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Full Length Research Paper

An investigative analysis of factors influencing E-business adoption and maintenance of commercial websites in Nigeria

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Abstract

The number of commercial organizations applying electronic commerce systems is on the rise when viewed globally. In the near future, this trend will become not only a tool to simply increase income, but without doubt will be considered an essential means for competition. Although Nigeria has the largest and fastest growing ICT marketplace in Sub-Saharan Africa, e-commerce activities have not progressed at a similar speed. In general, Nigerian retailers have not responded actively to the global growth of online retailing. Using a case study approach, various managers in six organisations from different states of the country were interviewed with a view to unravelling the factors influencing the adoption and maintenance of commercial websites in Nigeria. Analysis shows that consumer readiness is an influential factor for both developed and developing economies. Findings further revealed that most company websites are not maintained due mainly to absence of internal know-how by employees, time, and lack of continuous connectivity. This study contributes to a greater understanding of the factors that influence website adoption and maintenance within developing economies. And it provides insight to businesses contemplating setting up a website in developing economies on the successes and failures in the process of developing a commercial website.

Keywords: Website, maintenance, adoption, e-commerce, e-business, developing economies, Nigeria

INTRODUCTION

The evolution of e-business over the past few years has been tremendous; it is used by businesses to gain a competitive advantage, as it allows for both large and small businesses to access and compete in a global marketplace. However, the digital landscape comprises of a mix of different channels such as websites, social networks, emails; mobile devices such as smart-phones

or tablets; videos, widgets, kiosks, and gaming consoles. These mediums help marketers to build relationships with consumers, publicize their brands, and also sell their products or services. E-business has become increasingly popular since the late 1990s into the beginning of the 21st century.

Digital marketing arrived on the scene more than 15

years ago but has evolved rapidly in the last couple of years. Social media has significantly transformed consumer behaviour (Uzoka et al., 2007). It has facilitated sharing of information with prospective buyers like never before through online advertisements, videos, blogs, tweet, and more. The digital space has clearly caught the fancy of savvy marketers thanks to factors such as its:

- Huge impact on brand reputation
- Potential to quickly launch online campaigns
- Interesting mix of marketing technologies
- Ability to engage prospects in dynamic exchanges that influence buying decisions
- Measurability and cost-efficiency
- Creative potential of platforms such as rich media, gaming, and mobile applications (Wymer and Regan, 2005; Lee et al., 2006; Lee, 2010)

The evolution of digital: A convergence story

Digital media has progressed rapidly due to the convergence of technology and easy availability of consumer technologies (Kim et al., 2008). This has paved the way for interactive mediums that engages the audience something the traditional media did not provide.

It commenced with advancements in internet technology that led to the launch of thousands of websites. This was still a passive communication medium since sites were not interactive. Then came email, the first dynamic medium that enabled direct communication between consumers and businesses in a cost-effective and meaningful manner (Grandon and Pearson 2004). Doong, et al., (2011) stated that the revolution finally took off when 'search' became a part of the user experience. It was the arrival of social media, however, that made the digital landscape 'interactive' forever (Agwu, 2012).

The success of social media sites such as Facebook, Google+, YouTube, Pinterest, LinkedIn, and Twitter indicate how well connected today's users are across multiple geographies. The digital experience has switched the role of users from a passive receiver to an active participant, circulating relevant, useful information and influencing buying decisions.

Cote et al., (2005) asserts that the convergence of mobile technologies with location-based services and smart devices has now made real-time interactions a reality. Consumers are spending more time and money on these devices for their personal and business consumption. This means an increased opportunity for sellers to create interesting mobile applications that engage users.

Marketers, small and medium scale entrepreneurs as well as multinationals and conglomerates can now gain insight into the nature of information being accessed and shared (Johnson, 2007). Since consumers are interacting through various digital channels, they play a critical role

in building or demolishing a brand's reputation. This makes it imperative to identify the most relevant consumers and understand their behaviour in order to target the right audience and deliver the intended message. There has not been extensive research into developing economies especially in countries, such as Nigeria, where e-commerce is not quite popular. This study therefore closes this gap with the explorative study of the factors behind the adoption and maintenance of e-business in selected Nigerian organisations. It is recognized that in the United Kingdom, USA, Canada, Australia, and most EU countries, almost all products and services can be sourced online through various companies' websites (Molla et al., 2006). In furtherance of this, the objective of the research is therefore to investigate the factors that influence website establishment and maintenance in developing economies using selected Nigerian organisations as a case study and data will be gathered from face to face interviews with managers of selected organisations. The research question based on the above will be: What are the factors influencing website establishment and maintenance in developing economies? In the course of the analysis, emergent themes (Berg, 2007) will be identified through reviewing field-notes and interview data, and supplementary codes. The structure of the remainder of the paper is as follows: after a brief review of the literature regarding the adoption and maintenance of e-business, the research methodology is discussed. The next section presents the results and discussion of the paper, finally, the last section concludes the paper.

Review of related literature

Electronic business or e-business applications provide many benefits across a wide range of intra- and inter-firm business processes and transactions (Bitner et al., 2002). E-business is defined as the electronic integration of all information exchanges both within and outside of an organization in order to facilitate management practices and business processes. This involves the use of the web to conduct business transactions, that is, internet for e-commerce websites that allow customer transactions and customer service, intranets and extranets (Kim et al., 2008). In furtherance of this, Simpson and Docherty (2004) defined e-business as the use of information and communications technology (ICT) to improve business relationships, competitiveness and performances; however, the "business relationships", (Wymer and Regan 2005), referred to are not limited to those between the business and its customers, suppliers, etc., but covers those with employees as well as governmental institutions. According to Kamel (2006), website adoption is viewed as "the establishment of a Company website to share business information, maintain business relationships, and conduct business transactions through

telecommunications”.

