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Appraisal of Construction claims Management Practices in Nigeria

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Abstract: In developing countries, effective construction claim management practices can help project owners and contractors resolve claims easily. Existing studies have been centred on the nature, frequency, severity, causes, magnitude and the effects of claims in Nigeria but less has been done to holistically examine various construction claims management practices. This study examines the level of usage and effectiveness of existing claims management practices by gathering quantitative data from 323 respondents engaged in building projects construction. The collected data were analysed using the percentile, mean item and Kruskal-Wallis K-test. Among the three groups, owners mostly use the construction claims management process and framework. In total, 64% and 21% of the participants had used the claims management process and framework respectively. Furthermore, among the seven sub-processes, owners were most effective in the documentation whereas contractors and consultants were most effective in the use of identification and evaluation, respectively. An implication of these findings is that stakeholders are yet to embrace an innovative methodology, such as available frameworks, to improve the management and settlement of claims. As such, adequate sensitization of the stakeholders in the use of a framework can be implemented to eliminate the cost of litigation, which is often the result of disputed claims.

Keywords: Construction claims, Claims management process, Dispute, Project success.

1. Introduction

Claims management is a knowledge area in project management. Studies by researchers all over the world have shown that there are two main approaches in claims management, namely the use of the claims management process and the use of an

innovative methodology, such as frameworks. Abdul-Malak et al. (2002) advocated that for successful claims management, contractors submitting claims must clearly follow the steps stipulated in the contract conditions and that the owners must follow an overall comprehensive procedure for tracking and managing the claims submitted by the contractors. Bakhary et al. (2013) stated that the idea of a construction claim is not new, but what has been lacking is a practice that can help construction claims administrators in assessing the level of their construction claims process. Therefore, Bakhary et al. (2013) stressed the need for an organised instrument (framework) for auditing contractor's claim process. Singh and Sakomoto (2001) also concluded that all parties to a construction contract should understand the claim management process so as to ensure proper claims management practice.

Construction claims management practices vary from country to country. Bakhary et al. (2013) reviewed the means of improving the claims management process in Malaysia and developed a framework for improving this process, which implies that claims are managed in Malaysia through a claims management process and framework. Aibinu et al. (2008) investigated the role of perceived fairness in the process of managing construction claims in Singapore and the study confirmed that the client-appointed contract administrator assesses and decides on the genuineness of claims presented by the contractor. The study explained further that any disagreement on the recommendation of the administrator may be corrected or negotiated by the parties to the contract. The study concluded that when negotiation fails, claims may be resolved through alternative dispute resolution techniques or litigation, implying that the Singapore approach to claims management is different from that used in Malaysia.

Studies have been conducted in many countries, such as Moshin (2012) in Oman, Scott and Harris (2004) in United Kingdom, Chovichien and Tochaiwat (2005) in Thailand, Enshassi et al. (2009) in Palestine and Hassanein and Nemr (2008) in Egypt have concluded that construction claims management is managed through the procedure outlined in the conditions of the contract. Oyegoke (2008) researched on building competence to manage contractual claims by Finish contractors. The study concluded that in Finland applications, the procedures and management of claims are not clearly defined, and claims require little documentation/correspondence with prompt reimbursement by owners. The above studies confirmed that approaches in construction claims management practices vary from country to country.

In Nigeria, the majority of previous research efforts have been on the nature, causes, magnitude and effects of construction claims. Among these studies were Kehinde and Aiyetan (2002), who studied the nature of contractual claims in building contracts in Nigeria; Aibinu and Jagboro (2002), who evaluated the effects of delays on project delivery in Nigerian construction industry; Aibinu and Odeyinka (2006)

worked on construction delays and their causative factors in Nigeria; Ameh et al. (2010), who studied noticeable factors causing cost overruns in telecommunication projects in Nigeria; Oke and Makinde (2011), who modeled the extent of contract claims on building projects; and Oladapo (2007), who performed a quantitative assessment of the cost and time impacts of variation orders on construction projects in Nigeria.

