

Challenges Of Communication Between The Client And Contractor During Construction Projects: The Nigerian Perspective

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Abstract—Communication today has become the crucial element of every organization. In the construction industry, during a construction project, information needs to be accurately and timely communicated among project stakeholders in order to realize the project objectives. Poor communication between clients and contractors during the construction project is one of the major factors that affect project delivery. Therefore, the purpose of this research is to investigate the causes and effects of poor communication between clients and contractors. This was achieved by identifying the causes and effects of poor communication between clients and contractors in the Nigerian construction industry through a statistical analysis. It is hypothesized that poor communication between clients and contractors, significantly affects construction projects. The population of the respondents is 150, and survey method of data collection was used. One hundred and twenty (120) questionnaires were distributed to clients and contractors in the construction industry with 80% of respondents' rate. Several analyses such as frequency mean, ranking and Regression were used to analyze the data. The results show that, lack of cooperation and selfish interest was the most causes of poor communication between the client and contractor. Identifying barriers to communication among stakeholders in construction industry contribute in perfecting communication that result in enhancing project delivery.

Keywords—Causes, construction projects, effects, Nigeria, and Poor communication

I. INTRODUCTION

Communication is an important element for every organization to succeed. organizations cannot exist without communication, and management will not be able to receive information inputs, and supervisors would not be able to give instructions, coordination of work is impossible and the organization will collapse for lack of it [1]. efficiency in building depends upon the quality of the relationship between the client,

professionals, contractors and sub-contractors. In other words, the problems in construction are a communication problem [2]. Participants need to collaborate, share, collate, and integrate significant amounts of information in order to realize project objectives [2].

According [1], information dissemination plays a profound role in a construction environment whether during the preconstruction period or the project implementation, sharing and communicating such information is vital not just to the procurer but to all the parties involved in the project. During all stages of construction such as design, production, organisation and management, communication is paramount important in order to realize the construction processes [3].

Information sharing among the project participants is vital for realizing the project objectives. Construction project management requires effective communication among project stakeholders for successful project delivery [4].

During construction project, irrespective of the size of the project, communication between the user (client), contractor and other parties involve in the project plays a vital role in order for the project to be realized [5]. The project participants must provide timely and accurate information to all project stakeholders so that members of the project prepare information in variety of ways to meet the need of stakeholders so as to incorporate feedback from these stakeholders [6].

The Nigerian construction industry has suffered many setbacks in term of completion of the projects at stipulated period and within the predetermined sum and quality. Lack of effective communication between project stakeholders is one of the major causes of delay which results in abandonment of project in Nigerian construction projects [7]. Poor communication between project participants such as the client and contractor is one of the factors that affect the working efficiency; it is the reason for relatively low productivity of the construction industry [8]. [9] Stated that the problem of communication within a project environment leads to severe misunderstanding between client and contractor and this affects the execution of the project.

The research objective is to investigate the causes and effects of poor communication between the client and contractor during construction projects based on these hypotheses;

H1 Poor communication between client and contractor has a significant effect on Construction projects in Nigeria construction industry.

Ho Poor communication between client and contractor do not have a significant effect on construction projects in Nigeria construction industry.

II. LITERATURE REVIEW

Communication is the process of which information which is encoded and imparted by a sender transferred to a receiver via a channel or medium. The receiver then decodes the message and gives the sender feedback [6]. The Webster's New World Dictionary of Media and Communications 1996 defines communication as the transmission or exchange of information, signals, messages, or data by any means such as talking, writing or via telephone, telegraph, radio, or channels within a group as directed to specific individuals or groups [10]. [4] Defined communication as a process of exchanging information, ideas, thoughts, feelings and emotions through speech, signals, writing, or behavior [11]. Communication can be defined as the process of transmitting information and common understanding from one person to another [19]. Communication is the transfer or transmission of meaningful information or signal through a recognized medium to a receiver via a recognized medium in order to receive the same information sent.

A. *Communication in Construction Projects*

According to [2], communication within construction teams, or rather the effectiveness of communication within construction teams is a significant factor in the successful completion of construction projects. Construction is a service business where interpersonal skills which include communication skills play an important role for the success of a project [12]. Communication plays a vital role in all stages of construction such as design, production, organization and management [3]. Information sharing among the project participants is vital to realizing the project objectives. According to [4], building, project management requires effective collaboration and coordination between all the stakeholders and effective communication between all the members. And is believed to be crucial for successful project delivery [13]; and [14]. In procurement, [1] said, information plays a profound role in a construction environment, whether it is during the reconstruction period or during the project implementation. Such information is vital not just to the procurer, but to all the suppliers and parties involved in the project. According to [15] highlighted that, the performance in the construction industry is highly affected by the ineffective communication practices.