Lee (2010) categorised the adoption levels into: (1) those who have not adopted any form of e-business/e-commerce; (2) those who are thinking about adoption; (3) those who are ready to adopt; (4) those who have adopted the basic elements (5) those who have adopted and fully embraced e-business/e-commerce. However, Mendo and Fitzgerald (2005) stressed that organisations often take so many factors into consideration in the decision making process for innovation adoption and some of these are: organizational Readiness/Organizational Features, Perceived Pressures/Social Pressures and Perceived Benefits as well as risks.

In another premise, Papazoglou and Ribbers (2006) argued that several organisations are often at a dilemma on the need for adoption of any form of innovation, and e-business is still new hence they see the creation of a website as an onerous task. These factors include: firm size, organizational structure, and quality of human resources; technologies which are the internal and external factors significant to the business; others include: environment which expresses where the firm conducts its business such as industry, competitors, government, etc. Within the wider spectrum, issues such as Technology Competence, Firm Size, Firm Scope, Consumer Readiness, and Competitive Pressure were significant factors in the adoption of e-business. Doong et al., (2011) stressed that lack of trading partner readiness was deemed as a factor that inhibits the adoption of e-business. The importance of E-business to business improvement cannot be overemphasized. Clearly, electronic commerce over the internet has offered important advantages including a more efficient way to conduct business transactions for buyers and vendors alike (Buderi, 2005). Eckhardt et al., (2009) stressed that within the sales and marketing departments, e-commerce and a well developed website can assist in the gathering of data, providing information, handling complaints, creating and operating a form of helpdesk, etc. Websites also assist in facilitating communications between organisations, their suppliers, customers and the general public.

Within the banking institutions, Yap et al., (2010) stated that bank websites makes information readily available to internal and external stakeholders. For example, the marketing department can promote the bank's new products on their websites, and the financial department can as well file their financial statements on the website. The public relations press releases can be made available to the public through the banks' websites. Managing internet technology is a challenge because of expanding and shrinking bank boundaries (Afuah, 2003; Floros, 2008). It is a general belief among researchers in electronic banking that website quality and features creates trust (Grandon and Pearson, 2004). The notion behind this is that if the website is of high quality, then

one would infer that the website vendor and owner may have some positive attributes and this will ultimately help in forming trusting beliefs and to some extent intentions. Moreover, website images, as seen in most ecommerce transactions have a significant effect on purchasing intention, while background pictures and colours affect consumer product choice (Eckhardt et al., 2009). Other researchers have examined the impact of specific website features and found them to be effective, attractive and also appeals to customers. Other scholars Hoffman and Novak 2000); Chen and Lee (2005); Reynolds (2010), all demonstrated the impact of features such as interface variables, interactivity, efficiency and speed of upload and download.

It is however on record that researches on commercial websites has very often focused on quality and effectiveness issues and has either developed instruments used to capture website success or examined the key properties that increase online buyers' satisfaction or traffic or online purchases (Reynolds, 2010). Research focusing on the effectiveness of commercial websites, has identified information quality, navigability, usability, personalization capability, security and reliability as highly desirable features that make buyers more likely to visit and/or to purchase at a given website

Website updates

While so much has been written about the importance of websites, few literatures have covered its updates. Sutton et al. (2008) stressed that there exist varying types of content updates of a site and they can range from mild to the infectious; for example misspelt words, lost transactions, systems crashes and so on. Yap et al. (2010) contends that website updates is must for organisation to reap the fruits of patronage. Customers should not have to be concerned with whether the information on the site is current or not. Therefore, maintenance is an important element in the success of websites for a business (Wymer and Regan 2005); Floros (2008) argued that web application development and maintenance is a very lengthy and costly ordeal. They further stressed that site maintenance and management is an essential issue within a website's life cycle. Much literature has dwelt on the adoption of e-business and less on the need for website hosting and maintenance. This research will seek to fill the gaps in relation to this aspect within the Nigerian context. Furthermore, most of the literatures reviewed in the course of this study dwelt more on the developed economies. It is therefore important to conduct similar research on developing economies such as Nigeria as it will greatly improve and impact on current and future development of websites and establish the extent to which management of these businesses observe the importance of website

Table 1. Interviewees and their background

Interviewees	Position	Organisation
A	Chief Operating Officer Director of Marketing	Hotel
B	MD/CEO	Supermarket
C	Manager, Sales and Marketing	Bank
D	Senior Manager, Sales and Marketing Manager, Marketing	Large farm
E	General Manager Head of Marketing	Oil palm producing company
F	Public Relation Manager	Educational institution

maintenance.

METHODOLOGY

This research sets out to investigate the factors which influence the adoption and diffusion of commercial websites and its maintenance in Nigeria as a developing country. A comparative analysis of factors within the developed and developing economies was discussed. Inductive approach was used due to the exploratory nature of the research and the scarcity of extant literature in Nigeria; therefore, rich, in-depth information is necessary to understand the subject area. Furthermore, case studies of various organisations were further used in order to achieve the research objectives. The case study approach was used in this research (Yin 2008; Saunders et al., 2009; Bryman and Bell 2011). Six organisations situated in three geo-political regions of Nigeria – North, West and East - were visited and some of their top managers were interviewed. These include; a hotel, supermarket, educational institution, oil palm producing company, a bank, and a large farm.

The companies within this study gave a wide scope although limited in number with respect to the objectives of the research. Each organisation operates in a different market and gives a wider range of the possibilities for adoption. And each of the selected organisations is at varying degrees where their websites are concerned and have been developed at various times, the oldest being ten years, and the youngest five years old in business. Internet services introduction, diffusion and adoption within the Nigerian state is less than 15 years as mobile telecommunication and internet was introduced into the Nigerian market in 2001. The selected organisation and their years of internet services adoption and website creation clearly serve the purpose of the study.