Although a considerable number of researches have been conducted in the aforementioned areas, no study is known to have attempted to address the general approaches in construction claims management in Nigeria. It may be argued that such research has been performed in other countries; however, because of the differences in business cultures from one geographical location to another, there is a need to fill this knowledge gap. Therefore, the current research aims at appraising the existing construction claims management practices in Nigeria. The specific objectives are as follow: (1) to assess the level of usage of existing construction claims management practices and (2) to evaluate the effectiveness of stakeholders in the use of the construction claims management process. In line with the second objective as stated above, a null hypothesis was postulated that will help determine statistically the effectiveness of stakeholders in the use of construction claims management sub-processes. The null hypothesis is as follows:

Ho1: There is no significant difference among the perceptions of the clients, consultants, and contractors regarding their effectiveness in the use of construction claims management in each sub- process.

2. Literature Review

Tochaiwat and Chovichien (2004a) described Construction claims management as the process of relating with or controlling changes by one of the parties involved in the construction process. Kululanga et al. (2001) observed that management of construction claims is the greatest difficult task that is facing contractors in today's unstable business environment. This study equally asserted that construction projects are becoming increasingly susceptible to a variety of factors that give rise to time extension and cost recovery. Kululanga et al. (2001) concluded that even though the construction business has moved toward partnering arrangements in recent years, difficulties in claims management continue to increase. Rooke et al. (2004) asserted that claims are sometimes planned at the tender stage or during the course of a project. The study affirmed that one practice at the tender stage is the pricing technique, which minimizes the tender prices while maximizing the out-turn cost of a contract by exploiting mistakes in the bill of quantities. Another practice is the programming of work to maximize its vulnerability to delay. This strategy of tendering by contractors is referred to in many studies as opportunistic bidding. Ren et al. (2001) and Aibinu (2007) observed that over the past three decades, the construction industry has experienced increases in claims, liability exposures and disputes, along with increasing

difficulty in reaching reasonable settlements in an effective, economical and timely manner. Oyegoke (2006) stressed the importance of claims management in the construction industry, because it is vital for the successful implementation of the project, brings about fair dealing between the project owner and the contractor, improves the contractor's cash flow and discourages disputes and project abandonment.

Several studies, such as Oke and Makinde (2011) and Ameh and Osegbo (2011), have shown that in Nigeria construction projects are not usually completed without cost and time overruns. Kehinde and Aiyetan (2002) observed that this phenomenon has been attributed to a series of complex inter-relationships between project variables, the design, the method of construction, the mode of payments, availability of materials, a lack of harmony among the building team members, environmental conditions, and other factors. The implication of these complex variables may not be known at the pre-contract stage, but results in several claims in the cost of executing the contract by the contractors. The study of the existing approaches will also assist construction industry participants in solving the problems that are associated with construction claims management in Nigeria.

Aibinu et al. (2008) opined that a normal process for administering construction claims involves three major stakeholders, namely the client, the main contractor and the client-appointed contract administrator/representative. The study explained further that the employer is the owner or financier of the project, the main contractor is the organization that undertakes the construction of the project in accordance with the contract documents, the appointed client representative is responsible for assessing and certifying the genuineness of the contractor's claims. Enshassi, et al. (2009) postulated that the key objective of the claims management process is to resolve certain difficulties in an efficient manner to avoid litigation and arbitration in settlement of claim. Tochaiwat and Chovichien (2004a) opined that to address or control claims effectively, all parties should establish good construction claim management processes in their organizations. Kululanga et al. (2001) concluded that the components that form the construction claim process comprises six sub-processes, namely, identification, notification, examination, documentation, presentation and negotiation.

