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Influence of Information Communication Technology on the Performance of Private Schools in Bauchi Metropolis, Nigeria

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Abstract

The visible presence of enormous opportunities inherent in the usage of online marketing in terms of cost-saving and the ability to transmit tailor-made messages to target audiences had made some private secondary school operators in Nigeria embrace online marketing communication as a strategy for reaching present and potential customers individually. The study primarily examines the profound influence of online marketing tools on the performance of private schools in Bauchi metropolis. A survey research design was adopted for the study, and a structured questionnaire was utilised to collect the required data from one hundred and twenty three (123) staff of private schools in Bauchi Metropolis. They were selected through a simple random sampling procedure. The data elicited from the respondents were analysed through mean scores and linear regression analysis using SPSS 22 version software. The study results showed that e-mail marketing has a significant influence on the profitability performance of private schools. It was also discovered that social media marketing has a significant influence on the number of student-enrolments performances of private schools. The study recommended that the managers of private schools regularly exploit e-mail marketing to enhance their firms' profitability. Also, they should adequately utilise social media marketing platforms to boost students' enrollment in their schools.

Keywords: Online Marketing, Profitability Performance, Students-Enrolments Performance, Bauchi Metropolis, Private Schools

Introduction

As an innovative technology-based undertaking, online marketing has been considered as one of the key areas of marketing practice, which involves using the web and other interactive technologies to make and mediate dialogue between the firm and its customers (Coviello, Milley, & Marcolin, 2001). Online marketing provides customers with access to information while interactive technologies allow these customers to supply information to the business (Brodie, Winklhofer, Coviello & Johnston, 2007). The web, the core online marketing tool, has been recognised as a key business resource and is increasingly getting used and integrated into the firm's marketing activities. Brodie *et al.* (2007) found out that the adoption of E-marketing is positively related to marketing performance and more so on customer recruitment and retention. Effective online marketing enables firms to get competitive intelligence and organisational competencies that facilitate effective marketing decisions for correct placement within the industry (Olalekan, 2009).

The utilisation of internet marketing can also positively influence business performance. People and factors like technological competence, managerial support, star grading, and

alliances significantly influence internet marketing usage within the business (Matikiti & Afolabi, 2012). It allows to communicate online marketing messages to a possibly huge group of onlookers without exorbitant promotion costs and to remain in touch with the clients through E-mails, news, letters, etc. These immense opportunities inherent in internet marketing have made several educational institutions at all levels in Nigeria to embrace online marketing communication as a suitable strategy for reaching to their present and potential customers.

The exponential expansion within the number of private school operators in Nigeria's educational system requires adopting appropriate operational strategies to ensure their growth and survival in a turbulent operating environment. For instance, demonstrating the continuing growth in Nigeria's educational sector as a result of private entrepreneurs' efforts, Varrella (2021) observed that there were about 117,000 schools in Nigeria as of the 2018 and 2019 academic session. The private schools constitute fifty five thousand while public schools represent sixty two thousand. Adopting an appropriate strategy becomes necessary because school owners, like other business owners, desire to achieve specific goals and objectives such as profit, target student enrollment and increase in assets. The attainment of any of those objectives is contingent on several factors of implementing an alternative one-on-one e-marketing communication strategy. This is because the traditional marketing tools such as T.V. commercials, radio commercials, print media advertisements and advertorials, personal selling and sales promotions are expensive for private school owners to adopt.

Lilyquist (2019) pointed out that several traditional marketing communication methods are costly and cost-prohibitive for many small business owners like private school entrepreneurs. Hence, online marketing is an alternative means of communication for private school owners to reach their target market place and provide awareness about their operational activities. Consequently, private school owners need to know the appropriate mixture of online marketing techniques to maximise customer reach and measure its impact on their operations. It is against this background that the study sought to investigate whether or not the adoption of online marketing influenced the performance of private schools in Bauchi Metropolis in Nigeria as this had not been properly documented in the extisting literature in Nigeria.

The literature review on the subject matter revealed a paucity of empirical studies that investigated the consequences of online marketing on the performance of private schools in Nigeria. Previous studies carried out on the effects of online marketing on the performance of various business firms did not specifically focus on educational institutions as a case study, especially private schools (Yasmin, Tasneem & Fatema, 2015; Srinivasan, Bajaj & Bhanot, 2016; Onyango, 2016; Enyioko & Lloyd, 2017; Maina, 2017). For example, Olomu (2016) and Enyioko and Lloyd (2017) studied the Nigerian economy's manufacturing and other industrial sectors. This study was necessitated by the scarcity of studies specifically investigating the effect of online marketing on the performance of private schools and the researcher's desire to establish the extent of the influence empirically. The gap in the literature motivated this study to investigate the influence of

online marketing on the performance of private schools in Bauchi Metropolis in Nigeria. It was on this basis that the study sought to answer the following questions:

1. What is the influence of e-mail marketing on the profitability performance of private schools in Bauchi metropolis?
2. Does social media marketing affect the number of student enrolments performance of private schools in Bauchi metropolis?
3. Does mobile phone marketing have an influence on the assets-based performance of private schools in Bauchi metropolis?

Objectives of the Study

This study seeks to achieve the subsequent specific objectives:

1. To examine the influence of e-mail marketing on profitability performance of private schools in Bauchi metropolis.
2. To determine the impact of social media marketing on the number of student enrolments performance of private schools in Bauchi metropolis.
3. To evaluate the influence of mobile phone marketing on the assets-based performance of private schools in Bauchi metropolis.

LITERATURE REVIEW

The existing literature on the subject matter reviewed provided direction for the study. The review was done along with the following rubrics; conceptual review, theoretical review and empirical review. Several definitions of online marketing are recorded within the reviewed literature. Stokes (2011) describes E-marketing as utilising digital channels to undertake brand marketing while to Molenaar (2012), online marketing is an integral strategy based on customer behaviour. The study adopted the definition offered by Kotler and Keller (2009) which views online marketing as a means through which a company endeavours to communicate to its customers, promote products and sell its offerings through the means of the internet.

