MAIN ARTICLES

E-COMMERCE IN GHANA

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Abstract

In this study, the main focus is on e-commerce in Ghana with emphasis on e-commerce sites and their implications go the customer. Other issues such as factors that encouraged and/or discouraged the adoption and implementation of e-commerce were also studied. Observation and interview methods were employed to collect data. 100 websites of business entities were examined to know the website interface for features that attract customers to initiate a transaction and information that aids customers in making choices as well as the kind of applications used in the initiation of a transaction and how difficult these applications are. In all a total of 300 people were interviewed comprising 100 owners/managers, 200 internet users randomly selected to find out if they had adopted e-commerce in their areas of endeavor. Descriptive statistics was used to present data. The results of the research revealed two levels of e-commerce websites. Level 1-sites had information on products and services, prices/charges, company profile and link to other sources. Level 2-sites allowed online ordering, online payment, online auctions, product referencing/customization and privacy laws.

Introduction

For over two decades, the adoption of the World Wide Web and the internet has become very common in Africa and is catching up fast with its European counterparts. Most companies are becoming aware of the necessity of incorporating the internet into their businesses but frequently the companies se the internet service for communication purposes. In Ghana, very few companies have realized the importance of internet and e-commerce in their businesses. In Europe and other developed countries, e-commerce is

popular among many citizens because it cuts down transactional costs and opens up new distribution and marketing channels among economic stakeholders such as businesses, consumers as well as governments (World Bank report on Ghana's telecommunication, 2006). It is rather unfortunate that Africa has failed to seize these opportunities and now has to play catch up.

The main focus of this research is on e-commerce in Ghana with emphasis on e-commerce sites and their implications for the customer. Other issues such as factors that encouraged and / or discouraged the adoption and implementation of e-commerce were also studied.

E-commerce (EC) has many definitions. However, for the purpose of this research, (Kalakota & Whinston, 1997) definition is adopted:

- EC is the process of adopting technology to automate business transactions and workflow.
- EC is the ability to buy and sell products, information and services through the internet and the World Wide Web (www).

Literature review

Globalization and information technologies (IT) are drastically transforming the activities of both businesses and organizations. Organizations that have invested in IT infrastructure are accepting and integrating IT specifically for the success of their business. Awareness of EC as a way of transacting business is increasing exponentially and now it is a priority for several companies (sharp, 1998).

Kalakota & Whinston, (1997) defines e-commerce as the buying and selling of products or services through the internet. Similarly, (The Cabinet Office, 1999), defined EC as not buying and selling only but also the use of electronic data transmission by companies via the internet to either exchange or deliver information internally or externally. Some researchers (Prescott and Conger, 1995; Van Slyke, 1997; White et al., 1998) claim that EC is a bunch of separate innovations instead of a simple innovation. Businesses can make a range of selection from these innovations and use them in the order they desire.

Benefits of e-commerce

E-commerce provides many benefits to both suppliers and buyers. According to Napier et al, (1999), adopting EC, reduces information on markets segments that are widely spread to suppliers and buyers. while Chaudhury & Kuilboer, (2002) EC improves product quality and provides new ways of selling products. Further, it gives customers quick access to more quality information than before. Online transactions offer an environment which is rich in information. This information-rich environment helps companies to identify, match and improve product innovation. Evidence suggests that a company that reacts quickly to customers' requests and supports their buying decisions builds their confidence and loyalty (Singh et al, 2001). E-commerce applications make it easier for customers to choose and order products according to their personal and unique specifications. Similarly, EC assists customers to choose from a wide range of transactions electronically instead of over the telephone, by mailing or in person. E-commerce gives companies improved efficiency and reliability of business processes through transaction automation. However, despite the numerous potential benefits of EC,

its use is limited in Ghana.

