### CHAPTER ONE

### 1.0 INTRODUCTION:

E-commerce is fast gaining ground as an accepted and used business paradigm. More and more business houses are implementing web sites providing functionality for performing commercial transactions over the web. It is reasonable to say that the process of shopping on the web is becoming commonplace.

The objective of this project is to develop a general purpose e-commerce store where product like clothes can be bought from the comfort of home through the Internet. However, for implementation purposes, this paper will deal with an online shopping for goods.

An online store is a virtual store on the Internet where customers can browse the catalog and select products of interest. The selected items may be collected in a shopping cart. At checkout time, the items in the shopping cart will be presented as an order. At that time, more information will be needed to complete the transaction. Usually, the customer will be asked to fill or select a billing address, a shipping address, a shipping option, and payment information such as credit card number. An e-mail notification is sent to the customer as soon as the order is placed.

**1.1   BACKGROUND OF THE STUDY**

The Internet revolution was really about people customer and fundamental shift of market power from the seller to buyer. In the new economy customers expectations are very different than before. A company understanding of this difference and its ability to capitalize on it will be the key to success. The web, the internet and emerging computing and communication technologies have redefined business erasing traditional boundaries of time and geography and creating new virtual communities of customers and suppliers with new demand to product and services. E-commerce only forms a fragment of e-business. Earlier companies had web sites displaying the company products etc. then they started to use the e-commerce as one of the distribution channel in addition to the existing system for sales that is e-commerce. The term Electronic commerce or e-commerce consists of all business activities carried on with the use of electronic media, that is, computer network. It involves conducting business with the help of the electronic media, making use of the information technology such as Electronic Data Interchange (EDI). In simple words, Electronic commerce involves buying and selling of goods and services over the World Wide Web. Customers can purchase anything right from a car or a cake sitting comfortably in his room and gift it to someone sitting miles apart just by click of a mouse. Shipping method is generally used for the delivery of the goods ordered. Every Bank which is highly leading now performs their transaction through computer and computer is not only the concept can make off the transaction automatic. All the commercial application now transfers to the concept of e-commerce and is one of the very important aspects for carrying bank transactions falsity. In the commercial world surrounded by highly competitive and volatile market conditions, any new concept or technology would be acceptable only if it provides strong benefits to all concerned. Ecommerce offers some distinct advantages.

First, portability improves bottom line of and organization. And secondly expanded market share, some component can be handled by multiple customers at the same time.

**1.2   STATEMENT OF THE PROBLEM**

A study by the United Nations Conference on Trade and Development (UNCTAD) has shown that SMEs, while generally lagging in ICT, have the most to gain from increases in productivity thanks to e-commerce. SMEs, however, actually run the risk of missing opportunities in both productivity and profitability by not engaging in e-business.

**1.3   OBJECTIVES OF THE STUDY**

**The main objective of the research project is to design and implement an online goods procurement system (E-commerce). Specific objectives of the research paper are:**

1.     To study how e-commerce aid in the economic development of developing countries.

2.     To identify the relationship between e-commerce and emerging market.

3.     Toidentify the significant impact of e-commerce on emerging market.

4.     To assess the influence of e-commerce in developing an economy.

**1.4   SIGNIFICANCE OF THE STUDY**

E-commerce has been hailed by many as an opportunity for developing countries to gain a stronger foothold in the multilateral trading system. E-commerce has the ability to play an instrumental role in helping developing economies benefit more from trade. Unlike the requirements necessary to run a business from a physical building, e-commerce does not require storage space, insurance, or infrastructure investment on the part of the retailer. The only pre-requisite is a well-designed web storefront to reach customers. Additionally, e-commerce allows for higher profit margins as the cost of running a business is markedly less.

**1.5   SCOPE/LIMITATIONS OF THE STUDY**

This study is on the impact of e-commerce on emerging markets using shop n surf online store as a case study.

Limitations of study

1.        Financial constraint- Insufficient fund tends to impede the efficiency of the researcher in sourcing for the relevant materials, literature or information and in the process of data collection (internet, questionnaire and interview).

2.        Time constraint- The researcher will simultaneously engage in this study with other academic work. This consequently will cut down on the time devoted for the research work.

**1.6   DEFINITION OF TERMS**

**E-commerce:** It is the buying and selling of goods and services or the transmitting of funds or data, over an electronic network, primarily the internet. These business transactions occur either as business-to-business, business-to-customer, customer-to-customer or the customer-to-business.

**An Emerging Market:** Is a country that has some characteristics of developed market but does not meet standards to be a developed market.

