PERCEIVED RISK IMPACT ON MARKETING OF CONSTRUCTION PROFESSIONAL SERVICES

Ojo, Grace Kehinde; Ebunoluwa, Esther Ilori
Department of Quantity Surveying, Faculty of Environmental Design and Management, Obafemi Awolowo University, Ile-Ife, Osun State, Nigeria
Odediran, Sunday Julius
Department of Construction Economics and Management, Faculty of Engineering and Built Environment, University of Cape Town, Rondebosch 7701, Cape Town, Western Cape, South Africa

Abstract
Risk is inevitable in all aspects of life including the construction industry. Its impact is evident in every activities of construction in which marketing of professional services cannot be left out. Therefore, this paper examined the impact of risk on marketing of the services rendered by the construction professionals with a view to enhancing their marketing outcome. Twenty- one risk factors were identified for assessment by the construction professionals through the administration of questionnaire. Architects (72), Engineers (91) and Quantity Surveyors (73) were systematically selected in Lagos State, Nigeria. Data collected were subjected to relative importance index (RII) and factor analysis. Close competition between the client and other competitor was the most significant risk associated with the marketing of construction professional services followed by tough competition. The result of factor analysis reduced the identified risks into five major factors; which were related to clients' expectation, stakeholders' relationship, cost related, ethics and government influence and economic-related factor. The study concluded that the impact of client professional relationship has a high impact on the marketing of construction professional services. Therefore, it is recommended that these factors should be given adequate and prompt consideration in order to reduce its adverse effects on the marketing objectives.

Keywords: Construction professionals, Marketing, Professional services, Risk

1 Introduction

Marketing is an important function for the success of companies. Effective marketing plays an important role in the overall success of companies and is critical for any business to grow in the competitive business environment. Developing marketing strategies can provide significant advantages for companies over their competitors. However, as Cicmil and Nicholson (1998) stated, many companies do not realize the true worth of marketing until it is too late to change.

Professional service providers are qualified advisors and problem solvers, even though it may encompass some routine work for clients. Marketing, according to United States Department of Agriculture (USDA n. d), is that part of the business that transforms production activities into financial success. It usually helps construction companies to differentiate themselves from their competitors, cultivate and/or keep clients, and thereby create competitive advantage. A professional association needs to market the profession for a number of key objectives as established by Allred (2005). Marketing makes the public aware of the services offered and

also increase familiarity among client. Moreover, risk is evitable in all aspects of life including construction activities. Marketing is one of the construction activities which is not an exception that is being impacted by risk. Risk according to Bowen and Edward (1998) is the probability that adverse effects will occur during a stated period of time. Also, Ojo (2010) established that risk is the probability that unfavourable outcome will occur. Risk is an important issue to contractors as well as clients and consultants in the industry due to its inevitability in all aspects of construction. The amount of fee allocated to marketing exercise by any organization will determine the level of benefits to be derived from marketing their services. Despite the fact that marketing is being practice among the professionals, yet they still face a lots of challenges due to the level of competition experienced, therefore, it is of importance that appropriate strategies should be adopt in order to improve the profits and attract higher patronage. Although, the purpose of this research is to examine the risk associated with the services rendered by the construction professional in the area of marketing.

2 Literature review

The professionals in the construction industry bring together expertise and skill to work towards a common goal of satisfying their client. Hussin and Omran, (2009) described construction professionals as the Architect, Engineer and Quantity Surveyor among others. The construction professionals are known to be the most responsible person in a project especially when technical works are concerned. The expertise of each construction professionals must be careful in providing their services as they are answerable to any sinfulness occurred during the constructions.

2.1 Related Studies on Risks and Marketing of Construction Professional Services

Many researchers have worked on the concept of marketing in the construction industry. Morgan (1990) investigated marketing of consulting engineering services and discovered that very few firms had their own marketing departments. Philip and Richard (1977) investigated marketing professional services and found that professionals would like to believe clients would come to them without any organized effort on their part, simply as a result of achieving a good reputation, and that they do not have competitors or that other firms are not aggressively cultivating the same pool of clients. They posit that professional firms that want to grow and prosper will have to shed this attitude and confront the marketing issues and challenges. Ojo (2011) proposed effective marketing strategies among the construction professionals and concluded that the level of practice of marketing among professionals in Nigerian construction industry was very low and inadequate compared to the level and keenness of competition in Nigerian construction industry.

