

## **E-MARKETING ADOPTION AND PERFORMANCE IN THE NIGERIAN PAINTS INDUSTRY**

**Michael Oluwaseun Olomu** 

Department of Science Policy Research and Innovation Studies (SPIS), National Centre for  
Technology Management (NACETEM), Obafemi Awolowo University, Ile-Ife, Nigeria  
[smo128micho@yahoo.com](mailto:smo128micho@yahoo.com)

**Isaac Adeyemi Irefin**

Department of African Institute for Science Policy and Innovation (AISPI),  
Obafemi Awolowo University, Ile-Ife, Osun State, Nigeria  
[airefin@yahoo.com](mailto:airefin@yahoo.com)

### **Abstract**

*Firms increasingly deployed Information and Communication Technology (ICT) to improve sales and create competitive advantage in the market. This study examined the impact of e-Marketing adoption on the performance of the Nigerian paints industry. The study was conducted using 240 questionnaire administered on paints manufacturing firms which resulted into 84.5% response rate in year 2014. A statistical analysis was performed on these firms using Ordinary Least Squares techniques and the performance parameters measured were market share, sales growth, customer retention and the number of marketing staff as well as the total level of investment on e-Marketing adoption. The study revealed that sales growth has more intensity in the e-Marketing performance, while the study further suggested that firms should intensify the utilization of ICT for marketing thereby increasing profitability and thus promote sales performance in the industry.*

**Keywords:** *E-Marketing, ICT, Performance, Manufacturing, Paints industry*

## INTRODUCTION

Studies in recent times have shown that there has been a growing concern on the relationship between marketing and sales and how it affects business performance (Le Meunier-FitzHugh and Piercy, 2007; Homburg *et al.*, 2008). This subject matter has attracted increased interest from both academic (Dewsnap and Jobber, 2000; Rouziès *et al.*, 2005) and managerial arena (Dewsnap and Jobber, 2002; Homburg *et al.*, 2008).

On the other hand, the today's business environment are compelled to increase and encourage effectual collaborations among marketing tools that would lead to enhanced outsourcing activities, transformation in the value chains and distribution networks which require enhanced communication capabilities and increased information exchanges. The existing trends in the business environments which allow shrinkage of markets, technology turbulence and diffusion of the Information and Communications Technology (ICT) through the organizations demand for structural changes in the organizations and their marketing networks.

Likewise, information has been noted to be one of man's precious commodities from the time immemorial but the major concern has been how to collect, store, retrieve and distribute it by any conceivable fastest means (Ilori *et al.*, 1999). Information management therefore necessitates a diverse set of technological tools and resources to create, disseminate, store and bring value-addition into knowledge. This makes knowledge a fundamental resource for all economic and developmental activities in the society.

For much of this time, businesses and marketing experts have attempted to formulate the best ways to introduce the knowledge of ICT successfully into their domain, while it has to empower the widespread study of this development (Brodie *et al.*, 2006). Similarly, ICT provides marketing with an extraordinary ability to target specific groups of individuals and enable mass customization and one-to-one strategies by adapting communications and other elements of the marketing mix to consumer segments (Prasad *et al.*, 2001). The diversity in the technological world could be attached to the fact that ICT is evolving faster than physical or traditional means of doing things.

Basically, successful integration of ICT into marketing practice demands organizations to take active managerial role far beyond traditional range of competence and authority. The deployment of ICT requires incorporating of not just technology but also of experts and other organizational tasks into articulated and concerted strategic operational approaches to offering and delivering on value propositions for customers (Fellenz and Brady, 2006). For marketing decisions, ICT offers ready access to a vast array of global information resources and aids the gathering of valuable competitive knowledge and consumer-related information that simplify the decision processes.

The Nigerian paints industry which is the area of focus for this study has been in existence for a number of years and the industry has gone through various levels of development from the manual based processes to more technologically advanced production methods. The Nigerian paints industry is competitive but not highly regulated where there is free entry and exit due to rather 'friendly capital required' to set up the business as operating costs are relatively low, thereby increasing the number and longevity of players that exist (Lead Capital, 2008).

An industry with over 1,000 players can be considered to be saturated where the bigger ones are less than 10% of the total numbers of companies producing paints controls about 50% of the market while the remaining market share are divided among the rest. About 40 million litres of paints are produced and used in the country annually, which include the decorative/architectural paints constituting 71% of the market share, Industrial has 19%, Automotive 6% and others have 4% of the market share (Frost and Sullivan, 2013). Many new players get enticed to paints making business due primarily to ineffective regulatory practices as well as the attractive capital requirement.

In Nigeria, the means of disseminating information has varied from voice, smoke signals, beating of drums, carrier pigeon, writing and distribution attained through magazines, books, newspapers and the poster system to the contemporary day system of telecommunication (Ononogbo, 1990). It was not until Coviello *et al.* (2001 and 2003) systematically added an e-Marketing (eM) component to their framework that ICTs were considered and since then, various researchers have used the Coviello findings and other such frameworks to study the operationalization of ICT in marketing practice and approach.

