 589-602.

[3] Chan, E.H.W.,and Suen, C.H. (2005). Disputes and Disputes Resolutions Systems in Sino-Foreign Joint Venture Construction Projects in China, Journal on Professional Issues in Engineering Education and Practice, 131(2), 141-148.

[4] Cheung, S.O., Suen, C. H, Ng, S.T.T. and Leung, M-L. (2004). Convergent views of neutrals and users about alternative dispute resolution. ASCE Journal of Management in Engineering, 20(3), 88-96.

[5] Cheng, M., Tsai, H. and Chiu, Y. (2009), "Fuzzy case-based reasoning for coping with construction disputes", Expert Systems with Applications, 36(2), 4106-4113.

[6] Corbin, J., and Strauss, A. (2014). Basics of Qualitative Research: Techniques and Procedures for Developing Grounded Theory. Sage publications.

[7] Dada, M. O. (2012) "Analysis of Conflict Centers in Projects Procured with Traditional and Integrated Methods in Nigeria." Engineering Project Production Management. 2(2), 66–77.

[8] Dawson, B.W (2006). Scope for Improvement: A Survey of Pressure Points in Australian Construction and Infrastructure Projects. A Report Prepared for the Australian

[9] Farooqul, R.U., Umer, M., and Azhar, S. (2014), Key causes of disputes in the Pakistani construction industry- assessment of trends from the viewpoint of contractor. NED University of engineering and technology Karachi, Pakistan

[10] Khekale, C. and Funtane, N. (2013) Management of Claims and Disputes in Construction Industry

[11] Khanaki, H., and Hassanzadeh, N. (2010). Conflict Management Styles: The Iranian General Preference Compared to the Swedish. International Journal of Innovation, Management and Technology, 1(4), 419-426.

[12] Kumaraswamy, M., & Yogeswaran, K. (1998). Significant sources of construction disputes. International Construction Law Review, 15(1), 144-160.

[13] Kumaraswamy, M. M, (1998). "Tracing the roots of construction claims and disputes," Proceedings of RICS, London.