Categories of EC

The three forms of e-commerce are: Business-to-business transactions (B2B), business-to-consumer transactions (B2C) and consumer-to-consumer transactions (C2C). B2B e-commerce is the largest form so far, but the two B2C and C2C have been growing rapidly in recent years due to the fast development and diffusion of the Internet and, more recently, on increased broadband access (OECD, 2009). A review of the literature revealed that the number of consumers purchasing goods and services over the internet has increased from 26.9% in 2004 to 35% in 2008 (OECD, 2009). B2B e-commerce is defined as "e-commerce between companies" (Andam, 2003). This kind of e-commerce deals with relationships between and among businesses. Approximately 80% of B2B is e-commerce. It is predicted that B2B will continue to grow faster than B2C segment (Andam, 2003). Most B2B applications are in the areas of supplier management (especially purchase order processing), inventory management (i.e., managing order-ship-bill cycles), distribution management (especially in the transmission of shipping documents), channel management (i.e., information dissemination on changes in operational conditions), and payment management (e.g., electronic payment systems or EPS).

"Business-to-consumer e-commerce, or commerce between companies and consumers, involves customers gathering information; purchasing physical goods (i.e., tangibles such as books or consumer products) or information goods (or goods of electronic material or digitized content, such as software, or e-books); and, for information goods, receiving products over an electronic net-work" (Kalakota & Whinston, 1997 cited in 2003). According to Andam (2003), B2C is the second largest form of e-commerce. The more common B2C business models are the online retailing companies such as Amazon.com, Drugstore.com, etc. Other B2C examples involving information goods are E-Trade and Travelocity. B2C is common in the areas of purchasing products and information, and personal finance management, which pertains to the management of personal investments and finances with the use of online banking tools (Kalakota & Whinston, 1997 cited in Andam, 2003). According to ((US Census Bureau, 2009a), B2C e-commerce is growing fast; however its impact remains relatively low, particularly when compared to traditional retail and B2B e-commerce. In the United States, for example, B2C e-commerce retail sales have grew to USD 133 billion in 2008, up 5 % from 2007 accounting for less than 4 % of total retail sales. B2B, on the other hand, generates USD 3.1 trillion in sales, accounting for over 27 % of total B2B transactions.

C2C is defined as commerce between private individuals or consumers. It is described by the expansion of electronic marketplaces and online auctions; particularly in vertical industries where firms/businesses can bid for what they want from among multiple suppliers (Traderinasia.com, 2002 cited in Andam, 2003). According to Andam, (2003), B2C is in the areas of:

- auctions facilitated at a portal, such as eBay, which allows online real-time bidding on items being sold in the Web;
- peer-to-peer systems, such as the Napster model (a protocol for sharing files between users used by chat forums similar to IRC) and other file exchange and later money exchange models; and

- classified ads at portal sites such as Excite Classifieds and eWanted (an interactive, online marketplace where buyers and sellers can negotiate and which features "Buyer Leads & Want Ads").

Factors influencing EC growth

One of the factors influencing the growth of EC is the increase in the number of people connected to the internet. Approximately 22% of the world's population used the web in 2007 as shown in fig. 1. Most internet users were from developed countries where the number of internet users grew to 62% of the population in 2007.

Figure 1. Internet users per 100 inhabitants 1997-2007
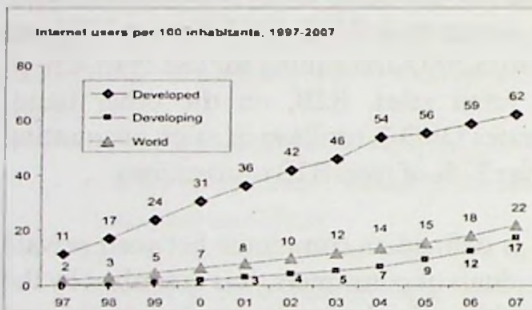
Source: International Telecommunications Union's World Telecommunication Indicators Database, at: www.itu.int/ITU-D/ict/statistics/ict/graphs/internet.jpg.

The second factor that has influenced EC growth is the broadband penetration and the increase in use of mobile devices. Fig. 2 shows the broadband subscriptions in OECD areas. According to (OECD, 2008b), consumers with high speed broadband internet are active in purchasing online compared with consumers having low internet speed. For instance, in Ireland and Finland, internet users having high speed internet connection were more active in EC than those having low speed internet connection (OECD, 2008c).