E-Marketing is defined as the means of "using the internet and other interactive technologies to create and mediate dialogue between the firm and identified customers (Coviello *et al.*, 2001) which encompasses one-to-one marketing and allows for mass customization".

Similarly, Gilmore *et al.* (2007) defined e-Marketing as the use of internet and related technologies along with other marketing tools in order to carry out the traditional marketing operations and activities, finding customer, communicating with them and delivering value to them. Electronic marketing is viewed as another philosophy practiced in modern business involving marketing of goods, services, information and ideas through internet and other electronic means.

Numerous studies in the 1990s indicated a low incidence of eM adoption as more recent investigations have discovered that not only has there been an improvement in the deployment of eM in firms, but that firms adopting eM are likely to show increasing marketing performance (Barwise and Farley, 2005; Brodie *et al.*, 2006). It was also opined that the spelling of

“Marketing” should be transformed to “MarkITing” to reveal the widespread deployment of ICT in Contemporary Marketing Practice (Brady *et al.*, 2002).

More so, Brodie *et al.* (2006) envisaged that the benefits of eM to organizations surpasses those only related to communication as investigations have revealed that the eM has overall impact on enhancing the firm’s capability to manage customer relationships while relationship benefits such as encouraged customer feedback were seen as equally important in measuring a firm’s performance.

However, companies still fall short of their sales target, despite the growing awareness of the use of ICT in marketing, while expenditure on ICT is usually looked upon as an unproductive overhead cost and it is difficult to directly measure ICT contribution because of its hidden and intangible benefits (En Mao and Palvia, 2001). Therefore, it is important to objectively and systematically examine the impact of e-Marketing adoption on the performance of the paints manufacturing companies in Nigeria.

Similarly, studies regarding the application of ICT on marketing and their proper usage and performance in the Nigerian paints industry still remains largely unexplored area, and in an attempt to fill this research void, this paper would examine the impact of e-Marketing on the performance of the paints companies’. This study is expected to guide the players in the paints industry on how to successfully integrate marketing strategies with information and communications technology, thereby contributing immensely towards realization of high sales turnover.

## **OVERVIEW OF NIGERIAN PAINTS INDUSTRY**

The Nigerian paints industry is that section of manufacturing industry which produces coloured liquid applied to a surface in order to decorate or protect it. Paints is the general term for a family of products applied to various surfaces such as wood, metal or stone to protect the surface from corrosion, oxidation and environmental weathering. It is a substance used as coatings to protect or decorate a surface (especially a mixture of pigment suspended in a liquid); dries to form a hard coating.

The Nigerian paints industry has been in existence for a number of years and it is highly competitive in nature as there is free entry and exit of investors. Information gathered has it that many stakeholders get appealed to paints production business primarily as a result of incompetent regulatory practices. This has inevitably led to the lowering of quality of paints manufactured while more of the players produce sub-standard paints products at relatively cheaper rate which enables them to sell at a lower price.

The paints industry is a raw material intensive one with about hundreds of inputs going into the manufacturing process. The raw materials for paints maybe classified into five segments namely pigments, solvents, binders, additives and white cement/urea and they account for about 50% of total cost. Hence, the industry's profits are sensitive to international price rises as when the international prices of petrochemical products come down, the paints companies benefit more and vice versa.

The industry is currently import dependent as over 70 per cent of the raw materials are sourced from abroad but not until recently as the enactment of the local content law which gives directive to the major international oil companies to support the initiative that at least 60 per cent of the materials needed by them are sourced locally in order to assist in the development of sustainable capabilities within Nigeria.

Considering the raw material prices and charges which are predicted to come down in the next coming years, the organized sector's operating profit and margins should improve substantially. Remarkably, the demands for paints is relatively price elastic in nature and the leaders in the industry operate a vast dealership network and they are therefore required to maintain high inventory levels.

Another notable feature of the paints industry in Nigeria is the existence of various tiers categorized by criteria such as sales growth, market share, product quality, reputation, etc. The players in the industry can be classified into three broad categories: the first, second and third tiers. The first tier category constitutes the foremost players which control greater market share and have been in operation for many years. Companies such as Berger Paints, Chemical and Allied Products Plc. (CAP Plc.), Premier Paints Plc., African Paints, DN Meyer Plc., International Paints West Africa Plc. (IPWA Plc.) etc. are in this category.

Berger paints is the leading paints and allied coatings manufacturing and marketing company in Nigeria which has span over fifty-three years in the paints industry with a market share of 23 percent of total annual production volumes. Berger Paints is at the forefront of manufacturing, development and distribution of paints and coatings to professional, industrial, commercial and retail customers in Nigeria. Its operations are majorly into five segments: Decorative, Industrial coatings, Marine and Protection coatings, Automotive/Vehicle refinishes and Wood Preservers and finishes.

Similarly, CAP Plc. which is the second largest producer of paints in Nigeria with a market share of about 20 percent. IPWA Plc. is a more diversified paints manufacturing company holding an estimated market share of between 15-20 percent of the industrial protective coatings market.

