

Potential Barriers and Benefits of Project Partnering in the Construction Industry in West Africa: A Case Study of Nigeria

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Abstract— The increasing rate of litigation and conflict in recent construction activities had exposed the state of poor collaboration, lack of customer focus, and end-user involvement in the construction industry. It is on the premises of these challenges that this paper assessed the potential barriers and benefits of project partnering in the construction industries in West Africa using the Nigerian construction industry as a case study. Empirical data was collected through a survey study of ninety-eight construction professionals and stakeholders and the data were analyzed using SPSS version 20.0. The result of the analysis revealed among others that: ‘Adversarial relationship’ (RII 0.92), ‘Misunderstanding of the concept’ (RII=0.90); distrust and inadequate involvement of key party members (RII of 0.81); and ‘Uneven commitment of participants’ (RII=0.80) are the predominant barriers arranged in their order of severity. Similarly, the result revealed, ‘good teamwork relationship’ (RII=0.81); ‘provision of good conflict resolution strategy’ (RII=0.79), and ‘Sharing of mutual goals among all participants’ (RII=0.74) as some of the major project partnering benefits. Consequently, the study recommends among others, the adoption of project partnering among construction professionals and stakeholders in the construction industry as a preventive conflict resolution strategy as it tries to take care of the ambiguity in concepts or terms at the early stage of the construction process.

Keyword— Potential Barrier, Benefits, Project Partnering.

I. INTRODUCTION

The construction industry in many countries have over a long period been criticized for its poor relationships among stakeholder, reoccurring conflicts and disputes and the lack of involvement of end-users as some of its significant shortcomings (Latham, 1994; Egan, 1998; Ericsson, 2002; Chan et al., 2003). These factors have directly affected the efficiency of the outcome and resulted in challenges like; cost and time overrun, low productivity, low quality, and customer satisfaction among others. Consequently, practitioners, researchers, professionals, and the society at large are yawning for a change in attitude, behavior, and procedure in order to bring synergy among construction stakeholders and increase

the chances of the improved end product and project success at large (Love et al., 2000; Dubois and Gadde, 2002).

There is increasing interest to increase collaborative relationships in the construction industry. In other words, the primary intention of relational contracting is to avoid the adverse conflict of objectives and conflicts that have characterized the industry for too long (Ling et al., 2006).

The practical application of Partnering in construction had created concern in many countries over the years had created immense awareness on project quality, cost, and delivery within schedule. Many researchers advocate the fact that the partnering process has a substantial positive impact on project performance, not only with regards to time, cost, and quality objectives but also concerning more general outcomes such as greater innovation and improved user satisfaction (Latham, 1994; Bennett and Jayes, 1998; Bennett et al., 1996; Bresnen and Marshall, 2000).

The inter-organizational crisis between stakeholders is another issue affecting the construction process in Nigerian construction. Disputes and claims are most prevalent between the contracting organizations either between the contractor and client or between consultants and clients. Resolving adversarial activities lead parties into claims, litigations, or arbitrations that are likely to occur. These are only a few major setbacks that arise during a contracting process in the Nigerian construction industry (Idoro, and Okun, 2009).

The growing popularity of partnering (Hong et al. 2011, Black et al. 2000) has emerged in response to the adversarial culture and high levels of conflict typically associated with the construction industry (Eriksson 2008). In addition, projects increasingly are more critical and complex than before (Azari et al. 2014), creating the need for closer collaboration.

According to Latham (1994) and Egan (1998) achieving the client’s objectives and product satisfaction is regarded as the project’s success. The problem is quite similar when we refer to how the construction process operates in Nigeria. It is quite irritating that the clients are rarely satisfied with the product they require. However several professionals in Nigeria

have advocated for the adoption of another innovative approach to the current procurement method to achieve efficiency and effectiveness. Partnering is regarded as a possible solution to the procurement problems faced in the Nigerian Construction industry. Partnering/collaborative procurement is one of such innovative processes that can bring about the much-needed continuous improvement and desired change in the construction industry (Faruk, 2014).

To increase productivity and efficiency in the construction industry, a strong focus has been set on better integration of the different parties (including the client, architects, engineers, general contractors, subcontractors, suppliers, etc.) in one integrated project organization. The different parties are normally independent firms and organizations, with separate goals and objectives and different operating procedures. Typically problems that occur are lack of communications and coordination leading to changes and alterations during the process. This again causes disputes, rising costs, and reduced performance and quality (Li *et al.*, 2000). Nkeleme *et al.* 2020, observed that in any setting where professionals of different backgrounds and training are present, collaborative management promises a conducive project partnering environment with every member to involve aligning to a single objective.

