

Evaluating the Effect of Strategic Alliance Procurement Method on Construction Financial Performance in Nigeria

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Abstract

Strategic Alliance is a collaborative agreement between two or more companies to develop a joint strategy on certain operation, in which all sides take a win-win attitude. Since the implementation of strategic alliances in the construction industry, there has been a great significant impact on financial performance in any approach this procurement model takes. In line with the development, this study contributed to the research field within the strategic alliance procurement in the construction industry by focusing on the impact of the strategic alliance on Nigerian construction industry's financial performance in order to enhance awareness of strategic alliance in the Nigerian construction industry. The study embraced survey design in gathering information from questionnaires given to construction professionals. Mean Item Score (MIS) and Kruskal-Wallis Test (K-W) were used in analyzing data gathered from three hundred and sixty-three (363) respondents. Cronbach's α test was utilized to check the reliability level of the instrument used. It was indicted from the paper that 'open door to new funding opportunities, ability to accrue economies of scale and scope in value-added activities, easy cash flow coordination' are the major effect of strategic alliance on the financial performance of Nigerian construction industry. The study also recommended that there should be a developed structure and standardized form of sharing formulae for profit and financial report should be given when required to ensuring openness with better understanding between both parties in other to prevent rift and lack of trust for each other. Although this study was carried in Nigeria, it recommendations can be applicable to other developing countries with the same pattern and method of construction.

Keywords

Strategic alliance, Procurement, Professional, Construction

1. Introduction

strategic alliance is a co-operative arrangement between two or more companies where a common strategy is developed in unison and a win-win attitude is adopted by all parties. Yoshino and Rangan (2015) sees strategic alliances as formal and mutually agreed upon commercial collaborations between companies.

According to (Jongwe, Moroz, Gordon, and Anderson, 2020), it is a mutually beneficial long-term formal relationship formed between two or more parties to pursue a set of agreed upon goals or to meet a critical business need while allowing these parties to remain independent organizations. Strategic alliances can take the form of equity positions or contractual arrangements including but not limited to collaborative agreements, licensing agreements, joint ventures, consortiums, alliances, and other forms of collaboration (Kumar, 2014). One of the most important reasons for participation in strategic alliances is improvement in firm financial performance. Among an array of performance indicators, the majority of authors emphasize the importance of profitability as the key indicator of performance and competitiveness in the long run (Buckley, Pass and Prescott, 1988; Stojčić and Vojvodić, 2012; Stojčić, 2012). In the long run, only profitable firms can survive, while their loss-making counterparts are forced to leave the market and face seizure of their market share by more competitive rivals. In the construction industry, alliances represent a significant departure from the traditional project by project contracting arrangements between contractor and subcontractors, and are characterised by the involvement of long-term relationship between contractors and subcontractors to achieve both individual and joint business goals.

Implementation of strategic alliances procurement in construction industry has one way or the other have much effects on the financial performance on any handle this model. As a relational project delivery model, it contractually binds two or more entities to work cooperatively toward agreed outcomes (Davis and Love 2011, Love et al., 2011, Jefferies et al, 2014, Walker and Lloyd-Walker, 2015). Strategic alliance is generally deployed in large and complex projects with much financial activities, particularly in the infrastructure and construction sector around the world. Inter-organizational projects are executed by a network of diverse firms and organizations that is, a project network (Artto and Kujala, 2008) and are embedded in networks of inter-organizational relationships (DeFilippi and Sydow, 2016). In such project networks, actors usually have varying objectives, interests and expectations from the project, based on the respective business objectives of their base organizations (Artto and Kujala, 2008). For that reason, a high degree of uncertainty is also likely. To successfully initiate and execute an alliance project, the project organization needs the capabilities to collectively manage such a project. Moreover, the problems related to traditional investment project procurement methods and the pressure to develop construction industry in Nigeria are incentive for seeking new operational models. Traditional procurement methods do not fully utilise the know-how of the various parties in solving various problems facing financial performance in the industry. So therefore, this study aimed to contribute to the research field within Strategic alliance procurement in Nigerian construction industry, with focus on the effect of strategic alliance on the financial performance of Nigerian construction industry, in order to improvement increase the level of awareness on strategic alliance in an Emerging Market (EM). Recommendations from this study can be highly beneficial to other developing countries with the same pattern and method of construction/project execution.

