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Introduction

Spiegel (2000) defined e-business as all the customer services, business transactions and intra-business tasks that are executed with the help of digital communication technology. In other words, e-business involves the use of Information and Communication Technology to exchange services, products and even information for commercial as well as communication purposes. It can occur among businesses, between businesses and individuals, between government and members of the public, even with governments etc. The main driving force of e-business is the Internet. The Internet is a generic term used to describe a global networked environment, which support such systems like email, websites, and file transfer protocol. It's simply a network of computers scattered across the globe. The exponential rise of internet and digital technology has made e-business to occupy a very significant position, in the world of business. In this paper, we take comprehensive look as the concepts and feature of e-business.

1. The concept of E-Business

1.1 Describe the environment in which e-business is conducted and business transaction types.

As already mentioned at the beginning of this paper, e-business is defined as the use of information and communication technologies, in executing various business operations. According to Ladan (2010), e-business is basically conducted in three different systems, namely: systems of human activity, systems of information, and systems of information and communication technology. These three systems interact collectively together to form the environment in which e-business is basically carried out.

E-business can be classified based on the type of organizations or individuals that are involved in the transaction. The main types of e-business as: Business-to-business (B2B), Business-to-consumer (B2C), Consumer-to-business (C2B) and Consumer-to-consumer (C2C).

Business-to-business (B2B) is a special type of business transaction, which takes place between businesses. It can either occur between a wholesaler or retailer or a manufacturer and a wholesaler. For instance, manufacturers of vehicles usually make several B2B transactions that include: buying tires, glass for windcreens, and rubber hoses for the vehicles. Many of these transactions can be conducted via the internet (Nemat, 2011).

Business-to-consumer refers to business activities, in which end customers are served with services and/or products. Thus, it includes any business that sells its services or products over the Internet. Some good examples include: Amazon, online banking, travel services, online auctions, health information and real estate sites (Nemat, 2011).

Consumer-to-business (C2B) is a unique type of e-business, in which consumers sell their services or products to companies via the internet. A very good example is the affiliate program (Dutta and Bison, 2001).

Consumer-to-consumer (C2C) is the process whereby transactions are electronically facilitated between consumers through a third party. One of the commonest examples of this type of e-business is the online auction, where commodity for sale is posted by a consumer and other consumers bid to purchase it. The auction site is owned by a third party who makes his own money from the commissions that are charged for these transactions (Nemat, 2011).

1.2. The benefit and barriers to businesses considering an online presence

Over the last few decades, the exponential rise of internet and the digital technology has opened a new playing field for all categories of businesses. Consequently, an increasing number of businesses have continued to establish presences on the vast internet world. However, there are both benefits and disadvantages of e-business. These are discussed below.

Benefits of e-businesses

The main reason behind the increase in the number of business that operates online is the numerous advantages that can be obtained from the venture. Internet is the basic platform on which every online business operates. Statistics has shown that billions of users log in to the internet on daily basis. Thus, any business that is established online will be exposed to millions of potential customers, who will have an unrestrictive access to the information about the products and services that are being rendered by the businesses (Henderson, 2014). Also, e-stores operates 24 hours a day, seven days a week, a feature that enables the owner to even makes money while sleeping (Bradley, 2014). Some internet platforms like chat rooms, web forums etc enables e-business owners to create strong networks that can link them to potential customers

across the globe. Finally, operating an e-business is more cost-effective than operating a physical store (Henderson, 2014).

Barriers of e-business:

There are also certain factors that are militating against the successful establishment of businesses on the vast internet world. Among these factors are legal issues. For instance, every online business is unavoidably subjected to the laws of the countries where customers can access your website. At times, these laws may not be conducive for the business owner. Some of these laws include: copyright laws, taxation laws, etc (George, 2014). Another obstacle is lack of trust. Because of incidence of internet fraud, lots of customers at times may be wary of products online. Finally, it's normally expensive for online businesses to copyright or patent their website ideas globally. Unfortunately, this is very necessary for one to stay ahead of competition.

