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FACTORS DETERMINING THE MARKETING STRATEGIES OF CONSTRUCTION FIRMS: CONSTRUCTION PROFESSIONALS' PERSPECTIVE

Imoleayo Abraham Awodele
Federal University Of Technology Owerri, Nigeria
E-mail: a.imole@yahoo.com

Adesoji Anthony Adegboyega
Waziri Umaru Federal Polytechnic Brinin Kebbi, Nigeria
E-mail: adegboyegaadesoji@gmail.com

Onyinye Sofolahan
Lagos State Polytechnic, Nigeria
E-mail: onyxnwoko@gmail.com

Abdullahi Adamu
Federal Polytechnic Nasarawa, Nigeria
E-mail: adamunbiya@gmail.com

Kenneth John Saidu
Federal University of Technology Minna, Niger State, Nigeria
E-mail: johnkisnice@gmail.com

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ABSTRACT

Construction firms are not dedicated to the comprehensive adoption of marketing concepts and strategy, and thus do not enjoy the benefits of profit maximization, client satisfaction and loyalty and improved overall organizational performance. The purpose of this paper is, to assess the perception of construction professionals regarding the factors influencing the choice of marketing strategies adopted by their construction firms. A questionnaire survey approach was used in the study. The questionnaires were administered to construction professionals within the study area, Frequency, Percentile, Mean item score and Kruskal-Wallis test were used to analyses the data collected. The study found that employees' competence, technical knowledge of the firm, macroeconomic environment, and innovation are the major factors that influence the choice of marketing strategy.



It was concluded that a firm's employee's knowledge and competencies and technological innovation plays a critical role in the adoption of suitable marketing strategies in the construction industry. In addition, there is agreement among construction professionals regarding the factors influencing the choice of marketing strategies adopted by their firms. This study adds to the body of knowledge existing on marketing and marketing strategies in construction organizations in Nigeria.

Keywords: Construction firms, Construction Industry, Construction professionals, Factors, Marketing strategies, Nigeria

1. INTRODUCTION

The roles played by the construction industry in the economic development of any nation cannot be overlooked because of its size (NISA et al., 2006; NNADI et al. 2016). Its contribution to the national economy is well represented through the construction value addition, investment, employment, trade balance and sectorial linkages. Thus, its impacts are felt in all communities (MESHKSAR, 2012; NNADI et al. 2016).

The survival of the construction firms within the construction industry depends solely on effective competition. The construction business environment is highly competitive due to the influence and controlling force of lowest bid characteristic of the contractors (DULAIMI; SHAN, 2002; OYEYIPO et al, 2016). Similarly, the activities and performance of construction firms are influenced and shaped by the dynamics of demand and supply (EZE et al., 2018). In a traditional setting, most construction projects are awarded based on the lowest tender sum, having considered the commercial and technical capabilities among other factors. Therefore, construction projects are procured through the competitive bidding process.

In most countries, the construction industry is characterised by high risk, extreme competition and low profitability when compared to manufacturing and other industries (MOCHTAR; ARDITI, 2001). The competitive nature of the construction industry is attributable to the relative ease of entry into the industry compared to other industries, even for individuals or firms with little capital investment (LANGFORD; MALE, 2001). Since construction firms cannot induce or create demand for their works and/or services, they have to participate in a competitive bidding process in order to secure a new construction project (AL-SOBIEI et al., 2005; BENNETT 2005; POLAT, 2010).

These inherent characteristics of the construction industry have made many construction companies to continually strategise on means to outbid their competitors. Hence, the need to explore new or less crowded areas of speciality within the industry that may provide more projects and improved profits (POLAT; DONMEZ, 2010). Therefore, according to EZE et al. (2018), it is through marketing that construction companies differentiate themselves from their competitors, sustain existing projects/clients, and carve out a competitive niche for themselves.

Ogbu (2017) defined marketing as "the activity, set of institutions, and processes for creating, communicating, delivering, and exchanging offerings that have value for customers, clients, partners, and society at large". Marketing as it is practised all over the world is referred to as the activity of getting the company to sell goods or services to customers (OJO, 2011). The importance of marketing for the survival of companies cannot be ignored (ARSLAN et al., 2009; NNADI et al. 2016). Therefore, effective marketing plays an important role in the overall success of companies and it is critical for any business to grow in a competitive environment (POLAT; DONMEZ, 2010). Thus, the main objective of marketing construction firms' products and services is to create a positioning strategy within the entire construction market.

In Turkey, Polat and Donmez (2010) examined the marketing management functions of Turkish construction companies and reported that Turkish contractors made use of marketing management functions to some extent. Yan and Chew (2010) investigated the marketing strategy, business environment and performance of construction SMEs in China, and found that marketing differentiation and innovation helps construction SMEs to achieve superior performance, but reported a negative relationship between competitive pressure and construction SMEs' performance.

Enerson et al. (2016) carried out a study aimed at identifying the critical factors that influence the marketing of professional services in the South African construction industry. The study found that the place, physical evidence and product components appear to be perceived as most critical. Ogbu (2017) studied marketing strategies and performance of indigenous construction firms in Nigeria and found that maintaining a pool of professionals to boost company image was highest among the identified marketing strategies used by companies within the region.

Alwashi et al. (2017) assessed the use of marketing strategies in the Nigerian construction industry. The study was aimed at identifying the impact of marketing management

on the construction industry in Nigeria with a view to ensuring an effective marketing system in the industry. The study that examines the views of construction professionals found out that maintaining a strong pool of professionals to boost a company image was the most widely used among the marketing management strategies.

