

Client and Contractor Organisations' Assessment of Design-Bid-Build Procurement Practice in Nigeria

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Abstract: This study sought to investigate the assessment of client and contractor organizations on the use of the design-bid-build method for project delivery in Nigeria. One hundred fifty seven questionnaires were administered purposively on contracting and client organizations in Nigeria. Sixty seven organisations responded to the questionnaire. The responses were analysed through the use of descriptive and inferential statistical tools. Of the twenty issues used for the assessment, 'individual participants are exploitative of loopholes in contract documents' ranked first on aggregation for the two groups. 'Relationships among participants breed mistrust' ranked least. On the average, contractors and clients disagree with the twenty issues or criticisms about the traditional procurement practice. The results of the analysis further indicate that there are no significant differences in perceptions on the issues between the two groups. It is recommended that the homogeneity of perceptions can be a launching pad for further investigation and intervention efforts for procurement improvement in Nigeria.

Keywords: Design-bid-build, perception, procurement, Nigeria, traditional method.

Introduction

The construction industry is the vehicle for the provision of shelter, buildings, and other infrastructure that adds to, or supports the quality of life of the citizen. The industry contributes to the growth and development of nations through the provision of new infrastructure and the maintenance or deconstruction of existing ones. In addition to the provision or maintenance of infrastructure, the industry contributes to the gross domestic product of nations [1-3]. While the construction industry has been seen as a multi-party business [4], the organization for the procurement of the construction project or product is often-times a temporary multi-organisation [5,6]. These features combine to explain the peculiar nature of the industry. Eriksson [7] indicated that construction transactions are characterized by high complexity, customization, long duration, and high uncertainty.

Several methods exist for the procurement of projects in either the private or public sectors. Among these methods is the traditional method (design-bid-build) that is the oldest and or commonest in some countries [8-10]. While the method has been a subject of criticisms over time, its continued dominance in the procurement of both private and public works in Nigeria seems or remains paradoxical.

Interestingly, some researchers investigated the situation in Nigeria and concluded that the traditional method remains the most dominant and preferred or fashionable method in the letting of both public and private works [11]. Those researchers ascribed the procurement of about 57% of new works to the use of the traditional method [11]. In essence, part of their findings on Nigeria is that the traditional procurement method is the leading and most preferred method in the private sector [11]. This is in spite of the fact that the traditional method has been criticized severely for what are regarded or perceived as its shortcomings [12]. Why is this so, despite the seeming criticisms of the procurement method. There is assertion or inference in literature, by Naoum [13], that the design-bid-build procurement method is obsolete. Eriksson [7], however, reasoned that while clients want to establish more co-operative relationships with contractors, obviously through alternative procurement methods, their choice of procurement methods is not consistent with their wish. Eriksson [7] then concluded that there is a difference between desired situation and actual behavior of clients regarding procurement, possibly due to earlier experience. It is this concern of a seeming hiatus or gap between literature criticisms of the design-bid-build procurement method and the continued dominance of the method for project delivery that propels an empirical investigation into perceptions being held by clients and contractors in the Nigerian construction industry on the practice and contract documentation of the traditional procurement method. The empirical investigation has the possibility of bringing to the fore or explaining the perceptions and reactions or response to the use of the design-bid-build procurement method in Nigeria.

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The study has the potential for contributing to the body of knowledge on traditional procurement in Nigeria and also illuminating the use of the method. Additionally, the study would reflect the perceptions of the two groups on the issues. The relevance of the investigation of those perceptions is that perceptions, whether right or wrong, have been argued to affect responses, decisions, and market behavior and customer patronage. Perceptions may be subjective and intangible, yet they have the power to influence objective reality and the tangible [14,15]. The implication is that in an age of increased competitiveness, the management of perceptions of stakeholders can have effect on the success of an endeavour. It is thus in this context that an empirical investigation is made into assessment of issues on traditional project procurement. Furthermore, the client and contractors are two parties who take and implement procurement decisions respectively on the construction project. Investigating their views and perceptions is a possible step for understanding procurement transactions in the environment of the research