1.3. The security and the legislative issues facing an online business organization

In the last section, we listed the major issues militating against the successful establishment of businesses on the vast internet world as: security and legal (legislative) issues. These are the two areas which we are going to further discuss in this section.

Security Issues

Security issues are among the main factors that militate against the establishment on businesses on the vast internet world. Thus, it's very necessary for these issues to be adequately addressed by every prospective e-commerce. Ladan (2013) listed thefts as the main security issue currently facing e-business. E-businesses are specifically prone to theft. This may involves the theft of client's data stored web "cookie" or even user's financial data from local disk. This may occur as a result of certain security lapses like: inadequate or lack encryption in home wireless network. Also, customer's financial data can be stolen from the user's keystrokes at Point-of-Sale (POS) terminals in brick-and-mortar stores. Even some sophisticated malicious programs are known to have the capability of stealing data from client's mobile and handheld devices as well as from networks and different intermediate communication links. This issue of insecurity could be worsened by firewall problems or when the merchant websites aren't adequately secured.

Legislative Issues:

The issue of intellectual property rights is one prominent legislative problem that is currently facing e-business owners. This is made more complicated by the fact that; e-business is typically operated at the global level as well as the ease, with which digital media can be copied and saved. Despite attempts by global bodies, the attitude toward intellectual property rights still differs from one country to another. There are also concerns about the legal validity of electronic transactions. This explains why many legislatures across the globe are very reluctant to pass bills that can promote e-business within their countries. Finally, a lot of governments were worried about the influx of commodities that are termed illegal in their own country (Bingi, et al, 2001). For instance, while alcoholic drinks are legal in many parts of the world, they are termed illegal in Islamic countries.

1.4. The modes of communication available to an e-business and their application

Basically, every e-business use mode of communications that are in tune with present digital and electronic technology. These include: use of social media, mobile phones, SMS, email etc. Even though they appeared to be simplified these modes of communication nevertheless, enables more elaborate discussions and conversations between e-merchants and their clients. Even the Frequently Asked Questions (FAQ) pages of the ecommerce can also serve as formidable modes of communication, as it provides answers to initial questions, which clients may ask.

Some of the most common methods of online business communication are used by a company to facilitate discourse among employees. The exact mode of communication that is normally used to accomplish this is the use of social media platforms like: Facebook, Twitter etc. Most e-commerce maintains fanpage on these social sites, through which they converse with their general clients (MacDonald and Smith, 2003).

Mobile Phones and emails can be used to contact prospective buyers individually. Many businesses have email accounts for employees to use, which are intended for official and professional messages. Instant messaging software is also frequently used, allowing people to quickly and easily relay information to each other. Some e-business also used such advanced communication platform like audio and video messaging and chat programs to relay information

to often provided to employees, allowing them to send each other messages and to facilitate teleconferencing. This allows representatives of e-commerce see and hear their prospective clients during discussions (MacDonald and Smith, 2003).

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2. Internet Technology as a formidable tool for e-business

2.1. The internet technologies and their importance in making an e-business successful

Internet technology is a generic term used to describe a global system of interconnected computer networks, which make use of the standard Internet protocol suite. It is global accessible to billions of users scattered across the globe and it's consist of millions of private, public and government networks. In today's modern world, internet technologies form an integral part of e-business platform. The simplest information technologies that are being used in e-business include: email, PCs, and use of the Internet for information searches. Bigger corporations are fully using information technology in form of remote data storage, extranet, remote help desk assistance etc.

The use of information technologies have greatly contributed to the success of e-business. Davis et al (2006) listed the main ways, through which internet technologies have contributed to the success of e-business as follow:

- Developing and boosting relationships with clients ;
- Cutting down the production cost of the e-business;
- Improving the rate at which the e-business adopt innovative strategies as well as its flexibility;
- Boosting the productivity and profitability of the business;
- Boosting the overall brand image of the business as well as the products and services that are being offered by the business;
- Increasing the domestic market share;
- Increasing the international market share;
- Boosting the level of customer' services and satisfaction
- Increasing the speed of supplying products or services and
- Gaining competitive advantage over rivals in the business environment.