According to Awodele and Ogunsemi (2007), partnering is a good development in Nigeria which is practiced mainly in the oil sector and few banks in Nigeria. Acquiring the knowledge of the Critical Success Factors (CSF), benefits, and barriers of project partnering will enhance drastic improvement in its applicability will consequently lead to its formal adoption in Nigerian. From the ongoing, this research intends to explore the Critical Success Factors (CSF) and benefits of Project Partnering in the Nigerian Construction Industry.

Saka (2013) found out that the few firms that carried out Project Partnering in Nigeria do it based on the client request; even though the type of clients indicated are mainly in the banking, oil, and gas sector. Conversely, no research on Project partnering in the construction industry has been slightly carried out even though their various professionals are actively involved in the success of a construction project. Thus, this study seeks to identify the potential barriers and benefits to the adoption of Project Partnering in the construction industry using the Nigerian construction industry as a case study. Thus, this study seeks to investigate these barriers to project partnering practice based on the other severity to identify a realistic way to enhance its adoption. The challenges faced with the construction industry are tough but can be solved effectively by a collaborative approach such as partnering, relational contracting, and joint venture.

II. LITERATURE REVIEW

Project Partnering

Construction project partnering was initially used by the U.S. Army Corps of Engineers in the 1980s more as a means to reduce the number of contract disputes caused due to extra costs incurred for unexpected risks. The partnering process was incorporated into the construction procurement process

from the initial stages of the project itself and involved all the project participants: the owner (The U.S. Army Corps of Engineers), the design team, the prime contractor, and the subcontractors. All the parties involved in the construction process had to agree to specific management procedures and develop a working relationship before the construction project got underway. It was found that the projects that used the partnering process had a lower cost growth, lesser contract modifications, increased savings due to value engineering, and also helped to build up trust among all the participants involved.

The projects that utilized the partnering process were shown to be more cost-effective for all the parties involved and there was also better utilization of resources. Also, the owners and contractors had more opportunities to be innovative in improving the quality of the final built product (CII, 1991). The study by Chan, *et al.* (2003) found that there was a better value to be realized by all the parties.

Partnering thus creates an environment to minimize cost growths and schedule overruns, establish good working relationships between stakeholders, and most importantly create a winning situation for all the parties involved in the construction procurement process (Chan, *et al.*, 2004; Crowley and Karim, 1995). Though partnering may not be able to resolve all the problems arising during the construction process it helps to create an effective framework to reduce litigation, improve communication, resolve conflicts, and contain costs on potential overruns. It was also found that the parties who committed to the partnering process were rewarded in that they were able to develop strategic relationships which were mutually beneficial to them in cultivating their business (Chan *et al.*, 2004).

Potential Barriers to Partnering Adoption

According to Ibrahim (2005) states that is important to note that partnering cannot solve all the problems in the construction industry as it is only a management technique, and its success is dependent on the people who drive it. Scott (2001) broadly observed that most of the barriers can be viewed as being primarily self-imposed and resulting from how organizations are structured and how they have been used to conducting business. The broad areas include:

- 1 organizational formulation
- 2 status of attitudes
- 3 best partner fit
- 4 Financial concerns
- 5 Client experience/ skills
- 6 legal considerations

Organizational Formulations

Many organizations have adopted the structure of a military hierarchy with many tiers of command, each level of management being responsible for a small number of subordinates. Although this model evolved in the construction to promote efficiency, it has often resulted in communication restraints imposed by contractual conditions, especially in a dynamic and multi-party environment that is necessary to realize a project. Hierarchies also promote a culture of

formulating responsibility and accountability upwards and are not suitable for the realization of major projects in the short time frames that the economic environment demands.

The development of matrix organizations overcame many of the limitations of the pure hierarchy. Matrix organizations work with task forces led by a project manager, who draws on resources (such as suitably skilled staff) supplied by the department. Once assigned to a project, the staff is controlled by the project manager, who is the person accountable for the results of the project team. Since in partnering the aim is to form an overall task force organization (the single integrated project team) which is led by a project manager, the individual project managers from the different partner organizations take direct accountability for their scopes of work.

Cross-Cultural Attitudes

Organizations develop cultures over time that give common meaning to life in the workplace. These cultures define the pattern to which individual human behavior conforms in a particular environment. Culture is conditioned by the environment within which relationships are conducted, and is modified by the accumulated experience and attitude of individuals. But since by definition, partnering will bring together organizations with different cultures, specific actions will have to be taken to surmount cultural barriers. One way to achieve this is to create a project culture that is separate from the cultures of any one of the organizational cultures represented. A starting point may be the creation of a separate identity for the project that all team members can align behind (Wilson, et al 1995).

Specific cultural characteristics that may be a barrier to effective partnering are listed below. For each, an approach to overcome the impact of the characteristic is offered and ways in which specific features of partnering can assist are also noted where appropriate.