Tools of Online Marketing

The tools of online marketing which are of interest to the present study are: **E-mail Marketing**

E-mail marketing is one of the earliest used web marketing techniques that encompasses the provision of individualised or targeted communications to certain publics at the exact time. With the e-mails, business firms deliver e-mails that meet the requirements of the users. Marketing through e-mail may be a unique way of transmitting advertising messages and produces value for customers. This is because marketing through e-mails is cheap, cost-effective and possesses abundant addressees (Javadian, Rezvani, Sabbir, Fouladivanda, Nahid & Faramarzi, 2012). In the views of Castronovo and Huang (2002), e-mail marketing may be a cost-effective medium to develop and re-inforce consumer relations. It is an interactive channel that could be used to attract new customers, sustain current customers and create brand loyalty by sending e-mails on the descriptions of goods and

services, uncommon, special offers, accessories and links to websites. Furthermore, Onuoha (2018) pointed out that e-mail marketing was considered the most effective compared to other digital tactics when it comes to building customers' awareness, acquisition, retention and conversion. In fact, Onuoha (2018) observed that in the year 2017, e-mail marketing emerged as one of the most effective digital investments in Nigeria.

Mobile Phone Marketing

Mobile phone marketing is any advertising exercise that encourages patronage of goods and services through mobile gadgets like tablets and smart phones. It uses the features of ultra-modern mobile technology including location facilities to tailor marketing campaigns grounded on an individual's location (Kenton, 2021). Mobile phone marketing is a way in which technology can be used to create tailored promotional messages of goods and services to a user who is constantly connected to a network. In Kenton's view (2021), mobile phone marketing is a necessary tool for large and small business firms because mobile gadgets have become ubiquitous. Mobile phone marketing usually targets the audience who may not be so important by demographics but by behaviours.

This commercial content includes advertising a new product, providing information about a sale, products, sales promotions and other commercial ventures. Mobile phone marketing, alongside e-marketing and social media marketing are components of the digital marketing sector. It promotes goods, services and concepts by providing personalised, location and time-sensitive information using interactive wireless channels (Ancarani & Shankar, 2003). Unlike the other marketing media, mobile phone marketing features a direct link to final users allowing marketers to reach each purchaser quickly and directly (Steinbock, 2006).

Social Media Marketing

Social media marketing (SMM) is a form of internet promotion that utilises social networking websites as a marketing tool. SMM intends to produce content that frequenters share with their social networks to help an enterprise enhance brand exposure and widen account reach (Target, 2011). Social media may be a forum that facilitates information sharing and participation among media users to make and distribute the content (Steenkamp & Hyde-Clarke, 2014). These platforms have shifted the emphasis of internet services from being consumption-based towards becoming more interactive and collaborative thereby producing new opportunities for interaction between organisations and, therefore, the public (Henderson & Bowley, 2010). Distinct from old media, social media can include both web-based and mobile technologies (Mou, Atkin, Fu, Lin & Lau, 2013). Mangold and Faulds (2009) claimed that marketing managers should identify the facility and important nature of the discussions being administered by customers utilising social media. Social media links businesses to the final consumers directly, promptly, and at a low cost (Kaplan & Haenlein, 2010). This is possible by smoothing different areas of

marketing like promotions, marketing intelligence, sentiment research, public relations, marketing communications, product and customer management (Akar & Topcu, 2011; Tanuri, 2010); social media has become the centre of attention in many industries.

These virtual social universes may be utilised for social media promotional purposes. Having these sketched features and indeed more, Facebook in this manner may be an exemplar of social media (Fiester, 2016). Social media has gone through a few sort of revolutions over the past decade, and since then, the typical media is dynamically being supplanted with social media systems. This development has driven to expanded online marketing using various marketing practices and methods resulting in boundless prospects in marketing (Fiester, 2016). Modern technology has played a considerable role in the gradual development of social relations among people. As a result of the emergence of web 2.0 technologies, social networking websites like Facebook and WhatsApp are readily accessible and supply the users with a connection to virtually everyone around the globe. Now people spend longer time on social media communicating through social platforms like Facebook and involuntarily leaving the traces of their links which are readily available to those social media managers (Katona, Zubcsek & Sarvary, 2011). According to Kemp (2021), there were thirty-three million social media users in Nigeria as of January 2021. This figure shows an increase of six million social media users (22%) between 2020 and 2021. This figure simply indicates that the total number of social media in the country is equivalent to 15.8 per cent of the total population of Nigeria.

Search Engine Optimisation

Search Engine Optimisation is known by the acronym 'SEO'. It refers to the procedure used to improve any internet site's ranking and get organic or un-paid visitors on the Search Engine Result Page (SERP). Therefore, SEO, can be used as a very powerful tool in marketing. So basically, search engine marketing increases the quality and volume of the site visitors to the website via increasing the rank and visibility of an internet web page to users of an internet search engine such as Google, Bing, and Yahoo (Srikanth, 2019). Furthermore, websites with top web optimisation techniques and awareness of the present-day market scenario improve the rank and traffic of their websites by way of a sizable margin. Some of them even generate income in 6-digit figures from their website (Srikanth, 2019). According to Stokes (2011), an inquiry engine optimiser is used to make sure that a company's website is situated at the top of the search engine through the utilisation of particular keywords. It performs a crucial role within a marketing context because it ensures that the merchandise or offer is displayed towards the top of the page. Furthermore, it enables a firm to influence specific customers and create an enhanced experience which may cause improved retention of consumers.

Alford (2010) maintains that successful online marketing is indispensable thanks to the extremely competitive schools' operational activities. Small rural businesses had to improve their online presence through effective programme optimisation. He argues that a business

owner should know which keywords to incorporate to improve the company's search engine results. He further suggests that internal and external links are vital and that data should be kept up to date as a website is a customer's first impression of a corporation. McLaren (2011) endorses that private schools should use electronic media more effectively by creating shared links to help with marketing between members. The study also proposed the utilisation of an inquiry engine optimiser to expand the number of responses from customers. Additionally, the study noted the worth of social media and the way the members could boost word of mouth through connections with parents or guardians on Facebook, Twitter, WhatsApp and YouTube.