Need for marketing of construction professional services was carried out by Allred (2005) and found out that it improved familiarity among the clients, improved profitability, brings better sales among others. The research did not considered the risk that come along with the marketing of the activities performed by the professionals. In addition, Olujide (2002), Allred (2005) and Ojo (2012) studied marketing strategies employed by construction professionals but did not considered the risk that actually come with each of the strategies. Despite the fact that many research works on marketing exist, few have been recorded on risks associated with the marketing of professional services in construction industry. Hence, this research work will focus on risk factors that influence the marketing of construction professional services in Lagos State, Nigeria.

2.2 Risk Factors associated with the Marketing of Construction Professional Services

Professional Architects, Engineers, Quantity Surveyors, project managers and other consultants often find themselves doing work which could expose them to legal liability. Yet

few understand the risks to which they are exposed or the standard of skill and care which the law expects (Alan n.d). Ojo (2010) emphasized that the effect of risk is assessed through the risk factors. Factors that influence marketing of any business were identified from literature (Table 1), meanwhile risk can be assessed through their factors and risk is anything that has negative effects on any outcome of an exercise, therefore, those factors are seen as risk associated with the marketing of construction professional services. For example, Pheng (2003) opines that high spending level of customer is one the factors that limits the services of the construction professionals. This is so, since net disposable income of the customers (Clients) is the primary element that contributes to the sales of any product in the target market.

Furthermore, high level of clients' awareness, inconsistent Government policies as revealed by (Hoxley, 1998; Smyth, 2004) are risks associated with the marketing of professional services. The intelligent or sophisticated client has previous experience of purchasing professional services and enters into each new service encounter with preconceived ideas of what to expect. Also, government policies affects the services rendered by the professionals. Assaults on Professional codes of ethics are another risk factor that limits the marketing of the services rendered by the construction professionals. This is so as the services rendered by professionals such as the Quantity Surveyors are affected by the rules against advertising at least to some extent. According to Philip and Richard (1977), association codes of ethics have erected stringent rules against commercial behaviour. In addition, changing expectations of clients is considered as a risk factor by Geraldine (2006) who reported an important change in customer expectations, which actually influenced the professional's response to these new conditions.

Likewise, tough competition experienced by the construction industry makes it a major task for the professionals in marketing their services. The table below shows the identified factors that influencing the marketing of any business which the study perceived to be the risks impacting marketing of construction professional services.

Table 1. Factors influencing marketing identified from literature

Risk factors	Author(s)
High spending level of Customer	Smyth, 2004
High cost of investing on Electronic Commerce	Brassington & Pettit, 2003; Pheng, 2003
Inconsistent Government Policies	Pattulo, 2003
High cost of innovating products	Smyth, 2004; Bennett, 2005
Rapid increase of Consumer Demand	Geraldine, 2006
Demographic factors	Pheng, 2003
Unavailability of Land and Restriction from the Government	Pettinger, 1998; Pattulo,2003
High level of Clients' awareness	Hoxley, 1998; Basil, 2009
Tough competition	Powell et al., 1999
Lack of infrastructure	
Poor power supply	
Changing clients' expectation	Philip & Richard, 1977; Geraldine, 2006
Assaults on professional Codes of Ethics	
Disdain for Commercialism	Hanlon, 1994
Association Codes of Ethics	Philip & Richard, 1977
Inadequate security	
Close relationship between the client and competitor	
Escalating high cost of technology	Geraldine, 2006
Globalisation	Geraldine, 2006
Increased material costs and labour shortages	
Transportation challenges	

3 Research Methodology

This research makes used of quantitative approach since those factors were perceived to be risk impacting marketing of construction professional services. Total population for the study were 538 professionals which were stratified into three groups comprising of 161 Architectural firms, 168 Quantity Surveying firms and 209 Engineering firms (ARCON, 2008; QSRBN, 2010 and COREN, 2008) respectively cited in Babatunde (2011). Systematic sampling was then used to select a sample from the total population. To calculate the required sample size for this study, the study followed the submission of Trochim (2000) that 10-30% is adequate for a small population and as low as 1% is adequate for a large population. The calculation of the required sample size is according to Equation (1):

$$n = \frac{t^2 \times p\,(1-p)}{m^2} \quad \text{---------- (1)}$$

Where, n = required sample size
t = confidence level at 95% (standard value of 1.96)
p = estimated professional firms in the study area expressed as decimal 0.3 (30%)
m = margin error at 5% (standard value of 0.05)

Therefore,

$$n = \frac{1.96^2 \times 0.3\,(1-0.3)}{0.05^2} = \frac{3.8416 \times 0.3\,(0.7)}{0.0025}$$

$$= \frac{3.8416 \times 0.21}{0.0025} = \frac{0.8067}{0.0025}$$

$$= 322.68 = 323$$

From the above calculation, three hundred and twenty three (323) firms were sampled indicating that 323 questionnaire were administered on professionals in the Architectural firms, Quantity Surveying firms and Engineering firms in the study area. The retrieved and fully completed questionnaire comprised (72) architects, (91) engineers and (73) quantity surveyors which is equivalent to 73.07% response rate. This can be considered adequate following the assertion of Morsan and Katon, (1979) that a study could be considered little or no value if the response rate is less than 30-40%. Moreover, Relative Importance Index (RII) and Factor analysis were used to analyse the data collected. Relative Importance Index (RII) was used to reflect the significant measurement of the factors. This method of analysis has been employed by many construction management researchers including Akintoye (2000); Wang *et al* (2001) and Odeyinka (2003).