- i. Little low-level empowerment
- ii. Little peer group contact
- iii. Blaming not sharing
- iv. Reluctance to communicate freely
- v. Lack of real commitment
- vi. Ingrained distrust
- vii. Investment in inappropriate skills
- viii. Avoidance of personal accountability
- ix. Rigid rules and procedures

Partnering Benefits

The majority of literature on partnering suggests that it can provide the basis for participants to reorient themselves towards a win-win approach to problem-solving, meeting challenges, and moving towards shared goals where all project stakeholders benefit from the results. The benefits of partnering can be classified into two broad categories; tangible and intangible benefits (Russell, 1997).

Tangible benefits

These are clear which are directly measurable. For example, partnering has been reported to lower the risk of cost overruns and delays as a result of better time and cost control over the project (Cowan, et al. 1992; Moore, et al. 1992;

Gransberg, et al. 1999; Black, et al. 2000). Weston and Gibson (1993) compared 16 partnered and 29 non-partnered projects (averaging about \$10million) by the US Army Corps of Engineers and found that there was a 9% improvement in cost and 8% improvement in time on the partnered projects.

An outline of the tangible benefits

Usually linked to contract elements (e.g. time, budget, quality, conflict resolution, and safety) :

- 1 Completes projects on time and within budget,
- 2 Improves quality performance,
- 3 Enhances efficiency and cost-effectiveness,
- 4 Produces substantial value engineering savings,
- 5 Reduces paperwork,
- 6 Lowers claims and expedites early resolution of disputes with almost no need to resort to litigation,
- 7 Resolves equitable adjustment claims at the project level, and
- 8 Improves safety with no lost-time accidents and increases productivity.

Outline of the Intangible Benefits

These are the benefits that either cannot be measured, are difficult to measure with precision, or are not directly measurable, but which are likely or may contribute to achieving future tangible benefits. For example, Abudayyeh (1994) posited that because of open communications and the existence of trust among project participants, partnering has resulted in increased opportunity for innovation, especially in the development of value engineering changes and constructability improvement. Scott (2001) articulated intangible benefits reported by owners, contractors, and their personnel involved in partnered projects to include:

- 1 enhanced practices, processes, and procedures that are transferable to future projects,
- 2 rationalized and streamlined project procedures have led to a simpler organization and reduced resource requirements,
- 3 employees have learned communication skills and problem-solving mechanisms which will be of help in their future work,
- 4 learning from partnering has improved overall company competitiveness,
- 5 employees are more motivated and more focussed on performance improvement,
- 6 employees are much happier in their work,
- 7 the creation of an environment where skills, expertise, and knowledge are valued has allowed individuals at all levels to make a positive contribution and to achieve self-development,
- 8 the company reputation and profile has been enhanced,
- 9 the development of a longer-term business relationship from an initial one-off partnering, and
- 10 a much better understanding has been achieved of the totality of the risks associated with projects and how to manage these more effectively.

An outline of the intangible benefits

Usually linked to human interaction (e.g. trust, communication, respect, recognition, and integrity):

- 1 Improves relationships on the job by nurturing a synergistic bond of cooperation and teamwork,
- 2 Creates an atmosphere for better open communication,
- 3 Builds trust,
- 4 Eliminates surprise,
- 5 Encourages empowerment to anticipate, surface, and resolve problems,
- 6 Sets a higher degree of appreciation, recognition, and respect among project participants,
- 7 Establishes a better working environment,
- 8 Provides more innovative and creative solutions to problems,
- 9 Increases customer satisfaction,
- 10 Enhances business reputation might be earned on a lump-sum contract, but benefits by being insulated from loss and, most importantly, the prospect of performing future work for that owner. The owner gets a contractor, whose learning curve increases from project to project, making for greater efficiency and lower overall costs when it uses the contractor for future projects.

III. METHODOLOGY

This research was pursued through fieldwork. The Fieldwork entails the use of the questionnaire administered to the respondents to establish their opinion on the Critical Success Factors (CSF) Of Project Partnering towards Its Adoption in the Nigerian Construction Industry

3.1 Method of Data Collection

The primary data for this survey was collected using a structured questionnaire, while secondary data was obtained from books, journals, magazines, conference/seminar papers will be utilized. The questionnaires were used for data collection and were administered to various professionals in the construction industry broadly categorized into three as the client, contractor, and consultant respectively.

3.2 Population and Sample of the Study

The population for the study are the stakeholders and also construction professionals majorly responsible for public building projects delivery in Nigeria. They include professionals involved in the Nigerian Construction Industry irrespective of the fact that they can belong to any of the following Categories: clients, consultants, and contractors. This categorization was to ensure that all information obtained from the structured questionnaires guarantee a reasonable level of validity to achieve the aim of this research work

Similarly, owing to the wide range of population and the fact that there are no exact records of the number of these professions in the three States under Study, the Sample population is presumed to be unknown and as such the sampling size was determined based on the formula below because the targeted population is unknown

$$n = (z^2 pq) / d^2 \tag{3.1}$$

Where;

n = the desired sample size

z = the ordinate on the Normal curve corresponding to α or the standard normal deviate, usually any of the following determined based on the 'margin error formula'

- i. A 95% level of confidence has $\alpha = 0.05$ and critical value of $z_{\alpha/2} = 1.96$.