2. Literature Review

This section presents a synthesis of a literature review from several broad areas strategic alliance. Strategic alliance literature has received much attention by scholars during the last couple of decades, and extensive theorizing has been conducted. The term *strategic alliance* (Howarth et al., 1995) is described as “*a cooperative arrangement between two or more organisations that forms part of, is consistent with their overall strategy, and contributes to the achievement of their major goals and objectives*”. According to zamir, Sahar, and Zafar, (2014), A prosperous alliance can create enormous opportunities for success and growth as well as securing the business in market place at the same time, due to an additional competitive edge and capacity enhancement. As stated by Mohamed, Devapriya, and Fasna, (2019), constant alliance and experience provide an opportunity for learning and new developments along with other tangible benefits. Some studies have focused on the inclination of alliance configuration while focusing on organization characteristic (Artto and Kujala, 2008). On the other hand, some other studies have considered construction industry’s position on it implementation and its performance (Nguyen, 2019). There is hardly any evidence of agreement on the effect of strategic alliance on the financial performance in construction industry.

Highlighting the difference between joint venture and strategic alliance, it was emphasized by Yoshino and Rangan (2015) that an arrangement between two companies that have decided to share resources to undertake a specific, mutually beneficial project. A strategic alliance is less involved and less permanent than a joint venture, in which two companies typically pool resources to create a separate business entity. In a strategic alliance, each company maintains its autonomy while gaining a new opportunity (Kumar, 2014). That is why Mohamed et. al (2019) Stated that strategic alliance could help a company develop a more effective process, expand into a new market or develop an advantage over a competitor, among other possibilities. Included in this agreement among two or more parties working together for the achievement of common objectives, is the ability to create new value for the parties involved. It cannot be overstated that the achievement of value may come in many forms including new entries to market, speed to market, innovation or new product or process, etc.

In the construction industry, there are various benefits gained in forming strategic Alliance within the organisations. As stated by Buckles (2011), gaining new client base and add competitive skills without incurring the burden of recruiting, paying and caring for new staff is one of the two top alliance-model sellers. DHT & Lloyd-Walker BM (2015) seek an alliance partner with well-developed relationships and complimentary work experience in the territory you are targeting to create a force that offers a compelling total package to this new geographic marketplace. Other are: Create different sources of additional income (Langfield-Smith, 2005); build valuable intellectual capital (Nguyen, 2019); reduce risk (Arto and Kujala, 2008); create a different perception of each firm. Inkpen (2000) and Raue and Wieland (2015) listed advantages of strategic alliances as to access new markets, materials and technologies, acquisition of needed proprietary resources, alternative to mergers and economies of scale and scope. A focus on core competencies and outsource of other aspects of the business as market access, minimization of the costs of research and development, transaction and production costs add to the same. Learning of new processes, skills, or competencies and risk sharing are the key (Shenkar, 2015 and Burke, 2011).

As stated by Raue and Wieland (2015), some various forms of strategic alliances are; Horizontal strategic alliances, which are formed by firms that are active in the same business area. This indicated that the partners in the alliance used to be competitors and work together in order to improve their position in the market and improve market power compared to other competitors. According to Das and Teng (2000), there is also vertical strategic alliances, which describe the collaboration between a company and its upstream and downstream partners in the supply chain, that means a partnership between a company its suppliers and distributors. Intersectional alliances are also partnerships where the involved firms are neither connected by a vertical chain, nor work in the same business area, which means that they normally would not get in touch with each other and have totally different markets and know-how (Raue and Wieland, 2015). Others are joint ventures, equity alliances, non-equity strategic alliances, technology development alliances, operations and logistics alliances, and so on.