The second category comprises of mainly the medium-sized players with less control of the market share and their equities are being controlled by few private individuals while the third tier category consist of companies with relatively larger customer patronage than their mid-tier peers which are characterized by lower price advantage but are restricted based on quality.

The major regulatory body for the paints industry is the Standards Organization of Nigeria (SON) which has been at the forefront of ensuring quality standards in the industry. Several efforts have been made by SON to maintain minimum standards for paints manufactured but are confronted by large number of players in the industry. Such standardization has produced a remarkable overall quality level of paints made in recent times. It therefore bestows a responsibility on the lower tier companies to improve on their quality levels in order to compete efficiently.

The industry is riding high noticeably in terms of growth in the automobile industry, new constructions in the housing segment and improving infrastructure throughout the country. The industry has improved well in the last few decades and is also motivated to move ahead with several influencing factors such as new technologies, new innovative products, new associations, consolidation and performing better in the international market.

## **LITERATURE REVIEW**

### **Concept of Information and Communications Technology**

ICT refers to as a “diverse set of technological tools and resources used to communicate, and to create, disseminate, store, and manage information. ICT has more recently been used to describe the convergence of several technologies and the use of common transmission lines carrying very diverse data and communication types and formats. ICT underpins innovation and competitiveness across a broad range of private and public markets and sectors.

According to International Telecommunication Union (ITU), ICT is a term used to describe technologies in manipulating and communicating information. Notably, the vast increase in the capabilities and numbers of personal computers and the unprecedented changes brought about by the internet have driven an integration of computing technology and telecommunications as the two areas have moved from analog to digital and then to packet technologies, and as the internet has emerged to become the dominant data communications system in use today, whether as the “public Internet” or “managed Internet.”

ICT has become an integral and acceptable aspect of human endeavours which is increasingly important and it is expected that this trend will continue to the point that it will become a functional requirement for people’s work, social and living. This implies that it involves the application of principles to engage physical component in achieving an intended goal.

The growing prevalence of ICT in business has created opportunities for continuous two-way links with respect to products, services, information, processes etc. between companies and their individual customers, suppliers and other partners. This aptitude for increased linkage and networking had profound effects on the “structure, strategy and competitive dynamics of industries” (Butler *et al.*, 1997).

This development has created catch-up opportunities for developing countries such as Nigeria to attain desired levels of development without necessarily ‘reinventing the wheels’ of economic growth (Obasan, 2011) as this new technology has brought far-reaching revolution in societies, which has tremendously transformed most business scenes. Notably, ICT is not just about technology, but more about information transfer and communication.

Modern information and communications technologies have created a "global village," in which people can communicate with others across the world. For this reason, ICT is often studied in the context of how modern communication technologies affect society.

However, ICT capabilities vary widely in the developed countries while in developing countries; they may be less available and offer less capacity. Nevertheless, developing countries are catching up quickly by leapfrogging older generations of technology as well as creating solutions that suit the needs of their user communities. In some cases, the lack of a legacy infrastructure makes rapid modernization easier.

### **ICT Development in Nigeria**

Technology is regarded as an important factor in the economic growth and development of many nations and Nigeria is not an exemption. The greatest indication that Nigeria has realized the crucial role of technology is the formulation of the Telecommunications and ICT policy, as well as the empowerment of an independent regulator for the sector.

The development of the ICT sector in Nigeria has proceeded with a focus on liberalization, deregulation and competition in service delivery. ICT policy formulation and implementation in Nigeria is an assignment undertaken in each of the domains that make up the sector. These are the broadcasting, telecommunications and information technology domains.

The recognition of the importance of ICT in socio-economic development motivated the Nigerian Government to set in motion tactics that would ensure the effective participation of the country in the new information system. To accomplish this objective, the Nigerian government established the National Information Technology Development Agency (NITDA) in 2001 to implement all policies related to the development and use of ICTs in the country.

The National Policy on Information and Communications Technology had earlier in 2001 been formulated and approved to address the issues relating to low level of ICT development in

the country as well as the matters of access and utilization which are intimately linked to service availability and affordability. In Nigeria, the existence of Telecommunications Policy along with the ICT Policy is particularly remarkable.

Notably, the Nigerian ICT policy is a comprehensive document that embraces all the key components of the vertical, infrastructural and horizontal policies. Generally, according to Hafkin (2002), ICT policy is categorized into vertical, infrastructural, and horizontal policies. The vertical ICT policy addresses sectorial issues and needs such as transportation, commerce, manufacturing, agriculture and oil.

Infrastructural aspect in other hand deals with the development of national infrastructure that gives supports to communications and linkages among the actors in a National Innovation System (NIS). Also, the horizontal aspect deals with the impact on broader parts of society such as freedom of information, pricing, tariff, security and privacy issues.

Right at the dawn of 2000, the Nigerian Government embarked on an aggressive initiative towards the provision of more effective services by privatization and deregulation policies. The policy realization led to the creation of National Telecommunication Policy in December 2001. The policy then acknowledged the need for enabling environment for deregulation and rapid expansion of the telecommunication services in the Nigeria.