Mokhtariani et al. (2017) examined the nature of the construction industry from the marketing viewpoint and developing a comprehensive framework in Iran construction industry. The study reported that competitive bidding mechanism, which is often based on the lowest price, has the highest impact on construction marketing. Eze et al. (2018) evaluated construction professionals' perception of the marketing strategies employed by construction firm, and found that maintaining a strong pool of professionals to boost the company image, developing non-economic or social bonds with clients, including political offers in bids, having a project signboard, developing a marketable name as well as equipment branding, claim aversion, and free design contribution are the specific marketing strategies employed by construction firms.

Available literature of marketing in construction focused more on marketing strategies adopted by construction firms and their impacts on their performances. But studies on factors that trigger the choice of the marketing strategies adopted by construction firms are still lacking, especially within the geographical area of this study. Therefore, this study assessed the perception of construction professionals regarding the factors that influence the choice of marketing strategies adopted by the construction firms they found themselves, with a view to examining the most influencing factors especially in the construction industry of Nigeria.

The hypothesis that guided this study states that;

- H₀: there is no statistically significant difference in the perception of construction professionals regarding the factors influencing the choice of marketing strategies adopted by construction firms.
- H₁: there is a statistically significant difference in the perception of construction professionals regarding the factors influencing the choice of marketing strategies adopted by construction firms.

The outcome of this study will help construction professionals and construction-based firms to devote and utilize a good percentage of their managerial and organisational resources in the best way possible within the industry. Especially in areas of marketing decision for better

marketing strategies to strengthen their competitive position, profit maximization and revenue drive. This study will help construction management researchers and industry's practitioners to advance their knowledge of marketing concepts and construction marketing strategies for better industry performance. Thus, there is a need to understand the basic factors that are considered whilst making a decision regarding marketing strategy to be adopted.

2. REVIEW OF RELATED LITERATURE

2.1. Marketing in the Construction Industry

Marketing is critical to the survival of businesses, firms, and individuals; as it offers opportunities for employment and impacts on the standard of living of individual firm (OLANIYI et al., 2011). Similarly, marketing ability influences financial success (ODE, 2007; KOTLER; KELLER, 2009). Thus, financial flows and business success depends on the choice and implementation of suitable marketing strategies. The overall success of companies and the ability of any business to grow in a competitive environment depend on effective marketing of firm's services and products (POLAT; DONMEZ, 2010).

As a management function, marketing has received wide acceptance in most industries as it is considered an indispensable tool for increasing market shares, satisfying clients/customers, improving profitability, building lasting relationships, consolidating competitive advantage and accomplishing firm performance (NARANJO et al., 2011; KANAGAL, 2013; OGBU, 2015). Effective marketing drives business growth especially in an open competitive market environment (OJO, 2011). Nigeria, like other developing countries, has been identified among the largest construction markets (ODEDIRAN et al., 2013).

Client expectations, unstable economic and technological environments, risks, lack of skilled operatives, increased in the numerical strength of professionals, internationalisation of the construction trade, among other variables, have been identified as the causes of the increased competition in the construction markets of developing countries like Nigeria (OGBU, 2015). Some construction firms are becoming smaller or specialised due to the need to survive and remain viable within the industry's fierce competition (ODEDIRAN et al., 2013; AWE et al., 2009; KUNHUI, 2009). Hence, the death of most construction firms in developing countries (EGESA, 2011; OGBU, 2015), and the influx and dominance by foreign construction firms.

The construction industry like any other sector of the economy faces keen competition for survival and sustenance. Withstanding such competition come with a cost and the magnitude of this marketing cost (expenses) depends on the marketing policy of the firm. In MOCHTAR'S (2004) examination of marketing expenditures in the Indonesian construction industry, it was discovered that the total marketing expenditure of construction organisations is 8.9% of its annual contract value. In the U.S.A. it was reported that 14.3% of construction firms spend over 2% of their annual contract value on marketing (MOCHTAR, 2000; MOCHTAR; ARDITI, 2001). Whereas, in Indonesia, 60% of the contractors spent over 2% of their annual contract value on marketing (MOCHTAR, 2001). Although, this figure is small compared to what marketing expenditure is in other industries. This is due to a low profit margin in the construction business.

2.2. Marketing Strategies

According to Olaniyi (2014), a strategy is a set of plans designed to reach target goal over a stated period. Marketing strategies entails the management of marketing mix variables. It involves picking a target market and selecting a marketing mix to serve that market (AKPAN, 2003). Marketing strategy is a managerial process of analyzing market opportunities and choosing marketing position that serves the company's purpose and objectives (OJO, 2011). It is the response of an organization to exogenous forces through the setting of achievable long-term customer and profit based policies and principles. Professional firms sell their services to their potential clients through well-drawn marketing strategies. Thus. OJO (2011) emphasized that marketing plays a critical role to the success of construction organizations especially in times of high competition.

Lee *et al.* (2008) identified marketing strategies of Korea's housing construction firms and classified them as green, well-being and ubiquitous. According to ALWASHI *et al.* (2017), there 6 major grouped of marketing strategies adopted by construction organization in Nigeria, and these are; location of the firm, professional client relationship, professional contract, price and other user strategies, business promotion / education strategy, and research. OGBU (2017) identified 43 marketing strategies used by indigenous construction firms and grouped them into 5 major strategies.