Foundations of Design-Bid-Build Procurement

The contractual arrangement and organizational deployment of participants for the realization of the building is the purview of construction project procurement. Procurement is thus the organizational design that determines the line of relationships and communication between and among project participants, among which are clients, consultants, and contractors. Procurement is perceived by researchers and practitioners from several worldviews. The views include: view of organization as a system (scientific management); biological organism (system approach); states of flux and transformation; a socio-technical framework (Stated by Green, 1994, as cited by McDermott [16]). Furthermore among perspectives to the study of selection of procurement is the situational or contingency approach. This perspective acknowledges that no single procurement method is applicable and adaptable to all situations [17,18]. No one method is a cure-all. A related perspective is the socio-technical perspective. The approach assumes that the selection of procurement method cannot just be based on objective data alone but on a combination of objective and subjective reality. It acknowledges the interaction between objective and subjective reality (the human aspect). The subjective reality, though intangible, can have tangible and far-reaching influence on procurement selection. As human beings are not mechanistic, they play a part in the procurement process and thus influence procurement decisions.

The design-bid-build (otherwise called the traditional) procurement method is one of the options for construction project delivery. The traditional method retains the name traditional [18] because it is an offshoot of the differentiation between designers and contractors. In this method, the owner or client contacts an architect or an engineer, as the case may be, who appoints other consultants to design, and then construction is awarded to a contractor. A primary feature of this method is that design is separated from construction. Furthermore there is a serial, sequential approach to the design and construction. The concept of traditional procurement method imposes a contractual and organizational separation of design from construction. The possibility of the traditional method enhancing the certainty of final cost, and the achievement of quality and functional considerations and the room for competition in letting out works are among the reported strengths of the method [19]. However, some perceived or reported criticisms of the traditional procurement method include: serial and hierarchical project development philosophy with possible time and cost implications [20], lack of single point responsibility, adversarial relationships [21], participant's conflicting loyalties to project objectives [22], claim consciousness, the lack of the mandatory input of contractors into the design stage thus not taking advantage of their experience, lack of commitment to project objectives or lack of customer focus [23, 24]; parochial attitudes and biases that often time become overriding to overshadow project goals [25], the possibility of the legal contracts that bind project participants together becoming the basis for finger pointing, claim consciousness, litigation and broken relationships [24].

The foundations of the traditional project procurement method can be located in the theory and doctrine of division of labour propounded by Adam Smith. Division of labour as enunciated by Adam Smith was to promote specialization. Division of labour was also premised on the understanding that specialization would increase expertise and productivity. In the traditional procurement method, a serial project development philosophy is practiced. In the twenty first century, sophistication continues with the possibility of virtual or physical collocation of participants to develop a product [26,27]. While different specialists may work together to achieve a project, the emphasis on collaboration even among functional disciplines especially in the age of technological advancement is emphasized. While not throwing away the possible advantages of different specialists working together to achieve a goal, the emphasis on experts working as a team is pronounced. Thus, in a way that signals a departure from differentiation, technological advancement and

sophistication have affected product development and processes, pointing to the use of teams and integration. This view is captured by Freeman-Bell and Balkwill [28], who argued that modern engineering invention is not a solo flight. In essence, the philosophy behind traditional project procurement is analogous or can be traced to the economic theory of differentiation in work execution or, in other words, the economic theory of division of labour.

Some works exist on procurement in Nigeria. While some of the works have compared some procurement paths, others dwell on procurement selection and performance. Ogunsanmi et al [29] investigated the factors contributing to the performance of procurement path between the traditional method and the labour only method. Ojo [12] investigated the performance of procurement types in Nigeria using the concept of performance indices. He acknowledged that the traditional procurement method is the most commonly used in the country, a position also supported by Babatunde et al [30]. Ojo [12] further investigated a variant of the traditional method (lump sum contract method), management contracting method, design and build, build-own-operate-transfer. In this research, issues obtained from literature and practice regarding traditional procurement, are investigated empirically in the context of the Nigerian environment. None of the other works has brought together and used a combination of the issues for empirical assessment of stakeholder perceptions about traditional project procurement in general and in Nigeria in particular. This is the gap this work intends to fill and herein lays its potential contribution and relevance.

Research Methods

The field investigation was preceded by an examination of literature and recourse to anecdotal issues from practice to distil some issues for assessing the design-bid-procurement practice. Opinion survey questionnaires were administered on construction industry client and contractor organizations in Nigeria. Construction industry professionals were targeted to complete the questionnaire on behalf of their respective client or contractor organizations. The professionals included architects, civil/structural engineers, electromechanical engineers, quantity surveyors, land surveyors, estate surveyors, town planners, and builders. By the peculiar nature of construction works, where projects and operational bases could be dispersed, most of the respondents were drawn from the city centres or state capitals. Responses for the questionnaires were received from ten states of Nigeria in addition to Abuja, the Federal Capital Territory.