Sampling techniques

Self-selection sampling technique was used (Saunders et al., 2009). Top managers in these organisations (interviewees) were contacted via telephone, personal visits and email and readily agreed to participate. Some

of these interviewees further provided a list of willing participants as well as other organisations that could be useful to the study. Email correspondences were sent to these new contacts. These new set of interviewees were also contacted, however, due to work pressure and other commitments, some of them could not be reached. Interview sessions lasting not more than 60 minutes at the most and were finally conducted with nine managers in the six organisations with respect to their organisations websites' establishment and maintenance. Some interview sections were however extended in some cases. In line with the objective of the study, the interview sessions was to obtain as much information as possible from the interviewees on reasons why their organisations have made the decision to establish a website and those relating to maintenance. Table 1.

The companies and interviewees within this study are anonymous. The interviews could not be recorded as most of the interviewees did not give their consent. Hence notes were taken and later transcribed *ad verbatim*. The transcripts were analysed using codes (Saunders et al., 2009). Descriptive and then analytic codes were used as they not only simply code what happened, but rather suggest the way in which the interviewee thought about, or conceptualised them. After coding, the codes were arranged in a hierarchy (Merriam, 2009), codes that are similar were grouped together on the same branch of the hierarchy. This aided in the process of looking for patterns, comparing the data to establish similarities and differences and the formulation of themes (Berg, 2007). The themes were aligned to the objectives of the study as well as the research questions; and they were primarily focussed on factors that made each of the organisations interesting and specific to the research questions.

Case studies and analysis

An overview of the companies

Company A – Hotel

What started in four rooms have now transformed into a magnificent blocks of buildings with the state of the art

equipments. Situated in a serene part of a bubbling city, this hotel can comfortably sit more than five hundred participants in the newly built auditorium. From rags to riches as captioned in the hotel's ten years newsletter, the management went memory lane detailing the hurdles bothering on land space, financials, as well as government policies he has to pass through to move beyond the first step. Today, the hotel welcomes the *cream de lac* of the society with more than two hundred employees of different categories. Though the hotel is well known, the website is simply an informational one and no e-commerce or Business to Customer (B2C) or Business to Business (B2B) transactions are conducted on it. The phone numbers on the websites are still analogue and never rings, the prices of different rooms are also obsolete. Other than the address, location and picture of the rooms, no other concrete information is evident on the website. Since it is not updated, customers can only contact the hotel in person and not through telephone, emails or through the website.

Company B – Supermarket

Company B was established in 2001 and has since grown in both size and shape. It is now one of the leading supermarkets in Nigeria with outlets in most cities; and employee strength of seven hundred and fifty five. The website was however created in 2007. The website is basic in both appearance and functionality, the website is regularly updated by the IT department in conjunction with the sales and marketing department. Orders can be made through the website but delivery is usually followed by several phone calls and sometimes emails to ensure prompt delivery as well as the right address and customer. Most customers are within the cities as well as have access to the internet. There is an established e-commerce/website strategy and the company is also hoping that the website would generate additional sales with additional upgrade and constant maintenance.

Company C – Bank

This is a medium sized financial institution which have leveraged on technological innovations to carve a niche for themselves. Though this bank has now been diluted as a result of mergers and acquisitions due to the consolidation exercise of the immediate past administration in 2006; their focus at inception, i.e. in 2001, has been to use more of internet technology as opposed to brick and mortar system of the older banks. Unfortunately, the non availability of communication infrastructures led to a draw back in their desire to take the number one position in financial services delivery. The same internet banking and online sales strategy has now become a commonplace in all Nigerian banks,

however, the company maintains a very strong e-commerce/website strategy. At present, virtually all forms of financial transactions can be done online. Individual and current accounts can be operated from any part of the globe. The 24/7 customer services has further endeared the bank to its current customers.

Company D – Large farm

Company D was established in 1995 by a team of four retired service personnel from the Nigerian civil service. Though they could be classed as retired but not tired, they invested their hard earned money into farming ranging from food crops to animal husbandry. Today, the farm boasts of different types of food crops such as yam, cassava, corn, beans, rice, etc, as well as animals such as goats, chicken, cow, sheep, etc. The vast plots of about one thousand five hundred acres, also doubles as centre for teaching and learning as various institutions of learning visit the farm to teach the students of the importance of farming. In addition, the produce from the farm are well known in most homes and eateries. The corporate website is simply an informational one with details of locations and the services they provide unfortunately, no e-commerce transactions are conducted on it. The not too pleasant news splashed in the print and electronic media about customers losing their money to hackers stands as a hindrance for the lack of online transaction on the website.

Company E – Oil palm producing company

Established in 1975, this family run business have undergone several transformations as well as several managements. It is now managed by the great-grand-son of the founder. The company has impacted on the lives of so many individuals within the community. It is also well known within and out its vicinity. Two branches of the company was recently opened in nearby communities and plans are afoot to further expand based on the vision of the new management team. They have approximately fifty staff in total with different levels of expertise and some have been with the organisation for close to twenty years. Staff turnover is relatively low compared to other organisations due mainly to the incentives which the employees receive twice a year. The present management team which by extension doubles as the owners are practising Christians and they also display and practise the tenets within the workplace. There only exist a website which showcases the name and locations of the organisation but this website have not been updated since it was hosted. Purchases of the company's products have been mainly through the outlets in various markets and mostly by locals. This company probably does not see any reason for a website update and

Table 2. significance of various factors under review

Variables/Companies	A	B	C	D	E	F
Organisational factors	Somehow important	Very important	Very important	Very important	Not important	Somehow important
Environmental factors	Very important	Very important	Very important	Important	Not important	Somehow important
Technological factors	Somehow important	Very important	Very important	Not important	Not important	Somehow important
B2C and B2B	Somehow important	Very important	Very important	Not important	Not important	Not important
International outlook	Not important	Somehow important	Very important	Not important	Not important	Not important
Website maintenance	Somehow important	Very important	Very important	Not important	Not important	Somehow important

maintenance.