P = the proportion in the target population estimated to have a particular characteristic (normal between the range of 0.1 - 0.5)

q = 1.0-p, d = degree of accuracy corresponding to the confidence level and Z selected.

For this study, a confidence level of 95% was adopted because the questionnaire was geared towards evaluating the perception of the respondents on construction project partnering.

Consequently, the sample size is determined as thus,

$$z = 1.96, d = 0.05 \text{ where } p = 0.9, q = 0.1$$

$$N = (1.96^2 \times 0.9 \times 0.1) / (0.05)^2 = 138$$

Therefore a total of hundred and forty project team members (respondents) were sampled in the area. The sampling technique to be adopted in the distribution of the questionnaires was done using the random sampling technique.

3.3 Questionnaire Administration

Data were collected with the aid of structured questionnaires which the respondents' organizations in Abuja, Kaduna, and Katsina. These locations were chosen because most of the clients (Public Institutions), just like the consultants and the contractors, are located in the north-central. The targeted respondents of the questionnaire were the executive or senior management staff of the organisations; this is necessary because they are in the right position to have adequate information regarding their organisations' policies on adopting project partnering. The questionnaires were delivered and retrieved by hand. A total of 140 self-administered questionnaires were distributed to respondents in the target population, 98 were returned and found appropriate for the analysis.

3.4 Method of Analysis and Data Presentation.

In the analysis of data to be obtained in the study, both descriptive and referential data analysis will be adopted. Bar Charts, Pie Charts, Tables, means, percentages, and charts will be used to express the statistical results. Charts like bar and Pie charts will also be used to present results. Suitable statistical tools were adopted in the analysis. The Statistical Package for Social Sciences (SPSS) software was used to analyze the data using descriptive statistics Relative importance index will also be used in the study to assess the results.

$$\text{Relative importance index. (RII)} = \frac{\sum fx}{\sum f} \times \frac{1}{k} \tag{3.2}$$

Where,

$\sum fx$ = is the total weight given to each attribute by the respondents

$\sum f$ = is the total number of respondents in the sample

K = is the highest weight on the Likert scale.

The ranking of the items under consideration will base on their RII values. The item with the highest RII value will be ranked first (1) the next (2) and so on. The interpretation of the RII values is achieved when,

$RII < 0.60$, the item is assessed to have a low rating

$0.60 \geq RII < 0.80$, item assessed to have high rating

$RII \geq 0.80$ items assessed to have a very high rating

Also using mean for the interpretation their extent of prevalence as either low, moderate, or high based on the following boundaries (level of measurement) developed by Ruikar *et al.* (2006):

- a) a mean rating with value $0.00 < x < 2.50$ is considered "Low"
- b) a mean rating with value $2.50 < x < 3.50$ is considered 'Moderate'; and
- c) a mean rating with value $3.50 < x < 5.00$ is considered 'High'.

IV. DATA PRESENTATION

A total of one hundred and forty questionnaires were administered to various respondents within the areas of study. The percentages of responses are presented in Table 1. From

the Table, it can be gathered that a total of ninety-eight (98) questionnaires were received adequately filled giving a percentage response of 70.0%.

TABLE 1. Questionnaire Administered

Questionnaires	Frequency	Percentage of (%)
Number returned	98	70.0
Numbers not returned	42	30.0
Total	140	100

Source: Field Survey, (2020)

4.1 Respondents Profile

The breakdowns of the major component of the respondents' profile are presented in this session in Figure 1— Figure 5 in the form of charts with their corresponding interpretation.

4.1.1 Respondents Professions

Figure 1 shows the bar chart distribution of respondents by nature of their professions in that 23.5% of the respondents were Architects, while 41.8% were Builders, while 22.5 % of the respondents are Mechanical and Electrical Engineers while 12.2% were as quantity surveyors.