B. Causes of Poor Communication between Client and Contractor

Affected by so many factors such as lack of trust and inadequate responsibility, which causes

C. Effects of Poor Communication between Client and Contractor

According to [16], the true cause of construction related conflicts is unsuccessful communication between the participants (client and contractor) in a construction project. The absence of communication between client and contractor creates fears of exploitation and betrayal, which results in avoidance of commitment of the team [17]. While ineffective communication leads to an adversarial relationship between the client and contractor [18], also mention that, poor communication between the client and contractor results to conflict, misunderstanding, uncertainty and lack of mutual cooperation among the two parties. Similarly, [1] said that, lack of understanding and communication results to trust issues among projects client and contractor. According to [12] said, lack of effective communication among project stakeholders such as the client and contractor, is one of the major factors causing delay in construction projects in Malaysia. According to a study conducted by [19], the cost of communication between project client and contractor result to lack of management skills, human resources and infrastructure during project execution. [20] highlighted that, poor communication between the parties (client and contractor) leads to estrangement between the parties and misunderstanding regarding the contract requirement. While [21] mention that, poor communication between client and contractor is one the factors that leads to time overrun in construction projects, in Malaysian construction projects [22], in Nigerian construction projects [23], and in Indian construction projects [24].

III. METHODOLOGY

The research adopted quantitative method, where survey was conducted using a questionnaire. In order to achieve the objective of the research which is the causes of and effects poor communication between the client and contractor in the construction project, one hundred and twenty (120) questionnaire were distributed randomly among client organization and contracting firm to conform with population size. The professionals involved in the organization are, contractors, project managers, quantity surveyors, architects, mechanical and electrical engineers (M&E) and civil engineers. Ninety six (96) questionnaires were answered and returned, which results to 80% response rate. The questionnaire contains ten (10) variables. Previous studies form the basis of drafting the questionnaire variables. The respondents were asked to ranked the variables base on a Likert scale of five (5) measuring system consist of five (5) options

starting with strongly disagree = 1, disagree = 2, moderately agree = 3, agree = 4 and strongly agree = 5.

TABLE I. CAUSES OF POOR COMMUNICATION BETWEEN CLIENT AND CONTRACTOR

Causes of poor communication between client and contractor during construction project	S	D	M	A	S	Mean	Ranking	
	D	D	D	A	A			
Percentage %								
Lack of cooperation between the two parties	3 . 1	6 . 3	2 2 .	3 8 .	2 9 .	3.84	1	
	3 . 2	9 . 5	2 2 1	3 5 8	2 9 5	3.79	2	
Misunderstanding between the two parties	5 . 3	6 . 4	1 9 .	4 8 .	2 0 .	3.72	3	
Lack of open communication between the two parties	4 . 2	4 . 8	3 2 .	2 9 .	2 6 0	3.65	4	
Lack of trust between the two parties	7 . 3	9 . 4	2 5 .	2 9 .	2 9 .	3.64	5	
Failure to understand the individuality of each other	3 . 1	7 . 3	3 2 .	4 2 .	1 4 .	3.58	6	
Unpleasant relationship between the two parties	5 . 3	1 0 .	2 9 .	3 5 .	1 8 9	3.53	7	
Conflicting ideas between the two parties	3 . 2	1 4 .	3 0 .	3 4 .	1 6 8	3.47	8	
Language barrier	1 6 .	1 7 .	2 7 .	2 3 .	1 5 .	3.03	9	
Complexity of the project	1 7 .	1 8 .	2 2 .	2 9 .	1 1 5	2.98	10	

The data obtained from this research was tested. Reliability test was conducted and the result obtained was 0.801 as the Cronbach's alpha. The result was suitable as it is within the most acceptable value as indicated by [25]. After confirming the reliability of the data, Table 1, illustrates the results of descriptive

analyses. The result was arranged from the highest mean to the lowest. The five (5) top causes of poor communication are lack of cooperation, selfish interest, and misunderstanding between the two parties. Others are lack of open communication and lack of trust. These were ranked in the table as 3.84, 3.79, 3.72, 3.65, and 3.64 respectively. Moreover, failure to understand the individuality of each other, unpleasant relation, conflicting ideas, language barrier and complexity of project were ranked as 3.58, 3.53, 3.47, 3.03 and 2.98 respectively. The table also shows complexity of project having the lowest mean of 2.98.

