



Adoption of Electronic Marketing Tools in the Nigerian Construction Industry

Tolulope S. FAWALE^{1*}, Monday O. IMAFIDON², Chukwuemeka P. OGBU³

^{1,2,3}Department of Quantity Surveying, University of Benin, Benin City, Nigeria

^{1*}tolulope.fawale@uniben.edu, ²monday.imafidon@uniben.edu, ³chukwuemeka.ogbu@uniben.edu

Abstract

There is a growing trend of e-marketing tools which have been enhanced by internet penetration in the Nigerian construction industry. To promote construction services through e-marketing tools, there is the need to address the concerns of firms on what is required to engage effectively with stakeholders. The study therefore assessed the perspectives of construction professionals on the level of awareness and frequency of use of e-marketing tools in Edo State, Nigeria. Respondents were selected from construction professionals who are involved in pre-design, design and construction phases of projects in Edo State. With the aid of a structured questionnaire, data were collected and analysed using tables, percentages and mean scores. The study found out that the level of awareness of professionals was high on e-marketing tools like WhatsApp (MS= 4.08), YouTube (MS=3.88) and E-mail (MS= 3.85) but low on Mobile monkey (MS=1.53), Hootsuite (MS=1.45) and Trello (MS=1.33). Conversely, E-mail, Facebook and WhatsApp accounted for 100% usage on the frequency of use of e-marketing tools by construction professional. Hence, the study concluded that the greater the level of awareness of e-marketing tools, the higher their frequency of use in construction projects. It is essential to simultaneously improve awareness and use of the e-marketing tools due to their relevance in construction projects. The study recommended that construction consultants should encourage bidders on the use of e-marketing tools for construction project management, while government should prioritise continuous investment in internet connectivity, power and digital infrastructure to support the growth of e-marketing.

Keywords: Construction industry, construction professionals, construction projects, e-marketing, project delivery.

1.0 Introduction

In recent times, the traditional marketing method adopted by firms for transacting goods and services to customers is gradually phasing out with the advent of electronic marketing system (e-marketing) which involves the use of internet and information technologies to perform marketing functions (Iddris and Ibrahim, 2015). The fact that firms are producing better goods and services does not necessarily assure business success if not aided by marketing (Perera et al., 2015). Marketing generally is accepted as a veritable service that links production and consumption of goods and services for the satisfaction of consumers' needs (Otika et al., 2022). E-marketing is now a trending platform for firms to advertise, promote, and publicise their products since majority of their target audience spend a lot of their time online such as social media, mobile applications and the internet (Kripesh et al., 2020; Pachbhai et al., 2022). For instance, total number of populations in the world today is estimated to be approximately 8.1 billion, out of which 5.07 billion are social media users equating to 62.6% of global population (Statistic, 2024). Furthermore, Asia has the largest social media users of over 2.93 billion, followed by Europe with around 750 million users and Africa with 427.05 million equating 5.27% global populations (Worldwide Digital Population, 2024). Nigeria, being one of the top countries in Africa, was ranked by global research platform to have spent an average of 04.20 hours on social media platform daily. This could be as a result of younger population between the ages of 16 and 24 years serving as market drivers globally (Digital, 2024). Therefore, the possibilities of firms to attract a larger audience to companys' products are relatively high since out of the 205.4 million active phone users in Nigeria, there are 36.75 million social media users with an internet penetration of 45.5% (Digital, 2024). These statistics shows that the future of social media marketing in Nigeria is appearing brighter by the day, as many Nigerians are now using the platform to market their goods and services (Okposo, 2022).