Benefits of Online Marketing

The internet provides good access to business firms' potential customers. It has been projected that a few billion people around the world use the world wide web and more are getting conscious of the internet with each passing day. So, marketing your business to such an outsized group of individuals is merely possible through the web (Sharma, 2017; Picincu, 2019). Internet is the only medium that can cross geographical and national boundaries. The cost of promoting your business on the web is cheaper than other mediums of marketing communication. This makes it easy for small and mid-sized businesses to promote their products. The internet allows the ability to remain connected with customers on a real-time basis. If any discount goes on, then it is easier to send an e-mail to customers and purchase merchandise instantly (Sharma, 2017; Picincu, 2019).

The internet also allows sending multiple messages simultaneously which saves the tedious task of sending a physical letter to each client. Internet marketing facilitates a moment of feedback from the purchasers. Customers can share their experiences after using the product. Internet web saves a tonne of your time and energy. Rather than having a customer service representative to answer customers' queries, one can put all the knowledge about the merchandise or services on the internet so that customers familiarise themselves with the products (Sharma, 2017; Picincu, 2019).

The foremost common way of doing it is to have a section dedicated to frequently asked questions (FAQs) about the product to get all the required information about the merchandise or the service. Finally, only internet marketing permits your business to be available 24/7 which leads to increased sales and profits.

Performance of a Firm Indicators

A firm's performance refers to that procedure of gauging the action's efficiency and effectiveness (Al-Matari, Al-Swidi & Bt Fadzil, 2014). The improvement in a firm performance requires some measurements to work out the action's proficiency and effectiveness. Scholars like Santos and Brito (2012) and Tarute and Gatautis (2014) have categorised those measurements into financial and strategic performance indicators. A firm's financial performance considers an efficient indicator of the firm's profitability and,

therefore, the business compared to the benchmark rate of return equivalent to the risk-adjusted weighted average of the capital costs (Al-Matari, Al-Swidi & Bt Fadzil, 2014). It includes three main dimensions: profitability, growth, and market value, as illustrated by Santos and Brito (2012).

Profitability measures a firm's past ability to get returns, and it includes indicators such as return on assets, return on investment, net income or revenues, return on equity, and economic value-added (Al-Matari, Al-Swidi & Bt Fadzil, 2014; Santos & Brito, 2012; Tarute & Gatautis, 2014). While growth demonstrates a firm's previous capacity to increase its size (Santos & Brito, 2012), the firm's growth results in a rise in its absolute profit and cash generation. It extends the firm's economies of scale and its market power (Santos & Brito, 2012). Growth includes indicators like market-share growth, asset growth, net revenue growth, and the extent of employees' growth (Santos & Brito, 2012; Tarute & Gatautis, 2014). Furthermore, the customers satisfaction indicator raises customers' willingness to pay and thus the worth created by the firm (Barney & Clark, 2007). In this regard, scholars have presented it as one of the main variables for testing a firm's performance. Customer satisfaction has indicators like a mixture of products and services, number of complaints, repurchase rate, new customer retention, general customers' satisfaction, number of new products/services launched (Santos & Brito, 2012; Tarute & Gatautis, 2014).

Consequently, the performance of private school operators is defined in this study in terms of profitability (that is the efficiency of the private school operators in using shareholders' funds to realise profit), students' enrolment (that is efficiency of the school operators in using the firms' resources to win market) and asset base (efficiency of the school operators in using the firms' resources to acquire more assets). Therefore, this study measures the performance of the private school in terms of the schools' operational ability to use e-mail, social media and mobile phone as marketing communication strategies to achieve profitability, required number of students' enrollments, and acquire the necessary asset-based.

Theoretical Framework

This section reviews the theories which the study considers seemly suitable to provide the required theoretical base. The theories of network/social network and collective intelligence were reviewed.

Network/Social Network Theory

The network approach's concept emanates from several of the structural concepts put forward by sociological scholars like Emile Durkheim, Georg Simmel and anthropologist Radcliffe-Brown whose study were principally founded on grasping the structure and influence of relational webs or "networks" of social relations among individuals. Network theory analyses all types of relationships, whether or not it is between people, animals or things. Social network analysis is an overlapping tool utilised in learning about patterns that manifest within social networks and their impact on behavior.

The study of how individuals, institutions or collections of people interrelate with others

within their network is known as the social network (Claywell, 2016). Characteristically, social networks are utilised to publish content which reach greater number of followers. Business community operators can add their business activities to promote either themselves or their businesses. The Social Networking Spots permit associates to upload short messages, dispatches, photos, audio and recorded videotape free of charge. Content posted by memberships can be surfed and reflected upon by all members who form part of the community (Kumar, 2018).

Digital marketing networks are significant in this respect since they permit marketers to concentrate and comprehend what is said by consumers and permit them to take advantage of influential users' power to spread the messages to other people in their networks. Research indicates that the compelling users are those with the foremost impact across a variety of differentiated networks. It sees social associations in terms of nodes and ties. The nodes are the players within the networks, and ties are the relationships amongst the players. Various kinds of ties exist between the nodes, and in its basic form, a social network outlines all the relevant ties between the nodes being analyzed (Patariaia, Falconer, Margaryan, Littlejohn & Fincher, 2014). The network can also be used to "determine the social capital of distinct players". These ideas are normally exhibited during a social network diagram, where nodes represent the points while ties are the lines.

Theory of Collective Intelligence and generational

Collective intelligence symbolises a process where huge numbers of individuals congregate concurrently on the same point(s) of knowledge while simultaneously realising intellectual performance. The theory hypothesises that groups are usually more intelligent and more industrious than the sum of the individuals. Crowd sourcing is an internet phenomenon in which projects are divided into small individual activities that are shared with many individuals for completion, and this is acknowledged to have collective intelligence features. According to Tapscott and Williams (2008), collective intelligence requires four principles to exist: openness, peering, sharing and acting globally.

Openness is the required principle by which people and companies have to present their ideas and be frank about their ideas to the individuals on the net to improve their products (Tapscott & Williams 2008; Steve, 2013). Peering has to do with old information or products to be modified to match your and others' personal needs before releasing it to the public to utilise them. Sharing explains how intellectual property is required to be shared with others in the group. It is essential to allow for the constant exchange of ideas and critiques around which productivity is enhanced (Tapscott & Williams 2008; Steve, 2013). The principle of acting globally is based on communication technology's advancement that allows organisations to reach out to their entire collaborators' network and engage everyone (Tapscott & Williams 2008; Steve, 2013). This concept overcomes department and branch borders' challenges to capture and

utilise new ideas, new talents, and new markets.