Levin (1998) and Mbabazi (2004) supported this standardization and stated that the solution to the continuous occurrence of claims in the construction industry is the claims management process, which includes proper identification, notification, documentation, presentation and resolution. Enshassi et al. (2009) also supported this standardization and professed that the solution to the problem of claims management is claim management process, which includes identification, notification, examination, documentation, presentation and negotiation. Almost all the previous studies on claims management agreed

that to avoid disputes that may arise, it is better to follow the claims management process. Several instruments (i.e., frameworks) have been developed for the management of construction claims. These frameworks can be grouped into four groups according to their approaches in managing construction claims: the "bid your claims" group, which includes opportunistic bidding behaviour according to Mohamed et al. (2011) and the analytical model for analysing construction claims and opportunistic behaviour according to Ho and Liu (2004). This group opined that the contractor can bid low if there is opportunity to recoup his losses through claims during the execution of the contract.

Another group is the "step-by-step procedure", which includes the construction contractor claim process by Kululanga et al. (2001); claims administration model by Abdul-Malak et al. (2002); the framework of systems for managing employers' claims by Chovichien and Tochaiwat (2006) and the framework on claim analysis by Nguyen (2009). This group also opined that construction claims management practices should follow the procedures as set out in the conditions of the contract. The next group is the "multi agent negotiation", which includes the use of a multi-agent system for construction claims negotiation by Ren (2002) and the general negotiation framework by Fidan et al. (2010). This group affirmed that once it is established that the contractor is entitled to claim(s), independent agents should be appointed by both parties to negotiate the cost and time due to claimant on their behalf.

The last group is those who developed the framework for "a particular type of claim", which includes the variation order sub-model by Abdul-Malak et al. (2002) and the analysis of weather-related construction claims by Moselhi and El-Rayes (2002). This group developed frameworks that can be used to manage a particular type of claim. In conclusion, those who developed the aforementioned grouped frameworks opined that the use of the framework is an important practice in managing construction claims.

3. Research Methodology

To address the objectives stated above, data were collected using a well-structured questionnaire administered to clients, contractors, consultants, architects and quantity surveyors. The respondents were stakeholders who were involved in claims management on various building projects executed between 2009 and 2014 in Ondo state. The population for the study was 323 respondents; they included 53 clients, 168 contractors, 52 architects and 50 quantity surveyors. The building projects used for this study were owned by Ondo state government while the contractors and consultants involved were widely spread across the country. Census method was adopted because the population falls within a manageable size and locations. Therefore, the results of the study can be generalized. The questionnaire was structured into three sections, and questions were asked on a 4-point Likert type, with 4 being the highest rating. The first section was on the background information about the

respondents, whereas the second section was mainly on the respondent's levels of awareness and usage of the identified practices. The third section was on the effectiveness of the respondents in the use of the practices. Out of the questionnaires administered, 197 of them were returned and found suitable for analysis, representing about 61% response rate, which is above the usual rate of 20-30% for questionnaire surveys in construction management studies, as suggested by Akintoye and Fitzgerald (2000) and Fellows and Liu (2008). The data collected were analysed using percentiles and mean scores. Kruskal-Wallis K-test KW was also adopted in determining the level of agreement in the respondents' opinions because the data collected were ordinal. Fellows and Liu (2008) asserted that KW can be used when there are three or more samples.

In order to check the internal reliability of the instrument used for the study, Cronbach's alpha was calculated. Tan (2004) suggested that for a scale to be reliable Cronbach's alpha must be at least 0.7 and that if the questions are uncorrelated, Cronbach's alpha = 0. Field (2005) concluded that a value of 0.7- 0.8 is an acceptable value for Cronbach's alpha and that value that is substantially lower indicates an unreliable scale. From the result of the reliability test performed on the scale used in the questionnaires for this study, as presented in Table 1, it is evident that the Cronbach's alpha value ranges from 0.828 to 0.941. Hence it can be considered acceptable and good, based on Tan (2004) and Field (2005) criteria. Therefore, it can be concluded that the instruments used for this study are significantly reliable.

Table 1. Reliability Coefficients for the Data Collection Instrument.