The first part of the questionnaire sought to know the personal variables of the respondent supplying information for the organization, viz: age group of respondent, profession, grade of membership in professional body, highest educational qualification, and years of experience in construction industry or service. The second subdivision addressed organizational variables: head office location, number of employees, annual turnover range for the last five years where applicable, ownership structure of organization, age of organization in practice, frequency of commissioning of construction works.

The questionnaire also required respondents to assess their agreement or otherwise with twenty issues itemised about design-bid-build project procurement documentation and practice. The responses were inputted thus: 'strongly disagree' was assigned '1', 'disagree' was assigned '2', 'agree' was assigned '3', while 'strongly agree' was assigned '4'. The ratings or the values of 1 to 4 were deliberately assigned to exclude and to foreclose the position of neutrality and to make respondents take a position. It was reasoned that this approach, would force respondents to think through, more than when the 'neutral' position or option is provided. It was also reasoned that in the process categorical outcomes are possible: either a respondent agrees or disagrees on an issue will be apparent.

The method used for the sampling was the purposive and snowballing technique. Many reasons account for this development. There was no available and reliable record of construction industry contractors. Many were not registered with The Federation of the Construction Industry (FOCI) in Nigeria; those who registered were not under any legal mandate to do so; those who were not registered with them were more in number than those who were registered and could often be grouped as part of the informal industry which, however, contributed to a greater part of construction output [31]. It was therefore judged more appropriate and pragmatic to adopt the non-probabilistic approach of purposive and snowballing sampling techniques for both the opinion survey instrument. Reluctance on the part of some respondents to supply relevant information was encountered. Adams [32] and Odusami [33] have reported part or similar problems in research in the field of construction in a developing country like Nigeria.

The twenty items used in assessing perceptions about the traditional procurement method were gathered individually or severally from literature and practice. As those issues were collections of issues to be used newly in this investigation, it was judged necessary to test the items for both reliability and validity. While reliability measures the stability

of an instrument, validity investigates the extent to which an instrument measures the hemisphere of a subject matter. For this research, reliability was computed at 5% level of significance. The value of the parallel form reliability coefficient that also takes care of inter-item correlations, of 0.945 was obtained. This value was judged acceptable by the researcher in view of earlier studies addressing reliability by Kaming et al. [34]. The content validity was done through assessment of the instrument by experts in the environment of the research. The level of significance (α value) for statistical analysis was set at 5%.

Analysis and Results

Descriptive data analysis and results

Seventy one and eighty six questionnaires were administered respectively on client and contractor organizations. The respective response rates were 49% and 41%. Out of the 157 questionnaires administered on client and contractor organizations,

67 were returned. This represents an aggregated response rate of 43%. Further, demographic characteristics of the respondents indicate that with respect to academic qualifications, 15 (22.38%) of individuals who represented their respondent organisations had masters degree, while 32 (47.76%) had the bachelors degree. 16 (23.90%) had the higher national diploma qualification, while 2 (2.98%) had the national diploma qualification. Equally, 2 (2.98%) did not indicate their highest educational qualification. On the whole, not less than 94% of respondents had at least a degree or equivalent qualification. On experience of the organisations' representatives in the construction industry, analysis indicates that 29 (43.3%) of the respondents has more than 15 years experience in the construction industry, 2 (7.5%) has less than four years, 10 (14.90%) have between 5 to 8 years experience, 12 (17.90%) have between 9 to 12 years experience, and 11 (16.40%) have 12 to 15 years experience.

Table 1 shows the mean item scores of the responses, the applicable rankings by the two groups and the

Table 1. Mean Item Scores (MIS) and Ranking of Issues on Design-bid-build Procurement