Figure 2: OECD broadband subscribers, million (1997-2008)
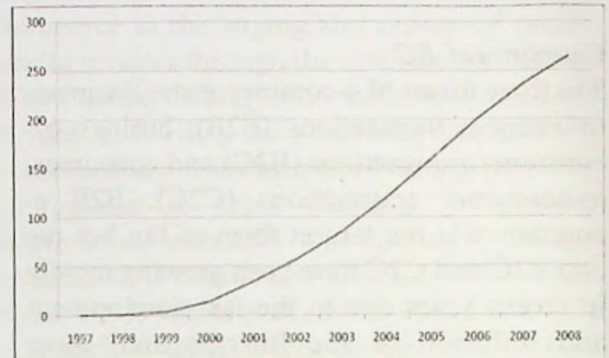
Source: Data collected from the 2009 OECD Communications Outlook (OECD, 2009b) and the OECD Broadband Portal, at: www.oecd.org/document/54/0,3343,en_2649_34225_38690102_1_1_1_1,00.html.

Lastly, the presence of e-retailers is also influencing EC activity. According to an EC report, in countries where there is a high number of retailers selling online, more consumers also purchase products or services on-line (EC, 2009a). Other factors, such as the creation of new websites and supply diversification, are seen as drivers for e-commerce growth (FEVAD, 2009).

E-commerce websites

EC websites provide for buying and selling of products and services online to customers. For instance, eBay is the largest auction store. There is limited study on identifying the features that attract customers to shop from EC websites. Researchers (Agarwal & Venkatesh, 2002; Chen & Wells, 1999; Ranganathan & Ganapathy, 2002) have studied categories of websites such as search engine, entertainment, communication, data sharing etc. Olsina et al., (2001) conducted a study on six websites of universities to identify the features of the websites that attract users for use. The most feature of the website revealed by the study was usability followed by functionality, reliability and efficiency. In a similar study, (Abels et. al, 1997) cited navigability as important features

for online shopping. In addition, customization has been identified as a significant feature for search engines. However, what these studies failed to research was the features of EC websites that attract customers to transact business.

Research methodology

This section of the report outlines the steps taken to gather the needed information required for the research. It continues to discuss and interpret the results of the research conducted with respect to the topic being researched. To empirically evaluate the adoption and use of ecommerce in Ghana, in-depth interviews were conducted with members of selected business entities, some customers and a sizeable number of websites of goods and service providers was observed. These methods of data collection were adopted because the research is people centered and the best way to be able to get good responses was to interact with people.

Population

The population of interest for this study was customers who in more than one way use the internet and owners of EC websites. In all a total of 350 people were interviewed to find out if they had adopted EC in their areas of endeavor. The population comprises 100 owners and 250 users of EC.

Data collection

The research was carried out by means of observation and semi-structured interviews. An observation of 100 websites of business entities was carried out. The criteria used included: (i) critical analysis of website interface for features that attract the customer to initiate a transaction and information that aids customers in making choices, (ii) analysis of the kind of applications used in the

initiation of a transaction and how difficult these applications are and (iii) analysis of the number of clicks a customer makes before completing a particular transaction. In addition, initial 50 customers who in more than one way use the internet and 100 owners were interviewed to find out if they have adopted e-commerce in their areas of endeavor. The information from these sources was gathered, compiled and analyzed. Further, a probability sampling method was used to randomly select 200 users of e-commerce for more detailed interviews, in order to gain a deeper understanding that would assist in the interpretation of the result.

Data presentation and analysis

In this section, data and descriptive statistical analysis were presented without discussing the implication of the findings. Tables and figures were used to complement textual material where data could not be presented in a few sentences in text.

(i) Observations

During the observation of the websites we looked for dynamism, how frequently the content of the websites changed but still made sense to customers. 40% of the websites belonged to government agencies, 25% were websites owned solely by native Ghanaians and 35% were websites of companies owned by multinationals.

The first thing to observe was the features and the amount of information on the web pages, if they were attractive and relevant information to customers satisfied with transactions. Technical information on products and services, information on upcoming events and the prices of products and services were observed. The websites were also examined to find out if they were linked to other sources of

information and the company profile or history since some customers check the credibility of the company before initiating a transaction.