2.2 The main features of HTML

HTML is an acronym for Hyper Text Markup Language. It's a standard markup language that is specifically used to create web pages. Basically, the HTML codes consist of elements, which consists of tags enclosed in angle brackets (like `<html>`). Most of these tags usually occur in pairs like `<h1>` and `</h1>`. The first tag in a pair is the opening tag, while the second one is the closing tag. It's the function of the web browser to read HTML documents and display them as the normal WebPages, which can be comprehended by users. The tags `<html>` `</html>` aren't display by the browser. Instead, the browser uses them to interpret the content of the page.

HTML elements are the building blocks of every website. Thus, all the fundamental features of websites are encoded in HTML elements. In the HTML elements, these web features are encoded as including *tags* (and their *attributes*), character-based data types, character references and entity references. Some examples of web features include headings, paragraphs, tables, forms, frames, meta tags, images. Below is an example of HTML codes.

```
<html>
  <head>
    <title> This is a title</title>
  </head>
  <body>
    <h1>Heading level 1</h1>
    <p>Paragraph 1</p> <p>Paragraph 2</p>
    <p>Hello world! </p>
  </body>
</html>
```

As already stated earlier on, the first tag `<html>` and its corresponding closing tags `</html>` enables the tags to interpret the content of the page. The second tag `<title>` and its corresponding closing tag `</head>` specifies the title of the page. The tags `<body>` and its corresponding closing tag `</body>` specified the main body (content) of the web page. The tags `<h1>` and `<p>` are used to encode heading and paragraphs.

2.3 The functions of client servers and browsers and the role of the search engine

The term “Client servers” is used to describe a unique type of relationship between two different computer programs, where one of the computer programs (the client) makes a service request from another program (the server), which fulfils the request (Yongsheng et al, 2013). This great model is of great importance in network programs, where it offers able platform through which several computer programs at different locations are conveniently linked up. Computer transactions using the client/server model are very common (Benatallah, 2004). For example, a bank customer can check his account balance by from his personal computer to the bank’s central server, which will then process his request and send back the respond to him.

The client-server model enables the sharing of functions between individual computers (the clients) and the server. The main functions of the server in this model are to process requests submitted from individual computers. These requests are then processed by the server and the result sent back to the users (Benatallah et al, 2004). On the other hand, the browser displays the result that has been processed by the server in a format that is comprehensible to the clients. It’s also the function of the browser to display HTML elements in an understandable format.

Today, there are billions of websites that are being hosted on the vast internet world. Gaining access to relevant websites has been a great challenge for many web users. This is exactly the area, where the search engine comes. In its simplest term, search engine can be defined as a specialized web-based tool, which enables internet users to find relevant information on the World Wide Web. The commonest examples of search engines are Google, MSN and Yahoo. Each of these types makes use of software apps like bots, spiders and robots to bring about this great function.

2.4. The use of intranets and extranets within business communication

Currently, there is an increasing need for companies to have networks, which can enable them to share information internally and externally. Two examples of networks that can fulfill this obligation are: intranet and extranet. An intranet can be defined as an internalized computer network, which can only be used to share information within an organization. It consists of web pages and network access. On the hand, extranet is quite similar to intranet. The only difference

is that, an extranet can be access by limited external partners, who can be business partners, important customers, suppliers etc (Mista, 2014).

There many benefits of integrating intranet into the structure existence of any organization. Some of the advantages of intranet include: better internal communications, improved customer services, sharing of resources and best practice, reduction in paperwork, flexibility working hours, single user interface between organization and its clients etc. These advantages are the same as extranet. However, there are some additional advantages of extranet. These include: integrated supply chains, more effective collaboration and improved business relationships.