The study reviewed and adopted these theories because of the following reasons. Firstly, the theory of collective intelligence is useful in online marketing as it allows private school owners and their consumers (students and parents) to come together to interact and be able to exchange ideas on how to come up with the services that enhance the entire experience (Wolpert, 2013). On the other hand, the Network and social network theory is considered relevant as it enables private school operators to analyse how to maximise their 'networks' with customers (Williams & Durrance, 2008).

EMPIRICAL REVIEW

Nuseira and Aljumahb (2020) examined the role of digital marketing in business performance with the moderating effect of environmental factors among SMEs of the UAE. The study aimed to determine the empirical relationship between digital marketing and business performance among SMEs of the UAE. The SMART-PLS through measurement and structural equation modeling was used as a tool of analysis. The study discovered that digital marketing applications positively and significantly influence business performance. Enyioko and Lloyd (2017) investigated digital marketing strategies and marketing performance optimisation in Port Harcourt, Nigeria. The study aimed at determining whether industrial marketers' efficient deployment of digital systems optimises digital marketing performance. Structural equation modeling was employed to test the hypotheses with the aid of SPSS 17.0 software. The study found that the independent variables (website marketing strategy, search engine marketing strategy and e-mail or newsletter marketing strategy) were significant predictors of marketing performance optimisation.

The study of Maina (2017) examined the effect of digital marketing tools on the performance of businesses in the real estate sector of Nairobi County. Regression analysis served as an analytical tool of the study. The study findings indicated that e-mail marketing, web solutions, mobile marketing, and social media platforms affected firms' performance. Onyango (2016) studied the influence of digital marketing strategies on performance of cut-flowers exporting firms in Kenya. The paper mainly examined the influence of digital marketing on the financial and non-financial performance of cut flower exporting firms in Kenya. The outcomes show that digital marketing has an incredible impact across all elements of firms' performance. Firms that invested in digital marketing harnessed better returns, more customers, and more sales. On his part, Olomu (2016) investigated the influence of online marketing adoption on the performance of the Nigerian paints industry. The performance indicators measured were market share, sales growth, customer retention, the number of marketing staff as well as the total level of investment. Ordinary least square techniques were used in analysing the data. The study results revealed that online marketing has more intensity on sales growth performance.

The study of Yasmin, Tasneem, and Fatema (2015) examined the impact of digital marketing classes on a firm's sales performance. The work aimed to determine the influence of classes of digital marketing on a firm's sales performance. The results exposed that digital

marketing had a positive relationship with sales increase and that elements of digital marketing like online advertising, search engine optimisation, e-mail marketing, and social media positively impacted on firm's sales. Srinivasan, Bajaj, and Bhanot (2016) investigated the role of social media marketing in the micro, small and medium enterprises sector. The study aimed to ascertain the social media marketing methods used to acquire and retain Medium and Small Manufacturing Enterprises (MSMEs) customers. Findings of the study showed that MSMEs involvement in social media generates a strong impact on brand awareness and brand trust.

The review of the extant literature on the subject matter revealed a lack of empirical studies investigating the effects of online marketing on the performance of private schools in Nigeria and other parts of Africa. Previous studies on the effects of online marketing and performance focused on other industries, with few studies that focused on the education sector especially private secondary schools. For example, Olomu (2016) and Enyioko and Lloyd (2017) studied the Nigerian economy's manufacturing and other industrial sectors. Hence, the need for this study arises from the paucity of studies that have specifically investigated the effect of online marketing on the performance of private schools and the researcher's desire to establish the extent of the influence empirically.

METHODOLOGY

A survey research design was adopted to conduct of this study. The population of this study comprised the staff of the five randomly selected private schools in Bauch Metropolis in Nigeria. The schools are Divine International Academy (DIA), Sunshine International School (SIS), Harmony High School (HHS), Hope Academy (HA) and LYS Academy (LYS-A). Based on their records, the staff in each of the selected private secondary schools was 34, 24, 45, 36, and 38, respectively adding up to 177. The sample size for the study was determined using the Yamane (1967) formula. Based on this authority, 123 staff of the selected private schools in Bauchi Metropolis served as the sample elements in the study. A simple random sampling procedure was employed to hand-pick the five secondary schools in the Metropolis. The same technique was employed to select sampled staff for the study. The technique was considered apt for the study because it offered an equal chance to all the staff of the selected private schools chosen as a sample for the study. A structured questionnaire as an instrument of data collection was administered to the target respondents. The device was separated into six sections; Section A dealt with the profiles of the respondents while Sections B, C, D and F addressed online marketing as independent variables and performance as dependent variables. A structured questionnaire was adopted because it required less time to complete and prevented the respondents from giving irrelevant responses (Sekaran & Bougie, 2009).

The data was personally collected through a questionnaire administered to the proprietors, principals and staff of the selected schools. This method was chosen to accomplish a high response rate by establishing a good rapport with the respondents. The data were analysed using descriptive statistics and simple linear regression analysis. Specifically, descriptive

statistics of simple percentages and standard deviation were used to present the study data while an inferential statistical tool of simple regression analysis was used to test for the influence of online marketing on school performance. The analysis was done with the help of the SPSS Version 23. The study's independent variable was online marketing which was proxied by e-mail marketing, social media marketing and mobile phone marketing. At the same time, the dependent was the performance of the selected private schools which was proxied by profitability, number of student enrolments and assets base. The study's model was adopted from the work of Adewole (2014) and Mustapha, Abdulazeez and Abdul (2020) and the model was as specified below:

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + U$$

Where,

Y= performance (proxied by profitability, number of student enrolments, assets based) of private schools