The mission statement of the government was to use ICTs for Education, Creation of Wealth, Poverty Eradication, Job Creation, and Global Competitiveness. The policy objective was aimed to design globally competitive valuable human power in ICTs and associated disciplines. It is also targeted at modernizing and rapidly expanding the telecommunications system and services with anticipation to improve socio-economic development through internal incorporation of economic and social actors.

This entails developing a pool of ICT engineers, scientists, technicians and software developers. Consequently, attractive career opportunities will emerge in addition to development of “Made in Nigeria” software and computer components that can earn the nation some foreign exchange. The enactment of ICTs policy gave room for the adoption of Global System for Mobile Communications (GSM) and its related components in Nigeria. Just as the Telecom policy was successfully introduced, the National Communication Commission (NCC) was consequently established to implement the policy.

Following the release of a new telecommunication policy in year 2001 and several Private Telephone Operators, Internet Service Providers, Fixed Wireless Access Operators and a Second National Carrier have begun operation in Nigeria (Ndukwe, 2003). The activities have increased and promoted competition in the industry, resulting in exponential growth in the number of telephone lines. Just within six months after the take-off of the GSM in Nigeria,

more than 350,000 mobile lines were active. The existing operational fixed lines increased from 450,000 in December, 2000 to 888,854 by March, 2004, while mobile lines increased to 3.8 million (Akwani, 2005).

Based on the seemingly unquenchable desire of the phone services consumers and the potentials of the Nigerian market, US\$2.110 billion was pumped into the sector by December 2002, US\$2.55 billion by June 2003, and over US\$4.0 billion by March 2004 compare to the initial investment which was just US\$50 million as at the end of 1999. This represents a percentage increase of over 8,000. According to Ndukwe (2003), investment in the telecommunication sector was ranked second to the oil industry as at this period. Of all the applications of ICTs, the use of mobile phones is on the increase in most developing countries while internet usage is considered to rank next to phone usage, especially in Nigeria.

However, considering the consciousness about the potential ensued in the adoption and deployment of ICTs for transforming the national economy among the policy makers and stakeholders, the Nigerian government has taken giant steps by creating an enabling environment to attract investors both within and outside the country. More so, it is important for the Nigerian government to ensure the sustainability of this development as such.

### **Empirical Literatures on e-Marketing**

In the past decades, several empirical studies shown that marketing was slower than other purposes to deploy ICT and that ICT adoption for marketing functions were principally for productivity or automation focused on routine or tactical activities (Fletcher and Wright, 1997; Leverick *et al.*, 1998; Peattie and Peters, 1997).

Similarly, Naude and Holland (1997) emphasized that the world is changing from the informational to the transformational phase, and thus an increased use of ICT for marketing should occur now and into the foreseeable future. Recently, ICT development and its effects on business activities have been in the forefront of scientific thinking in the last two decades (Salo *et al.*, 2005).

E-Marketing as an innovation is a crucial concept for a firm to attain optimum performance in profit and growth. Sandvik (2003) noted that marketing innovation has a positive effect on sales growth and firm's performance. If an organizational marketing competence and potentials are efficiently and appropriately harness with other forms of technologies, such an organization is bound to be reckon with in such industry. That is SMEs can achieve leadership positions by properly harnessing and applying aggressive marketing innovation strategies in niche industries. Marketing innovation would improve sales growth through the rising demand

for products, which is bound to generate additional profit to innovative firms (Johne and Davies, 2000).

Likewise, Otero-Neira *et al.* (2009) concluded with strong evidence in their study that market innovation strongly and positively influence business performance and profitability.

The smooth integration of ICT successfully in marketing domain requires firms to take an active managerial role far beyond their traditional areas of competence and authority. Successful deployment of ICT requires integration not just of technology but also of technologists and other organizational functions into coherent and concerted strategic and operational approaches to offering and delivering on value propositions for customers (Fellenz and Brady, 2006).

Literature has it that many ICT investments required much purposeful strategic dimension and focused on the rational and engineering viewpoint. The more ICT possessed and deployed for transformational consideration, the more challenges that emerge in implementation and in assessing their eventual benefits. ICT for transformational purposes can be fully incorporated into a firm's marketing efforts, but a large and often dramatic change in organizational culture may be necessary (Brady, 2002).

Notably, the sizable investments in terms of resources into ICT initiatives within the marketing practice have ensued into many major failures or at a minimum, resulting to significant technical, human and organizational challenges (Chen and Ching, 2004). Numerous efforts to improve efficiencies and profitability from the deployment of ICTs such as the Internet (Deeter-Schmelz and Kennedy, 2004), Sales Force Automation (Speier and Venkatesh, 2002; Geiger and Turley, 2005), Electronic Data Interchange (Naude and Holland, 1997), Marketing Information Systems (Li, 1995), Databases (Desai *et al.*, 1998) and Customer Relationship Management (Chen and Ching, 2004) have not lived up to adequate results.