Secondly, the type of applications the websites used was observed to see, if they were user friendly or not. The applications on the website should be flexible to be used by the customers, reducing the number of clicks a customer has to make before eventually completing one single transaction. This prevents the customer from eventually closing the web page because he or she is bored or ran out of time associated with that transaction. When this problem is addressed users can finish one transaction quickly and proceed to the next, and the next, increasing sales between them and the company in question.

Some of the websites observed had features such as prices/charges, company profile and links to other sources, but had no information on products both on sale and yet to be, and no applications that allowed customers to initiate transactions. These websites were categorized as Level1 and Level 2 sites. Park and Kim (2003) asserted that quality information on product and service helped to win customers' trust in EC websites. Level1 sites had features that allow online ordering, online payment, online auctions, making product preferences, prices/charges, links to other sources of information and also laws of privacy but had inadequate information on products and no company profile. Evidence suggests that information on company's profile in EC websites forms good reputation in customers' minds (Donney & Cannon, 1997; Yoon, 2002). These websites were considered EC websites, but lacked some features.

The second category of website had all the features of level1-site in addition to adequate information on the product and service, company's profile and search engines. This was classified as level 2-site. Of all the websites observed, 57 were Level 1 sites and 43 were Level 2-sites as shown in *table 1* below:

Website categories	Total number
Level 1 sites	57
Level 2 sites	43

Table 1: Categories of e-commerce websites

Interviews

During the interviews with the managers of firms, questions were formulated to find out whether or not they had a website or not. Those who answered in the affirmative were asked if their websites were dynamic. Their general views on e-commerce were also inquired. After interviewing the managers, the firms were categorized into 3 types of users namely non-user, thin user and fat user.

Non-users refer to the firms that do not have websites at all. 5% of the managers confessed that even though their return on one transaction was averagely low, the nature of their work did not need a website. They were convinced that information technology is just an add-on in business establishments. One manager said, "we just use it to receive and send emails because it's the new trend and faster." It was also observed that most of the employees of such firms had little or no knowledge in information technology. Regardless of this fact, they were not actually ready to change from traditional paradigm of transacting business to the present trends. When asked about their successes over the past

years their response was that they had not been able to achieve their target for the past five years and blamed it on the economy.

One of the managers blamed the government saying, "The Government fails to provide support for our businesses so we rely on our own returns and please ICT has nothing to do with our past failures. The Government is fully responsible." Others on the other hand realized that most of their competitors were doing well with the help of information technology but found it extremely expensive and complicated to implement now. Some concerns raised included training of staff, purchasing of computers, building a working website with its continuous update and internet access. Another important point that was raised was the possible laying off of some workers not on the basis of incompetence but because of the introduction of the automated systems that reduces the workforce needed. It was noted here that change was something that both employers and employees failed to accept not only because they could not afford it, but because it would have lasting implications on them they could not afford to endure, they just avoided it completely.

A thin client is a network computer without a hard disk drive, whereas a fat client includes a disk drive. The Thin and Fat users fall under the same category; they are companies that have websites. Managers of both firms were interviewed to find out more specifically what information technology and in this case the establishment and maintenance of a website has done for their firms.

Managers of Thin user firm environment acknowledged the great returns that websites provided them. By using the internet as a means of making their products and services known, more and more people get to know what they do and tend to initiate business transactions with them. "It was so difficult initially when we decided to build a website and maintain it; the cost too played a major role but now we are enjoying the full benefits of the site and we are working towards improving upon it very soon" one of the managers said. The employees in such environments too were pleased at the successes they had chalked over the years since hosting their websites. They confessed that work had been made a lot easier especially for those in marketing departments. They are able to reach their customer base with a more simple and easy approach than the traditional billboards, radio and television advertisement.

During inquiry it came to light that most of the chief executive officers of these firms were foreign nationals and only a handful were indigenous Ghanaians who have learnt to appreciate information technology enough to implement it in their daily activities. The employees of such firms were mostly graduates with full working knowledge of information technology and the ability to apply it to the work they do. The benefits they have derived from the full implementation of e-commerce is enormous as compared to competitors in similar lines of business who do not implement e-commerce. They are able to reach as far as international markets with their products and services and annual returns are always above target. The table below categorizes the total number of firms we tested into Non-users, Thin users and Fat users and their company outcomes as per their usage of e-commerce. Of all the firms interviewed, 19 firms were non-user, 60 were Thin-user firms and 21 were fat-user firms.