X1= E-mail marketing

X2= Social media marketing

X3= Mobile marketing

α = constant

β_1 = slope (beta coefficient) for X1, E-mail marketing variable

β_2 = slope (beta coefficient) for X2 Social media marketing variable

β_3 = slope (beta coefficient) for X3 Mobile marketing variable

U= error term

With 0.05 level of significance or 95% degree of confidence

RESULTS AND DISCUSSIONS

Table 1: Demographic Characteristics of the Respondents

	Variables	Frequency	Percentage
Schools	Divine International Academy	23	20.2%
	Harmony High School	17	14.9%
	Sunshine International School	28	24.6%
	Hope Academy	22	19.3%
	LYS Academy	24	21.1%
Gender	Male	66	57.9%
	Female	48	42.1%
Years of Service	Less than 1 Year	28	24.6%
	1-5 Years	45	39.5%
	6-10 Years	36	31.6%
	Above 10 Years	05	4.4%
Highest Qualification	ND/NCE	41	36.0%
	HND/BSc	63	55.3%
	Postgraduate	10	8.8%

Source: Field Survey 2020

Table 2 above presents the analysis of the demographic characteristics of the respondents. The analysis revealed that 23(20.2%) of the respondents were staff of DIA, 17(14.9%) were staff of HHS, 28(24.6%) were staff of SIS, 22(19.3%) were staff of HA, and the remaining 24(21.1%) were staff of LYS-A. This suggests that the majority of the respondents were from SIS, and this is because the school is a little bit bigger than others. The analysis based on gender revealed that the majority of the respondents, 57.9 per cent were males and 42.1 per cent were females. Also, it was found out that 24.6 per cent of the respondents had worked for less than one year, 39.5 per cent had worked for one to five years, 31.6 per cent had worked six to ten years and 4.4 per cent had worked for more than ten years with the various places of work (private schools). The analysis based on educational qualification revealed that 36.0 per cent of the respondents had National Diploma (ND) or Nigeria Certificates in Education (NCE), 55.3 per cent had a Higher National Diploma (HND) or a Bachelor of Science (BSc.) and 8.8 per cent had Postgraduate certificates. This suggested that the majority of the respondents had HND or BSc.

Table 2: Reliability Test

Constructs	Cronbach's Alpha (a)	Convergent	Validity
		CR	AVE
E-mail Marketing	0.750	0.910	0.727
Social Media Marketing	0.823	0.869	0.693
Mobile Phone Marketing	0.741	0.841	0.833
Profitability Performance	0.762	0.742	0.756
Number of Student Enrolments Performance	0.806	0.834	0.658
Assets Based Performance	0.722	0.922	0.662

Source: Field Survey, 2020

The internal consistency or reliability of the scale was measured via Cronbach's alpha and convergent validity tests. The result on table 1 shows that all the study's construct has Cronbach's alpha and composite reliability values above 0.7 signifying internal consistency among constructs. These values were all greater than the 0.70 thresholds recommended by Nunnally and Bernstein (1994). From this, one can conclude that the construct of online marketing measured by (e-mail marketing, social media marketing, and mobile marketing) and performance proxied by (profitability, number of student enrolments, and asset-based performance) have good reliability. Similarly, the average variance extracted (AVE) value of all constructs is greater than 0.60, thus satisfying the reliability requirements.

Test of Hypotheses

This section presents a test of the study's hypotheses. The data contained in Table 3 are derived from the model summary to provide details about the characteristics of model and the coefficients of the model to show the significance level of the variables in the model for the three hypotheses formulated for the study.

Table 3: Simple Linear Regression Analysis Summary

Construct	R	R square (R ²)	Adjusted R ²	Unstd. B	Std. β	P- value	Decision
EM and Profitability Perf.	0.724	0.605	0.597	0.211	0.324	.000	Significant
SMM and Students Enrolments Perf.	0.695	0.534	0.497	0.173	0.295	.000	Significant
MPM and Assets based Perf.	0.742	0.664	0.535	0.192	0.272	.000	Significant

Source: Field Survey, 2020

Note: EM- E-mail marketing, SMM- Social media marketing, MPM- mobile phone marketing, Perf- Performance

H₀₁: E-mail marketing has no significant influence on the profitability performance of privateschools in Bauchi metropolis.

The output presented in Table 3 indicated a semi-strong correlation coefficient between E-mail marketing and profitability performance of private schools with $R = 0.724$. The R-Square value of 0.605 ($R^2 = 0.605$) implies that e-mail marketing of private schools accounted for 60.5 per cent of the variations in profitability performance of private schools in Bauchi metropolis. The output also shows the unstandardised B of 0.211, standardised β of 0.324, and a p-value = 0.000. Consequently, by having P-value < 0.05 , the result is statistically significant. Based on the above results ($R^2 = 0.605$, $P < 0.05$ & $\beta = 0.0211$), the null hypothesis, which states that "*E-mail marketing has no significant influence on profitability performance of private schools in Bauchi Metropolis,*" is rejected in favour of the alternative hypothesis.

H₀₂: There is no significant impact of Social media marketing on the number of students-enrolments performance of private schools in Bauchi metropolis.

Table 3 also revealed a semi-strong positive correlation coefficient of 0.295 between social media marketing and the student-enrolments performance of the private schools in Bauchi metropolis. The R-Square value of 0.534 implied that 53.4 per cent of the variations in the number of student-enrolments performance of private schools could be explained by social media marketing. The results also show that unstandardised is B of 0.173, standardised β is 0.295, and the p-value is 0.000. Therefore, by having a P-value of $< .005$, the result is statistically significant. Hence, based on these results ($R^2 = 0.534$ $P < 0.000$ & $\beta = 0.173$), the null hypothesis, which states that "*there is no significant impact of social media marketing on the number students-enrolment performance of private schools in Bauchi metropolis,*" is rejected in favour of the alternative hypotheses.

H₀₃: Mobile marketing has no significant influence on the assets-based performance of private secondary school in Bauchi metropolis.

Table 3 further indicated a strong positive correlation co-efficient exists between mobile phone marketing and the assets-based performance of private schools in Bauchi metropolis ($R=0.742$). The R-Square value of 0.644 indicated that 64.4 per cent of the variations in the assets-based performance of private schools in Bauchi metropolis could be explained by mobile phone marketing. The results further show that by having a P-value of $< .005$, the result is statistically significant. In other words, based on these results ($R^2 = 0.644$; $P < 0.000$ & $\beta = 0.192$), the null hypothesis, which postulates that "*Mobile marketing had no significant influence on the performance of the private secondary school in Bauchi metropolis*" is rejected while the alternative hypothesis is accepted.