Scale of Measure	Cronbach's α
The level of awareness of the existence of the construction claims management process	0.866
The level of awareness of the existence of frameworks (structured instruments for managing construction claims)	0.938
The use of the construction claims management process	0.902
The use of the frameworks (structured instruments for managing construction claims)	0.941
Effectiveness in the use of the construction claims management process	0.828

4 Findings and Discussion

4.1 Background Information on the Respondents

About 53% of the respondents were corporate or registered members of their professional bodies and with up to ten years of post-registration experience, whereas 20% and 27% were junior and senior members of their professional bodies, respectively. Senior professional members had over 25 years of post-qualification experience, whereas the junior members had less than 5 years of post-qualification experience. These

experience levels imply that the respondents were well educated, professionally qualified and competent to answer the questions, and their opinions are reliable.

4.2 Level of Awareness of Existing Construction Claims Management Practices

As stated earlier, two major practices were identified in literature and the results of their analyses were as follow:

4.2.1 Level of Awareness of Construction Claims Management Process

In assessing the level of awareness of the stakeholders of the construction claims management process as a practice, three groups of respondents were involved. From Table 2, 11.11%, 22.22% and 35.56% of the clients were somewhat aware, aware and very aware of the construction claims management process as a practice, respectively suggesting that 68.89% of the clients were generally aware of this practice. The overall point of view of the contractors indicates that 69.6 them were aware of construction the claims management process as a practice for managing construction claims at diverse levels. In the case of consultants, 13.10% of them were somewhat aware of this practice, whereas 39.29% and 42.85% of the consultants were aware and very aware of this practice, respectively. These findings signify that 95.24% of the consultants were aware of this practice at various levels. The general views of the respondents show that 80.20% of the respondents were aware of this practice at varying levels. The overall point of view of the respondents indicates that the stakeholders' awareness of the construction claims management process as a practice was fairly high, because 80% of them were aware of this practice at various levels.

The Kruskal-Wallis K-test was performed to examine whether respondents differed in their perception based on their type of organisation (i.e., clients, contractors and consultants). An asymptotic significance value of 0.566 was generated, which is greater than 0.01 and 0.05. This result implies that there is no significant difference among the respondents' response to this aspect of the study, which confirmed statistically that the results of the descriptive analysis are reliable.

Table 2. Levels of Awareness of the Existing Construction Claims Management Practices.

Practice	Clients		Contractors		Consultants		Overall	
	Freq.	%	Freq.	%	Freq.	%	Freq.	%
Construction claims management process								
Not aware	14	31.11	21	30.88	4	4.76	39	19.80
Somewhat aware	5	11.11	6	8.82	11	13.10	22	11.17
Aware	10	22.22	15	22.06	33	39.29	58	29.44

Very aware	16	35.56	26	38.24	36	42.85	78	39.59
Total	45	100.00	68	100.00	84	100.00	197	100.00
Frameworks (Structured instruments for managing construction claims)								
Not aware	39	87.00	59	87.00	46	54.76	144	73.10
Somewhat aware	1	2.00	4	6.00	9	11.00	14	7.11
Aware	2	4.00	2	3.00	12	14.00	17	8.62
Very aware	3	7.00	3	4.00	17	20.24	22	11.17
Total	45	100.00	68	100.00	84	100.00	197	100.00

4.2.2 Level of Awareness of the Frameworks (Structured Instruments for Managing Construction Claims)

In examining the level of awareness of the stakeholders of the frameworks as a practice, owners, contractors and consultants were asked to indicate their level of awareness of the frameworks. Table 2 shows that 13% of the clients were aware of the frameworks at classed levels as a practice for managing construction claims. The general point of view of the respondents shows that 13% of the contractors were aware of this practice at various levels. In the case of the consultants, 45.20% of them were aware of this practice at classified levels. The general view of the respondents indicates that 26.90% of them were aware of this practice at diverse levels. The analysis shows that consultants have the highest level of awareness of the framework as a practice in managing construction claims (approximately 45%). A further analysis was performed using the Kruskal-Wallis K-test to examine whether respondents differed in their perception based on their type of organisation (clients, contractors and consultants). An asymptotic significance value of 0.248 was generated, which is greater than 0.05. This result implies that there is no significant difference among the groups of respondents in this aspect of the study. This finding also confirmed statistically that the results of the descriptive analysis are reliable.