Issue	MCR	RCR	MCL	RCL	MCO	COR
Where sought at all, inputs of contractors are at best advisory	2.77	1	2.59	5	2.69	1
Individual participants are exploitative of loopholes in contract documents	2.54	6	2.81	1	2.67	2
It discourages innovation on part of contractors	2.66	2	2.63	4	2.64	3
It discourages cooperation and collaboration among project participants	2.51	9	2.66	3	2.58	4
It encourages participants to be more profit conscious instead of client/customer conscious	2.26	19	2.72	2	2.48	5
Communication and transfer of useful knowledge among project participants is difficult	2.57	4	2.38	10	2.48	5
Seeking inputs of contractors is not mandatory but optional	2.54	6	2.41	7	2.48	5
Detached objectivity of participants is doubtful- each is interested in what he can gain from the project	2.60	3	2.31	14	2.46	8
There is uneven, unclear and unfair allocation of risks to some participants	2.57	4	2.34	11	2.46	8
It does not encourage commitment of all participants to total quality right from project design	2.49	11	2.34	11	2.42	10
It engenders a climate of conflict among participants	2.43	13	2.41	7	2.42	10
Does not create a win-win situation among project participants	2.54	6	2.28	16	2.42	10
It is more protective of clients than other participants	2.37	16	2.41	7	2.39	13
It encourages confrontation of persons instead of issues	2.29	18	2.50	6	2.39	13
It encourages professional mistrust and rivalry among participants	2.43	13	2.34	11	2.27	15
There is master servant relationship among participants	2.51	9	2.16	19	2.34	16
It encourages claim consciousness among participants	2.37	16	2.28	16	2.33	17
It increases exposure of participants to litigation	2.46	12	2.19	18	2.33	18
It does not encourage commitment to project objectives rather individual participants objectives	2.23	20	2.31	14	2.27	19
Relationships among participants breed mistrust	2.40	15	2.06	20	2.24	20

MCR= Mean item score for contractor group; RCR = Rank for contractors' group; MCL= Mean item score for clients' group; RCL = Rank for clients' group; MCO = Mean for the two groups combined; COR = Rank for the two groups combined

aggregated mean item scores and rankings. Table 1 indicates the respective rankings by the respondent groups of the various issues used to assess the traditional procurement method. 'Where sought at all, inputs of contractors are at best advisory' is ranked most critical by the contractor respondent groups while the same issue is ranked fifth by the client group. On the whole, for the issue, the aggregated rank is 1. The next issue assigned the rank of '2' on the aggregated ranking column is 'Individual participants are exploitative of loopholes in contract documents'. The issue that was ranked least on the basis of mean item score is 'relationships among participants breed mistrust'. The two respondent groups individually and also in combination 'disagreed' with the last eight items or issues for assessment in the table.

Inferential data analysis and results

The next step in the research is to investigate whether there are significant differences between the stakeholder organizations on the documentation and practice of the traditional procurement method. In this regard, the following null and alternative hypotheses were set up:

Null Hypothesis (H_0): There is no significant difference between the perception of contracting and client organizations on the documentation and practice of the design-bid-build procurement method.

Alternative Hypothesis (H_1): There is significant difference between the perception of contracting and client organizations on the documentation and practice of the design-bid-build procurement method.

To test the hypothesis that there are no significant differences in perceptions among the two groups, the non-parametric Mann-Whitney-U test is used. The test is the non-parametric equivalent of the t-test. The responses are ordinal and this justifies the recourse to the use of the non-parametric test for the differences of means. Table 2 shows the results of the analysis for each of the issues used for assessment.

Table 2 shows the Mann Whitney-U values. The corresponding Z values, in line with Gupta [36], are shown in the table too. Furthermore, using the approach suggested by Kinnear and Gray [37], the probability values (p-values) are examined for decision making. All values above 0.05 indicate non-significant difference between clients and contractors with respect to the issue at stake. This implies an acceptance of the null hypothesis. P-values lower than 0.05 suggests significant differences among the stakeholders on the issue at stake and warrants a

rejection of the null hypothesis. In this table all the p-values are more than the α -value of 0.05. This implies that there are no significant differences among the stakeholders on each of the issues used for assessment.

To be able to make a categorical statement or decision as to whether contractors and clients agree or disagree on these issues as a composite, further analysis was done. The ordinal but numerical values of responses for each of the twenty issues were summed and a score obtained for each case or respondent. These scores which exist for each case in either contractor or client organizations were then subjected to test of differences of means using the t-test. (Based on the gradation of the level of measures for the twenty issues used to assess perception, the least possible score is 20. The maximum score is 80. Each case is expected to fall within 20 and 80, the extreme values inclusive). These scores were then treated as scale data and subjected to t-test. Table 3 shows the output of the descriptive statistics regarding the aggregate assessment of each group about all the twenty issues combined. In a similar vein, the results of the t-test for the same null and alternative hypotheses used before are indicated in Table 4.