DISCUSSION OF FINDINGS

The analysis of the first hypothesis revealed that the null hypothesis, which states that E-mail marketing has no significant influence on the profitability performance of private schools in the Bauchi metropolis, is rejected, and the alternative hypothesis was accepted. The standard coefficient beta of 0.324 in Table 3 shows the influence of the standard significance of .000 is anticipated 5 per cent confidence level which demonstrates that the result is significant. The result implies that E-mail marketing had influence on the profitability performance of private schools in Bauchi metropolis. This accounts for why literature considers the social network a tool for fostering interrelationship among people in a social group. It is evident from this result that the management and staff of the schools have used e-mail marketing to endear desired results from the parents or guardians and others within the social network group.

The results of the present study are consistent with the findings of the previous studies by Olumo (2016), who surveyed the influence of E-Marketing implementation on the performance of the Nigerian paints industry which found that intensification of ICT utilization increases a firm's profitability and sales performance and that of Yasmin, Tasneem and Fatema (2015) who explored the impact of classes of digital marketing on a firm's sales and discovered that digital marketing tools such as online advertising, search engine optimisation, e-mail marketing, and social media had positive impact on firm's sales. It also agrees with Nuseira and Aljumahb's (2020) findings, which examined the digital marketing roles in business performance with the moderating effect of environmental factors among SMEs of UAE and uncovered that digital marketing platforms positively and significantly influence business performance.

The analysis of the second hypothesis demonstrated that a positive and significant effect exists between social media marketing and the students-enrolments performance of private schools in Bauchi metropolis. The table value shows that R^2 , the coefficient of the determination to be 0.534, which implied that 53.4 per cent variations in the number of students-enrolments performance of private schools in Bauchi metropolis could be explained by the same change in social media marketing. This implies that the more private schools engage in social media marketing, the higher their student-enrolments performance. This finding is in line with the findings of the work of Srinivasan, Bajaj, and Bhanot (2016) which investigated the influence of social media marketing strategies on customer acquisition and retention of micro, small, and medium enterprises. The study found that social media marketing has a strong influence on customers' acquisition and retention and that of the work of Onyango (2016), which studied the influence of digital marketing stratagems on the performance of cut-flowers exporting organisations in Kenya and claimed that firms which invested on digital marketing derived improved returns, added customers and extra sales.

The analysis of the third hypothesis revealed that mobile marketing affects the asset-based performance of private schools in Bauchi metropolis. It was observed from the findings that approximately 64.4 per cent of the asset-based performance of private schools in the Bauchi metropolis is affected by mobile phone marketing. This finding is in accordance

with that of Nuseira and Aljumahb (2020) which examined the digital marketing's roles in business performance with the moderating effect of environmental factors among SMEs of UAE and discovered that digital marketing platforms positively and significantly influence business performance and that of Maina (2017) which examined the consequence of digital marketing apparatuses on the performance of businesses in real estate sector in Nairobi County and found that mobile marketing affects business performance to a very great extent. The study's finding also concurred with Enyioko and Lloyd (2017), which examined digital marketing strategies and marketing performance optimisation and found that digital marketing variables had a significant influence on marketing performance optimisation.

CONCLUSION AND RECOMMENDATIONS

The following conclusions were drawn from the findings of the study; that online marketing variables improve profitability performance, social media marketing impacted the number of students' enrollment performance, and mobile marketing enhances assets in the study area, respectively.

Based on the above conclusions, the following recommendations were made for the managers of private schools in Bauchi metropolis and other similar organisations:

- (a) managers of private schools should regularly exploit the usage of E-mail marketing to enhance their firms' profitability;
- (b) managers of private schools should adequately employ social media marketing platforms as a way of boosting students' enrolments in their schools;
- (c) school management should concentrate more on online marketing platforms (mobile marketing) to increase their assets base; and
- (d) management of private schools should ensure efficient usage of online marketing tools such as e-mail, social media, and mobile marketing to attain enhanced organisational performance.

References

- Adewole, C. (2014), Corporate governance and performance in the banking and food industries in Nigeria, *Ilorin Journal of Management Sciences*, 1 (2), 89-101.
- Akar, E. and Topcu, B. (2011), An examination of the factors influencing consumers' attitudes toward social media marketing. *Journal of Internet Commerce*, 10(1), 35-67. <https://doi.org/10.1080/15332861.2011.558456>. Available online at: <https://www.tandfonline.com/doi/abs/10.1080/15332861.2011.558456>.
- Alford, P. (2010), Marketing technology for adoption by small business. *The Service Industries Journal*, 35(11-12), 655-669. <https://doi.org/10.1080/02642069.2015.1062884>. Available online at: https://www.researchgate.net/publication/279852199_Marketing_technology_for_adoption_by_small_business.
- Al-Matari, E.M., Al-Swidi, A. K. and Bt Fadzil, F.H. (2014), The Measurements of Firm Performance's Dimensions. *Asian Journal of Finance & Accounting*, 6(1), 24-49. <https://doi.org/10.5296/ajfa.v6i1.4761>. Available online at: <https://www.macrothink.org/journal/index.php/ajfa/article/view/4761/4198>.