Company F – Educational institution

A thriving nursery and primary school situated right the heart of the city and welcomes children from various ethnic and religious groups. The institution was established in 2007 based on the enterprising effort of a young entrepreneur who delved into teaching after searching for white collar jobs for years without success. Today she is an employer of labour, with about 20 staff and several blocks of classrooms. The school has a functional and informational website and was hosted in 2011. However, the website is still at the developmental stages. The website was designed with a modern look-and-feel while still being able to easily and clearly catalogue the various educational structure of the school with loads of pictorial and attractive as well as eye-catching outlook that is both attractive and modern. However, this website is not updated or maintained as the management feels there is no need based on the fact that the children are mostly within the vicinity and been a competitive business with the attendant risks, parents might not travel far and wide to bring their children to the school. There is therefore no e-commerce/website strategy at the moment, but the school management hopes to update same if there is need in the future.

Summary

The experiences and observations of the researchers suggest that online shopping is not very popular in Nigeria. Reasons are however, attributed to the fact that most organisations do not have a web presence. Though it was observed that several organisational websites exist in Nigerian web-space, unfortunately, majority only provides company information or basic information on products and/or services which are usually outdated and most are not updated. This was the catalyst to investigate

and uncover the reasons behind the reasons for lack of webs presence by majority of Nigerian organisations and where they exist, they are never maintained. Additionally, the majority of studies regarding e-shopping in Nigeria are not of an academic nature. The results of this research can be particularly useful to both existing and future business executives who wish to improve or create websites respectively, and by extension enhance their competitive edge.

RESULTS AND ANALYSIS OF FINDINGS

Table 2 shows the significance of various factors in the establishment of each company's website. Individually each company has varying significance levels to each factor; however this analysis will seek to determine whether these factors taken holistically can be deemed to be relevant in the establishment of commercial websites and their maintenance in Nigeria. The interviewees as evidenced in Table 2 were asked to state their opinions in a scale of 1-4. At the end, four groupings were deduced in the course of the analysis. There groupings are:

- Very important
- Important
- Somehow important
- Not important

The organisational managers approached the interview questions in line with what is obtained in their various organisations. As seen from the table above, there are varying attachments to based on management policies to the variables. However, offering information to customers is one of the fundamental reasons that companies decide to establish websites. It can be considered a tremendous cost-saving mechanism and allows much more information to be made available than via traditional methods of words of mouth and big bill boards at side streets. It can also be noted that most companies start their websites on a small scale but develops with time to offer enhanced functionalities as evidenced by the words of Company B and corroborated by the Manager, Sales

and Marketing for Company C:

"We operate websites for customers that are unable to visit us. With the website, they can still access our products and services as well as make orders with ease"

As evidenced in the literature, the need to improve organisational efficiency and expand customer base play a competitive role within a particular area of business can be considered an important factor in the setting up of a website. It assists organizations in maximizing productivity and simultaneously reducing effort and advertising expenses. The view of participants in Company's A, B, C and F was summed further:

"Website creation and maintenance has indeed reduced the cost of printing fliers which often used in other purposes. And the cost of buying an advert slot in the electronic media or the prints are usually beyond the reach of many small and medium scale enterprises. With the internet/website, all these can be achieved with little or no cost"

It is the dream of all business organisations, big and small to sustain a high level of competitive advantage. While this was recognised by the managers of the six organisations, not all of them (see company D and E) feel that website is important to them. Reasons deduced in the course of the interview will not be unrelated with educational levels of the owners as well as the fact that the locals who form the bulk of their active customers may not be educated. And in some cases, the educated ones may not have the technological know how to use. The words of the General Manager for Company E are summed up thus:

"We do not need to invest money in website maintenance as we already have buyers and the orders are in some cases beyond our capacity. What then is the need to start advertising on the web for more customers?"

To buttress further, the Chief Operating Officer for Company A stated that

"Though we started small but our rooms are sold out every week and we are at the moment searching for avenues to expand, though I appreciate the need to host and maintain a functional website, however, it is not applicable to us at the moment considering the constraints we are having".

Several other factors were equally discussed in the course of the interview, this included issues bothering on the scope of the firms under study – and this involves the nature of the businesses of the firms. It was gathered in the course of the discourse that the nature of the firms and what they trade in have a very strong alliance with the need to either establish a website or not. Furthermore, top management support of such ventures was also discussed. Contemporary management researchers posit that without top management support, virtually nothing can be introduced let alone work in the organisation. As seen from the table above with respect to Companies D and E in terms of technological factors

and companies A, D, E and F for website maintenance; it is evident that the respective managements of these organisations are not in support of such laudable programmes. And since the final decision depends on top management therefore, some websites may not be in existence if they had no input. However, it is on record that many organisations such as Company C use competitors' websites to gather information about the latest technologies, customers and their needs, products, etc. And the reason is simply to assist them to become more efficient and effective in executing their marketing and customer centred functions.

Lee and Kozar (2006) stressed that websites can be a powerful tool in connecting businesses together especially when they are located in different geographically locations. Furthermore, Reynolds (2010) states that websites saves cost, time and other resources to companies when they have to reach business partners. The current economic climate has brought about unity even among nations, furthermore, mergers and acquisition is also on the rise and partnership among likeminded organisations have become the order the day. Therefore, websites are created to assist in this regard. The study findings show that most organisations that have a functional and fully maintained website have leveraged on their technological competence and the availability of communication technologies in Nigeria. However, this is not the case with the others who have a different view about the technology. Most top management are simply comfortable with the age-long practice of business transactions as summed up in the words of General Manager for Company E:

"Human touch service is very important to this organisation and with it we have solved several problems for our customers as there will be a perfect match between what we have and what they are getting from us. This we as an organisation cannot give to them through any website. We need to speak to our customers, hear them out, give them some form of explanation, etc, and when they are satisfied as well as enjoy the experience, then it is the climax as nothing can take the place of the human touch".

Based on the above analysis, these authors deduced that no singular factor can be said to cut across the six organisations as "Very Important". Rather, the set of variables independently and collectively play some form of roles within each organisation.