In a qualitative study conducted by Brookes *et al.* (2004) evidences were further provided on the extent to which ICT are shaping marketing practices. Coviello *et al.* (2001) in their empirical study noted that the e-Marketing practice is not extensively integrated 'at a high level' as most firms are concentrating more on traditional marketing approaches and where it is practiced, it occurs in collaboration with others rather than as a separate marketing practice. They advocated that the practical application of communicational or interactive technologies is in its infancy. They had the knowledge of the developmental features of ICT and recommended that decisions as to the implementation of e-Marketing will demand perfect understanding of both the firm's capabilities to deploy and support 'e' operations and their customer's preferences to participate in electronically-interactive relationships.

Another related study on e-Marketing adoption among 212 US-based firms carried out in 2002 and also in 2005 involving 139 US-based firms by Brodie *et al.* (2006) compared the 2002 results with the 2005 and they concur with Barwise and Farley's (2005) argument that eM is 'starting to come of age'. Specifically, they ascertained that with a rise from 63% to 71% of firms showing 'medium' or 'high' levels of eM, it is evident that eM is no longer 'new' but reasonably becoming an established marketing practice within the majority of firms. Although this level of diffusion is not as high as for the other marketing practices, it is approaching a comparable level (Brodie *et al.*, 2006).

Brodie *et al.* (2006) further affirmed that eM is evolving as a practice that is highly incorporated with and thus gradually enhancing and supporting existing marketing practices rather than becoming an independent practice. They also showed a strong and positive relationship between eM penetration and adoption performance, especially 'acquisition' performance (such as sales growth and new customers gained) and customer retention performance revealing that firms adopting eM will perform better".

Mielach (2012) discovered that "even though the popularity of social media marketing has grown in recent years, marketing outfits are still unsure exactly how their efforts are helping businesses". This is because there have not taken time to study the success achieved through e-Marketing. This could be the situation with Nigeria where the available technological mediums are not fully utilized for marketing the Nigerian brands.

Similarly, Boyd *et al.* (2006) in their recent research established that the biggest problem that marketing and advertising managers are confronting is its inability to accurately measure the return on investment it provided their businesses.

## **METHODOLOGY**

The data obtained from a survey conducted in the year 2014 was used in this study. It covered the states in the Southwestern part of Nigeria, and this was due to the fact that most of the paints companies in Nigeria are situated in this region while bulk of paints firms in other regions depend solely on regular supplies from the firms from the Southwestern Nigeria which are made possible through effectual vast dealership systems they operate.

This study also used a self-structured questionnaire to gather data from randomly selected paints manufacturing. The questionnaire were purposely administered on the Chief Executive Officers, Heads/Senior Officers of Marketing/Sales department and other staffs found to be relevant to this work. About 203 completed questionnaire representing 84.5% response rate were used in this study.

The approach of distribution of the respondents recognized a prior expectation of having more of paints firms in Lagos State with a progressive decrease as one move away from the state. This is as a result of the fact that the state still remains the commercial centre of the country and its accessibility features to the outside world.

The Least Squares method of multiple regressions is adopted in estimating the model as a result of more than one independent variable the model possesses. This statistical method seeks to establish the nature of relationship among the selected variables (Brooks, 2008). The performance model adopted in the study was in line with the Vorhies and Morgan (2005) where only three major performance indicators were measured (market share, sales growth and customer retention), but this study also went ahead to consider the impacts of total number of marketing staffs and total investment on e-Marketing performance. The model examines whether each of the indicators have significant impact on the e-Marketing adoption of the sampled firms and also whether they jointly have impact on e-Marketing performance. E-Marketing adoption performance was used to proxy market share, sales growth, customer retention rate, and investment on e-Marketing, while the number of marketing staff was used as the control variable. The statistic aims to examine whether changes in one or more variables lead to changes in other variable(s). The attention of this paper is central on market share, sales growth, customer retention rate, number of marketing staffs and investment on e-Marketing.

The firms were asked to indicate their estimated market share rate and sales growth performance in percentage for the year 2014, while the respondents were also asked to rate their companies' customer retention performance for the same period. More so, the figures for the level of investment on e-Marketing and the total number staffs in the marketing department during the period were provided by the respondents.

### **Model and Hypothesis of the study**

This section provides the mathematical model and hypotheses for the study. The model of the framework can be written as:

$$EMP = f(MSR, SGR, CRR, TMS, TIE) \quad (1)$$

Where LEMP = log of e-Marketing Adoption Performance of the firm,

MSR= Market Share Rate,

SGR= Sales Growth Rate,

CRR= Customer Retention Rate,

TMS= Total Marketing Staff,

TIE= Total Investment on eM

Equation (1) can be logged, so as to reduce the stochastic error term and expressed as:

$$LEMP = \alpha_0 + \alpha_1 MSR + \alpha_2 SGR + \alpha_3 CRR + \alpha_4 TMS + \alpha_5 TIE + Ut \quad (2)$$

Where  $\alpha_0$  = Constant factor

$\alpha_1, \alpha_2, \alpha_3, \alpha_4,$  and  $\alpha_5$  = Coefficient of market share, sales growth and customer retention, total marketing staff and total investment on e-Marketing of firm respectively.