- Ancarani, F. and Shankar, V. (2003), Symbian: Customer interaction through collaboration and competition in a convergent industry. *Journal of Interactive Marketing*, 17(1), 56-76. <https://doi.org/10.1002/dir.10048>. Available online at: <https://www.sciencedirect.com/science/article/abs/pii/S1094996803701297?via%3Dihub>.
- Barney, J. and Clark, D. (2007), *Resource-based theory*. New York: Oxford. <http://dx.doi.org/10.1002/pa.303>. Available online at: <https://onlinelibrary.wiley.com/doi/epdf/10.1002/pa.303>.
- Brodie, Winklhofer, Coviello and Johnston (2007),.. Is e-marketing coming of age? An examination of the penetration of e-marketing and firm performance. *J. Interactive Mark*, 21, 2- 21. <http://dx.doi.org/10.1002/dir.20071>. Available online at: <https://www.sciencedirect.com/science/article/abs/pii/S1094996807700191?via%3Dihub>.
- Castronovo, A. and Huang, M. (2002), Social media as a strategic marketing tool in the Sicilian wine industry: Evidence from facebook. *Wine Economics and Policy*, 6(1), 40-47. <http://dx.doi.org/10.1016/j.wep.2017.03.003>. Available online at: <https://www.sciencedirect.com/science/article/pii/S2212977417300054?via%3Dihub>.
- Coviello, H., Milley, A. and Marcolin (2001). Understanding IT-enabled interactively in contemporary marketing. *Journal of Interactive Marketing*, 15(4), 18-33. <https://doi.org/10.1002/dir.1020>. Available online at: <https://www.sciencedirect.com/science/article/abs/pii/S1094996801701909?via%3Dihub>.
- Claywell, C. (2016), What is social network theory? Retrieved from http://socialnetworking.lovetoknow.com/What_is_Social_Network_Theory.
- Enyioko, N.C. and Lloyd, C.J. (2017), Digital marketing strategies and marketing performance optimization. *International Journal of Innovative Research and Advanced Studies*, 4(7), 370-378. Available online at: [Paper Title \(use style: paper title\) \(ijiras.com\)](#).
- Fiester, A. (2016), A study of social media usage and interactions. An Unpublished M.A. thesis presented to the Faculty of the Graduate School at the University of Missouri-Columbia. Available online at: [Microsoft Word- Promoting Film Through Social Interactions Online.docx \(umsystem.edu\)](#).
- Henderson, A. and Bowley, R. (2010), Authentic dialogue? The role of "friendship" in a social media recruitment campaign. *Journal of Communication Management*. 14(3), 237-257 .<http://dx.doi.org/10.1108/13632541011064517>. Available online at: https://www.researchgate.net/publication/46168049_Authentic_Dialogue_The_Role_of_Friendship_in_a_Social_Media_Recruitment_Campaign.
- Hof, R. (2011), Online advertising spend to overtake TV. *An International Journal*, 9(3), 100-102.
- Javadian, D. Rezvani, S. Sabbir, R.M., Fouladivanda, F., Nahid, N. and Faramarzi, J.S. (2012). A conceptual study on e-marketing and its operation on firm's promotion and understanding customer's response. *International Journal of Business & Management*. 7(19): 114. (2) (PDF) A Conceptual Study on E-marketing and Its

- Kaplan, A.M. and Haenlein, M. (2010), Users of the world, unite! The challenges and opportunities of social media. *Business Horizons*. 53(1): 59-68. <http://dx.doi.org/10.1016/j.bushor.2009.09.003>. Available online at: <https://www.sciencedirect.com/science/article/abs/pii/S0007681309001232?via%3Dihub>.
- Katona, Z., Zubcsek, P.P. and Sarvary, M. (2011), Network effects and personal influences: The diffusion of an online social network. *Journal of Marketing Research*, 48(3), 425-443. Available at: <https://www.semanticscholar.org/paper/Network-Effects-and-Personal-Influences%3A-The-of-an-Katona-Zubcsek/bf677e540bfbed95604f9d7853444dd837dd6deb>.
- Kotler, P. and Keller, K. (2009), *Marketing management*. (13th ed.). Upper Saddle River: Prentice Hall. Available at: <https://www.worldcat.org/title/marketing-management/oclc/189700343>
- Lilyquist, M. (2019), Understanding the pros and cons of traditional and internetmarketing. Trational vs internet marketing. Available online at: Traditional vs. Internet Marketing (thebalancesmb.com)
- Linda, A. (2012). E-mail marketing insight Ireland 2012/2013 in Bluecast Digital. Available online Email Marketing Statistics Ireland 2012/2013 | (bluecastdigital.com)
- Mangold, W. G. and Faulds, D.J. (2009), Social media: the new hybrid element of the promotional mix. *Business Horizons*. 52, 357-365. <https://doi.org/10.1016/j.bushor.2009.03.002>. Available online at: <https://www.sciencedirect.com/science/article/abs/pii/S0007681309000329?via%3Dihub>
- Maina, N.C. (2017), Effect of digital marketing tools on performance of businesses in real estate sector in Nairobi County. An unpublished MBA Project submitted to KCA University, Nairobi, Kenya. Available at: <http://41.89.49.13:8080/xmlui/bitstream/handle/123456789/1241/Maina-Effect%20Of%20Digital%20Marketing%20Tools%20On%20Performance%20Of%20Businesses%20In%20Real%20Estate%20Sector%20In%20Nairobi%20County.pdf?sequence=1&isAllowed=y>
- Matikiti, H. and Afolabi, O. (2012). An empirical evidence on the usage of internet marketing in the hopsitality sector in an emerging economy and its relationship to profitability. *International Review of Social Sciences and Humanities*. 4(1), 181-197.
- McLaren, L. (2011),. *Critical marketing success factors for sustainable rural tourism routes: a KwaZulu-Natal stakeholder perspective* (online). (MPhil dissertation). University of Pretoria. Available at: <https://repository.up.ac.za/handle/2263/28529>.
- Molenaar, C. (2012), *E-Marketing: Applications of information technology and the internet within marketing*. Routledge. Available at: <https://www.worldcat.org/title/e-marketing-applications-of-information-technology-and-the-internet-within-marketing/oclc/801775270>.
- Mou, Y., Atkin, D., Fu, H., Lin, C.A. and Lau, T.Y. (2013), The influence of online forum and SNS use on online political discussion in China: Assessing "spirals of trust". *Telematics Inform.* 30(4), 359-369. <https://doi.org/10.1016/j.tele.2013.04.002>.