All the numerical scores of each of the identified factors were transformed to risk indices to determine the relative ranking of the factors. Relative Importance Index (RII) was evaluated using the expression in equation (2):

$$RI1 = \frac{\sum w}{A \times N}; \quad (0 \le \text{index} \le 1) \text{ ---------- (2)}$$

Where: w = weighting given to each factor by the respondents, and ranges from 5 to 0
A = highest weight (i.e. 5 in this case) and N = total number of respondents.

Furthermore, factor analysis was also used to reduce the variables to a few that represents some combination of original variables by factor extraction. According to Fellows and Liu (2003), such factor extraction is done by means of principal components; which transforms the original

set of variables into a smaller set of variables. The extracted factors were named based on the loading items upon which generalization is being made.

4 Findings and Discussion

4.1 Background Profile of the Respondents

The result from Table 1 shows that 40.3% of the registered firms are engineering companies, 30.9% are Quantity Surveying and 28.4% Architectural. Also, the highest respondents as showed on the table were Engineers (38.56%), 30.93% are Quantity Surveyors while 30.51% of the respondents came from Architects. The Table 1 also shows that 33.5% of the respondents are member of NSE, 32.2% are member of NIQS and 32.2% are member of NIA. This shows that 97.9% are members of particular professional bodies; therefore, they are able to provide vital and adequate information necessary for this study. From Table 1, it may be seen that the entire respondent had minimum of HND and others with higher degree had B.Sc. degree holders (66.1%). None of the respondents possess a qualification below HND; hence the respondents are qualified to practice in their respective professional and are therefore deemed competent to provide the needed information for the study.

Table 2. General particulars of the Respondents

Respondents' particulars	Frequency	Percentage (%)
Types of Firms		
No response	1	0.4
Architecture	67	28.4
Engineering	95	40.3
Quantity Surveying	73	30.9
Total	236	100.0
Designation of Respondents		
Quantity Surveyors	73	30.93
Engineers	91	38.56
Architects	72	30.51
Total	236	100.0
Professional Affiliation		
No response	5	2.1
NIQS	76	32.2
NIA	76	32.2
NSE	79	33.5
Total	236	100.0
Academic Qualification		
HND	50	21.2
B.Sc.	156	66.1
M.Sc.	24	10.2
Ph.D	5	2.1
Others	1	0.4
Total	236	100.0
Professional Experience		
No response	3	1.3
1-5	47	19.9
6-10	107	45.3
11-15	70	29.7
Over 20	9	3.8
Total	236	100.0
Number of Employees		
No response	2	0.8
1-5	41	17.4
6-10	102	43.2
11-15	50	21.2
16-20	25	10.6
>20	16	6.8
Total	236	100.0
Types of Work Engaged		
Building construction	105	44.49
Civil engineering construction	63	26.70
Both building & Civil engineering construction	51	21.61
Industrial engineering construction	17	7.20
Total	236	100

(Source: Authors' fieldwork, 2015)

4.2 Perception of the Impact of Risk Factors on the Marketing of Construction Professional Services

The study sought to know the impact of the identified risk factors on the marketing of construction professional services. Relevant data collected in this regard is presented in Table 3. Result from Table 3 indicates that 10 factors out of 21 factors (48%) have a high impact on marketing outcome of construction professional services. The result shows that the factors with very high impact are close relationship between the client and other competitors, followed by tough competition, inconsistent government policies, association codes of ethics, and unavailability of land and restriction from the government. Unavailability of land (expensive amount of land, approval etc) in Lagos State limited the amount of services to be rendered by the professionals due to the fact that clients were unable to purchase and the time awaiting for the government approval. This finding is because the impact of these factors on marketing of the services of construction professionals is aligned to the findings of previous studies available in literature (Hoxley, 1998; Pheng, 2003 and Geraldine, 2006).