Despite the numerous advantages, there are still some disadvantages that are associated with both intranet and extranet. Prominent among these are:

- Managerial issues
- Security issues such as: unauthorized access, denial of service, abuse of access, packet of sniffing
- Technological issues such as availability of too much information
- High cost of implementation and maintenance
- Reduction of personal contact with customers and business partners, which can hurt customer's loyalty to the organization

3. E-Business Models

3.1. The different e-business models that can be used to generate revenue for a business

E-business model is very important for the development of an e-commerce system. It is actually responsible for providing the correct design rationale for any e-commerce systems as per the type of business to be conducted on such systems. Thus, the design of the e-business model provide very vital information, on how the prospective business is going to be conducted (Gordijn, 2000). There are several types of e-business models. Prominent among these are: storefront model, auction model, portal model, dynamic pricing model etc

Storefront model: This is the commonest type of e-business model that exist in the society today. In fact, this is what many people think of, whenever they heard the word, “e-business”. A typical storefront model consists of all those features that enable merchants to sell their goods and services to the consumers. These include: online payment system, security, transaction processing, information storage etc. Some examples of storefront model include www.more.com and www.ticketmaster.com .

Auction Model: This is a forum-like website, which enables sellers to post any commodities they hope to buy and receive bids from different interest buyers. A typical auction sites support features that enables sellers to add pictures of their commodities, select the lowest prices for the commodities and even chose the deadline for its commodities. Some common examples are www.ebay.com and www.liquidprice.com.

Portal Model: This model offers web surfers the ability to search and find information that is relevant to their needs. Some of these include news, weather, sports etc. There also some special portals that primarily link customers to online merchants. Some examples of these e-business portals are: www.hotbot.com, www.about.com, www.yahoo.com.

3.2. Analyze each model in terms of its capacity to generate revenue

Even though the structural design of each e-business model differs significantly from others, all models still have the ability to generate revenue. However, the methodology through which these revenues were generated differs from one type to another. These are briefly described below.

Storefront model: These e-business models are specifically designed for the generation of revenue for its owner. As have already stated, it's a site that is designed to enable buying and selling to take place on the internet. Every storefront model has online payment system that enables transactions to be processed instantly on the internet. Thus, the bulk of revenue generated in this model is obtained from selling of commodities on the internet. Some websites that fall under this category do have high inflow of traffic. This prompts many website owners to monetize the site further by going into online advertisement.

Auction Model: This type of e-business model enables sellers to post any commodities they hope to buy and receive bids from different interest buyers. The site owners generate revenue through the transaction fee that is charged for every single successful transaction. Some revenues are also generated from the subscription and listing fees charged to members. Just like in the previous example, a significant amount of revenue can be generated from online advertisement.

Portal Model: This type of e-business model primarily generates revenue for its through online advertisement. It's actually this class of model that is the most successful group in area of online advertisement. We also having online shopping portals, where buying and selling of different commodities are carried out. In this case, significant revenues are generated from transaction and subscription fees.

3.3. Report on future developments in e-business models

The commentary rise of internet and digital technology has lead to the emergence of new ICT tools, which are increasing being adopted by customers all over the world. As a matter of fact, the internet is a customer-driven marketplace. The widespread use of laptops, tablets, Smartphone means that more and more people are now connected to the vast internet world. This means that the internet will continue to be an important driver of economic growth or many commercial organizations across the globe. Of course, this is wonderful news for e-business, whose operational platform is situated on the internet.

Already, e-business has been widely recognized as a critical competitive strategy that will continue to change the global economy. Its numerous advantages have continued to draw a large

number of business owners to it. The fact that more and more people are being connected to e-business is a clear indication that this sector of economy, will surely continue to remain feasible.

4. The concept of Good Web Design Structure

4.1. The key elements of good web design structure

Basically, the structure of websites consists of key elements such as body, metatags, description, keywords, navigation etc. These key elements are hugely responsible for the visual appeal, good clear navigation and good attention to usability of every good website (Bates, 2012). Thus, it's very important to always consider these key elements when building a website.