- Available online at:
<https://www.sciencedirect.com/science/article/abs/pii/S0736585313000269>.
- Mustapha, Y.I., Abdulazeez, S.O. and Abdul, F.A. (2020), Halal marketing practices and performance of cooperative societies in Ilorin metropolis, Kwara state Nigeria. *Journal of Islamic Business and Management*, 10 (2), 343-367. <https://doi.org/10.26501/jibm/2020.1002-004>.
<https://jibm.org/wp-content/uploads/2021/03/4-Mustapha-Yusuf-Ismaila-1-Abdulazeez-Sodiq-Olamilekan2-Abdul-Falilat-Ajoke3.pdf>.
- Nunnally, J. and Bernstein, I.H. (1994), *Psychometric theory*. (3rd ed.), New York: McGraw-Hill. <https://doi.org/10.1177%2F014662169501900308>. Available online at: <https://journals.sagepub.com/doi/10.1177/014662169501900308>.
- Nuseira, M.T. and Aljumahb, A. (2020), The role of digital marketing in business performance with the moderating effect of environment factors among SMEs of UAE. *International Journal of Innovation, Creativity and Change*. 11(3), 310-324. Available at: https://ijicc.net/images/vol11iss3/11325_Nuseir_2020_E_R.pdf.
- Olalekan, U. and Asikhia, H. (2009), The moderating role of e-marketing on the consequences of market orientation in Nigerian firms. Ogun state, Nigeria: Covenant University.
- Olumo, M.O. (2016), E-marketing adoption and performance in the Nigerian paints industry. *International Journal of Economics, Commerce and Management*. 4(2): 235-252. (2) (Pdf) E-Marketing Adoption and Performance in The Nigerian Paints Industry (Researchgate.Net).
- Onyango, K. (2016), *Influence of digital marketing strategies on performance of cut flowers exporting firms in Kenya*. (MBA Thesis). University of Nairobi, Kenya. Available at: <https://www.semanticscholar.org/paper/Influence-of-Digital-Marketing-Strategies-on-of-in-Onyango/9ed0087ef14998e2badbc390d90faeef8c767f82>.
- Patariaia, N., Falconer, I., Margaryan, A., Littlejohn, A. and Fincher, S. (2014), 'Who do you talk to about your teaching?': Networking activities among university teachers. *Frontline Learning Research*, 2(2), 4-14.
<https://doi.org/10.14786/flr.v2i2.89>.
<https://journals.sfu.ca/flr/index.php/journal/article/view/89/138>.
- Ryan, D. and Jones, J. (2009), *Understanding digital marketing: Marketing strategies for engaging the digital generation*. Kogan: Page Publishers. Available at: https://www.academia.edu/30511847/Understanding_Digital_Marketing_DAMIA_N_RYAN_and_CALVIN_JONES.
- Santos, J.B. and Brito, L.A.L. (2012), Toward a Subjective Measurement Model for Firm Performance. *Brazilian Administration Review*, 9(6), 95-117, <http://dx.doi.org/10.1590/S1807-76922012000500007>. Available online at: <https://www.scielo.br/j/bar/a/3P5gmSvbRPMgZRmp46BDTKr/?lang=en>.
- Scharl, A., Dickinger, A. and Murphy, J. (2005), Diffusion and success factors of mobile marketing. *Electronic Commerce Research and Applications*, 4(2), 159-173. <http://dx.doi.org/10.1016/j.elerap.2004.10.006>. Available online at: <https://www.sciencedirect.com/science/article/abs/pii/S1567422304000390?via%3Dihub>.

- Sekaran, U. and Bougie, R. (2009), *Research Methods for Business: A Skill Building Approach*. 5th edition, John Wiley and Sons Inc., Hoboken.
- Research Methods for Business: A Skill Building Approach (5th Edition) — Tilburg University Research Portal.
- Srinivasan, R., Bajaj, R. and Bhanot, S. (2016), Impact of social media marketing strategies used by micro, small and medium enterprises on customer acquisition and retention. *Journal of Business and Management*, 18(1), 91-101. <http://dx.doi.org/10.9790/487X-181391101>. Available online at: <https://www.iosrjournals.org/iosr-jbm/papers/Vol18-issue1/Version-3/M0181391101.pdf>.
- Statista (2021), Number of social network users in Nigeria from 2017 to 2026. Available online at: [* Number of social network users in Nigeria 2026 | Statista.](#)
- SteenKamp, M., & Hyde-Clarke, N., (2014). The use of Facebook for political commentary in South Africa. *Telematics Inform.* 31(1), 91-97. <http://dx.doi.org/10.1016/j.tele.2012.10.002>. Available online at: <https://www.sciencedirect.com/science/article/abs/pii/S0736585312000755?via%3Dihub>.
- Steinbock, D. (2006), The missing link why mobile marketing is different. *International Journal of Mobile Marketing*, 1(1), 83-94.
- Stokes, R. (2011). *E-marketing: The essential guide to digital marketing*. Quirk eMarketing, New York: The Free Press.
- Tanuri, I. (2010), A literature review: Role of social media in contemporary marketing. Retrived from: <<http://www.slideshare.net/groovygenie/role-ofsocial-media-in-contemporary-marketing>>.
- Tapscott, D. and Williams, A.D. (2008), *Wikinomics: How Mass Collaboration Changes Everything*, USA: Penguin Group.
- Tarutè, A. and Gatautis, R. (2014), ICT impact on SMEs performance. *Procedia - Social and Behavioral Sciences*, 110, 1218 – 1225.doi: 10.1016/j.sbspro.2013.12.968.
- Varrella, S. (2021), Number of primary schools in Nigeria 2019 by ownership. Available at: [Nigeria: private and public primary schools/Statista.](#)
- Wolpert, D.H. (2013), Theory of Collective Intelligence, NASA Technical Report Server. Available at: [https://ti.arc.nasa.gov/m/pub-archive/729h/0729%20\(Wolpert\).pdf](https://ti.arc.nasa.gov/m/pub-archive/729h/0729%20(Wolpert).pdf).
- Williams, K. and Durrance, J.C. (2008), Social networks and social capital: Rethinking theory in community informatics. *Journal of Community Informatics* (2008). <http://dx.doi.org/10.15353/joci.v4i3.2946>. Available at: https://www.researchgate.net/publication/220536667_Social_Networks_and_Social_Capital_Rethinking_Theory_in_Community_Informatics.
- Yamane, T. (1967). *Statistics: An introductory analysis*, (2nd ed.), New York: Harper and Row. Available at: <https://www.worldcat.org/title/statistics-an-introductory-analysis-2nd-ed/oclc/299725866>.
- Yasmin, A., Tasneem, S. and Fatema, K. (2015), Effectiveness of Digital Marketing in the Challenging Age: An Empirical Study. *International Journal of Management Sciences*, 1(5), 68-80.<https://doi.org/10.18775/ijmsba.1849-5664-5419.2014.15.1006>. Available online at: <https://researchleap.com/wp-content/uploads/2015/04/Effectiveness-of->

Digital-Marketing-in-the-Challenging-Age-An-Empirical-Study.pdf.