They are third-party-based strategies, client-based strategies, publicity-based strategies, firm-based strategies, project performance-based strategies. It was reported that the prominent marketing strategies are maintaining strong pool of professionals to boost company's image,

packaging company's document to look attractive, outsourcing supervision to more competent professionals, staff competence, writing of proposals, Developing a cordial relationship between client and other professionals, project signboard and equipment branding (OGBU, 2017; ALWASHI et al., 2017; EZE et al., 2018).

A list of the most commonly used marketing strategies in the Nigerian construction market were identified and summarised in Table 1.

Table 1: Marketing strategies of Construction Firms

S/N	Marketing Strategies	Sources
1	Engaging in post-purchase communications	ZEITHAML et al. (1985)
2	Location of the firm	ZEITHAML et al. (1985) ; ALWASHI et al. (2017); OGBU (2017)
3	Maintaining strong pool of professionals to boost company's image	OGBU (2017); ALWASHI et al. (2017); EZE et al., 2018
4	Packaging company's document to look attractive	ALWASHI et al. (2017)
5	Outsourcing supervision to more competent professionals,	ALWASHI et al. (2017)
6	Cordial relationship between client and other professionals	ALWASHI et al. (2017); ZEITHAML et al. (1985)
7	Use of project signboards	OGBU (2017); EZE et al., 2018
8	Development of non-economic or social bonds	OGBU (2017); ALWASHI et al. (2017); EZE et al., 2018
9	Equipment branding	OGBU (2017); ALWASHI et al. (2017); EZE et al., 2018
10	Claim aversion	OGBU (2017); ALWASHI et al. (2017); EZE et al., 2018
11	Free design contribution	OGBU (2017); ALWASHI et al. (2017); EZE et al., 2018

2.3. Factors Influencing the Marketing Strategies adopted by firms

YISA et al. (1996) reviewed the changes in the UK construction industry and their implications for the marketing of construction services, and reported that the marketing functions of construction organisations have improved greatly due to their resolved to adapt to the changing external environments. Therefore, the strength of a construction firm lies in its ability to eliminate and /or minimise the effects of the pressure of extreme competition through the adoption, implementation of comprehensive and efficient marketing activities.

A review of business management literature indicates that there are quite a number of factors that are put into consideration by managers and entrepreneurs before choosing a particular or certain group of marketing strategy. Marketing is a business management concept and its application in construction is emerging in developing countries.

Ogbu (2015) observed that the shortage of research information on which to base the choice of marketing strategies in the construction industry currently stands in the way of the adoption of marketing as an effective tool of management by most firms. In spite of the inadequate attention to marketing due to scarcity of informed research and useful common literature on marketing; its significance is progressively being appreciated by contracting and

professional firms. Contractors have been found to make use of marketing professionals and/or external marketing experts in the planning and implementation of marketing activities than the professionals firms (YISA et al., 1995) .This implies that the concepts are gaining ground in the construction market.

Rust et al. (2004) observed that a regular problem facing top managers are how to trade off the competing strategic marketing initiatives. Thus, this has hindered making an educated and implementable choice of marketing practices by both consulting and construction firms in Nigeria. Environment plays a very critical role in the choice of marketing strategies.

Ogbu (2015) posit that every firm's marketing strategies must reflect the environment in which it operates. Thus, the interplay of the dynamic forces of the firm's internal and external operating environments determines what marketing strategies to adopt. The criteria for selection of marketing strategies by quantity surveying firms were identified and categorised into: firm /owner characteristics, external macroeconomic environment, financial criteria, industrial criteria, client criteria and socio-economic criteria.

According to Antariksa (2014), the selection of a suitable marketing strategy is usually hinged on six criteria, and these include; (1) the company's market opportunities and external threats, (2) the personal ambitions, business philosophies, and ethical beliefs of managers, (3) societal, political, regulatory, and citizenship considerations, competitive conditions and overall industry attractiveness, (4) the company's market opportunities and external threats, (5) company resource strengths, competencies, and competitive capabilities, and (6) the influence of shared values and company culture on strategy. The choice of market expansion strategies adopted is influenced by situational factors such as the company's product and services, market and marketing factors. Risk management awareness, market knowledge and internal obstacles are the company's factors that affect the decisions regarding the most suitable strategy to adopt (GICHUKI; OGOLLAH, 2014).

A firm that is interested in exporting its product and services would choose a diversification strategy (Lee and Yang, 2001). Market expansion strategy is mostly influenced by market size, similarity among market, growth rate and customer loyalty. Diversification strategy would be helpful in a situation where a firm is experiencing low growth rate. According to Gichuki and Ogollah (2014), the level of standardisation in communication and spillover effects among markets are likely to influence what strategy a firm chooses.

A company gains economies of scale in communication where standardisation is possible. This reduces the operating costs, especially where the firm has branches in many countries. Mas-Ruiz et al. (2002) confirmed that this could influence the choice of a market diversification strategy. Gichuki and Ogollah (2014) found that the choice of marketing strategy is influenced mostly by innovation, technology and the employees' competence, and service quality.

Huang et al. (2013) state that there are two independent variables that influence the decisions to adopt certain marketing strategies. These are broad environmental factors (i.e. basic infrastructure, economic, technology, political/legal, socio-cultural, and demographic characteristic) and Task Environmental factors (the business suppliers, customers, competitor, intermediaries, Government agencies and administrators).