According to Dubois and Gadde, (2002), construction is a project-based industry, in which time and scope are seen in a narrow perspective. Thus, alliances focus on the short-term time frame, with actors attempting to lever what they can out of the existing contract, leading to opportunism (Chan, Chan, and Ho et al. 2003). In many developing countries not leaving out Nigeria, the construction industry has over a long period, attracted criticism for its relationships, with conflicts and disputes over financial performance, lack of trust and cooperation, poor customer focus and end-user involvement cited as significant amongst its shortcomings (Ericsson, 2007 and Chan et al., 2003). Practitioners, researchers and society at large have called for a change in attitudes, behaviours and procedures methods in order to increase the chances of project success through stable financial performance and an improved end product (DHT and Lloyd-Walker BM (2015). Generally, greater cooperation between construction stakeholders (i.e. cooperative relationships and strategic alliance) is argued to be a suitable antidote for many of the industry's problems (Nguyen, 2019). So therefore, enhancing change towards increasing alliance and cooperation among

construction professionals in Nigerian construction industry is a battle that must be won by stakeholders in order to improve financial stability and construction performance in the industry.

In the construction industry, the financial function plays a significant role in ensuring that company objectives are compatible with its resources and financial information usually serves as the basic instrument of strategic analysis. Thus, through the use of published financial data, analysis of the behaviour and competence of rival construction firms within the industry can be performed leading to judgements relating to a company's relative competitive position (Edum-Fotwe, Prince and Thorpe., 1996). Full implementation of strategic alliances procurement in construction industry can one way or the other have much effects (positive and negative) on the financial performance on any handle this model on the partners' companies. Some of these effects are minimize financial management problems (Mohamed et. al 2019)), racing for profit (Raue and Wieland, 2015), lower cost of technology (Išoraitė, ND), open door to new funding opportunities (Kumar, 2014), ability to accrue economies of scale and scope in value-added activities (Kumar, 2014), etc.

3. Research Methodology

Kothari (2009) stated that research design is the arrangement of the conditions for collecting and analysis of data in manner that aims to combine relevance to the research purpose. The survey explores the opinions of a sample of Nigerian construction professionals with to the aim of the study. To achieve this aim, information gathered via a questionnaire survey covering the effect of strategic alliance on the financial performance in the construction industry was empirically tested. A well-structured questionnaire was used for the data collection. The professions represented included Architects, Quantity Surveyors, Civil engineers, builders and contractors. As the questionnaire is the most widely used data collection technique for conducting surveys, it is widely used for descriptive and analytical surveys in order to find out facts, opinions and views. The details of these construction professionals were gotten from their respective organizational bodies and this aid their assessment. A total number of four hundred (400) copies of the questionnaire were randomly administered to the respondents. 145, 115, 80, and 60 copies were administered to practicing Architects, Quantity Surveyors, Civil Engineers and Builders respectively. The total response received was three hundred and sixty-three (363). Thus, the response rate for the questionnaire was approximately 91% which was considered satisfactory (Fellows and Liu, (2008). Table I shows details on data collection and the demographical information of the respondents.

Table I: Profile of the Respondents

Background Characteristics		Frequency	Percentage (%)
Profession of respondent	Architect	128	35.2
	Quantity Surveyor	102	28.1
	Builder	60	16.5
	Civil Engineer	73	20.2
	Total	363	100
Professional membership	NIA	128	35.2
	NIQS	103	28.1
	NSE	73	20.2
	NIOB	53	14.8
	Others	6	1.7
	Total	363	100.0

Category/Grade of membership	Probationer	138	38.0
	Corporate/Associate Member	223	61.4
	Fellow	1	0.3
	Others	1	0.3
	Total	363	100.0
Highest academic qualification of respondent	OND	11	3.0
	HND	46	12.7
	B.Sc/B.Tech	238	65.6
	M.Sc/M.Tech	57	15.7
	Ph.D	11	3.0
	Total	363	100
Project Executed	1-5 years	76	20.9
	6-10 years	152	41.9
	11-15 years	89	24.5
	16-20 years	34	9.4
	Over 20 years	12	3.3
	Average	8.7	

Table I established that Quantity Surveyors and Architects that responded to the questionnaire represented 35.2% and 28.1% respectively. 16.5% were Builders, while 20.2% of respondents were Civil Engineers. This showed that the respondents were from all relevant construction professionals in who are currently practicing in their respective states. The data showed that all respondents were under their professional membership. 35.2% were member of NIA, while 28.1% of respondents fall under membership of NIQS. It was established that 20.2% of respondents were under the umbrella of NSE. Moreover, 14.8% were under NIOB while 1.7% fall under other professionals not stated. The analysis of respondent's category/grade of membership showed that, 38%, 61.4%, 0.3% and 0.3% of respondents were probationers, Corporate/Associate members, fellows and others respectively. This means that the respondents were qualified to provide information on the subject of strategic alliance procurement method in the construction industry. Corporate/Associate members had the largest percentage because they are mostly active on site.