Table 2 is the result of linear regression showing the coefficient of determination. This is the percentage variation in house price that can be explained by combined influences of all independent variables in the regression equation. From the regression results our models R² is 0.86, meaning the combined influence of ten (10) grouped variables explain 86% of poor communication. Adjusted R square is R² adjusted to account for a number of independent variables. Adjusted R² is usually regarded as a better measure of combined influences of the independent variables on the dependent variable. The R² range is 0 < R² < 1. Our models adjusted R² is 0.80 [25]. Table 3, provides the result of Linear Regression analysis for dependent variables the effects of poor communication between the client and contractor. From the grouped variables, understanding and trust as effects of poor communication between client and contractor during construction project with significant value of 31.1% and 26.2% respectively.

TABLE II. SUMMARY FOR LINEAR REGRESSION

Model	R	R ²	Adjusted R ²	Std. Error of the Estimate
1	0.087 ^a	0.086	0.080	2.15330

The other two factors that have reasonable percentage are relationship and project having 12% and 11% respectively. From the analyses conducted to test the hypothesis if poor communication have or do not have significant effects on a construction project, it revealed that the hypothesis is accepted, that is poor communication between client and contractor has significant effect on construction project in Nigeria construction industry with 80% Adjusted R² significant effects as shown in Table 2.

IV. DISCUSSIONS

Table 1, shows the result of the survey and indicated that, the most significant factor that causes

poor communication between client and contractor is lack of cooperation between the two parties. The result indicates that, respondents rated the variable with highest mean value of 3.84 though it is between agree and strongly agree based on the Likert scale. The result shows mutual cooperation plays a vital role between the client and contractor during project execution, in order for them get along and communicated effectively, because of their different projects goals. Unwillingness to associate and support each other to achieve such objectives will cause communication failure between the two parties, as also highlighted by studies [26], which identified unwillingness of cooperation between the client and contractor, is among the major causes of poor communication between the two parties.

The second factor as ranked from Table 4.1, is selfish interest between the two parties with 3.79 mean values. The respondents agreed that selfish interest also causes poor communication between the two parties. The respondents feel that selfish interest from either or both parties will cause a communication gap between the two parties. It emerges from a perspective upon which each party views the objective of the project. The client objective is to achieve much by paying less, while the contractor's aim is only to maximize profit. This conflict of interest causes not only a communication barrier, but affect the project delivery entirely.

The third factor that causes poor communication between the client and contractor is Misunderstanding between the client and contractor, which is ranked third (3rd) by the respondents having mean values of 3.72. Misunderstanding between the client and contractor is among the critical reason that affects communication between the two parties. Unclear project objectives and failure of the contractor to understand the perception of the client causes misunderstanding between the two parties that will cause difficulty to communicate with each other. Lack of understanding between two parties will directly leads communication breakdown between them. For the two parties to effectively communicate there must be mutual understanding between them. This also highlighted by study of [27] who stated that, lack of understanding between the client and contractor results to communication failure in managing construction project. Understanding is among the key factors that will lead to successful project delivery, because poor communication between the client and contractor is due to misunderstanding between the two parties [16].

The fourth causes as ranked on the Table 1.1, is lack of open communication between the two parties with 3.65 mean values. The respondents agreed that lack of open communication also causes poor communication between the two parties. Lack openness in all dealings between the two parties will cause a communication barrier between them. Failure to completely express each other's mind will affect the way both parties interact with each other. Both the client and the contractor have to express his or her

view regarding the way the project is running, and show his or her dismay whenever any of them finds something wanting regarding the project running. This will lead to better understanding and communication between the two parties. This result was also supported the research of [26] who also mentioned lack of open communication causes poor communication between client and contractor during construction projects.

The fifth item that causes communication failure between the client and contractor during construction projects in the Nigerian construction industry is lack of trust between the two parties. The respondents rated the variable with a mean value of 3.64. The result shows Trust plays a vital role between the client and contractor during project execution, in order for them to get along and communicated effectively, and it is one of the major critical success factors of partnering and collaboration in the construction industry. Alliances work on the principles of mutual trust, commitment and communication [28] reduce conflict and enhance productivity and overall performance ([29]; [28]). When there is no trust between the two parties, there will not be interaction (communication), as highlighted by studies of [16], who mention that, lack of trust between the client and contractor will result in argument and conflicts that affects the communication between the two parties. [27] Stated that lack of trust between the client and contractor leads to communication failure during managing construction project. Also [26], identified lack of trust is among the major causes of poor communication between client and contractor.