Further, managers were required to answer positively or negatively if e-commerce would basically bring change in the way organizations would carry out business in the next three years. A positive response from every manager indicated an increased possibility of adopting and implementing e-commerce strategies. However, managers in Non-user environments did not believe that, that will mark the collapse of their businesses. They have confidence that no matter how far Ghana develops in the ICT sector there will still be a sizeable number of Ghanaians who will always opt for the traditional paradigm. In contrast the other managers are looking forward to a more exciting business environment as Ghana moves gradually towards the global trend and are putting sound measures in place in preparation for that era.

The next question put to managers was if they thought e-commerce would help them better manage their inventory. Most of the responses we received were affirmative, in that digitization of data storage even when e-commerce was not implemented had always been the best alternative therefore the two combined would definitely be a step in the right direction. Most of these websites have databases attached to them which store any data used on these sites. In Fat- user environment where some transactions take place online there is immediate record of such transactions which immediately updates other related records. The two most advantages cited were (i) easy manipulation and access of information when ever needed and (ii) data was not bounded by any boundaries and could be moved to any location whenever needed.

The third question asked managers was if they thought making technical information regarding products available on the website was difficult. A positive response, probably a "yes" to this question indicated that managers did not think it was important to make available technical information regarding products and definitely did not know how much they would earn from doing it. A negative response from the managers indicated they knew how much profit they would make out of making such information available and an increased possibility of them adopting and implementing e-commerce strategies.

The fourth question required managers to state if they thought it was difficult to establish personal relationships with customers over the internet. A negative response, probably a "no" indicated a high possibility of e-commerce adoption and implementation. Most of the managers clearly stated that it was much more difficult when done in physical context than over the internet. Their reasons though quite varying all boiled down to a single fact; the internet already has a way of drawing users to itself. All you have to do is to work a little harder to make sure that websites are as dynamic, easy to use, with exciting products and services and accessible as you can and the customer will automatically get glued to it.

Findings
100 e-commerce websites were examined. The categories of e-commerce were divided into three. The study revealed that basic websites had features such as prices/charges, company profile and links to other sources, but have no information on products and no applications that allow customers to initiate transactions. Level1-sites allow online ordering, online payment, online auctions, making product preferences, prices/charges, links to other sources of information and also laws of privacy but have inadequate information on

products and no company profile. The level 2 websites had all the features of level 1-site in addition to adequate information on the product and service, company's profile and search engines. Level1-sites were 57, 43 were Level2-sites.

Of the 40 government agency websites observed, Level1-sites were 92.5%, 7.5% were Level2-sites. Of the 25 locally owned private websites, 60% were Level1-sites, 40% were Level2-sites. Of the 35 multinational owned private websites, 14.69% were Level1-sites, 85.71% were Level2-sites. Table 2 below indicates the percentage of websites under every category of e-commerce websites.

Category	Government websites	Owned Private Local websites	Private multinational websites
Level1- sites	92.5%	60%	14.69 %
Level2- sites	7.5%	40%	85.71 %

Table 2: categories of e-commerce websites based on company ownership

To conduct face-to-face interview to collect data, a structured instrument developed and validated was used. Out of the 100 owners/managers: contacted, 92 responses were obtained – representing a 92% response rate. Of all the responses got from the managers, strategic decision support, information management and organizational support were factors found to contribute to the knowledge of perceived strategic value and adoption of e-commerce by most owners and managers.

After interviewing managers, some customers were randomly selected and also interviewed to know their concerns in relation to e-commerce in Ghana. The customers were

asked just two questions. These were:
1. If they thought e-commerce was a better option to the traditional way of transacting business.
2. If they shopped on the internet

Of the 200 customers contacted, 120 of the customers gave a "yes" to the first question but stated that the websites did not provide enough information to make transaction processes easy. 50 of the customers we interviewed gave a "no" to the first question because they thought all Ghanaians are not computer literate and not all have easy access to the internet. Only 30 of the customers gave a "yes" to the second question.