Table I showed that 3% and 12.7% of the respondents were polytechnic graduates which are OND and HND respectively. The highest number of the respondents were those with Bachelor Degree (B.tech & B.sc) which represented 65.6%. Moreover, 15.7% and 3% were M.sc/M.tech and PhD respectively. From the information on the academic qualifications of the respondents, it can be concluded that these professionals possessed satisfactory academic training to supply data for this study. The table further reveals that 20.9% of the respondents had executed 76 projects in the last 5 years and 79.1% had executed 287 projects in 6 years above. The above analysis indicates that majority of the sampled respondents were educated construction industry practitioners, experienced and had handle series of projects in years back does make them suitable to give adequate information on the strategic alliance contract in construction industry.

Initially, a reliability analysis was attempted to decide the consistency of components and dependability of the review instrument using Cronbach's α model. From the aftereffect of the examination, the general Cronbach's α unwavering quality for the 10 results was 0.832, showing satisfactory interior dependability and consistency of informational index. Furthermore, in light of the fact that the information gathered for the investigation were ordinal in nature. Mean item score (MIS) and Kruskal-Wallis Test were led on the

example information to rank the results as per how they influence the construction industry in the investigation region. MIS was utilized to rank all the identified effects of strategic alliance on the financial performance in Nigerian construction industry.

Table II: The Effects of Strategic Alliance on the Financial Performance of Developmental Projects

Effects of Strategic alliance on the financial performance of construction industry	Mean Item Score						Kruskal-Wallis Test	
	Qs	ARC	BLDR	C/S	Overall	Ranking	K-W	P
Open door to new funding opportunities for construction activities	3.93	4.33	4.11	4.20	4.14	1	7.238	0.132
Ability to accrue economies of scale and scope in value-added activities	3.99	4.30	3.82	4.29	4.10	2	18.383	0.001
Easy cash flow Coordination during project execution	4.10	3.90	4.00	4.10	4.02	3	4.376	0.232
Minimize financial Management problems	4.23	4.03	3.85	3.99	4.02	4	8.490	0.324
Personality conflicts	4.07	3.99	3.84	3.99	3.97	5	7.365	0.334
Sharing financial risk in high-risk projects	3.97	4.08	3.83	3.98	3.96	6	17.194	0.003
Acquiring lower cost of technology	3.49	3.57	3.67	3.70	3.60	7	3.347	0.432
Gaining access to partner's technology	3.35	3.49	3.49	3.37	3.42	8	4.823	0.123
Partners companies racing for profit	3.30	3.37	3.40	3.29	3.34	9	4.540	0.209
Gaining financial success	3.57	3.22	3.10	3.30	3.29	10	16.244	0.001

QS- Quantity Surveyor, ARC- Architect, BLDR- Builder, C/S – Civil engineer, Overall- (average of ARC, BLDR & C/S), K-W – Kruskal-Wallis, p – p-value

4. Results and Discussion of Findings

The aim of this study is assess the effects of strategic alliance on the financial performance in Nigerian construction industry. The outcome of reviewed literature identified ten (10) aftermath of strategic alliance on the financial performance of construction industry. The respondents were asked to assess the level of significance of these outcomes. Data obtained was subjected to mean analysis and Kruskal-Wallis test. The result is as presented in Table II.