The global expenditure on social media marketing accounted for \$234 billion US dollars in 2024, and expected to increase to \$345.75 dollars in 2029 (Statistic, 2024). These huge investments suggest the need for construction industry to adopt e-marketing as an integral part of every successful planning, from start to finish (Dahnil et al., 2014; McCann and Barlow, 2015). There is no doubt that e-marketing has opened more opportunities and possibilities to grow businesses in local and international market with the aid of computer, mobile smart phones and improved access to internet facilities (Salome and Ofunre, 2019). Firms are faced with the challenges of implementing e-marketing as a result of high start-up costs in digital marketing, lack of technical skills and knowledge, and access limitations to the internet (Das et al., 2021). The challenges of

not adopting e-marketing by nations, firms and consumers could negatively affect the transformative business outputs (Agbonifoh *et al.*, 2007). The level of awareness and frequency of use of e-marketing tools has transformed how businesses connect with clients globally. However, the uptake of these technologies by construction professionals remains relatively low, since there is still much reliance on traditional marketing methods for disseminating information (Perera *et al.*, 2015). Equally, there exists a low level of awareness and adoption of e-marketing tools among construction professionals. According to Perera *et al.* (2015), this resulted from the lack of understanding of how the tools can be used to build brand visibility required to engage with clients. Adedeji *et al.* (2018) further expressed the misconception that e-marketing can only work for industries like manufacturing, banking and entertainment and not the construction industry, and this has been the major problem behind the adoption of this technology. In addition, some older construction professionals lack the technical know-how or confidence to manage the online platform effectively, therefore preferring face-to-face interaction and seeing e-marketing as time consuming (Adedeji *et al.*, 2018).

Construction services need to be marketed to target clients and firms (Tang *et al.*, 2020). This might not happen unless appropriate contemporary marketing tools combined with technology are used to convey construction firm values to potential clients (Hendricks, 2015). Navandar *et al.* (2021) attributed construction to be a risky business and therefore the chances of failure are on the high side. A good way to minimize this failure is by deploying digital marketing tools and strategies to reach customers and promote their goods and services. The building of an online presence by firms is a veritable way of redefining marketing practices among construction professionals if they must remain in business with their contemporaries (Salome and Ofunre, 2019). Therefore, in order for construction firms to thrive in this digital era, it is important to identify which platform suits their aim and objectives. Limited studies have investigated the view of consultants on e-marketing awareness and adoption in the Nigeria construction industry. The aim of this study, therefore, is to assess the perspective of construction professionals on the level of awareness and the frequency of use of e-marketing tools in the Nigeria construction industry.

The adoption of e-marketing in most developing nations are still lagging behind since they are in their infant stage and are unable to achieve their full potentials (Faloye, 2014). For instance, existing literatures have dealt with organizations approaches to various business strategies and how well they are able to market their goods and services to reach their consumers in real time (Adedeji *et al.*, 2018; Salome and Ofunre, 2019). These approaches can only be possible if the orientations of organizations are tilting towards information technology (IT) and then, the ability to market their goods and services. Therefore, information technology plays a transformative role if organizations must thrive in e-marketing. Numerous researches have been done on e-marketing, social media marketing, e-business, e-commerce, but few focused on its adoption by construction professionals. Adedeji *et al.* (2018) analysed social media marketing of indigenous construction firms in Nigeria and found that as a necessity every organization must exist in an online platform as a large number of persons are active online and almost all uses one social media app or the other. Sheth and Sharma (2005) studied the opportunities and issues in international e-marketing and found that the level of infrastructure development and building of marketing institutions affects the growth of e-marketing in most developing nations. However, the study of Coviello *et al.* (2003) which assessed the role of e-marketing in contemporary marketing practice found that organization orientation towards information technology is proportional to the level of adoption of e-marketing. Several previous studies have found that there is a strong relationship between e-marketing and service delivery (Parveen *et al.*, 2013; Ahmad *et al.*, 2018). The implementation of e-marketing help to reduce cost, improve services, brand, and increases sales of goods and services to reach a larger audience through the internet (Kaplan and Haenlein, 2010; McCann and Barlow, 2015). The flexibility of e-marketing helps to influence the prevalent market condition at any point in time (Rodriguez *et al.*, 2012). While previous studies have examined the impacts of adopting formal communication tools within the construction industry, the awareness and frequency of use of e-marketing tools for promoting construction projects in Nigeria have been scarcely researched. Understanding the awareness level of e-market tools is essential for assessing their frequency of use in the construction projects