Six hypotheses were formulated to examine the impact of the market share, sales growth, customer retention, marketing staff and investment of firms on the e-Marketing. These are stated below:

- |              |   |                        |
|--------------|---|------------------------|
| Hypothesis 1 | $H_0: \alpha_1 = 0;$  | $H_1: \alpha_1 \neq 0$ |
| Hypothesis 2 | $H_0: \alpha_2 = 0;$  | $H_1: \alpha_2 \neq 0$ |
| Hypothesis 3 | $H_0: \alpha_3 = 0;$  | $H_1: \alpha_3 \neq 0$ |
| Hypothesis 4 | $H_0: \alpha_4 = 0;$  | $H_1: \alpha_4 \neq 0$ |
| Hypothesis 5 | $H_0: \alpha_5 = 0;$  | $H_1: \alpha_5 \neq 0$ |
| Hypothesis 6 | $H_0: \alpha_1, \alpha_2, \alpha_3, \alpha_4 \text{ and } \alpha_5 = 0;$                  |                        |
|              | $H_1: \text{At least one } \alpha_k \neq 0, \text{ where } K = 1, 2, 3, 4 \text{ and } 5$ |                        |

From Hypothesis 1 to 5,  $H_0$  is the Null hypothesis and it states that each independent variable has no significant impact on the e-Marketing adoption performance while the Alternative hypothesis  $H_1$  means that each independent variable has a significant impact on firm's e-Marketing adoption performance.

Meanwhile,  $H_0$  in Hypothesis 6 shows that the independent variables are not jointly significantly important in explaining changes in e-Marketing adoption performance while  $H_1$  in Hypothesis 6 illustrates that at least some variables in the model are jointly significant in explaining the firm's e-Marketing adoption performance. The results are shown in the table below.

## ANALYSIS AND FINDINGS

The ANOVA analysis shows that the performance value (P-value) of 0.004 representing that the null hypothesis cannot be rejected at 10%, 5% and even at 1%. Thus, there is no significant difference between the dependent variable (performance level) and the independent variables (customer retention, sales growth, market share, marketing staff and investment). This indicates that all the independent variables are jointly significant in explaining the dependent variable. The regression result shows that e-Marketing performance is positively related to sales growth, customer retention and investment, while e-Marketing performance is negatively related to market share and marketing staff. Each of the independent variables also significantly affected

the performance of the firms using 10% level of significant. Sales growth has more influence on the e-Marketing performance of the firms with coefficient of 0.471 as against that of market share of 0.011, customer retention of 0.086, marketing staff of 0.052 and investment of 0.272. Using 10% level of significance, the e-Marketing performance values (P-value) of 0.050 and 0.005 which are less than 10% significant level show that sales growth and investment respectively have significant impact on the firms' e-Marketing performance. However, market share, customer retention and marketing staff did not have a significant impact on the performance as their P-values of 0.911, 0.293 and 0.516 are greater than the 10% level of significance.

Table 1. Regression Output; Least Squares Method using SPSS 20

Dependent:	EMP			
Samples:	203			
Variable	Coefficient	Std Error	t-statistic	Prob (p-value)
<i>MSR</i>	-0.011	0.096	-0.112	0.911
<i>SGR</i>	0.471	0.084	5.630	0.050
<i>CRR</i>	0.086	0.082	1.057	0.293
<i>TMS</i>	-0.052	0.081	-0.651	0.516
<i>TIE</i>	0.272	0.095	-0.250	0.005
C	2.337	0.554	4.222	0.000
R <sup>2</sup>	0.556			
F-statistic	12.577			
Prob. (F-statistic)	0.004			

Moreover, the P-value of the F-statistics (0.004) shows that all the independent variables jointly have a significant impact on the firms' e-Marketing performance. The coefficient of determination (R<sup>2</sup>) showed that the proportion of variation in firms' performance that can be explained by the market share, sales growth, customer retention and marketing staff as well as the investment on ICT for marketing is 56%. This implied that there are few other variables that explained the firms' performance which are not considered in this study. These variables might include strategic behaviour of the firms, large capital base etc.

Finally, the information depicted in the table indicated a noticeable impact of customer retention and investment on firms' performance, but more remarkably in sales growth which was as a result of the companies' adoption of e-Marketing tools for marketing activities. This discovery correlated with the findings of Wu *et al.* (2003) which discovered a positive relationship between e-Marketing and firm's performance involving a comprehensive conceptual model that included antecedents of e-Marketing adoption and performance were rightly

considered in their study. This conformed well to our findings from the case of the Nigerian paints industry and also in support of the argument of Barwise and Farley (2005) which propounded that e-Marketing is “starting to come of age”.

## CONCLUSION

This study has successfully explored the relationship and impact of e-Marketing adoption on the performance of the paints industry in Nigeria. The findings showed the relationship among the market share, sales growth, customer retention rate, number of marketing staff, level of investment on e-Marketing and firms' adoption performance.