The response of construction professionals, who were practicing as consultants or contractors in construction firms, consulting firms and government organizations showed that 'Open door to new funding opportunities for construction activities' top the major effects of strategic alliance on the financial performance in the construction industry. This indicated that strategic alliances in Nigeria building sector bring about outsourcing relationships which mostly lead to new funding opportunities for easy project execution. Moreover, after new funding opportunities has been well established, the parties involved may now desire to achieve long-term win-win benefits and innovation based on mutually desired outcomes on that particular project. This buttressed Raue and Wieland (2015) that strategic alliance is another financial way to supplement internal assets within the construction industry, with easy access to needed resources or knowledge from outside stakeholders such as other construction firms, suppliers, clients, competitors, companies in different industries, brand owners, universities, institutes or divisions of government.

Moreover, ability to accrue economies of scale and scope in value-added activities with mean value of 4.10 also ranked to effects of strategic alliance on the financial performance in the construction industry. This happened when two or more construction companies pool their knowledge and resources together on a particular project, definitely maximization of value-added activities and economies of scale will be achieved. Another noticeable effects of strategic alliance on the financial performance of construction industry in Nigeria is easy cash flow coordination (MS = 4.08). As one of the sources of funding in the construction industry, most stakeholders in the building sector believe that the goal of a strategic alliance is to facilitate new opportunities and improve the probability of cash flow during project execution (Oliveira and Lumineau, 2019). This agreed with Mohamed *et. al* (2019), that partners in a strategic alliance can help each other by giving best way to monitor and coordinate cash flow properly, access to resources (personnel, finances, technology), which enable the firms involve in alliance to execute higher quality projects in more cost efficient way.

Kruskal-Wallis test was also used to assess the outcome of strategic alliance on the financial performance of construction industry based on the opinion of professionals within the construction industry in the study area. However, there were some disagreement reflected by the scores and ranking of the different group, this is because the mean score was very close to each other. The p-value of most of the identified behavior were greater than 0.05 (i.e $p > 0.05$). The result showed that there is relative agreement in the ranking of the factor except three (3) of them which were found to be common as far as the opinion of the professionals (see table 1). The significant factors were Ability to accrue economies of scale and scope in value-added activities ($p < 0.001$), sharing financial risk in high-risk projects ($p < 0.003$), and gaining financial success ($p < 0.001$). This implied that there is no agreement in the perception of respondents on outcome of strategic alliance on the financial performance of construction industry based on the opinion of professionals within the construction industry.

5. Conclusions and Recommendations

Strategic Alliance in the construction industry is a cooperative arrangement between two or more firms for the mutual benefit all involved various construction activities, which enables a greater opportunity for near-term successes for all firms involved than it might achieve individually. Strategic Alliances procurement methods in construction industry entails more than just achieving collective goals and directly benefitting partners. It adds value to the corporate social capital of each construction firm by providing easy access to a wide range of assets and resources. Furthermore, they are various effects (both positive and negative) of strategic alliance on the financial performance in the construction industry. From this study, it was revealed that when two or more construction firms pool their knowledge and resources together on a particular project, definitely maximization of value-added activities will be achieved. Likewise, there will be easy cash flow coordination for that particular project whose alliance created, and this will surely lead to new funding opportunities for the construction activities. Although this study was carried in Nigeria, the study

area was limited to the southwestern part of the country. Further studies can consider other regions and other developing countries. Studies can also be done on the negative impact of strategic alliances on smaller construction companies.

So therefore, this study recommended that there should be a developed structure and standardized form of sharing formulae for profit and financial report should be given when required to ensuring openness with better understanding between both parties in order to prevent rift and lack of trust for each other. Moreover, individual member interested in participating in strategic alliances in the Nigerian construction industry must be self-controlled financially and be ready to speak in one voice with the other participants. Also there should be a leader among the team to monitor, coordinate and communicate the with other team member on the progress. There should be a committee charged with the mandate of formatting, implementing and evaluating strategic alliances between partners, drawing human resources from firms as well as including non-executive experts and consultants in the team. To enable such managers to identify any challenge in alliance implementation. Future studies should be conducted to determine the impact strategic alliances on the efficiency and performance of stakeholders involving in complex, heavy civil engineering works and longer time periods within Nigerian construction industry. Recommendations from this study can be applicable to other developing countries with the same pattern and method of construction as Nigeria.

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