1.1 Electronic Marketing Tools

The means by which professional firms sell their services are referred to as marketing strategies. Conventional marketing tools also known as traditional marketing tools are used to drive these strategies. Tools and strategies employed in the traditional style involves business cards, print ads, posters, billboards, brochure, magazines, newspapers and anything except electronic or digital method to brand service or product (Taherdoost and Jalaliyoon, 2014). The transformation in computer science, technology, the internet, social media and communications online combined with reduce in cost has brought a change in the ways businesses are conducted in the world today (El-Gohary, 2016). Digital technology has transformed the possibilities of using electronic strategies like the web, social media, e-mails in marketing of firm's services (Al-Ghamdi *et al.*, 2014). Digital technology has obviously changed to a great extent the way we communicate,

access information and conduct businesses (Asifulla, 2023). The use of computer and computer network is spreading among construction firms both in contractor and consultancy firms. As working standard are improved by these computers and technology, marketing can be improved by adopting the use of these technological advancement. Shaltoni et al. (2018) argued that e-marketing can make a business globalized once an online presence is established. Construction activities among firms are more concerned with rendering services rather than purchase of goods. Therefore, in marketing these services, traditional methods may not drive home the point as fast, cheap and better than electronic method of marketing. In most of the e-marketing processes, knowledge of the product is gotten online and thereafter delivered physically. In these days of technological advancement, the internet is rapidly becoming the most valid technology and it is used on a daily basis especially in the online shopping services (Jusoh et al., 2020).

According to Allam (2022), electronic marketing is conducted using computers as well as communication technology for the marketing of goods and services. A successful marketing can be brought about by following the trends. In the 21st century, one of the undeniable trends is the rise in technology and improvement in tools and means of communication. Innovation is required for effective marketing (Krasnyuk et al., 2023). The innovation entails, to a large extent, moving from traditional marketing to electronic marketing. While a product is available and the price and whatever strategy that is to be employed, communication must be established in the right place and also promotion must be done on the right place in other to meet targeted customers. In influencing customers and client, marketing communication channels play significant roles as they serve as tools for making two-way communication possible between construction professionals and clients, and also a means of informing clients and customers about new products or services (Krasnyuk et al., 2023). From the comfort of a marketer's location, changes or updates can be made on the platform on different products and clients or customers can see from anywhere in the world, still without leaving their location. This simple advantage makes it only reasonable to adopt the use of electronic tools for marketing. Another marketing strategy taking over the global business and the construction world is the use of electronic tools. Electronic tools are used to drive whatever marketing strategies that is to be used. This happens to be the most effective as construction firms and construction consultants deal more of services than goods. Tools involved in this marketing style are social media marketing such as Facebook, WhatsApp, Instagram, e-mail and website marketing. An x-ray of studies on various e-marketing tools is as shown in Table 1.