For instance, General Manager and Head of Marketing of the Oil Palm Company (Company E) did not see any need for a website. In fact, the current technological waves have not played any form of impact on the organisation. This is sharp contrast to Company C, where the Manager, Sales and Marketing, believes that technology is the pillar on which all business must lie in order to play any form of role in the murky waters of business.

This sharp disparity is very important to this study based

on the fact that on the one hand, a company sees website establishment and maintenance as an avenue to reach both local market and the entire world and have used this to their advantage, unfortunately, another company sees it differently and have not reason to use any. Yet, they have a very good balance sheet with expansion plans on the table.

In the course of the interview, a very important issue bothering on cost as a militating factor was discussed. The authors deduced from the discussion that the cost of purchases, setting up and maintenance could have played a serious factor in most organisations shying away from website establishment despite the glaring importance of same to so many. The cost and its impact on the bottom-line was summed up in the words of Marketing Manager for Company D, thus:

"I believe that all businesses big or small normally operate within their level of financial capacity, a simply click of the mouse can cause serious fraud which is the more reason why so many businesses will either chose NOT to establish and maintain a business website or simply put one out there without maintenance, as we are not unaware of the incessant problems on the internet highways".

Website update and Maintenance

Based on the analysis of data from this study, it was deduced that the reasons for maintenance or otherwise, in most cases, are specific to the company and the nature of their business and environment in which they operate, this is evidenced from the findings so far. The managers of Company C, clearly stated that there were no factors that influenced their maintenance as the website serves as an operational tool. And the major reason for this may be connected to the fact that this company started the website usage from inception. And from the organisations that participated in this study, it was the only company that is not in any form affected adversely by any of the variables. However, with every Nigerian financial institution now with a functional website, establishment and maintenance of a website is now a prime requirement. In furtherance of this, the Manager, Sales and Marketing of Company C, clearly stated that the maintenance of the bank's website is very important because they cannot afford the huge cost of building high cost office spaces, with all the attendant costs. However, the general problems facing all financial institutions include but not limited to the readiness of the banking customers; most of the customers still prefer visiting the branches.

DISCUSSION

The adoption and use of internet and e-business

strategies depend on sector characteristics. For most developing economies the highest priority is to put in place the network infrastructure and a competitive environment and regulatory framework that support affordable internet access. Developing countries with widespread access to telecommunications and network services are rare.

The study data revealed that no singular factor can be described as the over-riding reason for the establishment and maintenance of websites among the Nigerian businesses. This is because different businesses have different customers. While the bank may not do without a website as its focus is on both local and international markets, the Oil Palm Company simply have no need for a website as their customers are mainly local. This is however in contrast to other similar businesses in developed economies where the establishment and maintenance of website are held high.

Website adoption and its impact on businesses

There are several factors that can be considered to have an influence on website adoption with some companies in Nigeria. The review of previous literatures showed that establishment and maintenance of business websites differ in various countries, and findings reveals that is also differs in various organisations in Nigeria. It was also noted in the course of the literature review that existing technology adoption models pay inadequate attention to types of business, cost of equipments, levels of education, etc, therefore the findings and details gleaned and garnered with respect to the different businesses that participated in this study, and other variables adds to the body of knowledge in relation to website establishment and maintenance literature in the developing countries in general and Nigeria in particular.

The factors described above can be considered the common factors that are not country-size, country-wealth or economic-standing specific. Although Nigeria is considered to be one of the developing economies in Africa, findings of this study show that there seems to be a lack of readiness by businesses to adopt e-commerce.

Analysis of the findings also shows that consumer readiness is an influential factor for both developed and developing economies. In the developed economies, consumers are willing to accept e-commerce and shopping online through the websites of various organisations. And consumers also have ready access to the internet either personally or through a workplace. This was brought to the fore during one of the interviews where it was stated that most of the customers, especially by Managers of Companies C, D and E, are not literate and the internet technology are way beyond their reach, and most customers are not computer literate. In addition to this is the cost of the equipments and their maintenance. This singular factor has in fact

prevented some company managements from giving their support for investment in such innovative technologies. Based on the findings of the study, the authors deduced from the data analysed, the over-riding importance of websites thus:

Image

The improvement of the organizational image is often touted as an important factor for the establishment and maintenance of company websites; and by extension assists in gaining more customers and attracting new partners. Furthermore, the adoption of a website will allow for a company to publish information about themselves and the activities that they are involved in, such as corporate social activity reports. In the same vein, it also allows the company to receive feedback from customers about products or services and this in turn will assist them in improving their overall image. As evidenced in the data collected, Company C could be regarded as an early adopters of e-commerce, and they have entered the next stage of ICT use, e-business. They have begun to engage in increasingly sophisticated uses of ICT, involving business process reengineering and more complex technology. In the same vein, B2C and B2B e-commerce have become part of their overall e-business strategy. Furthermore, external relations with customers as well as internal processes are being linked. Marketing and sales, logistics and delivery, after-sales service, supply chain management and other business functions are integrated in an overall e-business strategy.

Competitive advantage

This is another similar factor to the above. Many companies may aspire to be leaders in their market; therefore a very well developed and functioning website can help companies to attract and retain customers and gain the edge over their competitors, as obtained in developed economies. The improvement of a company's operational efficiency is important to the businesses as it aids in them obtaining and retaining a competitive advantage. A website can facilitate this as customers can use it to gain information about products and services instead of calling into the office and speaking to a sales representative, who can use that time on other daily operations of the company. Through this means, business networks can be extended as the websites will assist in the ease at which businesses can communicate, form partnerships and improve their operational efficiencies. Using a website to provide information to customers is considered an important factor within the literature (Floros 2008; Yap et al., 2010)

It is on record that decisions pertinent to the organization or any major organizational changes are

usually left to top management to choose and/or approve; without the support of top management the websites may not exist or receive assistance. Therefore, without management support, it is practically impossible to invest in any form of innovation. Data analysis clearly shows that most company managers does not support website establishment in Nigeria due mainly to the types of customers they serve, cost of acquisition, maintenance and the employment of experts to manage same.