From Table 3, on aggregation, the mean aggregate assessment of contractors on all the twenty issues that were treated as a composite is 49.54 (for $N = 35$). The mean aggregate assessment for clients is 48.13 (for $N = 32$). The reduced mean aggregate assessments (weighted means) are thus respectively 1.42 and 1.50. These values fall within the 'strongly disagree' and 'disagree' response categories. This finding suggests that on the average, both groups disagree with the statements or issues raised about the traditional project procurement practice in Nigeria.

The results in Table 4 indicate that the t-calculated is 0.334 while the calculated p-value or significance (on two tailed) is 0.740. The calculated p-value is less than the set α -value of 5%. The decision is therefore to accept the null hypothesis that there is no significant difference between contractors and consultants in their perceptions of the design-bid-build procurement practice in Nigeria. This result of the analysis of the composite perception of all the twenty issues by the two groups is similar to the results of the test of differences conducted on each of the issues used in assessing the traditional project procurement method. It thus implies that the two organizations view the design-bid-build procurement method in Nigeria in the same way. The combined import of Tables 3 and 4 is that the two groups disagree, on the average, with the issues or

Table 2. Results of Mann-Whitney-U Test on Assessment of Traditional Procurement

Issue raised on traditional procurement	MRCT	SRCT	MRCL	SRCL	Mann-U	Z	Sig.	Decision
It discourages cooperation and collaboration among project participants	32.89	1151.00	35.22	1127.00	521.000	-.506	.613	Accept H ₀
It does not encourage commitment to project objectives rather individual participant's objectives	33.27	1164.50	34.80	1113.50	534.500	-.333	.739	Accept H ₀
It encourages confrontation of persons instead of issues	32.46	1136.00	35.69	1142.00	506.000	-.706	.480	Accept H ₀
It encourages professional mistrust and rivalry among participants	34.61	1211.50	33.33	1066.50	538.500	-.283	.777	Accept H ₀
It encourages claim consciousness among participants	34.50	1207.50	33.45	1070.50	542.500	-.233	.816	Accept H ₀
It encourages participants to be more profit conscious instead of client/customer conscious	30.20	1057.00	38.16	1221.00	427.000	-1.755	.079	Accept H ₀
Individual participants are exploitative of loopholes in contract documents	32.30	1130.50	35.86	1147.50	500.500	-.774	.439	Accept H ₀
It engenders a climate of conflict among participants	33.79	1182.50	34.23	1095.50	552.500	-.098	.922	Accept H ₀
There is master servant relationship among participants	37.27	1304.50	30.42	973.50	445.500	-1.498	.134	Accept H ₀
Relationships among participants breed mistrust	37.09	1298.00	30.63	980.00	452.000	-1.437	.151	Accept H ₀
Seeking inputs of contractors is not mandatory but optional	34.66	1213.00	33.28	1065.00	537.000	-.306	.760	Accept H ₀
Where sought at all, inputs of contractors are at best advisory	35.07	1227.50	32.83	1050.50	522.500	-.528	.598	Accept H ₀
Does not create a win-win situation among project participants	35.94	1258.00	31.88	1020.00	492.000	-.890	.373	Accept H ₀
Detached objectivity of participants is doubtful-each is interested in what he can gain from the project	36.01	1260.50	31.80	1017.50	489.500	-.914	.361	Accept H ₀
It is more protective of clients than other participants	33.33	1166.50	34.73	1111.50	536.500	-.307	.759	Accept H ₀
There is uneven, unclear and unfair allocation of risks to some participants	35.66	1248.00	32.19	1030.00	502.000	-.797	.425	Accept H ₀
It increases exposure of participants to litigation	36.17	1266.00	31.63	1012.00	484.000	-1.018	.309	Accept H ₀
It discourages innovation on part of contractors	34.07	1192.50	33.92	1085.50	557.500	-.032	.974	Accept H ₀
Communication and transfer of useful knowledge among project participants is difficult	35.43	1240.00	32.44	1038.00	510.000	-.651	.515	Accept H ₀
It does not encourage commitment of all participants to total quality right from project design	35.06	1227.00	32.84	1051.00	523.000	-.477	.633	Accept H ₀

MRCT = Mean rank for contractors; MRCL = Mean rank for clients; SRCT = Sum of ranks for contractors; SRCL = Sum of ranks of clients; d.f = degrees of freedom; Sig = significance

criticisms raised about the traditional procurement practice in Nigeria. Furthermore, there is no significant difference in the perceptions of the two groups about the traditional procurement practice in Nigeria.