Table 1: E-marketing tools

S/N	E-marketing Tools	Authors
1	Whatsapp	Krahl, 2013; Perera, et al. 2015; Fouad, 2017; Etim, et al. 2021; Muneja, 2024
2	E-mail	Perera, et al. 2015; Muneja, 2024; Etim, et al. 2021; Fouad, 2017; Krahl, 2013
3	Youtube	Al-Shehan and Assbeihat, 2021; Muneja, 2024; Krahl, 2013
4	Pinterest	Milder, 2013; Stilin, et al. 2019; Mohelska, and Sokolova, 2018; Krahl, 2013
5	Google+	Al-Shehan and Assbeihat, 2021; Fouad, 2017; Krahl, 2013;
6	Zoom	Perera, et al. 2015
7	Facebook	Al-Shehan and Assbeihat, 2021; Jaas 2022; Muneja, 2024; Etim, et al. 2021; Krahl, 2013
8	Instagram	Jaas 2022; Muneja, 2024; Etim, et al. 2021; Mohelska, and Sokolova, 2018
9	Twitter	Jaas 2022; Muneja, 2024
10	Google Analytics	Muryjas, and Muryjas, 2013; Ward et al. 2023
11	LinkedIn	Perera, et al. 2015; Stilin, et al. 2019; Milder, 2013; Mata, and Quesada, 2014
12	Dropbox	Nuseir, et al. 2023; Raul, et al. 2016
13	Discord	Pokrovskaja, et al. 2021
14	HubSpot	Surana, and Tiwari, 2024; Hossain, and Yafooz, 2017
15	Fiverr	Buffett, 2022; Tongwa, 2024
16	Website Marketing	Etim, et al. 2021; Krahl, 2013
17	Upwork	Tongwa, 2024; Buffett, 2022
18	Kissmetrics	Ganev, 2018; Konyeha, 2020
19	Ubersuggest	Szymanski, and Lininski, 2018; Fontes, et al. 2023
20	Mailchimp	Surana, and Tiwari, 2024; Bilos, et al. 2016; Mohelska, and Sokolova, 2018
21	Buzzsumo	Sokolowski, and Rosi, 2019;
22	Mobile monkey	Simmons, 2008; Babalola, et al. 2020
23	Omnifocus	Sokolowski, and Rosi, 2019;
24	Omnisend	Sokolowski, and Rosi, 2019;
25	Trello	Miszcza, 2023; Miluniec, and Miciuła, 2020
26	Hootsuite	Belghanami, 2022; Thapa, and Skinner, 2015

Table 1: E-marketing tools (Cont'd)

S/N	E-marketing Tools	Authors
27	Crazeyegg	Thapa, and Skinner, 2015
28	Followerwonk	Thapa and Skinner, 2015
29	Blogs	Perera, et al., 2015
30	Skype	Dosumu, et al., 2024
31	Tik Tok	Dosumu, et al., 2024; Thapa, and Skinner, 2015
32	Snapchat	Dosumu, et al., 2024; Muneja, 2024

Source: Authors' Synthesis of Previous Studies

1.2 Electronic Marketing Tools

Different researches carried out show to a large extent that construction professionals are aware of e-marketing tools, especially in the developed countries while in the developing countries, the awareness level is not so impressive. According to Salem et al. (2013), e-marketing is still relatively new especially in developing countries where competition is not that high and resources, infrastructure is bad. Companies are aware that to get maximum utility from offline and online marketing channels, a system for them to work together has to be put in place (Al-Shehan and Assbeihat, 2021). Of all the channels or tools available in marketing electronically, the most adopted are social media tools which include Facebook, twitter and Instagram (Jaas, 2022). Traditional marketing is product oriented while on the other hand, electronic marketing is customer oriented and focuses on potential customers or client (Dosumu, et al., 2024). The level of consumer value and communication with client and customers is growing constantly hence the continuous usage of E-marketing tools (Krasyuk, et al. 2023). According to Liu (2023), marketers noticed digital marketing when it first came out although they did not put much into it. Social media bridges, joins companies, firms, and business are becoming a lot more important in the online world (Al-Shehan and Assbeihat, 2021). These firms include construction consultant firms which prove awareness of EMT's by construction consultant to a certain extent. There has been a shift from traditional marketing to electronic marketing over the years. As stated earlier in the research, construction consultant can reach a wider audience by adopting EMTs, generate leads and carry out promotion of their services. The frequency of use however will depend on various factors. Jaas (2022) noted that 42% of marketing companies globally plan on increasing their spending on social media and also the global spending actually will go up by 10% annually. The use of e-marketing tools has been on the increase due to the activity of people on the website to promote direct trade. According to Shajrawi and Al-Shaikh (2023), people use their smart phones for variety of purposes and it observed that an average of five hours was spent on the phone daily.