The need for website maintenance

Most of the factors discussed so far are business specific in nature and clearly portrays the findings of this study based on the data collected. There were no specific website maintenance guidelines within the literature, and thus the discussion offered in this research is limited. Clickz (2010) stressed the importance of the need for a set standard and guidelines to website maintenance. However, findings of this study within the Nigerian businesses sharply contradict this as there are no time frames for the maintenance of websites. As stated, so many websites are outdated and hardly maintained. Findings further revealed that the methods used to maintain websites also vary from company to company however, as some companies outsource their maintenance to a third-party company, it means that they do not know the methods used. Findings further revealed that most company websites are not maintained due mainly to absence of internal know-how by employees, time, and lack of continuous connectivity. In addition, the literature stated that maintenance should be completed on a regular basis and a committee should be established to determine the maintenance methods and schedule. The managers of Company C stated that they monitor their website on a daily basis to ensure that it is functioning in the way that it should. The methods used to maintain websites also vary from company to company. One company uses a content management system which allows for real-time dynamic editing or addition of content to the website, it also ensures that changes can be made from any machine that has access to the web. Some of the barriers realised in the results that impede maintenance are internal know-how by employees, time, and lack of continuous connectivity.

The reality of the new digital landscape

The above demonstrates that the digital media has emerged as a reality that is continuously challenging marketers. Adopting and promoting an apt digital strategy is easier said than done. It requires a shift in the way marketing functions approach digital media. Some guidelines to assist in success navigation of the digital landscape includes but not limited to the following:

- Organisational must clearly define their business goals and their target audience
- Check if their focus brands are building or lead generations or both?
- They must identify the channels that will help them achieve their goals
- Set the right expectations with stakeholders about what a digital strategy can achieve and integrate offline and online strategy
- Provide engaging and consistently valuable content
- Engage with the right agency that can tailor digital solutions to suit their customers' needs, however, it is always okay to start small
- Organisations must implement the right analytics and automation tools to understand their target audience behaviour
- Review their plans over a defined period to measure progress and results
- They must also have a backup plan: the biggest boon of digital media could be its biggest bane as well.

Reasons are that on one hand your customers can be their brand ambassadors, but on the other they can damage it irreversibly. Therefore, organisational must ensure that they have a backup plan or team to respond to crisis situations.

Since the digital landscape is vast, success lies in having a consumer focused strategy and clear business goals. An effective integration of both with an overall marketing strategy can help organizations reap benefits and develop strong relationships with the consumers.

CONCLUSION AND CONTRIBUTIONS

This study investigated the factors that influence the establishment and maintenance of commercial websites in Nigeria. Although Nigeria has a high population and in fact the highest in Africa, it is still considered as a developing economy. It was observed in the course of data collection that the elites and most students in institutions of higher learning have to some extent embraced the use of e-commerce due mainly to the prevalence of computer, and the internet. Therefore, businesses in Nigeria need to fully utilize the possible potential benefits that the creation and maintenance of websites can bring to their organization. The academic contribution of this study lies in informing current theory regarding the factors of e-commerce adoption and maintenance in developing economies such as Nigeria. The factors that were deemed to be influential in the establishment of organisational websites in Nigeria were similar to those that were found within the literature; however some differences were observed. This demonstrates that some factors may be more important because of the size of the country and the resources that

it may possess as well as the multifarious cultures. Some important issues were also raised as to why some business organisations may not establish a site or not bother with maintaining their existing one. The results however confirmed that website creation and maintenance is essential for the productivity and profits of a company that their website is current, accurate and completing the tasks for which it was designed and implemented.

From a practitioner's perspective, the results of this study can inform future studies in informing theory regarding critical factors in adopting and maintaining e-businesses. Although the significant levels of these factors vary from one organisation to another. This study can illustrate to aspiring companies the factors they may take into consideration prior to website adoption and maintenance. It also highlights the difficulties some businesses face, especially with integrating online transactions in the website.

Limitations and future research

Much time and effort were devoted in gathering and analysis of various materials for this study. It is believed that this may have impacted on the negatively on the outcome of the study. In addition, it is assumed that the interviewees and organisations have given candid answers to the questions. Furthermore, majority of the interviewees dwelt more on the adoption rather than the maintenance due to educational, financial, and technical differences. Future research can however, dwell on and further explore the differences between businesses in developed and developing economies and in addition, investigate the cultural impact of adopting and maintaining e-businesses in developing economies.

RECOMMENDATIONS

As evidenced from the findings, computers and access to the internet have become common in Nigeria, but sales and purchases over the internet have yet to take off. While available data suggest that electronic commerce is growing in developing economies, it still accounts for a relatively small proportion of economic activity for firms of all sizes. The most relevant practical implications of this paper are probably those which can be drawn from the responses of Nigerian businesses which already have experience making online sales to Nigerian customers. According to them, the most serious inhibitors are cost of equipment acquisition by companies and customers, poor education and ability of use the equipments, unfavourable consumer habits, lack of government regulations, and lack of online payment options as obtained in the developed countries such as the United Kingdom, USA, Canada, etc. Retailers with previous

online sale experience also provide clear and practical indications as to the top enabling factors. These are developing online payment options, enhancing ICT infrastructure and government regulations and support. Therefore, the government and the industry should pay attentions to these factors to facilitate e-retail growth within the Nigerian economy. The critical question, then, becomes whether there are valid justifications for the government to take such an interventionist role in normal commerce, as opposed to the cases of e-government and e-learning which involve public services or “social” goods. Such a question must be left to future research.