The presence of and quality of infrastructure is central to every organisation in evaluating its marketing activities. Critical to the marketing decisions of organisations are reliance on transportation, communication, information technology and financing; especially foreign firms (BARON, 2010). Infrastructure is vital when considering expansion and diversifications. It was confirmed that marketing strategic formulation begins through broad environmental scanning for opportunities and threats; and scanning of task environment for strength and weakness (KOTLER, 2000; AKROUSH, 2012).

Magu (2014) also reported that the availability of support enterprises like banks, shopping centres and retail outlets, the country's macroeconomic environment, intense competition, market demographic characteristics, business customers, business suppliers, business competitors and business intermediaries, influenced the marketing strategies adopted by organisations in Kenya. It was confirmed that both broad and task environment influenced the marketing strategies.

Musa et al. (2016) identified three factors that influence the choice of marketing strategy, and these are the entrepreneur's attitude and knowledge, technical knowledge of the firm, and branding strategy. Enerson et al. (2016) proposed a framework of 7P (product/service, price, place, promotion, physical evidence, people, and process); which influences the marketing of professional services. The study found out that place, physical evidence and product components are most critical, and that promotion and price are least critical. The study confirms that professionals still have conservative attitudes toward marketing.

The studies reviewed have highlighted various factors considered by various businesses in making choices regarding marketing strategies to adopt and implement. These are based on the organisational resources available and management policy drive. This study adopted some of the factors considered by construction based organisations in making choice of marketing strategy to adopt. The factors considered are shown in Table 2.

Table 2: Factors Influencing choice of marketing strategies

S/Nr	Factors	Sources
1	Availability and cost of energy	MAGU (2014)
2	Availability of suitable transport and communication facilities	BARON (2010), MAGU (2014)
3	Support enterprises like banks/investors/manufacturers	GICHUKI; OGOLLAH (2014)
4	Macroeconomic environment	MAGU (2014)
5	Availability of technology	GICHUKI; OGOLLAH (2014), MAGU (2014)
6	Innovation	HUANG <i>et al.</i> (2013), GICHUKI; OGOLLAH (2014), MAGU (2014)
7	Political /legal environment	HUANG <i>et al.</i> (2013), MAGU (2014)
8	Client/consumer buying behaviour	HUANG <i>et al.</i> (2013), MAGU (2014)
9	Client/consumer social status	HUANG <i>et al.</i> (2013), MAGU (2014)
10	Client/consumer cultural beliefs	HUANG <i>et al.</i> (2013), MAGU (2014)
11	Clients/end-user sophistication and technical knowledge base	OGBU (2015)
12	Client size of income (client/customer purchasing power)	MAGU (2014)
13	Market demographic characteristics	HUANG <i>et al.</i> (2013), MAGU (2014)
14	Firm's area of specialisation/core competencies	RAMASWAMY; NAMAKUMARI (2009), OGBU (2015)
15	Level of prevailing competition in the market	OGBU (2015)
16	Client location and/or distance to market	MATINBE (2014) , OGBU (2015)
17	Type of client (private or public)	NARANJO <i>et al.</i> (2011), OGBU (2015)
18	Clients expectations in terms of (time, cost & quality)	OGBU (2015)
19	Company's subcontractors/suppliers	HUANG <i>et al.</i> (2013), MAGU (2014)
20	Company's competitors and their strategies	HUANG <i>et al.</i> (2013), MAGU (2014), OGBU (2015)
21	Company intermediaries	HUANG <i>et al.</i> (2013), MAGU (2014)
22	Government agencies and administrators	HUANG <i>et al.</i> (2013),MAGU (2014)
23	Employees competence	GICHUKI; OGOLLAH (2014)
24	Technical knowledge of the firm	MUSA et al.(2016)
25	Quality culture of firm	GICHUKI; OGOLLAH (2014)
26	Age of the Firm	OGBU (2015)
27	Size of the Firm	EGESA (2011), AYOPO (2011), OGBU (2015)
28	The grade/categorisation of Company	OGBU (2015)

3. RESEARCH METHODOLOGY

The study sought to assess the perception of construction professionals regarding the factors that influence the choice of marketing strategies adopted by construction firms in Nigeria, using Abuja as a case study. Construction-based firms and professionals are still embracing the concept of marketing in construction. Although, appreciable progress has been made in its adoption and implementation, it is still at the infancy in Nigeria.

The study gathered data from construction-based professionals within Abuja, the country's capital. The premise for choosing Abuja was because it is the administrative headquarters of Nigeria, and houses a lot of construction firms and professionals engaged in construction activities. These professionals were chosen based on their involvement and active participation in construction activities in organisations and companies rendering construction and developmental services. Also, marketing was confirmed to be an activity that involved all of the employees of the firms (RWELAMILA; MACHETE, 1997).

These construction-based organisations include those who are involved in either general or specialised construction works or both, and they are engineering companies, estate management firms, architecture firms, quantity surveying firms, and general construction contractors. The details of these professionals, which were obtained from their respective professionals' organisational bodies, aided their assessment and the study.

The study adopted a questionnaire survey approach for soliciting quantitative data from construction professionals working with construction firms and organisations. The use of a questionnaire is common in social research, and for collecting sample-based data (BLAXTER et al., 2001; TAN, 2011). According to Aghimien et al. 2018, the questionnaire is easy to use and have the ability to cover a wider range of participants. Its ease of use and wide coverage advantage makes it ideal for the study whose respondents are scattered all over the country.