Other findings that were found to affect business transactions in one way or the other were:

(i) Perceived Usefulness: From our results, we realized that the managers readily adopted e-commerce and became thin users but as to the implementation of all requirements needed to make them fat users they needed a lot of convincing to know the usefulness of having all the required features on their websites. Most of them felt making their products known on the World Wide Web was more than enough to bring them the returns they wanted. Some concerns too were raised on security issues one has to adopt to ensure safety of online transactions and their unpreparedness to go through such hassling situations. They are very content with the state of affairs of their companies now and will move with the pace at which technology is developing in Ghana.

(ii) Ease of Use: One other factor that raised many concerns was ease of use. Most of these companies believe the average Ghanaian has

very little knowledge about e-commerce therefore designing an interface for that purpose will be quite difficult. Explaining further, they pointed out that a working e-commerce site must have certain features like forms, which comes with security checks to ensure that the user is authentic, that the average Ghanaian will find absurd. They were not ready to compromise that since it would cause great revenue losses and therefore will stick to just a hosted website with all the information you may need.

(iii) Compatibility: The average Ghanaian consumer is used to the usual hustle and bustle way of transacting business. Most Ghanaians would prefer to see and also have a feel of whatever commodity they are purchasing so as to get value for money. E-commerce however does not provide such opportunities. Goods are displayed on a computer screen and customers have to browse through until they come up with a pick, purchase it online and it is later delivered which is huge contrast to what Ghanaians call shopping. There are compatibility issues between what the Ghanaian describes as shopping and technology based shopping. Companies who have adopted e-commerce outlined some major challenges they are facing. They claim most of their customers online are foreigners, only a handful are Ghanaians.

(iv) Organizational readiness: In every society or organizational setting, change is obvious as it is one of the most dynamic things in the world. Unfortunately though, most people fear change because of its possible implications. From the research conducted and responses received it was quite clear especially in the Non-user environment that they were very aware of e-commerce but

were not ready to accept it because of the possible effect it may have on the company. The other managers from the other user environments also outlined some of the challenges they encountered in implementing e-commerce. "Employees in general become less cooperative anytime we mention change," one complained. It will be very difficult to shift totally from the traditional paradigm especially in the Non-user environment because the employees are not ready to embrace information technology for fear they might lose their jobs. Some managers too are not ready to invest in acquisition of new equipment or even training of staff for the purpose of e-commerce and thus will continue doing business the old fashioned way.

External Factors
Apart from the above factors hindering the progress of e-commerce in Ghana, some external factors equally affect it as well. Most managers cited external factors such as:

(i) Competitors: Competition among corporate bodies tend to affect the implementation of e- commerce in that some companies feel their competitors are doing better without information technology and therefore do not see the need to implement e-commerce to incur extra cost that will fetch them the same revenue as the traditional way of transacting business.

(ii) Economic instability/cost – The general economic status of the country does not allow for the adoption and implementation of e-commerce. The shift from the traditional paradigm requires the acquisition of computers and their accessories including internet service providers that in our part of the world are very expensive, thus, companies find it difficult to take such risks that may bring losses or not fetch that much revenue to make up for

the cost involved in its implementation.

(iii) Internet service providers – Until recently, internet service providers were limited in number in the country. The sector was solely managed by Ghana Telecom now Vodafone. Presently, a sizeable number of internet service providers have sprung up in the city yet the problems that most companies face as a result of access to large uninterrupted bandwidth at affordable cost is still very bleak. Most of these service providers do not provide the consumers with the service they pay for, and also do not have packages for individuals and homes, making it difficult for those who do have access to internet cafes in their neighborhoods to enjoy services provided on the World Wide Web at their own convenience. Since most of the target audience of those who establish e-commerce sites are the general public and the majority of them do not have access to the internet as and when they wish the companies then do not see the need to do so anymore.

(iv) Government policy and laws – Though technology is quite new in the country, most governments ensure that they draft policies or laws that cater for emerging trends in information technology. Until recently there were no laws that protected individuals who did business online and this created a huge scare among individuals who were interested in e-commerce since some Ghanaians were able to defraud some foreigners of cash and goods or even both. One of such laws is currently being considered in parliament to check cyber frauds. Most companies expressed worry that until this law is passed and is fully functional, the adoption and implementation of e-commerce would still be a huge challenge.