REFERENCES

- Afuah A (2003). Redefining firm boundaries in the face of the internet: Are firms really shrinking? *Academy of Management Review*, 23(1):34-50.
- Agwu E (2012). “A qualitative study of the problems and prospects of online banking in Nigeria”, *Journal of Internet Banking and Commerce (JIBC) December 2012*, 17(3) Available at: <http://www.arraydev.com/commerce/JIBC/2012/AGWU.asp>
- Agwu E (2012). Generations X and Y's adoption of internet and internet banking in Nigeria: a qualitative study, *International Journal of Online Marketing*, 2(4): pp. 68-82, October-December
- Anandarajan M, Igbaria M, Anakwe U (2002). IT acceptance in a less-developed country: A motivational factor perspective. *Internal Journal of Information Management*, 22 (1): pp. 47-65.
- Anderson V (1991). *Alternative Economic Indicators*, London, Routledge.
- Bandyopadhyay K, Fraccastoro KA (2007). The effect of Culture on User Acceptance of Information Technology. *Communications of the Association for Information Systems*. 19(23): pp 23-29
- Basu S, Muylle A (2007). How to plan e-business initiatives in established companies. *MIT Sloan Review*, Fall
- Beatty RC, Shim JP, Jones MC (2001). Factors influencing corporate website adoption: a time-based assessment, *Information and Management*, Vol. 38, pp. 337-354.
- Berg BL (2007). *Qualitative research methods for social sciences* (6th edition); Long Beach, CA: Pearson Education.
- Bitner MJ, Ostrom AL, Meuter ML (2002). Implementing successful self-service technologies: *Academy of Management Executive*, 18(4), 96-108
- Bryman A, Bell E (2011). *Business research methods*. 3rded. Oxford: Oxford University Press.
- Buderi R (2005). E-Commerce gets smarter. *TechnologyReview.com*. Retrieved 24/08/2010, from: http://www.technologyreview.com/articles/05/04/issue/features_ec.
- Chaffey D (2007). *E-Business and E-Commerce Management*, 3rd ed., England: FT Prentice Hall.
- Chen L, Gillenson ML, Sherrell DL (2002). “Enticing Online Consumers: An Extended Technology Acceptance Perspective”, *Information and Management*, Vol. 39, No. 8, pp 605-719.
- Chen W, Lee C (2005). “The Impact of Web Site Image and Consumer Personality on Consumer Behaviour”, *International Journal of Management*, 22(3): 484.
- Clickz (2010). *Global Online Populations 2009*, [Online], Available: http://www.clickz.com/stats/web_worldwide, [Accessed: 16th August 2013].
- Cote L, Vezina M, Sabourin V (2005). The strategic management process in e-business. *Ivey Business Journal*, May-June.
- Cragg P, King M (1993). Small firm computing: Motivators and inhibitors. *MIS Quarterly*, 12(1): 51–61.
- Creswell, John W (2009). *Research design: Qualitative, Quantitative, and Mixed Methods Approaches*. 3rd ed. California: Sage Publications.
- Daniel E, Wilson H, Myers A (2002). Adoption of E-commerce by SMEs in the UK: Towards a Stage Model, *International Small Business Journal*, Vol. 20(3):253-270.
- Del Aguila-Obra AR, Padilla-Melendez A (2006), Organizational Factors Affecting Internet Technology Adoption, *Internet Research*, Vol.16(1): 94-110.
- Dholakia RR, Kshetri N (2004). Factors Impacting the Adoption of the Internet among SMEs, *Small Business Economics*, Vol. 23, pp. 311-322.
- Doong HS, Wang HC, Foxall GR (2011). An investigation of consumers' webstore shopping: A view of click-and-mortar company. *International Journal of Information Management* Vol. 31, pp. 210-216.
- Earl M (2000). Evolving the e-business. *Business Strategy Review* 11(2):33-38.
- Eckhardt A, Laumer S, Weitzel T (2009). Who influences whom? Analyzing workplace referents' social influence on IT adoption and non-adoption. *Journal of Information Technology* 24 (1): 11-24
- Eisenhardt KM (1989). Building Theories from Case Study Research, *The Academy of Management Review*. 14(4): 532-550.
- Fagerstrom A, Ghinea G (2011). On the motivating impact of price and online recommendations at the point of online purchase. *International Journal of Information Management* Vol 31, pp. 103-110.
- Featherman MS, Pavlou PA (2003). Predicting electronic services adoption: a perceived risk facets perspective: *International Journal of Human-Computer Studies* 59, 451-474.
- Fillis I, Johansson U, Wagner B (2004), Factors Impacting on e-business adoption and development in smaller firms, *International Journal of Entrepreneurial Behaviour and Research*, Vol. 10, No. 3, pp. 178-191.
- Flamand L (2009). *What is Qualitative Research*. Available at <http://www.wisegeek.com>. Free article and Tutorial.2008. *The Difference between Qualitative and Quantitative Research*. Available at <http://googleads.g.doubleclick.net>. Accessed October 11, 2013
- Flanagin AJ (2000). Social Pressures on Organizational Website Adoption, *Human Communication Research*. 26(4): 618-646.
- Floros, C. (2008), “Internet banking websites performance in Greece”, *Journal of Internet Banking and Commerce*. Vol. 13 No. 3
- Gemino A, Mackay N, Reich BH (2006). Executive Decisions About Website Adoption In Small and Medium-Sized Enterprises, *Journal of Information Technology Management*, 17(1): 34-49.
- Gill J, Johnson P (2010). *Research Methods for Managers*, (4th ed.) Paul Chapman
- Grandon EE, Pearson JM (2004). Electronic Commerce adoption: an empirical study of small and medium US Businesses, *Information and Management*, Vol. 42, pp. 197-216.
- Hackbarth G, Kettinger WJ (2000). Building an e-business strategy. *Information Systems Management* 17(3):78-79.
- Hamel J, Dufour S, Fortin D (1993). *Case Study Methods*, Sage Publications Ltd., California.
- Hoffman DL, Novak TP (2000). How to acquire customers on the web. *Harvard Business Review*, 78(3):179–188.
- Ihlstrom C, Nilsson M (2003). E-Business Adoption by SMEs – Prerequisites and Attitudes of SME in a Swedish Network, *Journal of Organizational Computing and Electronic Commerce*, Vol. 13(3): 211-223.
- Jeon BN, Han KS, Lee MJ (2006). Determining Factors for the adoption of e-business: the case of SMEs in Korea, *Applied Economics*, Vol. 38, No. 16, pp. 1905-1916.
- Johnson D (2007). “Achieving Customer Value from Electronic Channels Through Identity Commitment, Calculative Commitment and Trust in Technology”, *Journal of Interactive Marketing*, Vol. 21(4):2-22
- Kamel S (2006). Electronic Business in Developing Countries, Opportunities and Challenges, Hershey: Idea Group.
- Kim YJ, Song J, Koo C (2008). Exploring the effect of strategic positioning on firm performance in the e-business context. *International Journal of Information Management* 28,203-214.
- Krugman PR, Obstfeld M (2006). *International Economics: Theory & Policy*, 7th ed., Boston, Pearson-Addison Wesley.
- Laosethakul K, Boulton W (2007). Critical success factors for e-commerce in Thailand: cultural and infrastructural influences. *Electronic Journal of Information Systems in Developing Countries* Vol. 30, No. 2, pp. 1-22.