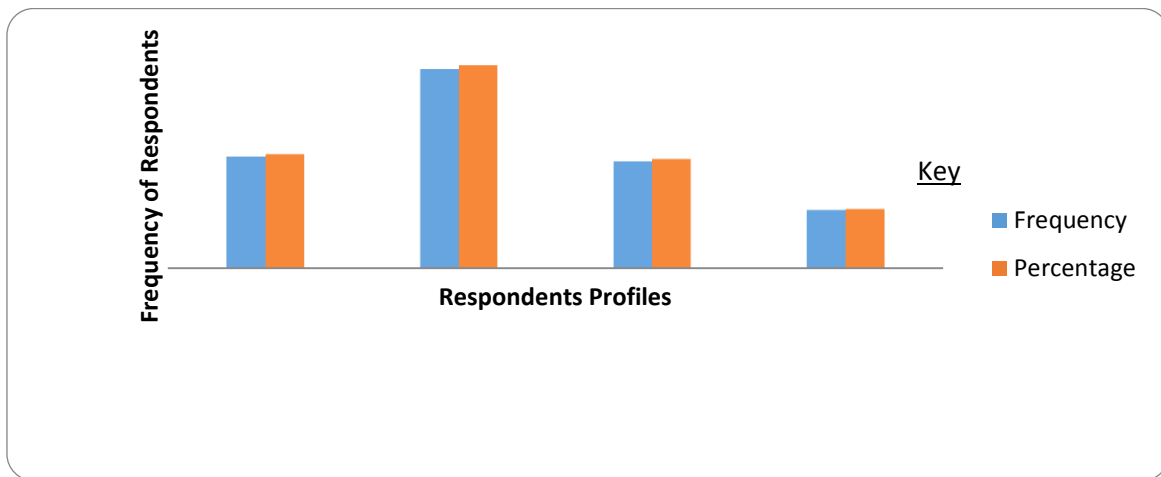


Fig. 1. Respondents Professional Profiles
Source; Field Survey 2020

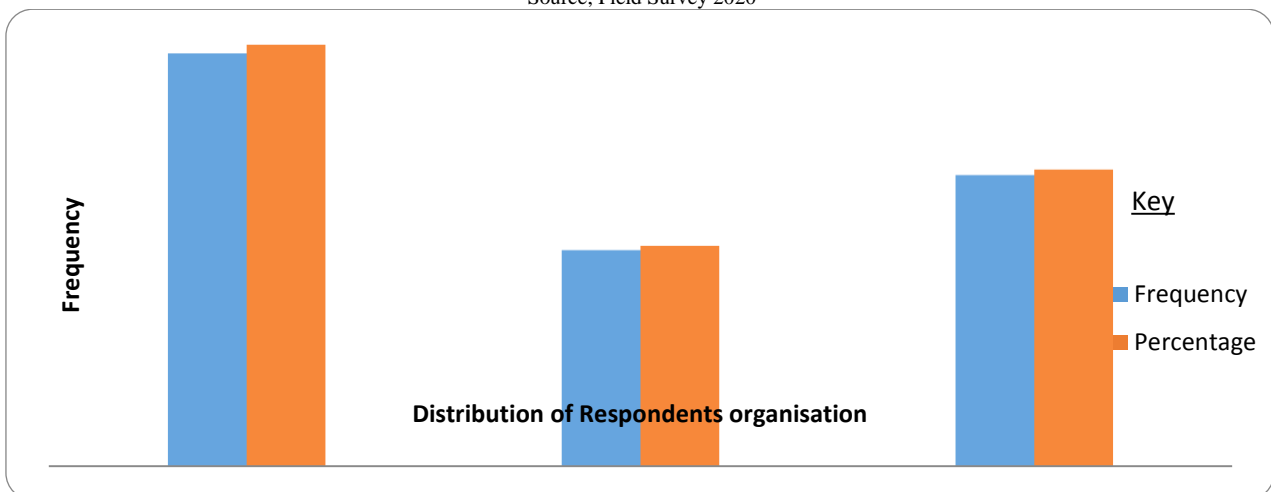


Fig. 2. Distribution of respondents by the type of organization.
Source; Field Survey 2020

4.1.2 Respondent Categories on the type of Organization

From Figure 2, the bar chart distribution indicates that 44.9% of the respondents are clients, while 23.5% of the respondent were consultants while 31.6% of the respondent were contractor organizations respectively.

4.1.3 Respondents Highest Qualification

Figure 3 Shows the distribution of respondents in terms of their highest qualifications, each indicates their various highest academic qualifications, Higher National Diploma has 23.5%, Bachelor of Science 24.5%, Postgraduate diploma 12.2

%, Masters, with 28.6% while the Doctorates i.e Ph.D. has 11.2% respectively.

4.1.4 Respondents Professional registration status

Figure 4 shows the frequency distribution and the percentages of the professionals, who are categorized based on their professional membership. Graduate members have 35.0%, corporate members have 25.0% of the frequency, while associate and fellow members have 22.4% and 16.3% respectively. About 75% of the professional status was members from corporate to fellow members which indicates the extent of their various professionalism memberships.