2.0 Materials and Methods

This study aims to determine the level of adoption of e-marketing tools in the 21st century by firms/organizations. The original set of e-marketing tools obtained from previous studies were tested through a preliminary survey before arriving at those used for the study (Table 1). This was carefully edited to avoid duplication of variables used. A questionnaire containing the demographic data of respondents and the various e-marketing tools was sent out to construction professionals in Edo State, Nigeria. They were asked to indicate their level of awareness and adoption of each of the e-marketing tools on a Likert scale of 1 = very low, 2 = low, 3 = moderate, 4 = high and 5 = very high. The questionnaire was purposively targeted at the population of construction professionals (builders, civil/structural engineers, quantity surveyors and architect) who are involved in pre-design, design and construction phases of the projects in Edo State. This therefore amounted to a total of 183 professionals sampled for the purpose of questionnaire administration. The construction professionals were contacted via emails and personal contacts, and were requested to fill the questionnaire. Out of the 183 questionnaires administered, 149 suitably filled copies were retrieved and used for the analysis. Based on the opinions of the respondents, the variables were ranked using mean item score techniques and the highest ranked variables were selected. The frequencies of use of the E-marketing tools were grouped into always (>80%), often (>60≤80%), average (>40≤60%), sometimes (>20≤40%), and seldom (≤20%). The respondents were asked to select the E-marketing tools applicable to their construction projects, and to rank the E-marketing tools identified from literature based on their experience on their respective projects. The levels of awareness of e-marketing tools in the construction industry were analysed using mean item score based on the respondents' views. Mean item score was calculated for each variable as follows:

$$ms = \frac{(n1 * 5) + (n2 * 4) + (n3 * 3) + (n4 * 2) + (n5 * 1)}{N}$$

Where:

n1 = the percentage of respondents who choose "totally unaware,"

n2 = the percentage of respondents who chose "unaware,"

n3 = the percentage of respondents who chose "neutral,"

n4 = the percentage of respondents who chose "aware,"

n5 = the percentage of respondents who chose "totally aware,"

MS = mean score and

N = total number of respondents.

3.0 Results and Discussion

Table 2 displays data of the respondents, majority of whom were engineers (39%). Most of the respondents have had at least 6-10 years' work experience in the construction industry. It is expected that such professionals must have been directly involved in project delivery. While most of the respondents are members of their respective professional bodies, it is also shown in that all the respondents are graduates. The data in Table 2 suggests that the respondents are quite aware and suitable to respond to which E-marketing tools are most appropriately used to reach the wider audience.

Table 2: Demographic information of respondents

Characteristics of the Respondents	Frequency	Percentage (%)
<i>Profession</i>		
Architects	34	23
Engineers	58	39
Builders	27	18
Quantity Surveyors	30	20
Total	149	100
<i>Construction Industry Work Experience (years)</i>		
1-5	25	17
6-10	62	42
11-15	30	20
16-20	18	12
Above 20	14	9
Total	149	100
<i>Academic Qualification</i>		
HND/ B.Sc. / B.Tech.	120	80
M.Sc. / M.Tech.	22	15
PhD	7	5
Total	149	100
<i>Professional Qualification</i>		
Member, Nigeria Society of Engineers (NSE)	38	26
Council for the Regulation of Engineering in Nigeria (COREN)	20	13
Member, Nigerian Institute of Quantity Surveyors (NIQS)	17	12
Quantity Surveyors Registration Board of Nigeria (QSRBN)	13	9
Council of Registered Builders of Nigeria (CORBON)	12	8
Nigerian Institute of Building (NIOB)	15	10
Architects Registration Council of Nigeria (ARCON)	14	9
Member, Nigerian Institute of Architects (NIA)	20	13
Total	149	100