Table 3 consists of ten (10) variables which are categorized in to four (4) groups. The analysis was done using Linear Regression to find if poor communication between client and contractor affects construction project in Nigeria construction industry. From the result of R Square in Table 2, the results show that poor communication between client and contractor have significant effect on construction project in Nigeria construction industry with 80% Adjusted R Square value. The result was analyse using the highest mean scores of objective one (1) which are lack of cooperation, selfish interest, misunderstanding, lack of open communication and lack of trust, as the independent variables, while the grouped variables from table 1 which are Trust, Understanding, Relationship and Project management as dependent variables.

TABLE 3: LINEAR REGRESSION FOR DEPENDENT VARIABLES

Grouped Variables	Percentage
TRUST	
Distrust between the two parties. Creates fear of exploitation and betrayal between the two parties.	26.2%
UNDERSTANDING	
Misunderstanding between the two parties Loss of Mutual Corporation between the two parties.	31.1%
RELATIONSHIP	
Loss of commitment regarding project objectives. Conflicts between the two parties. Loss of confidants between the two parties.	12%
PROJECT MANAGEMENT	
Leads to poor project management. Delay in completion of project. Leads to project time and cost overrun.	

Table 3 grouped variables identified the percentage of which poor communication between client and contractor has effects on construction projects. Understanding group (misunderstanding and loss of mutual cooperation) has the highest percentage. It was rated by the respondents with 31.1% value, to show the variables poor communication between client and contractor has effects on construction project from the hypothesis revealed, with significant effects up to 31%. The results shows misunderstanding between the client and contractor is a barrier to communication between them, since the absence of mutual understanding will leads to conflicts and confusion during projects execution between the two parties. As indicated by [18] who mention that, poor communication between client and contractor results to conflict, misunderstanding, uncertainty and lack of mutual cooperation among the two parties. Also [16], highlighted that, communication between client and contractor if affected by whatever factor, which causes misunderstanding among the two parties during construction that leads to conflict among them. Better understanding enhances flow of communication between the two parties.

The second group with the highest score is Trust (distrust and fear of exploitation and betrayal). The respondents' rate is the second group that poor communication between client and contractor affects construction project, having 26.2% significant effects, as indicated in Table 1.3. Lack of trust between the two parties is a major factor that affects project delivery. This is because trust promotes understanding, better working relationships and communication among project participants. Because

the absence of communication between client and contractor creates fears of exploitation and betrayal, which results to avoidance of commitment of the team [17]. Also [1], said lack of understanding and communication results to trust issues among project stakeholders (client and contractor).

The other groups from Table 3, which are Relationship (loss of commitment regarding project objective and conflict) and Project management (poor project management, delay, time and cost overrun), which came third (3rd) and fourth (4th) with almost same score of 12% and 11% significant effects. Misunderstanding and lack of trust will leads to conflicts, and when conflicts exist between the two parties, it will affects the relationship and interaction (communication) between the two parties. Commitments come from how each party is satisfied with each other and the project also. The lesser the satisfactory the lesser commitment renders from any of the party. While lack of commitment persist, the communication gap between the two parties will be wider that will affect the entire project delivery. This also mentioned by [16], the true cause of construction related conflicts is unsuccessful communication between the participants (client and contractor) in a construction project.[18]Mention that, poor communication between client and contractor results to conflict. While [30] mention that lack of communication among construction parties such as client and contractor results to poor management, selection of proper materials and soar relationship between the two parties. Poor communication is one of the major factor that cause delay in Nigerian construction projects [23]. While [9], concluded that poor communication between client and contractor leads to delay in Malaysian construction projects.

I. CONCLUSION

Communication is the lifeblood of every organization. In construction communication is among the critical success factor for successful project delivery. Poor communication is among the major causes of project failure in the construction industry. The researcher identified five (5) major causes of poor communication between the client and contractor during construction project as lack of cooperation, selfish interest, misunderstanding, lack of open communication and lack of trust, between the client and contractor during construction projects. According to the hypothesis generated, it reveals that poor communication between the client and contractor have 80% significant effects on construction projects. The objectives of the research have been achieved.

The research investigates the causes and effects of poor communication between the client and contractor during construction using quantitative method through questionnaire survey only. There is need to investigate the phenomenon using mixed mode approach, which other independent opinions may emerge through an interview that will be conducted. Eighty percent (80%) level of effects was identified in this research, there is need to investigate further the remaining 20%. Moreso,

there is need to proffer possible and appropriate ways of improving communication between the client and contractor during construction project

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