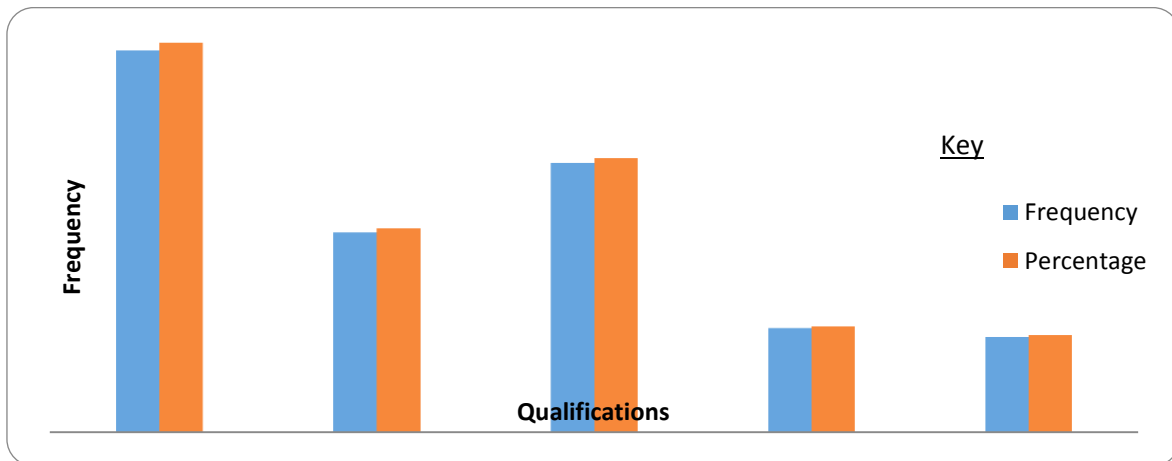


Fig. 3. Highest qualification obtained
Source; Field Survey 2020.

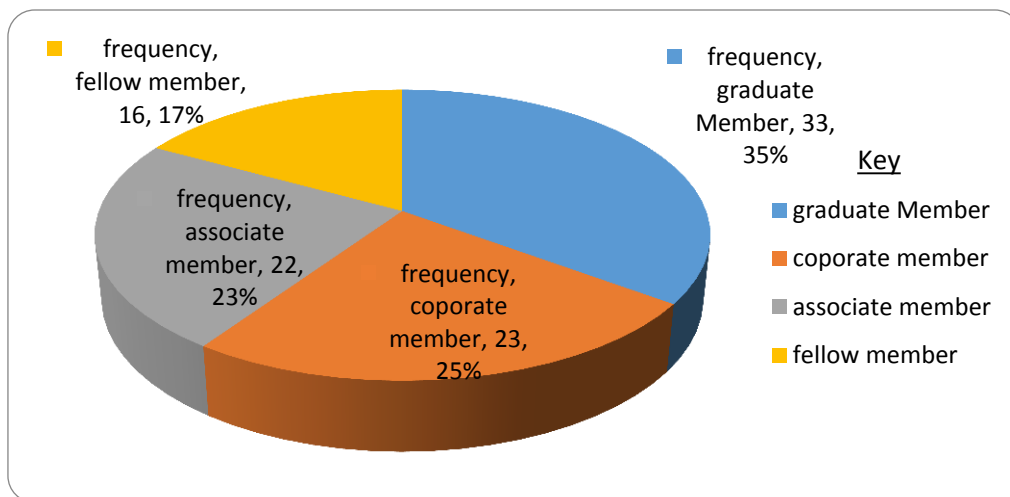


Fig. 4. Professional registration status
Source; Field Survey 2020

4.1.5 Respondents Working Experience in the Construction Industry

Figure 5 indicates that 3 (3.4%) of the respondent had been practicing for less than 6, while 9.3% of the respondent have been practicing between 6-10 years.10.2% between 11-15 years, 16.3% who have been practicing between 16-20 years, 28.2% of the respondents practice between 21-25 years, while, 32.6% have been practicing for more than 25 years.

This indicates that about 77.6% of the respondents are having a working experience of more than 10 years could be considered experienced to provide reliable data for the research.

4.2 Barriers of Project Partnering

Table 2 shows the seventeen possible barriers to the applicability of project partnering as ranked by the

respondents. It can be deduced that the respondents ranked ‘adversarial relationships’ (RII of 0.92) as the first and highest barrier to project partnering in Nigeria. Similarly, ‘Misunderstanding of the concept’ (RII 0.90) was ranked the Second major barrier, while ‘distrust and inadequate involvement of key party members’ (RII 0.81) were ranked the third. A closer glance at the mean values of the entire factor identified shows that it is closer to 4.0, an indication

that the factors are potential barriers to project partnering. However, from the respondents ranking it can also be deduced that ‘Lack of top management support is the lease barrier identified as it it's ranked the last. The cumulative mean of 3.34 indicates that the overall extent of the barriers prevalence is at the moderate level Details of the ranking of other barriers identified are as shown in Table 2.