3.1 Level of Awareness of E-marketing Tools

The study investigated the level of awareness and the frequency of use of e-marketing tools for construction project. The result indicated that respondents are aware of the majority of e-marketing tools for managing construction projects. From the result on Table 3, WhatsApp ranked first with (MS= 4.08), followed by YouTube (MS=3.88) and E-mail ranked third with (MS= 3.85). Among the least ranked tools are Mobile monkey (MS=1.53), Hootsuite (MS=1.45) and Trello (MS=1.33). The findings show that larger percentage of construction professionals are totally aware of WhatsApp as means of marketing and showcasing their project

delivery and also update progress of work and coordinate activities of site from one location to another. This suggests that respondents are more comfortable using WhatsApp for communication compared to other platforms. The trends in awareness and frequency of use of e-marketing tools are closely related with the findings of Dosumu *et al.* (2024), which indicated that greater awareness corresponds with higher implementation rates. The 2nd ranked tool is YouTube which has emerged as a game-changer for construction professionals who have increasingly explored innovative marketing strategies to showcase their expertise and projects in order to reach their audience globally.

Table 3: Level of awareness of e-marketing tools

S/N	Awareness of E-marketing Tools	MS	Rank
X1	WhatsApp	4.08	1
X3	YouTube	3.88	2
X2	E-mail	3.85	3
X7	Facebook	3.55	4
X31	Tik Tok	3.52	5
X30	Skype	3.48	6
X11	LinkedIn	3.46	7
X32	Snapchat	3.42	8
X5	Google+	3.40	9
X9	"X"	3.35	10
X6	Zoom	3.25	11
X4	Pinterest	3.23	12
X8	Instagram	3.15	13
X29	Blogs	3.05	14
X10	Google Analytics	2.98	15
X16	Website Marketing	2.70	16
X12	Dropbox	2.60	17
X18	Kiss metrics	2.13	18
X14	HubSpot	1.93	19
X13	Discord	1.90	20
X15	Fiverr	1.88	21
X21	Buzzsumo	1.85	22
X17	Upwork	1.73	23
X20	Mailchimp	1.70	24
X27	Crazyegg	1.70	25
X24	Omnisend	1.70	26
X19	Ubersuggest	1.60	27
X28	Followerwonk	1.55	28
X23	Omnifocus	1.55	29
X22	Mobile monkey	1.53	30
X26	Hootsuite	1.45	31
X25	Trello	1.33	32

3.2 Frequency of Use of E-marketing Tools

Table 4 shows E-mail was ranked high (100%) among the most frequently used e-marketing tool. This could be because it's quick, easily accessible and cost effective. It allows ease of sending messages to clients, contractors or suppliers and increases nurtured relationship with partners and stakeholders through regular communication (Noor *et al.*, 2021; Etemadi *et al.*, 2022; Dosumu *et al.*, 2024). This eventually promotes specific projects objectives, shared updates and showcase expertise. Facebook and WhatsApp also accounted for 100% usage on the frequency of use of e-marketing tools by construction professional for project delivery. However, Followwonk, Discord and Crazyegg are seldomly used by professionals in construction projects. Furthermore, other variables like YouTube, TikTok, "X" and blog are within the category of 80 - 100%. These e-marketing tools serve as one of the foremost and widely used tools globally. Construction professionals use it to share projects updates, bill of quantity, and to post updates on on-going works in order to enhance operational efficiency and client satisfaction. These findings align with those of Noor *et al.* (2021) and Etemadi *et al.* (2022), who reported that WhatsApp, Facebook, Instagram, X, and YouTube are frequently in use by professionals for construction project management. However, they contrast with the findings of Pivec and Maček (2019), and Noor *et al.* (2021), which suggested that tools like Instagram, X, YouTube, Facebook, and

blogs are rarely used in facilitating construction project execution. Furthermore, the result shows that followwonk, Discord and crazyeg egg are rarely used in a construction project in Nigeria. This implies that underlying challenges may hinder the efficient and effective adoption of e-marketing tools in construction project management. Additionally, it suggests that the adoption of e-marketing tools varies significantly across different organizations and regions. To promote wider use of these e-marketing tools, the concerns of construction firms must be adequately addressed. However, these tools offer an unused potential for construction firms to promote services, showcase projects and engage with stakeholders more effectively, going by the rise in digital literacy and internet penetration in Nigeria. Furthermore, Ojelabi *et al.* (2018) noted that while many organizations have these e-marketing tools available, they often do not utilize them for various reasons.