4.2 3 Level of Usage of Construction the Claims Management Process

This section examines the level of usage by the respondents who were aware of the construction claims management processes as a practice. In assessing this aspect of the study, the respondents who were aware of the existence of construction claims management processes were asked to rate the practice according to their level of usage. As shown in Table 3, 80.64% of the clients used the construction claims management process at various levels. The analysis also shows that 78.52% of the contractors used this practice at various levels, and 80.00% of the consultants used this practice at classified levels. The general opinion of the respondents indicates that 79.70% of them used this practice at varying levels, which is 64% of all respondents. Thus, clients used the construction claims management process most among the

three groups, with approximately 81% of them aware of this practice at various levels. A further analysis was conducted using the Kruskal-Wallis K-test to examine whether respondents differed in their perception based on their type of organisation (clients, contractors and consultants). An asymptotic value of 0.093 was generated, which is greater than 0.05. This finding indicates that there is no significant difference in the opinions of the respondents regarding the use of the construction claims management process and confirms that the results of the descriptive analysis can be relied upon statistically.

4.2.4 Level of Usage of the Frameworks (Structured Instruments for Managing Construction Claims)

The respondents who were aware of the existence of the frameworks were asked to rate this practice according to their level of usage. As shown in Table 3, 83.33% of the clients used the frameworks at varying levels. In addition, 77.78% and 78.95% of the contractors and consultants used this practice at diverse levels, respectively. The general opinion of the respondents shows that 79.25% of the respondents used the frameworks at varying levels, which is 21% of the total respondents. The results also indicate that clients used the frameworks most among the three groups, with 83% of them aware of the frameworks at various levels.

To analyse the level of usage of the frameworks, the Kruskal-Wallis K-test was performed to examine whether respondents differed in their perception based on their type of organisation (i.e., clients, contractors and consultants). An asymptotic value of 0.171 was generated, which is greater than 0.05. This finding indicates that there is no significant difference in the opinions of the respondents regarding the level of usage of the frameworks. Therefore, it can be concluded that the three groups concur on this aspect of the study.

Table 3. Level of Usage of Existing Construction Claims Management Practices.

Practice	Clients		Contractors		Consultants		Overall	
	Freq.	%	Freq.	%	Freq.	%	Freq.	%
Construction claims management process								
Not used	6	19.36	10	21.28	16	20.00	32	20.25
Somewhat used	2	6.45	7	14.89	4	5.00	13	8.23
Often used	7	22.58	11	23.40	18	22.50	36	22.78
Always used	16	51.61	19	40.43	42	52.50	77	48.74
Total	31	100.00	47	100.00	80	100.0(	158	100.00
N = 158								
Frameworks (Structured instruments for managing construction claims)								
Not used	1	16.67	2	22.22	8	21.05	11	20.75
Somewhat used	1	16.67	1	11.11	4	10.53	6	11.32

Often used	1	16.67	2	22.22	9	23.68	12	22.64
Always used	3	50.00	4	44.45	17	44.74	24	45.94
Total	6	100.00	9	100.00	38	100.00	53	100.00
N =53								

4.3 Assessment of the Participant's Effectiveness in the Use of the Construction Claims Management Process

In assessing the effectiveness of the use of construction claims management sub-processes, clients, contractors and consultants were asked to indicate their level of effectiveness in the use of the construction claims management process. From the clients' perspective, they are most effective in the documentation sub-process, with a mean value of 3.29, whereas they are least effective in the examination sub-process, with a mean value of 2.90, as shown in Table 4. Contractors rated identification, with a mean value of 3.24, as their most effective sub-process. From consultants' points of view, they are most effective in the evaluation sub-process, with a mean value of 3.08. Clients and contractors unanimously agreed that they are least effective in the use of the examination sub-process, with a mean value of 2.90 and 2.76, respectively. These findings are in contrast to the view of the consultants, who opined that they are least effective in the use of the negotiation sub-process, with a mean value of 2.79.