One of the most important elements, which play significant role in the success of every website, is the keywords. Keywords can be defined as phrases people usually type into search engines in their quest for the type of products and services offers by e-commerce sites. It's very necessary to obtain carry out research and identify the right keyword phrases that are right for a particular e-commerce site. It's through this way, that the e-commerce can become highly visible on search engine result. Researching for keywords can be accomplished with Google External Keywords tool and Wordtracker to help you find keywords which work for your business. In other boost the quality of the effect, the keywords should also be included in the metatags of the websites

The structure and content of the website should also be made more appealing for both search engines and web surfers. This will help visitors to understand the site, stick to it and patronize the services that are being rendered. The body contents of website can easily be perfected with the use of such CMS tools like WordPress (Bain, 2011).

Finally, the navigation structure of the website should be made consistent across the numerous pages, so that visitors can easily migrate from one page to another. The main reason for having nice navigation plan is to reduce the number of clicks that can take customer to the right information, services or products they are in dire need of.

4.2. The impact of a well designed website to an e-business

The E-commerce site is the official customer representative of the business owner, on the vast internet world. Thus, it is very important to make a good impression with the website as it can have significant impact on the success of the e-business. Gardener (2012) listed the main aspects of a website as Design, Content, and Functionality. These three aspects play great role in building the corporate brand of the business on the net.

- **Design:** The structural design of the website should be made akin to the corporate marketing image of the business. This will attract more potential customer to the site, but could also boost the daily sales of the website.
- **Content:** This is the most important aspect of every good website. In order to obtain a wonderful content, web content writers should always employ the technique called AIDA (Attention, Interest, Desire, and Action). This technique is capable of invoking the desired visitor response. Secondly, Search Engine Optimization techniques should also be applied, when developing the content of the website. This technique specifically made it possible for websites to be ranked and indexed on search engine. Thus, high quality content, improved the visibility of website on the vast internet world, thereby leading to an increased volume of sales and more profits
- **Functionality:** This has to do with the management and accessibility of web content via the website. In this case, the functionality of web content should fit in to the right format that simplifies the process of conducting business on the web interface. An e-business with high quality functionality can make customers to have more confidence in site. This will boost the sales being conducted on the site (Agrawal et al, 2001).

In summary, a well-designed website is very instrumental to the success of every e-business. This is because; such websites have increased traffic and are also capable of meeting the expectations of the business owners.

4.3. The issues concerning website usability

It's also very important to optimize the web pages for web surfers. Doing this correctly will make the website attractive to both the web surfers and search engine spiders. Thus, it's very necessary for web developers to know the major issue that can affect the usability of websites. These issues can be classified into two major classes namely: Formatting Issues and web browser issues. Both issues have to do with the site's architecture and navigation. (Tilson et al, 2012)Some of the issues that need to be addresses include:

- **Improving the loading speeding of website:** This enables web surfers to navigate the website quickly. It also enables Search engines to index the pages more easily.
- **Readability of web pages:** This makes it easier for web surfer to read and comprehend the websites more easily. The web pages should have very clear and concise headings, paragraphs, bullet lists etc.
- **Easy Navigation:** The usability of the e-commerce site can be greatly increased by providing clear and concise navigation links. This will help users to identify and navigate to the exact web pages that are relevant to their needs.
- **Improving the Content:** Optimizing the web content of the website also improves its usability. For instance, web content with nice structures can easily be accessed from small computer screens. Websites with nice contents also tends to rate high on search engine index. Thus, they have greater visibility on the vast internet world.
- **Browser compatibility:** The website should also be designed in a way that makes it compatible with major browsers such as Internet Explorer, Mozilla Firefox, Chrome etc. This will help to increase the number of potential clients that are accessing the websites.

Conclusion

From the discussion so far, it's very evident that the methodologies for conducting businesses are recording a paradigm shift, as a result of the exponential rise in the internet and digital technology. Today, e-business is progressively dominating the global business landscape. The immense benefits accruable from the online business have prompted more and more business to establish a presence on the World Wide Web. E-business is drastically altering the contours of space and time, restructuring the concept of value, transferring more power to consumer and revolutionizing the concept of business management. Despite the few concerns, statistics has shown that e-business will continue to dominate the world community.

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