A total of 425 questionnaires were administered to the respondents across the study areas, and 281 of them were retrieved, 7 discarded as a result of incomplete response. Only 274 were deemed fit and used for the analysis. This represents a valid response rate of 64.47%. This is well above the 20-30% response rate ideal for unbiased construction based survey (MOSER; KALTON, 1999; AKINTOYE, 2000).

Data collection was achieved through self-administration of the questionnaire by the researchers and trained field assistant who were adequately briefed about the study objectives. Data was also collected through electronic means. This was used because of the wide coverage over which samples are located and the need to meet study aim.

The questionnaire used was designed in two sections using information derived from the review of the related literature. Section A covered the general information of the target respondents. Information gathered from section A served as a quality check and verification of the data from the other part of the questionnaire. Section B covered the factors influencing the choice of adopted marketing strategies. The respondents were required to rate the degree to which the identified factors influenced the choice of marketing strategies used by their firms. This was based on a 5-point Likert scale, where 1 = not influential, 2 = less influential, 3 = averagely influential, 4 = influential, and 5 = very influential.

The data obtained in the study are ordinal measurement scale. Ordinal measurement reports the ranking and ordering of data but do not actually indicate the difference between the data (BHAT, 2019). Ordinal data are quantitative data and uses Likert-scale in assigning numbers to variables. This study used Likert-scale to assigned numbers to variable in the questionnaires. Furthermore, ordinal scale are nonparametric in nature. Thus, the scale of measurement of variables used in this study is ordinal scale.

To pre-test the survey, a pilot study was adopted to test the suitability and appropriateness of the questionnaire to meet the study objectives as suggested by FELLOWS; LIU (2008). Eighteen (18) of the initial draft of the questionnaire were randomly distributed to the selected construction professionals and academics and based on their feedback, the final draft was made. Furthermore, to ensure accurate results are obtained, a validity test of the survey instrument was done as suggested by (KOTHARI, 2004; SUSHIL; VERMA, 2010).

It was suggested that face validity allows expert researchers to review the contents of the test instrument to see if the items are proper. The eighteen (18) construction professionals used for the pilot study was also adopted for the face validity test of the research instrument. In the end, the identified factors were pronounced appropriate to be responsible for the choice of marketing strategies adopted in the construction industry of Nigeria. Thus, the questionnaire was considered face valid.

Furthermore, the reliability and internal consistency of the questionnaire was carried out using Cronbach's alpha test. This test measured the reliability of each of the field of the questionnaire and the mean of the entire fields of the same questionnaire. The acceptable value range of Cronbach alpha is between 0.0 and +1.0 and as the value tends toward 1, the higher the degree of internal consistency. The Cronbach alpha value for the variables is 0.845, thereby implying that the questionnaire is credible and have a high degree of reliability. According to

Moser and Kalton (1999), a research instrument is perfect as the value of the Cronbach alpha tends towards 1.0.

For the first section, the data collected on the general information of the respondents were analysed using frequency and percentage. The normality of the gathered data was analysed using Shapiro–Wilk test. Kruskal-Wallis H-test which is a non-parametric test was used in determining if there is any significant difference in the views of the different categories of respondents. Kruskal-Wallis H-test was ideal since the respondent's group is more than three. Mean item score was used in the ranking of the data collected on the factors identified.

Therefore, Mean item score, Shapiro-Wilko test and Kruskal-Wallis H-test, were applied to the data gathered from the second section of the questionnaire. The rule for accepting or rejecting the hypothesis is; accept hypothesis if P-value ≥ 0.05 , and reject hypothesis if P-value < 0.05 . These analyses were carried out using statistical package for social science (SPSS) Version 20.

4. RESULTS AND DISCUSSION

The analysis of the respondents' characteristic in Table 3 shows that in terms of their profession, 28.47% (78) are Quantity surveyors, 14.60% (40) are Builders, 20.07% (55) are Architects, 25.55% (70) are Engineers (Civil and Services) and 11.32% (31) are Estate surveyors & valuers. This shows a justifiable representation of the construction based professionals.

In terms of years of experience in the construction industry, 33.94% of the respondents had 1-10 years of experience, 28.83% had 11-20 years, 15.33% had 21 – 30 years, 10.95% of them had 31.40 years and 41 years and above each. Thus, the respondents are experienced and qualified enough to give reliable information in such a construction-based study. In addition, according to the respondents, 75.91% were always involved in marketing the services of their firm, 21.90% of them sometimes do marketing, and 2.19% of them had never been involved in marketing. By implication, a total of 97.81% of the professionals are involved in marketing in their organisations.

This confirms Rwelamila and Machete's (1997) finding that marketing is an activity that involved all of the employees of the firm. This implies that the respondents are aware of the importance of marketing in construction businesses.