The general view of the respondents reveals that they are most effective in the use of the evaluation sub-process, with a mean value of 3.11, followed by the documentation sub-process, with a mean value of 3.10. The respondents are least effective in the use of the examination sub-process, with a mean value of 2.79. The least effective sub-process is examination, with a mean value of 2.79 out of the maximum 4.00 point Likert scale used, indicating that they are above the average level of effectiveness in the use of each sub-process and implying that all the participants are effective in the use of all sub-processes. This result may foster successful construction claims management in Nigeria.

The Kruskal-Wallis K-test was performed to determine whether the respondents differed in their general perception based on their type of organisation (i.e., clients, contractors and consultants). The analysis yielded an asymptotic value of 0.134, which is greater than 0.05. This finding indicates that there is no significant difference among the respondents in their overall ratings of their effectiveness in the use of the construction claims management process and confirms that statistically, the overall results of the descriptive analysis can be relied upon in this aspect of the research.

Table 4. Assessment of the Effectiveness in the Use of Construction Claim Management Sub-Processes

Construction claims management process	Client		Contractor		Consultant		Overall	
	MS	Rank	MS	Rank	MS	Rank	MS	Rank
Evaluation	3.04	5	3.18	2	3.08	1	3.11	1
Documentation	3.29	1	3.16	3	2.96	3	3.10	2
Identification	3.13	2	3.24	1	2.83	4	3.04	3
Presentation	2.91	6	3.04	5	3.03	2	3.01	4
Negotiation	3.09	3	3.15	4	2.71	7	2.95	5
Notification	3.07	4	2.99	6	2.79	5	2.92	6
Examination	2.90	7	2.77	7	2.76	6	2.79	7
Average	*3.06*		*3.08*		*2.88*		*2.99*	

4.4 Test of the Hypothesis

4.4.1 Effectiveness of the Clients, Contractors and Consultants in the Use of Each Sub-Process of Construction Claims Management

The Kruskal-Wallis K-test was performed to examine whether respondents differed in their perception on the effectiveness of the use of each sub-process of construction claims management based on their type of organization (i.e., clients, contractors and consultants). This analysis was performed to assist in decision making with respect to the null hypothesis.

The Null Hypothesis:

$H_0$1: There is no significant difference among the perceptions of clients, consultants, and contractors on their effectiveness in the use of each construction claims management sub-process.

The results of the Kruskal-Wallis K-test (Table 5) indicate that the asymptotic value for two sub-processes is 0.000, whereas the p-value of four sub-processes is less than 0.05, which implies that there are significant differences in the perceptions of the respondents in respect to six out of seven sub-processes. Hence, the null hypothesis is rejected, which implies that there are significant differences among the perceptions of the clients, contractors and consultants on their effectiveness in the use of construction claims management sub-processes.

Table 5. Perceptions of the Clients, Contractors and Consultants on Their Effectiveness in the Use of Construction Claims Management Sub-Processes.

Process	Overall rating		Chi-square value	Kruskal-Wallis sig. p	Remark
	MS	Rank			
Evaluation	3.11	1	4.805	0.187	No Significant Difference
Documentation	3.10	2	10.285	0.016*	Significant
Identification	3.04	3	15.153	0.002*	Significant

Presentation	3.01	4	10.285	0.015*	Significant
Negotiation	2.95	5	21.724	0.000*	Significant
Notification	2.92	6	12.615	0.006*	Significant
Examination	2.27	7	32.679	0.000*	Significant

4.5 Discussion of the Results

4.5.1 Level of Awareness of Existing Construction Claims Management Practices

Concerning the two identified practices for construction claims management, it can be concluded that consultants are most aware of the construction claims management process and structured instruments for managing construction claims (frameworks) among the three groups, possibly due to their professional exposure and higher educational background compared with other groups. This finding corroborates the assertion of Kululanga et al. (2001), who stated that Malawian contractors were not aware of the organised practice for construction claims management. In contrast, in a similar study in Thailand, Chovichien and Tochauwat (2014) concluded that construction companies' representatives were not aware of the claims management process.