Table 4: Frequency of use of e-marketing tools

S/N	E-marketing Tools	Tick	Percentage %	Frequency
X2	E-mail	149	100	ALWAYS
X7	Facebook	149	100	ALWAYS
X1	WhatsApp	149	100	ALWAYS
X3	YouTube	147	98.66	ALWAYS
X31	Tik Tok	147	98.66	ALWAYS
X30	Skype	145	97.32	ALWAYS
X8	Instagram	140	93.96	ALWAYS
X32	Snapchat	138	92.62	ALWAYS
X5	Google+	138	92.62	ALWAYS
X9	"X"	136	91.28	ALWAYS
X6	Zoom	135	90.60	ALWAYS
X4	Pinterest	135	90.60	ALWAYS
X8	LinkedIn	135	90.60	ALWAYS
X29	Blogs	133	89.26	ALWAYS
X10	Google Analytics	118	79.19	OFTEN
X16	Website Marketing	115	77.18	OFTEN
X12	Dropbox	115	77.18	OFTEN
X18	Kissmetrics	101	67.79	OFTEN
X14	HubSpot	93	62.42	OFTEN
X13	Hootsuite	87	58.39	AVERAGE
X15	Fiverr	73	48.99	AVERAGE
X21	Buzzsumo	70	46.98	AVERAGE
X17	Upwork	68	45.64	AVERAGE
X20	Mailchimp	66	44.30	AVERAGE
X27	Trello	64	42.95	AVERAGE
X24	Omnisend	55	36.91	SOMETIMES
X19	Ubersuggest	45	30.20	SOMETIMES
X28	Mobile monkey	40	26.85	SOMETIMES
X23	Omnifocus	35	23.49	SOMETIMES
X22	Followerwonk	22	14.77	SELDOM
X26	Discord	15	10.07	SELDOM
X25	Crazyeg egg	5	3.36	SELDOM

4.0 Conclusion

This study examined the level of awareness and frequency of use of e-marketing tools by construction professionals in executing projects in the Nigeria construction industry. Firstly, it was discovered that the most aware e-marketing tools by construction professionals are WhatsApp, YouTube and e-mail in decreasing order of magnitude. Furthermore, fourteen (14) general items were found to be used always in construction projects covered by this study. They include items such as e-mail, Facebook and WhatsApp. This suggests that as awareness of e-marketing tools are increasing among construction firms, their frequency of use is also coming into play. Therefore, to enhance the frequency of use of these e-marketing tools, it is essential to simultaneously improve awareness of their relevance in construction projects. Similar to the awareness findings, the frequency of use of e-marketing tools for construction project management varies from organization to organization. Based on the findings of this study, it is important to emphasize that the use of

e-marketing tools is not proposed to replace traditional communication methods but to complement them, thereby enhancing effective construction project management practices.

5.0 Recommendations

Construction professionals should always increase awareness of e-marketing tools through seminars, general site meetings and conferences on the need to use e-marketing tools for construction projects delivery. Construction consultants can recommend important e-marketing tools to bidders for construction project management, while government should invest in reliable internet connectivity, electricity and digital infrastructure to support e-marketing growth. Furthermore, academia should be encouraged to focus research efforts on the specific applications and challenges associated with the adoption of e-marketing tools. It is recommended that the level of awareness of e-marketing tools should be properly promoted to construction firms during registration and bidding process of a construction projects. More so, there should be a detailed study on the level of awareness, frequency of use and the challenges of implementing e-marketing tools in the construction industry.

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