Table 3: General information of respondents

Category	Classification	Freq.	%	Cum. %
Profession of respondents	Quantity Surveyors	78	28.47	28.47
	Builders	40	14.60	43.07
	Architects	55	20.07	63.14
	Engineers	70	25.55	88.69
	Estate surveyor & valuers	31	11.32	100.00
	TOTAL		274	100.00
Years of experience	1 - 10 years	93	33.94	33.94
	11 - 20 years	79	28.83	62.77
	21 - 30 years	42	15.33	78.10
	31 - 40 years	30	10.95	89.05
	41 years and above	30	10.95	100.00
	TOTAL	274	100.00	
Involvement in marketing services/ products of firm	Always	208	75.91	75.91
	Sometimes	60	21.90	97.81
	Never	6	2.19	100.00
	TOTAL	274	100.00	

Source: Researchers' analysis (2018)

4.1. Test of Normality and Kruskal-Wallis H test

In order to ascertain the nature and the type of test to be carried out on the collected data, a normality test was first conducted. These data could be parametric or non-parametric, and the nature could only be determined by running a normality test. With an actual sample size of 274, Shapiro-Wilk normality test was used in-line with Pallant's (2005) and Ghasemi and Zahediasl's (2012) suggestions. It was suggested that where the sample size of the studies is less than 2000, a Shapiro-Wilk normality test should be used. From Table 4, it can be seen that all the variables evaluated have a significant value of 0.000, and this is less than 0.05 which is acceptable value for normality.

This shows that the gathered data are non-parametric and unsuitable for normal parametric statistical techniques. This affirms THODE'S (2002) recommendation that the normality of non-parametric data is best examined using Shapiro-Wilk test. Hence, Kruskal-Wallis test is the ideal tools for such a non-parametric data. This test is suitable in situations that warrant the establishment of significant difference in the view of three or more respondents groups. It also reveals the consistency of opinion of the five (5) different respondents.

On item by item basis (Table 4, column 5 & 6), revealed that the professionals view varied significantly on 8 (27.59%) of the factors. These factors have their p-value of less than 0.05, and they are; political /legal environment, availability of suitable transport and

communication networks, clients expectations in terms of (time, cost & quality), quality culture of firm, Market demographic characteristics, client/consumer cultural beliefs, government agencies and administrators, and company's subcontractors/suppliers. This implies a significant difference in the professionals' perception of these factors.

This variation in views could be attributed to the relative understanding of the marketing concept and its benefits in the construction industry by the professionals. Also, the marketing objectives of the firms of the respondents could have also influenced their views. However, there is a non-significant difference in the perception of the professionals as 21 (72.41%) of the factors had a p-value of > 0.05 . Therefore, with agreement on 72.41% of the variables, it can be concluded that there is no significant difference among the professionals.

The relative difference in the opinion of the different professionals is an indication of the existence of differing marketing strategies adopted by different organisations. This is relevant in marketing as it reveals why some firms are constantly being commissioned on new Jobs and others rarely secure jobs in a given business year. The success of a chosen set of marketing strategies is dependent on effective implementation and commitment from top management, and the company's strategic marketing policy.

Regardless of the differences, marketing strategies are targeted at attracting potential clients and securing new or maintaining existing projects. Although, adaptive marketing strategies are developed with adequate knowledge and understanding of the organisation's business environment (BAMBER et al., 2004; YAN; CHEW, 2011) .

Table 4: Analysis result of normality test and Kruskal-Wallis Test

Factors	Normality test			Kruskal Wallis test	
	Statistic	df	Sig.	X ²	Sig.
Employees competence	0.731	274	0.000	3.184	0.528
Technical knowledge of the firm	0.746	274	0.000	2.205	0.698
Client/consumer cultural beliefs	0.911	274	0.000	13.606	0.009*
Clients/end-user sophistication and technical knowledge base	0.882	274	0.000	6.706	0.152
Quality culture of firm	0.89	274	0.000	16.701	0.002*
Availability and cost of energy	0.889	274	0.000	4.906	0.297
Company's competitors and their strategies	0.871	274	0.000	1.614	0.806
Support enterprises like banks/investors/manufacturers	0.902	274	0.000	9.111	0.058
Macroeconomic environment	0.804	274	0.000	4.964	0.291
Availability of suitable transport and communication networks	0.789	274	0.000	15.875	0.003*
Availability of technology	0.789	274	0.000	1.539	0.820
Innovation	0.811	274	0.000	7.824	0.098
Political /legal environment	0.826	274	0.000	9.75	0.045*
Client/consumer buying behaviour	0.905	274	0.000	6.362	0.174

Client size of income (client/customer purchasing power)	0.853	274	0.000	3.119	0.538
Market demographic characteristics	0.903	274	0.000	25.004	0.000*
Firm's Area of specialisation/core competences	0.842	274	0.000	6.303	0.178
Level of prevailing competition in the market	0.846	274	0.000	2.489	0.647
Client/consumer social status	0.901	274	0.000	3.340	0.503
Client location and/or distance to market	0.885	274	0.000	7.030	0.134
Type of client (private or public)	0.905	274	0.000	8.053	0.090
Clients expectations in terms of (time, cost & quality)	0.801	274	0.000	12.845	0.012*
Company's subcontractors/suppliers	0.906	274	0.000	12.031	0.017*
Company intermediaries	0.915	274	0.000	1.291	0.863
Government agencies and administrators	0.907	274	0.000	14.265	0.006*
Age of the firm	0.894	274	0.000	6.778	0.148
Size of the firm	0.841	274	0.000	4.197	0.380
The grade/categorisation of company	0.899	274	0.000	8.409	0.078
Number of clients to be reached	0.908	274	0.000	6.429	0.169

Source: Researchers' analysis (2018)
 df = 4, *p-value < 0.05

4.2. Factors influencing the choice of marketing strategies

Table 5 shows the result of the analysis of the construction professionals' perception of the factors influencing the choice of the marketing strategies adopted in their firms. From the Table, it can be seen that the top 10 most influential factors of market strategy decisions are: Employees competence (MIS = 4.26), technical knowledge of the firm (MIS = 4.25), macroeconomic environment (MIS = 4.07), innovation (MIS = 4.07), availability of technology (3.97), firm's area of specialisation / core competencies (3.97), client size of income (client/customer purchasing power) (MIS = 3.95), level of prevailing competition in the market (MIS = 3.93), political /legal environment (MIS = 3.92), and size of the firm (MIS = 3.91).