Table 3. Impact of the Identified Risks on the Marketing of Construction Professional Services

Risk Factors	RII	Rank
Close relationship between the client and competitor	0.78	1
Tough competition	0.75	2
Inconsistent Government Policies	0.66	3
Association codes of ethics	0.64	4
Unavailability of Land and Restriction from the Government	0.60	5
Changing clients' expectation	0.58	6
Assaults on professional Codes of Ethics	0.57	7
High level of Clients' awareness	0.57	7
High spending level of Customer	0.56	9
High cost of investing on Electronic Commerce	0.51	10
Increased material costs and labour shortages	0.49	11
Poor power supply	0.49	11
High cost of innovating products	0.49	11
Transportation challenges	0.48	14
Lack of infrastructure	0.47	15
Escalating high cost of technology	0.45	16
Inadequate security	0.45	16
Rapid increase of Consumer Demand	0.43	18
Disdain of Commercialism	0.42	19
Demographic factors	0.39	20
Globalisation	0.36	21

Key: RII = Relative Importance Index; R = Rank

4.3 Results of the Factor Analysis Performed

Table 4 shows the result of factor analysis conducted. The factor analysis reduced the identified risks to five major risk factors that were found to have very high impact on marketing of construction professional services. The extracted risk factors were identified as economic related risk, cost related risk, ethics and government influence risk, clients' expectation related risk, and stakeholders' relationship risk. It was observed from Table 4 that the first dominant factor accounting for 30.08% of the observed variance and all the five factors accounted for 64.03% of the observed variance. This shows that the factors identified by factor analysis have very high impact on marketing of construction professional services. The Table also shows

how the items loaded to factors after rotation. The cumulative percentage of variance explained by the first five factors is 64.03%, in other words, 64.03% of the common variance shared by the 21 variables can be accounted for by the five factors.

Table 4. Rotated component matrix component

S/N	Marketing related risk	1	2	3	4	5	Mean Values	Rank
	Economic-related risk						0.6499	5
1	Poor power supply	0.736						
2	Lack of infrastructure	0.692						
3	High spending level of Customer	0.680						
4	Transportation challenges	0.662						
5	Escalating high cost of technology	0.632						
6	Rapid increase of Consumer Demand	0.622						
7	Globalization	0.525						
	Cost-related risk						0.6740	3
8	High cost of investing on Electronic Commerce		0.793					
9	High cost of innovating products		0.701					
10	Demographic factors		0.693					
11	Increased material costs and labour shortages		0.509					
12	**Ethics and government influence risk** Inconsistent Government Policies			0.682			0.6540	4
13	Association Codes of Ethics			0.671				
14	Assaults on professional Codes of Ethics			0.658				
15	Unavailability of Land and Restriction from the Government			0.605				
16	**Clients' expectation-related risk** Inadequate security				0.789		0.7280	1
17	Changing clients' expectation				0.726			
18	Disdain of Commercialism				0.669			
	Stakeholders' relationship risk						0.7075	2
19	High level of Clients' awareness					0.718		
20	Tough competition					0.708		
21	Close relationship between the client and competitor					0.697		
Eigenvalue =		*6.32*	*3.10*	*1.57*	*1.35*	*1.11*		
% of variance =		*30.08*	*14.78*	*7.46*	*6.45*	*5.26*		
Cumulative % =		*17.67*	*31.75*	*43.99*	*54.93*	*64.03*		

Also, the result revealed that all the reduced factors had very high mean value ranging from 0.7280 – 0.6499 which indicates their high level of impact on the marketing of construction professional services. Clients' expectation related risk had the highest mean value (0.7280), this implies to mean that, client/client executives are becoming more sophisticated in selecting, using, increasingly, and replacing firms. The second rank was stakeholders relationship risk (mean value = 0.7075). Good relationship between the client and the competitor hinders some

qualified professionals from achieving their aim even with effective marketing, thereby making it one of the biggest challenges facing the professionals in marketing their services.

5 Conclusion and Further Research

Based on the aim of this study, which set out to examine the impact of risk factors on the marketing of construction professional services in order to enhance marketing outcome, the following conclusions were made from the results of the analysis of data contained in the previous discussions. Three of the identified risk factors had very high impact on the marketing of construction professional services. These factors included close relationship between the client and other competitors, tough competition and inconsistent government policies. Furthermore, factor analysis reduced identified variables to few components, these included cost related factor, ethics related factor and government influence factor. The research work focused on Lagos State as the study location, further research can examine other locations within the country. Other professionals not captured in this research can also be the focus of future research.

6 Recommendations

Marketing activities should be more encouraged among construction professionals by improving on the fee allocated to marketing related activities. Also, construction professionals should use appropriate strategies in order to improve profit and attract higher patronage. Significant risk factors should be given adequate consideration by the construction professionals in order to reduce the occurrence and negative impacts on the marketing outcome of their professionals 'services.

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