Discussion

The findings from both the descriptive analysis throw up some issues. The same development holds for the inferential statistical analysis. An examination of the mean item scores of respondent organisations to the issues thrown up for measure-

ment indicates that the client organizations disagree with all but six issues used for assessment. The development is evident even after the mean item scores of the six issues are arithmetically approximated to 3. The six issues are: 'Where sought at all, inputs of contractors are at best advisory'; 'Individual participants are exploitative of loopholes in contract documents', 'It discourages innovation on part of contractors' 'It discourages cooperation and collaboration among project participants'; 'It encourages participants to be more profit conscious instead of client/customer conscious'; 'It encourages confrontation of persons instead of issues'. For the

Table 3. Edited Descriptive Statistics for Aggregate Perception of all Issues by Each Respondent Group

(1) Respondent	(2) Number (N)	(3) Mean aggregate assessment	(4) Reduced mean aggregate assessment (weighted mean)
Contractor	35	49.54	1.42
Client	32	48.13	1.50

Table 4. T-test Results on Differences in Perceptions of Design-bid-build Procurement by Contractors and Clients

Groups	Number (N)	T	D.f	Sig. (2 tailed)	Decision
Contractor	35	0.334	65	0.740	Accept Null hypothesis
Client	32				
Total	67				

D.f = degrees of freedom; Sig. = Significance

contractor's group, the items which the group agreed with are the ones ranked 1 to 9 in Table 1 under the contractor's ranking. The meaning is that the two respondent groups did not individually agree with majority of the issues raised for assessment. Where the agreement is reported it is still in the 'slightly agree' range. It is interesting to note this observation. Furthermore, it is noted that each of the two groups disagree with the statement 'Relationships among participants breed mistrust' and rank it least. Whether it is an indication that the traditional method is seen to have been perfected in its processes remains a possibility. It is even more interesting that contractors and clients who are two opposite commercial entities are having disagreement individually on some of the issues. The issues that the two groups agree concurrently with are the first four issues in Table 1 which are: 'Where sought at all, inputs of contractors are at best advisory'; 'Individual participants are exploitative of loopholes in contract documents'; 'It discourages innovation on part of contractors' and 'It discourages cooperation and collaboration among project participants'

The two groups individually agree that where sought at all, inputs of contractors are at best advisory. This result warrants closer examination. Contractors believe that their inputs are not sought and when sought at all, such inputs are advisory. One possibility in the interpretation of the assessment may be bias. However, this is just a possibility. The strength of the assessment is that the clients share this opinion. In the event that allusion is made to bias, another line of reasoning is that instead of bias, there is the possibility of advantage of the concept of rater and ratee evaluation. It gives a multi-dimensional perspective of assessment. It is in this regard that the clients' opinions are also noted. The clients are making their observations on the basis of experience. This implies that the clients believe that either by the letter and spirit of the contract, contractor's inputs are advisory. It suggests that the experience of the contractor is jettisoned, discounted out rightly, or not valued accordingly. It

suggests further the creation of a partition between the contractor and others who have technical inputs on the project. Furthermore, both contractors and clients believe that 'individual participants are exploitative of loopholes in contract documents'. It is interesting that both groups hold this view. This may suggest that, in an environment of utilization of project participants with varying psychological bends, the formularization of the contract documentation and organizational forms may not be a guarantee for success. The assessment by the two groups that the traditional procurement method discourages innovation on part of contractors may also explain the relative backwardness of the construction industry generally in catching up with innovation as obtains in their industries. Investments in innovation are thus not encouraged since returns on such investments are not assured. This view can be linked with the first: inputs of contractors, if sought at all, are advisory. Perhaps this will naturally reduce investment in research and development and new technologies as there is no encouragement/reward for doing so. Contractors are commercial entities that operate for profit. They may naturally decline any service that may be laudable and novel but that will not improve their profits on projects.