This finding supports the reports of Magu (2014), Gichuki and Ogollah (2014) and Antariksa (2014). Magu (2014) reported that the country's overall macroeconomic environment influences the choice of marketing strategies adopted by organisations. Gichuki and Ogollah (2014) concluded that the choice of marketing strategy is influenced majorly by innovation, technology and the employees' competence, and services quality of an organisation.

Gyamfi (2015) found out that the failure of organisations to adopt e-marketing strategy is largely due to firms' technological incompatibility, lack of knowledge, technological disorientation and stakeholders' non-readiness. This implies that organisations that have the requisite technology and competent and knowledgeable employees would adopt e-marketing strategy. Thus, the availability of technology coupled with competent employees and technical knowledge of the firm, influence a firm's choice of adopted marketing strategies.

Wikström and Normann (1994) posited that business is becoming more knowledge-intensive in all companies, and corporate investment in education and training is more extensive than ever before. Alvesson and Spicer (2012) pointed out the assumption that supports the importance of company technical knowledge and employees' competence. It was stated that as the pace of change increases, knowledge development among the members of the company becomes the key to competitiveness; to remain in the front line.

This result also supports the observation of Antariksa (2014). It was observed that political, the company's market opportunities and external threats, company resource strengths, competencies and competitive capabilities are variables that affect the selection of suitable marketing strategy. According to Ojo (2011); Alwashi et al. (2017); Ogbu (2017), one of the most important and effective marketing strategies adopted by construction firms are Maintaining a strong pool of professionals to boost company image.

This highlights the importance of a firm's technical knowledge and competence of its employees among others. Since working class are increasingly becoming more sophisticated (ADLER, 2002), the most effective way for firms to remain on top of its competitors is to 'hire smart and competent people and let them talk to one another' (DAVENPORT;PRUSAK, 1998). According to Kogut and Zander (1992), firms use the creation and transfer of knowledge within an organisation as a central competitive tool. Thus, firms succeed on the basis of their knowledge (GRANT, 1996).

Maintaining a strong pool of professionals entails employing and keeping qualifies and experienced professionals who are competent enough to project the image of the company in its entire ramification. Thus, retaining best hands even in times of economic downturn is critical to the survival and existence of any construction firms.

The role of political, economic and social environments cannot be overstressed when issues of work opportunities and profit generations of a firm is concerned. These form the major part of the external environment and influence the activities of most businesses. External environments fluctuates and is never static; firms ability to respond is dependent on the ease of adaptability. Thus, the strength of the marketing functions reveals the survival and adaptation of businesses to the political, legal, economic and social environments.

In the United Kingdom for example, a lot of changes have been reported regarding the marketing function of construction organisations in response to external environment. These changes include methods of placing contracts, emphasis on improvement of quality,

innovations, technological advancement, levelling of trade cycle, clients' purchasing powers and buying behaviours, and higher competition among firms (YISA et al., 1996).

The analysis also revealed that the least five (5) most factors influencing the choice of marketing strategy are; Government agencies and administrators (MIS = 2.98), company intermediaries (MIS =2.98), support enterprises like banks/investors/manufacturers (MIS = 2.96), client/consumer buying behavior (MIS = 2.84), and company's subcontractors/suppliers (MIS = 2.78). This finding, however, is not in agreement with Magu's (2014) report.

According to Magu (2014), the top most important factors considered by an organisation in adopting certain marketing strategy are the availability of support enterprises like banks, shopping centres and retail outlet, business intermediaries, business suppliers. This underscores the fact that the factors that have the greatest influence on the marketing decision of non-construction based organisations could differ from that which influences construction based organisations. This will, however, require a separate investigation to ascertain.

Overall, it is vital to note that all the factors assessed are important to marketing decisions. Their roles at various stages of development of marketing policies and strategy are dependent on the marketing needs and objectives of the firm. The average mean item score of the factors is 3.56 (71.20%), implying that they are critical factors that affect the choice of marketing strategy adopted by construction firms.

Table 5: Factors influencing the choice of marketing strategies

Factors	N	MIS	STD. DEV.	RANK
Employees competence	274	4.26	0.954	1 st
Technical knowledge of the firm	274	4.25	0.956	2 nd
Macroeconomic environment	274	4.07	0.984	3 rd
Innovation	274	4.07	0.994	4 th
Availability of technology	274	4.05	1.003	5 th
Firm's Area of specialisation/core competencies	274	3.97	0.989	6 th
Client size of income (client/customer purchasing power)	274	3.95	0.926	7 th
Level of prevailing competition in the market	274	3.93	1.044	8 th
Political /legal environment	274	3.92	1.144	9 th
Size of the firm	274	3.91	1.040	10 th
Availability of suitable transport and communication networks	274	3.86	1.209	11 th
Company's competitors and their strategies	274	3.83	0.981	12 th
Clients expectations in terms of (time, cost & quality)	274	3.82	1.189	13 th
Quality culture of firm	274	3.64	1.011	14 th
Clients/end-user sophistication and technical knowledge base	274	3.59	0.918	15 th
Client location and/or distance to market	274	3.54	1.201	16 th
The grade/categorisation of company	274	3.47	1.063	17 th
Client/consumer social status	274	3.35	1.229	18 th
Age of the firm	274	3.32	1.213	19 th
Type of client (private or public)	274	3.27	1.240	20 th