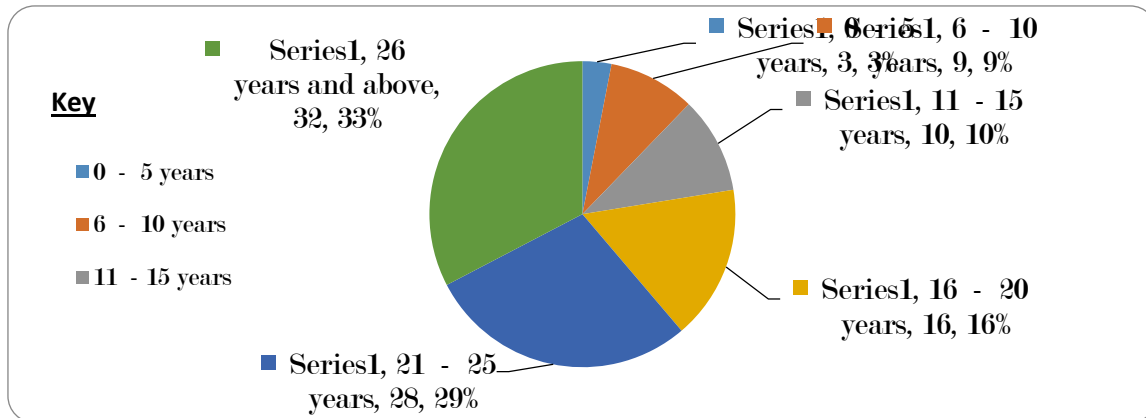


Fig. 5. Distribution of respondents by the number of years the organization has been practicing. Source; Survey 2020.

TABLE 2. Barriers of Partnering Projects in Nigeria.

S/n	Barriers of project partnering	Frequency of response					N	mean	RII	Rank
		1	2	3	4	5				
1	Complacent relationship among participants	0	0	28	28	36	98	2.41	0.48	14 th
2	Inadequate effective communication	1	10	23	26	38	98	3.81	0.76	5 th
3	In adequate training and knowledge sharing among participants	0	15	34	18	31	98	3.61	0.72	6 th
4	Distrust	0	6	31	43	38	98	4.03	0.81	3 rd
5	Failure of sharing risk	10	38	10	9	31	98	3.11	0.62	9 th
6	Over dependence on others	12	31	43	16	14	98	3.44	0.69	8 th
7	Cultural and Ethnic differences	9	20	40	18	13	98	3.12	0.62	7 th
8	Uneven commitment of participants	1	4	27	28	38	98	4.00	0.80	4 th
9	Corruption among member parties	26	18	7	41	6	98	2.83	0.57	10 th
10	Lack of continuous improvement	24	16	6	38	14	98	2.82	0.56	11 th
11	Insufficient problem solving strategy among participants	8	13	26	23	28	98	3.51	0.71	7 th
12	Insufficient effort by participant to keep partnering going	12	15	21	16	34	98	3.46	0.71	7 th
13	Inadequate involvement of key party members of partnering	11	36	29	14	8	98	2.71	0.54	12 th
14	Adversarial relationship	41	9	25	23	0	98	4.61	0.92	1 st
15	Inadequate information sharing	16	34	27	18	3	98	2.57	0.51	13 th
16	Misunderstanding of the concept	36	24	15	23	0	98	4.51	0.90	2 nd
17	Lack of top management support	38	29	8	22	1	98	2.17	0.44	15 th

Note; 1= Strongly disagree 2= disagree 3= somewhat agree 4= agree 5= Strongly Agree. Source: Field survey 2020.

4.5 Benefits of Project Partnering Projects in Nigeria.

The respondent’s perception on the extent of the benefits of project partnering in the Nigerian construction industry is represented in Table 3 below.

Table 3 shows twenty-four possible benefits to the adoption of project partnering in Nigeria ranked in their order of severity. From Table 3 it can be deduced that the respondents ranked “It establishes good teamwork relationship, (RII 0.81) as the first. This was followed closely by ‘It provides good conflict resolution strategy with RII

rating of 0.80) as second, while ‘mutual goal is shared among party members’ (RII 0.74) was ranked third. A glance at the mean ranking indicates that most of the benefits identified are feasible with the Nigerian construction industry. However, those with an RII value less than 0.5 are considered be inconsequential. The cumulative mean of 3.01 indicates that the overall extent of the prevalence benefits is at a moderate level.