Based on the results of the study, one percent increase in sales growth, customer retention and investment will increase the firms' performance level by 0.47, 0.09 and 0.30 percent respectively, and if the market share and marketing staff improves by one percent, the firms' performance reduce by 0.01 and 0.05 percent respectively. The direction of relationship between market share and firm's performance was negative as against the a priori expectation. It is not impossible that this was due to the low level of investment of Nigeria's paints firms on various e-Marketing offers. This is not unconnected with the role ICT plays on the marketing activities of paints manufacturing companies in Nigeria as sales growth improved remarkably when ICT were deployed for marketing and sales processes.

However, it becomes imperative for Nigerian paints industry to intensify and embrace more of ICT facilities and utilizes the various offers of e-Marketing for their daily marketing operations and automations so as to create a competitive advantage environment which will further improve their turnover and profitability. The firms should see marketing as a vehicle for the diffusion of technological knowledge that can contribute to their success by deploying ICT that would enable them the privilege to access emerging opportunities as any organization that refuses to engage in marketing innovation activities will find it very difficult to compete with its rivals in the industry. Nigerian government can provide tax rebate and other forms of incentives for the firms so as to break even in the short run. Therefore, the paper concluded that the adoptions of e-Marketing as well as the adequate deployment of ICT tools are vital for firms in Nigeria to grow and achieve profitability.

Finally, the study was not without its own limitations. At some points, some of the respondents were reluctant to provide useful information or where provided, they were not detailed which could have increased the horizon of the subject matter and the body of knowledge at large.

## REFERENCES

- Akwani, O. (2005). "Telecom Operators Creating New Employment in Nigeria". Retrieved June 15, 2014 from: <http://www.imdiversity.com>.
- Barwise, P. and Farley J. U. (2005). The State of Interactive Marketing in Seven Countries: Interactive Marketing Comes of Age. *Journal of Interactive Marketing*, 19(3), 67-80.
- Boyd, Harper A. John W. Mullins and Orville C. Walker Jr., (2006). *Marketing Management: A Strategic Decision Making Approach*, sixth edition. New York, NY: The McGraw-Hill Companies Inc.
- Brady, M., Saren, M., and Tzokas, N. (2002). Integrating Information Technology into Marketing. *Journal of Marketing Management*, 18(5/6), 555–578.
- Brodie, R.J., Winklhofer, H., Coviello, N.E. and Johnston W.J. (2006). Is e-Marketing Coming of Age? An Examination of the Penetration of eM and Firm Performance, *Journal of Interactive Marketing*.
- Brookes, R.W., Brodie, R.J., Coviello, N.E and Palmer, R. (2004). "How Information Technologies Impact on Marketing Practices: Reinforcing, Enhancing or Transforming?" *Journal of Relationship Marketing*, 4, (3) 7-26.
- Brooks, C. (2008). *Introductory Econometrics for finance*. 2nd ed. London: Cambridge University Press.
- Butler P., Hall T., Hanna A., Mendonca L., Auguste B., Manyida J., and Sahay A. (1997). A revolution in interaction, *McKinsey Quarterly*, 1, 4-23.
- Chen, J. S. and Ching, R. K. H. (2004). An empirical study of the relationship of IT intensity and Organizational absorptive capacity on CRM performance, *Journal of Global Information Management*, Jan-Mar, Vol. 12, 1-17.
- Coviello, N.E., Brodie, R.J., Brookes, R.W. and Palmer, R.A. (2003). Assessing the Role of e-Marketing in Contemporary Marketing Practice, *Journal of Marketing Management*, 19, 857-881.
- Coviello, N.E., Milley, R. and Marcolin, B. (2001). Understanding IT-enabled interactivity in Contemporary Marketing, *Journal of Interactive Marketing*, 15 (4), 18-33.
- Deeter-Schmelz, D. R. and Kennedy, K.N. (2004). Buyer-seller relationships and information sources in an e-commerce world. *The Journal of Business & Industrial Marketing*, Vol. 19, Issues. 3, 188-196.
- Desai, C., Fletcher, K. and Wright, G. (1998). Barriers to Successful Implementation of Database Marketing: A Cross Industry Study, *International Journal of Information Management*, 4, 265-276.
- Dewsnap, B and Jobber, D. (2002). A social psychological model of relations between marketing and sales, *European Journal of Marketing*, Vol. 36, No. 7/8, 874-894.
- Dewsnap, B and Jobber, D., (2000). The Sales-Marketing Interface in Consumer Packaged-Goods Companies: A Conceptual Framework. *The Journal of Personal Selling & Sales Management*, Vol. 20, No. 2, 109-119.
- En Mao, and Palvia, P. (2001). *Information Technology Acceptance: How Much Do We Know? The proceedings of the Seventh Americas Conference on Information System*, Boston: USA.
- Fellenz, M.R., and Brady, M. (2006). Why the Tail Should Not Wag the Dog: Integrating the Deployment of Information and Communication Technologies (ICT) in Service Innovation and Delivery, *Proceedings of the Irish Academy of Management Annual Meeting*, September 2006, Cork, 1 – 25.
- Fletcher, K., and Wright, G. (1997). The Challenge of database marketing, *The Journal of Database Marketing*, 5(1), 42-52.
- Frost and Sullivan (2013). *Opportunities in the African Coatings Market: How Can we help you grow in Africa*.
- Geiger, S. and Turley, D. (2005). Personal Selling as Knowledge-Based Activity: Communities of Practice in the Sales Force, *Irish Journal of Management*, Vol. 26, issues 1, 61-71.
- Gilmore, A., Gallagher, D., and Henry. S. (2007). "E-marketing and SMEs: Operational Lessons for the Future"; *European Business Review*, 19(3), 112-116.