(v) Security issues – a customer will be comfortable enough to initiate business transactions online only if they are sure that information being given is secure. The companies fear security will be a major hurdle in the full adoption and implementation because customers live under the fear that their credit card details will be used for dubious activities. Ghana has been banned from using credit cards on any online transaction, only credit cards issued by international banks can be used by Ghanaians outside the country to transact businesses online and sometimes this is by close supervision. One of the managers points out that, "Indeed, doing nothing serious to curb this menace may mean that not only will orders from Ghana be blocked by foreign traders, but we could also be shutting ourselves out of future sales to those countries. Given the significance of e-commerce in future international trade and commerce, it would be suicidal for Ghana to establish a bad reputation for herself in that area."

Our results suggest that the three types of users influence the prospect of e-commerce adoption and implementation. All the interview questions posed to managers made it crystal clear that their perception of the impact of e-commerce adoption and implementation is statistically significant with the type of user they become. We analyzed the features that distinguished the type of users and outline a list of factors that influence the implementation of EC strategies. These factors included transaction, payment, negotiations and customization, information availability, transportation and time. The research findings suggest that these factors increase users' awareness of improved efficiency gains in the use of the internet, thereby creating a high probability of users' adopting and implementing EC. While transportation influences the adoption of e-commerce strategies, transaction and time are

more influential in explaining the incorporation of e-commerce business strategies, and thus adoption and implementation.

Conclusion

There are many developments, which we should expect to see in the near future which will see electronic commerce spreading widely throughout the country. Whenever there are such huge changes in technology, there is always a lag period before our laws can be updated and modified to suit the new commercial environment. Further research is required to investigate the social implications and consequences of new and emerging technologies in relation to how they may affect people's lives. As we move further down the digital road further issues will begin to arise which will have widespread implications on e-commerce in Ghana. Issues which need to be addressed are:

- What issues relating to online shopping are consumers concerned about?
- Will there be implications for the built environment?
- Will work patterns change as a result of increasing activity online?
- How might online activity affect people's behaviour?
- Will the new information be as divided as 'normal' society?

One of the most important issues which need to be made clear to policy and decision makers is that the internet and digital television is really no different from any other tool, service or facility available to the public. The same problems of uneven access dependent on social status and conditions will play just the same part in the use of and access to the Internet as all other services and facilities in society.

As a final word, it may be worth remembering that while this new technology is having profound effects on the way many people live their lives it is not as if we have not coped with technological revolution before.

Recommendations

Ghana, the gateway to Africa, is trying to move ahead of many of her peers in ECOWAS in tying ICT issues to development in general and in pursuing e-commerce in particular. However, special efforts must be made to meaningfully include the private sector particularly merchants, the legal profession, and financial services and information technology industries and civil society in the policy and legislative formulation process. This is particularly important because the means by which these important stakeholder groups can participate in this proposed regional process is less obvious than for policy and legislative efforts at the national levels. Also, involving these stakeholders should help create advocates at the national level and thus improve buy-in and widespread implementation.

Ghana must also recognize that to successfully deploy e-commerce, the effort must go beyond creating laws to include government actively utilizing electronic delivery platforms for its own use for both its interactions with business and fundamentally for the delivery of government services through e-government. On the latter point, it should be noted that many of the issues relating to e-commerce, from data security, privacy, cyber-crime to e-payment solutions and electronic records, are equally relevant for e-government. Consumers will not take advantage of these if they are not assured a proper level of protection. They must be confident that the on-line world is a safe place to shop.

Consumers need protection against fraudulent, misleading and unfair behavior, and, when things go wrong, should be able to gain redress. It will be necessary to keep the regulatory framework under review so that consumers have effective protection when engaging in electronic commerce. Self-regulation may have an important role to play. As cross-border shopping increases there will be a growing need for international co-operation on questions of enforcement, dispute resolution and redress. Businesses, consumer organizations, governments and other bodies have significant parts to play in informing and educating consumers about how they are protected in the new marketplace. Further, efforts should be made to identify and facilitate the development of e-commerce projects with high impact potential especially among the general public.

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