Market demographic characteristics	274	3.26	1.267	21 st
Availability and cost of energy	274	3.17	1.230	22 nd
Client/consumer cultural beliefs	274	3.15	1.080	23 rd
Number of clients to be reached	274	3.03	1.288	24 th
Government agencies and administrators	274	2.98	1.256	25 th
Company intermediaries	274	2.98	1.201	26 th
Support enterprises like banks/investors/manufacturers	274	2.96	1.317	27 th
Client/consumer buying behaviour	274	2.84	1.286	28 th
Company's subcontractors/suppliers	274	2.78	1.085	29 th

Source: Researchers' analysis (2018)

4.3. Degree of variation among respondents from different zones

Having observed a 27.59% disagreement among the professionals regarding each of the factors (see result on Table 4 above), an overall comparison was made with a further analysis using Kruskal-Wallis test at 95% confidence level was conducted, as indicated in Table 6. This was carried out to ascertain if there is variation in the views of the professionals on the factors using the MIS values of each professional group.

The test showed that there is no significant difference in the ranking of the factors influencing the choice of marketing strategies adopted by construction firms. There seem to be consistencies in the perception of the various professionals regarding the variables. These variables recorded a significant p-value of above 0.05 (i.e. 0.182).

Since 100% of the factors are considered when making a decision regarding the marketing strategy to adopt for effective improvement of the performance of construction firms, it was then concluded that there is agreement among the respondents regarding the variables influencing the choice of marketing strategies adopted in the construction industries of developing countries. Thus, hypothesis (H₀) which states that there is no statistically significant difference in the perception of construction professionals regarding the factors influencing the choice of marketing strategies adopted by construction firms is, therefore, accepted, and the alternative hypothesis (H₁) is rejected.

Table 6: Overall comparison of professionals perception of marketing strategies of construction firms

	Respondent group	Mean Rank	Chi Sq.	P- value	Decision
Factors influencing choice of marketing strategies	Bldr.	105.31	6.252	0.182	Accept
	Q.S	149.64			
	Arch.	133.86			
	Engr.	142.53			
	Est. Surv.	143.58			

Source: Researchers' analysis (2018).

5. CONCLUSION AND RECOMMENDATIONS

Adopting suitable marketing strategies have the tendency to positively improve a firm's performance, client satisfaction and overall revenue generation drive of a firm. The study adopted a questionnaire technique in collecting data on the perception of construction professionals on the factors influencing the choice of marketing strategies adopted by their firms. The outcome of this study will help construction professionals and construction-based firms to devote and utilize a good percentage of managerial and organisational resources in the best way possible, on the most important variables that influence marketing decision for better marketing strategies to strengthen their competitive position and profit maximization and revenue drive.

This study will help construction management researchers and industry practitioners to advance their knowledge of marketing concepts and construction marketing strategies for better industry performance and market penetration. This study assessed the perception of construction professionals regarding the factors influencing the choice of marketing strategies adopted by construction firms in Nigeria. The study revealed that employees' competence, technical knowledge of the firm, macroeconomic environment, innovation, and availability of technology, are the major factors that influence the choice of marketing strategy adopted by construction firms.

The study, thus, concluded that the firm's employee knowledge base and competencies and technological innovation plays a critical role in the adoption of suitable marketing strategies in the construction industry of Nigerian. Also, there is agreement among construction professionals regarding the factors influencing the choice of marketing strategies adopted by construction firms.

Based on the findings and conclusion, the study made the following recommendations;

- 1) Construction firms should ensure that they keep their best and competent staffs regardless of the economic situation, this is critical to the survival of the firms.
- 2) Construction companies should invest and embrace innovations, new technology and modern information in order to implement a suitable marketing strategy. This will differentiate them from their competitors. Innovative strategies will sure make them

remain afloat of competitors and improve the internal marketing function and image of the companies

- 3) Construction firms should set up a commercial department and employ marketing experts to complement the efforts of the technical staffs who are also involved in the marketing activities of the firm. While those firms with the commercial department already: marketing management expert should be engaged to assist in marketing the firm's products and services, in addition to complementing the efforts of technical staff.

The limitation of the study is the paucity of publications on marketing in construction unlike studies on general business marketing. Also, the factors used for the study is not exhaustive of the factors considered in the course of making choice of marketing strategies.

6. FUTURE RESEARCH DIRECTION

Construction firms should ensure that there is continuous improvement in the adoption of marketing concepts and management support is fundamental to the survival of marketing functions. Studies on the adoption of marketing in construction are still emerging and the concept is yet to be fully embraced in most developing countries of the world. A study that examines the factors that trigger certain marketing strategies employed by oil and gas firms could be embarked upon, especially at the Niger-delta region of Nigeria or similar regions in other developing countries.

This would enable more factors that affect the choice of marketing strategies to be identified through an interview, brainstorming nor brainwriting among others, in addition to the use of a questionnaire. A study that would examine the marketing strategies employed by oil and gas firms should be embarked upon. Also, a study that will confirm if the factors that are critical to the marketing decision of non-construction based organisations differs significantly with those which influences construction based organisations, should be carried out.

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