- Hafkin, N. (2002). Gender issues in ICT policy in developing countries. An Overview: United Nation's Division for the Advancement of Women (DAW) Expert Group meeting on Information and Communication Technology and their impact on and use as an instrument for the Advancement of Women, Seoul, Republic of Korea. [http://www.apc.org/english/capacity/policy/mmtk\\_gender\\_ictpol\\_hafkin.pdf](http://www.apc.org/english/capacity/policy/mmtk_gender_ictpol_hafkin.pdf) [Accessed June 1, 2014].
- Homburg, C.; Jensen, O. and Krohmer, H. (2008). Configurations of Marketing and Sales: A Taxonomy, *Journal of Marketing*, Vol. 72, March, 133-154.
- Ilori, M.O., Adetayo, J.O and Sanni, S.A, (1999). "The Impact of Information Technology on product marketing: A Case study of a Multinational Company in Nigeria". *The International Journal of Technology Innovation Entrepreneurship and Technology Management*, 19,691-699.
- Johne, A. and Davies, R. (2000). 'Innovation in Medium-Sized Insurance Companies: How Marketing Adds Value,' *International Journal of Bank Marketing*, 18 (1), 6-14.
- Le Meunier-FitzHugh, K. and Piercy, N. F. (2007). Does Collaboration Between Sales and Marketing Affect Business Performance? *Journal of Personal Selling and Sales Management*, Vol. 27, No. 3, 207-220.
- LeadCapital Limited (2008). *Nigeria's Chemical & Paints Industry (An Analytical View)*.
- Leverick, F., Littler, D., Bruce, M., and Wilson, D. (1998). Using information technology effectively: a study of marketing installations, *Journal of Marketing Management*, 14, 927-962.
- Li, E. (1995). Marketing information systems in the top US companies, a longitudinal analysis, *Information and Management*, 28, 13-31.
- Mielach, D. (2012). What's Social Media Marketing's No. 1 Challenge *Business News*.
- Naude, P., and Holland, C. (1997). What are the benefits of IT-based supply chain relationships? In *Conference proceeding of the 5th International Colloquium on Relationship Marketing*, Cranfield University, November, 1-24.
- Ndukwe, E. (2003). "The Challenges of Globalization and the Imperative of Creating Adequate ICT Infrastructure in Nigeria", a paper presented at the e-Nigeria 2003 International Conference on Information and Communication Technologies (ICTs).
- Obasan Kehinde Agbolade (2011). Information and Communication technology and Banks profitability in Nigeria. *Australian Journal of Business and Management Research*, 1(4) 102-107.
- Ononogbo, R.U. (1990). 'Information and the Technologies for Its Communication' ABIC Books Ltd, Enugu, Nigeria.
- Otero-Neira, C., Lindman, M. T., and Fernández, M. J. (2009). Innovation and Performance in SME Furniture Industries: An International Comparative Case Study,' *Marketing Intelligence & Planning*, 27 (2), 216-232.
- Peattie, K., and Peters, L. (1997). The marketing mix in the third age of computing, *Marketing Intelligence and Planning*, 15(3), 142-150.
- Prasad, V.K., Ramamurthy, K. and Naidu, G. (2001). "The Influence of internet-marketing integration on Marketing competencies and export performance". *Journal of International Marketing*, Vol. 9 No. 4, pp. 82-110.
- Rouziès, D.; Anderson, E.; Kohli, A. K.; Michaels, R. E.; Weitz, B. A and Zoltners, A. A. (2005). Sales and marketing integration: a proposed framework, *Journal of Personal Selling and Sales Management*, Vol. 25, No. 2, 112-122.
- Salo, J. T, Alaojutsijarvi, K. J, and Koivumaki, T. K. (2005). A review of research illustrating the impacts of digitization on the buyer-seller relationships, 21th IMP Conference proceedings, Rotterdam, Netherlands.
- Sandvik, I.L. (2003). 'The Impact of Market Orientation on Product Innovativeness and Business Performance,' *International Journal of Research in Marketing*, 20 (4), 255-376.

Speier, C., and Venkatesh, V. (2002). The hidden minefields in the adoption of sales force automation technologies, *Journal of Marketing*, Jul., Vol. 66, Issues, 3, 98-112.

Vorhies, D. W. and Morgan, N. A. (2005). Benchmarking Marketing Capabilities for Sustainable Competitive Advantage. *Journal of Marketing*, 69, 80-94.

Wu, F., Mahajan, V. and Bala Subramanian, S. (2003). An Analysis of E-Business Adoption and Its Impact on Business Performance. *Journal of the Academy of Marketing Science*, 31(4), 425-447.