Furthermore, while clients almost agree (MIS = 2.72) that the traditional procurement practice encourages participants to be more profit conscious instead of client/customer conscious, contractors have a low ranking for this issue (MIS = 2.48). This development on this issue may be a signal of possible bias on the part of the respondent organizations. In addition, that the contractor is at the receiving end of some of the issues raised in traditional procurement practice may have accounted for the relatively higher MIS values assigned by him to these issues: communication and transfer of useful knowledge among project participants is difficult; seeking inputs of contractors is not mandatory but optional; detached objectivity of participants is doubtful- each is interested in what he can gain from the project;

and there is uneven, unclear and unfair allocation of risks to some participants.

The foregoing discussion is made based on the assessment of each of the two respondent groups on the individual issues raised about the traditional procurement practice. Exhaustive discussion is not made on each of the twenty items individually on the basis of space considerations. However, the composite perception of all the twenty issues by each of the respondent groups indicate that, on the average, the two groups express disagreement with the issues or criticisms raised about the traditional procurement practice

In essence, the groups as reflected in the table showing the descriptive analysis (Table 1) do not agree with some of the individual issues raised about the traditional project procurement practice and documentation. For example, none of the two groups agree with the issue that 'Relationships among participants breed mistrust'. In the environment of the research, the position of the assessment among the twenty items does not indicate that the groups place premium on the postulation that relationship issues breed mistrust among project participants. This result is at variance with submission in literature that relationships among project participants are adversarial. The research finding has an ally in the work of Eriksson [7] where empirical results do not match literature arguments or presentations. Is this opinion suggesting that the traditional project procurement method is already perfected in Nigeria to warrant respondents holding the opinion? Or is it that the two groups are just convenient with their past experience or tradition with the design-bid-build procurement. This issue warrants further investigation.

Furthermore, based on the inferential analysis done on each of the issues and also the analysis done on all the twenty issues as a composite, the two stakeholder groups do not have significant differences on the issues. This tends to suggest a commonality of views on the procurement method. The work of Dada [38] analyzing perceptions of stakeholders on priorities in public project implementation in Nigeria is handy. Even though the focus of that work is not on traditional procurement, the relevant aspect of the work is stakeholder perception. Dada's [38] work suggests the importance of carrying along stakeholders in the implementation of public projects. It further reports that the failure of many public or multilateral projects has been due among others to the failure of carrying along host communities and other stakeholders in the planning for and execution of public projects. The earlier restiveness in the Niger

Delta area of Nigeria which had recently abated due to the Federal Government organized amnesty program underscores the importance of carrying along host communities in project implementation. By extension of logic and drawing from the work of Dada [38] referred to above, the stakeholders perception reported to exhibit no significant differences on issues has implications for practice among others. This is further interesting if the two organizational groups that are different commercial or legal entities could have a concurrence of views. The extended implication is that there is no perception gap. As there is no perception gap, the potential for unanimity of purpose that could be leveraged on when evolving intervention efforts or policy considerations for construction procurement improvement exists. This is also reinforced by the finding that many public projects or projects fail due to failure to carry along and regard the views of critical stakeholders. Furthermore, the result of the current research differs from the work of Li et al. [39] whose investigation of stakeholder concerns on major infrastructure and construction projects in Hong Kong reveals mismatch in peoples' perceptions, expectations and reality in development. This current work however has similarity to that of Li et al. [39] in that the two works address stakeholder perceptions in relation to some issues regarding the development process.

Conclusions and Recommendations

This research used some issues that have been thrown up from literature and anecdotal evidence to assess the traditional project procurement method in Nigeria. The research investigated the assessment of each issue by each of the respondent groups – contractors and client organisations. It further investigated the composite or average assessment of the twenty issues by each of the two respondent groups. Of the twenty issues used for the assessment, 'individual participants are exploitative of loopholes in contract documents' ranked first on aggregation for the two groups. 'Relationships among participants breed mistrust' ranked least. On the average, contractors and clients disagree with the twenty issues or criticisms about the traditional procurement practice. The evidence from this research did not indicate support for some criticisms such as relationships among participants breeding mistrust. The statistical tests revealed that there are no significant differences between the two groups on all these issues. This is despite the fact that contractors and clients are two different commercial entities with varying organisational objectives. The practice, research or policy implication of the finding is that the homogeneity of perceptions can be a launching pad for further investigation and

intervention efforts for procurement improvement in Nigeria. In addition the composite perceptions of contractors and clients about the traditional procurement method may have implication on use and patronage. There may thus be need to explore the organizational development of the two groupings and any other underlying factors accounting for concurrence of views. It is recommended that this study can be replicated in other climes to guide policy developments accordingly.

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