4.5.2 Level of Usage of Existing Construction Claims Management Practices

Concerning the two identified practices for construction claims management, clients are best able to use construction claims management processes and frameworks among the three groups, possibly because the clients handle the largest number of building projects among the three groups. In support of this finding, Enshassi et al. (2009), in a similar study in Palestine, concluded that the staff of the clients and contractors does not understand the issues involved in the use of the construction claims management process. On a general note, stakeholders used construction claims management processes rather than frameworks. This result is in support of Kululanga et al. (2001), who concluded that some practitioners have used the construction claims management process, whereas their exposure to the framework is not widely known in the literature. This finding corroborates the assertion of Enshassi et al. (2009), who noted that claims in Palestine are managed through the construction claims management process, with the objective of resolving certain difficult task effectively and efficiently.

4.5.3 Effectiveness of the Clients, Contractors and Consultants in the Use of Construction Claims Management Sub-Processes

The findings indicate that among the seven sub-processes for construction claims management, the clients are most effective in the documentation sub-process, possibly because the clients are more interested in the documentation submitted by the contractors in support of their claims. Chovichien and Tochaiwat (2005) noted that public clients have high efficiency in assessing the documentation of changes because they have more power to access the information from their contractors. Contractors are most effective in the identification sub-process among the

seven sub-processes for construction claims management. Chovichien and Tochaiwat (2005) stated that contractors can easily identify changes in their work because they are so close to the project progress and can notice the changes occurring. In contrast, consultants are most effective in the evaluation sub-process among the seven sub-processes for construction claims management, possibly because consultants (architects and quantity surveyors) are solely responsible for the evaluation of claims submitted by contractors. Verster (2006) stated that evaluation is claims adjudication, including checking the validity of claims and complying with contractual terms and the possible outcome, which is the amount to be paid to the claimant.

The overall view of the respondents reveals that stakeholders are most effective in the use of the evaluation sub-process among the seven sub-processes for construction claims management. This result is in support of Aibinu's (2008) assertion that in the process of administering claims, the claims certifiers are expected to form an opinion on the authenticity of the contractor's claims and to make recommendations about the evaluated quantum of the contractor's entitlements.

5. Conclusion and Recommendation

Construction claims management practices were appraised with a view of determining the existing practices in Nigeria. The findings of this research should be interpreted in the context of construction in the area of study. Each geographical location has its own local construction culture, social-economic factors and political background that will determine its practices. The findings from the analyses show that the two major practices for managing construction claims in the area of study are the use of the construction claim management process and frameworks (structured instruments for managing construction claims). The results of the research further indicate that among the three groups, owners are the best at using the construction claim management process and frameworks, whereas contractors are the worst. These findings may be due to the owners' exposure to the largest number of construction projects among the three groups. Generally, 64% of the respondents have used the construction claims management process at varying levels, and 21% of the respondents have used frameworks at modifying levels, while the remaining 15% of the respondents have not used either of the two practices. These results imply that the participants use the construction claims management process more than the frameworks.

In addition, the research findings reveal that among the seven sub-processes, owners are most effective in the documentation sub-process, possibly because clients were interested in the documents submitted by contractors in support of their claims, while the contractors viewed identification as their most effective sub-process. The overall view of the respondents concurred with that of the consultants – they were most effective in the use of the evaluation sub-process among the seven sub-processes for construction claims management. To improve the

participants' level of usage of the frameworks as instruments for construction claims management, adequate and proper sensitization should be realized by government agencies and professional bodies, which can encourage the use of innovative methodologies by participants, such as frameworks. These measures will also ensure efficient construction claims management practices and will reduce or eliminate the cost of litigation that usually results from disputed construction claims. These data were collected from respondents involved in construction projects executed by a state government, and thus, these findings can be extended to projects performed in other states in Nigeria. Future research can also focus on construction claims management practices considering construction projects procured through partnering and public private partnerships.

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