TABLE 3. Benefits of project partnering in Nigeria construction industry

S/N	Benefits of project partnering in Nigeria construction industry	Frequency of response					N	Mean	RII	Rank
		1	2	3	4	5				
1	It enhance reduction in budget cost	8	16	44	26	4	98	3.02	0.60	7 th
2	Early implementation of the construction project	11	24	31	27	5	98	2.91	0.58	8 th
3	It speeds time of project completion	5	18	68	1	6	98	2.57	0.51	13 th
4	Its establishes good team work relationship	0	19	15	28	36	98	4.05	0.81	1 st
5	It enhances quality improvement of the project	0	20	19	27	32	98	3.72	0.74	3 rd
6	It enhances risk sharing among party members in the construction team	4	14	28	34	18	98	3.49	0.70	5 th
7	Effective communication among party members	9	11	20	36	22	98	3.52	0.70	5 th
8	Enhances Construction project cost savings	5	16	23	26	28	98	3.57	0.71	4 th
9	Mutual goals are shared among all participants.	3	16	18	32	28	98	3.69	0.74	3 rd
10	It enhances improvement in design	2	21	23	30	22	98	3.50	0.70	5 th
11	Develop understanding among party members	6	19	28	36	10	98	3.29	0.66	6 th
12	It provides good conflict resolution strategy	12	26	38	5	17	98	3.99	0.80	2 nd
13	It increases customer/client satisfaction	0	12	26	31	24	98	3.53	0.71	4 th
14	It enhances facility maintenance	16	28	32	6	16	98	2.78	0.56	9 th
15	It encourages financing option	17	29	22	29	1	98	2.67	0.54	11 th
16	It reduces project risk	39	24	7	28	0	98	2.27	0.45	10 th
17	It enhances economic growth of the nation	10	31	41	15	1	98	2.65	0.53	12 th
18	It involves the end users and subcontractors at the early stage of the project	33	26	13	26	0	98	2.33	0.47	14 th
19	Honesty in accepting responsibility among participant	10	32	36	19	1	98	2.68	0.54	11 th
20	All parties are willing to eliminate waste and problems to improve	32	24	21	21	0	98	2.33	0.47	15 th
21	All parties set to a win-win attitude	11	25	45	14	3	98	2.52	0.50	14 th
22	Reduction in cost variation	38	24	17	16	3	98	2.20	0.44	17 th
23	Provides Lower operational cost among party members	34	28	8	20	8	98	2.30	0.46	16 th
24	Encourages continuous improvement	26	19	22	26	5	98	2.64	0.53	12 th

Note: 1= Strongly disagree 2= disagree 3= somewhat agree 4= agree 5= Strongly agree.

Source: Field survey 2020.

V. SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Summary

Based on the objectives of the research stated in chapter one and major findings from the .so analyzed (results), the following conclusions were made:

1. Out of the seventeen possible barriers to the applicability of project partnering. Respondents ranked adversarial relationships with the mean rating of 4.61 and RII of 0.92, Misunderstanding of the concept, with the mean rating of 4.51 and RII 0.90, distrust and inadequate involvement of key party members with a mean rating of 4.03 and RII of 0.81 respectively. A closer glance at the mean ratings of these three factors that have 4.61, 4.51, and 4.03 respectively indicates their extent of prevalence of the barriers at the highest level. Their values being within the range of 3.50 < x < 5.00. The study result is in line with a similar study conducted by Ibrahim (2005); Chan, *et al.* (2003) and Faruk,(2015).

Conclusion

These are the conclusion drawn from the appraisal of the critical success factors of project partnering towards its adoption in the Nigerian construction industry.

1. It was established that one of the major barriers to project partnering in the construction industry is the adversarial relationships among the various professionals in the construction industry. Similarly, another key barrier is the misunderstanding of the concept among the various professionals in the construction industry. More so, it was identified that the inadequate involvement of key party

members even from the project procurement stage is also a major barrier to project partnering in the Nigerian construction industry.

2. From the ongoing, it can be established that Project partnering offers a wide range of benefits. Considering the Nigerian construction industry, one of the major benefits of project partnering as speculated is that it establishes good teamwork. Similarly, it also provides a good conflict resolution strategy and ensures that mutual goals are shared among party members.

Recommendations

Based on the findings of this research, the following recommendations were made with a view that it will encourage the adoption of project partnering in the Nigerian construction industry.

1. All stakeholders in the construction industry should work together in prompting Mutual trust among party members of the construction team for the adoption of project partnering
2. Professionals and stakeholders in the construction industry should adopt project partnering as a preventive conflict resolution strategy as it tries to take care of the ambiguity in concepts or terms among professionals at the early stage of the construction process.
3. Similarly, professionals and stakeholders in the construction industry should adopt project partnering as a preventive conflict resolution strategy as it tries to take care of the ambiguity in concepts or terms among professionals at the early stage of the construction process.

4. It is also recommended that the Professional bodies of the various professions in the construction industries should encourage it, member, to work with an objective mind and shun all forms of adversarial relationships with other professionals in the discharge of their professional duties. When this reorientation is achieved project partnering is easily adopted.

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