- Lee JW (2010). "The role of demographics as the Perceptions of Electronic Commerce Adoption", *Academy of Marketing Studies Journal*, 14(1): 2-11
- Lee Y, Kozar KA (2006). Investigating the effect of website quality on e-business success: An analytic hierarchy process (AHP) approach. *Decision Support Systems*, Vol. 42, No. 3, pp. 1383-1401.
- Lei Y, Motta E, Domingue J (2002). An Ontology-Driven Approach to Web Site Generation and Maintenance, IN, *Lecture Notes In Computer Science*, Springer Berlin/Heidelberg, Vol. 2473, pp. 185-194.
- Lin HF, Lee GG (2005). Impact organizational learning and knowledge management factors on e-business adoption, *Management Decision*. 43(2): 171-188.
- Major C, Savin-Baden M (2010). An introduction to qualitative research synthesis: Managing the information explosion in social science research. London: Routledge.
- Meckel M, Walters D, Greenwood A, Baugh P (2004). A taxonomy of e-business adoption and strategies in small and medium sized enterprises, *Strategic Change*, Vol. 13, pp. 259-269.
- Mendo F, Fitzgerald G (2005). Theoretical approaches to study SMEs ebusiness progression. *Journal of Computing and Information Technology* 13(2): 123-136.
- Miles MB, Huberman AM (1994). *Qualitative Data Analysis: An Expanded Sourcebook*. Thousand Oaks, CA: Sage.
- Molla A, Taylor R, Licker R (2006). E-commerce diffusion in small island countries: the influence of institutions in Barbados. *Electronic Journal of Information Systems in Developing Countries*. 28(2): 1-15.
- Papazoglou A, Ribbers PMA (2006). *e-Business: Organizational and Technical Foundations*. J. Wiley and Sons.
- Phan D (2003). E-business development for competitive advantages: a case study. *International Journal of Information Management*. 40(6): 581-590.
- Piris L, Fitzgerald G, Serrano A (2004). Strategic motivators and expected benefits from e-commerce in traditional organisations. *International Journal of Information Management* 24, 486-506.
- Reynolds J (2010). *E-Business: A Management Perspective*, New York, Oxford University Press.
- Saunders M, Lewis P, Thornhill A (2009). *Research methods for business students*, 5th ed., England: FT Prentice Hall.
- Schneider G (2002). *Electronic Commerce*. 3rd Edition. Thomson Publishing
- Simpson M, Docherty AJ (2004). E-Commerce adoption support and advice for UK SME, *Journal of Small Business and Enterprise Development*. 11(3): 315-328.
- Sutton SG, Khazanchi D, Hampton C, Arnold V (2008). Risk Analysis in Extended Enterprise Environments: Identification of Critical Risk Factors in B2B E-Commerce Relationships. *Journal of the Association for Information Systems*. 9(3-4) 151-174.
- Taralldar M, Vaidya S (2006). Challenges in the adoption of E-Commerce technologies in India: The role of organizational factors. *International Journal of Information Management*. 26, 428-441.
- Troy S, Willcocks L (1999). Global research perspectives on electronic commerce: Introduction to the theme issue. *Journal of Information Technology*. 14(4):315-318.
- Turban E, King D, Lee J, Liang TP, Turban D (2010). *Electronic commerce 2010: a managerial perspective*. Pearson Education.
- Uzoka FM, Shemi AP, Seleka G (2007). Behavioural influences on e-commerce adoption in a developing country context. *Electronic Journal of Information Systems in Developing Countries*. 31(4): 1-15.
- Vijayarathay LR (2004). Predicting consumer intentions to use on-line shopping: The case for an augmented technology acceptance model. *Information and Management*, 41(6), 747-762.
- Wu F, Mahajan V, Balasubramanian 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.
- Wymer SA, Regan EA (2005). Factors Influencing e-commerce adoption and use by small and medium businesses, *Electronic Markets*. 15(4):438-453.
- Yap KD, Wong CL, Bak R (2010). Offline and Online banking – where to draw the line and when building trust in e-banking. *International Journal of Bank Marketing*, 28(1):27-46
- Young J, Ridley G (2003). E-commerce in developing countries. *Electronic Journal of Information Systems in Developing Countries*. 11(1):1-6.
- Zhu K, Kraemer K, Xu S (2002). A Cross-Country Study of Electronic Business Adoption using the technology-organization-environment framework, IN: International Conference on Information Systems (ICIS) [Online], *23rd International Conference on Information Systems*, Available: <http://www.aisel.aisnet.org/icis2002/31>, (Accessed: 14th October 2013).