**Procurement:**

**CHAPTER TWO**

**2.0 LITERATURE REVIEW**

The literature review is a critical work at the existing research that is significant to the work which is being carried out. This chapter gives insight into various studies conducted by outstanding researchers, as well as explained terminologies with regards to the design and implementation of an online Goods Procurement system (E-commerce). The chapter also gives a resume of the history and present status of the problem delineated by a concise review of previous studies into closely related problems.

Electronic Commerce (E-commerce) seems to be everywhere these days. It’s nearly impossible to read a magazine or newspaper without coming across an article about how e-commerce is going to change and affect our lives. It is widely accepted that e-commerce and Internet technologies can benefit an organization.

E-commerce offers tremendous opportunities to do business electronically, such as using electronic data interchange (EDI) and World Wide Web (WWW). The exponential growth of the Internet and the WWW created a new type of commerce: E-commerce on the Internet. E-commerce on the internet is the exchange of goods, services and information using the Internet’s capabilities (Shahar, 1997).

E-commerce is fundamentally changing the economy and the way businesses are conducted today (Barua et al., 2001). It forces firms to find new ways to expand the markets, to attract and retain customers by tailoring products or services to their needs, and to restructure their business processes in order to deliver high quality products and services more efficiently and effectively (Chan and Davis, 2000).

The development of e-commerce offers a promising way for businesses to meet challenges of the ever-changing market (Kaiyin, 1997). The fast-developing information infrastructure makes the connectivity to reach almost everywhere around the whole world possible. However, the main challenge and successfulness of running e-commerce business comes not only from technology, but also from the people who do the business.

E-commerce probably began with electronic data interchange in the 1960s (Zwass,1996). However, (Melao, 2008) suggests that it was only in the 1990s, primarily via the Internet, that e-commerce has emerged as a core feature of many organizations. In his opinion, the hope was that e-commerce would revolutionize the ways in which organizations interact with customers, employees, suppliers and partners. Some saw e-commerce as part of a recipe to stay competitive in the global economy.

The term “e-commerce” has a very broad application and means different things to different people. Furthermore, its relation with e-commerce is at the source of many disagreements. (Melao, 2008). A more comprehensive definition of e-business is: “The transformation of an organization’s processes to deliver additional customer value through the application of technologies, philosophies and computing paradigm of the new economy.” In a simple sense, E-commerce can be defined as, “the organized effort of individuals to produce and sell, for profit, products and services that satisfy society’s needs through the facilities available on the Internet”

(Brahm Canzer, 2009).

According to (Melao, 2008) the clear commonalities among these definitions, include the improvement of business processes and the use of ICT in intranets, extranets and the Internet to conduct business. He defines e-commerce as the use of ICT as an enabler to (re)design, manage, execute, improve and control business processes both within and between organizations. Thus, front and back-office integration and multi-channel integration become crucial in e-commerce, which requires a challenging process improvement approach to support the necessary organizational, technological and social changes.

The article published by (Rahmath Safeena et al in January 2001), states that, the various areas where the banks are preparing to use e-commerce approach include familiar and relatively mature electronically based products in developing markets, such as telephone banking, mobile banking, credit cards, ATMs, and direct deposit. This means that most of the banks have recognized the need to change their business process to conform to changing business trends in order to keep up with competition. The customers are using net banking, to pay the utility bills, insurance premium, to book orders online, to book railway tickets also to book flight tickets, purchasing the products online using net banking or online banking (e-banking), credit cards, debit cards or smartcards also.

The development in the e-commerce however means that an increasing number of jobs are being changed from traditional tellers to branch advisors/ counselors. Bank staff is increasingly asked to provide highly qualified financial advice rather than perform simple teller functions. By using intranet the communication is very fast in the banks. The banks can handle their transaction very fast online, using e-banking.

Electronic business methods enable companies to link their internaland external data processing systems more efficiently and flexibly, to work more closely with suppliers and partners, and to better satisfy the needs and expectations of their customers. E-commerce refers to more strategic focus with an emphasis on the functions that occur using electronic capabilities. (Yen-Yi, 2006).

In the article published by (Windrum, and De Berranger in 2002) focused on the integration of the internet and related ICTs into the business organization forming e-commerce. It has two facets. One is the integration of the supply chain so that production and delivery become a seamless process. The other is the creation of new business models based on open systems of communication between customers, suppliers and partners. Where the integration of the supply chain provides increased efficiency and significant cost advantages through waste minimization, the development of new products and services are facilitated by new ways of conducting business based on internet working between organizations and individuals.

According to Basu and Muylle (2007), companies can gain two fundamental types of benefits from e-commerce. These are generally described as: Value Creation or Value Enhancement for one or more of a company’s stakeholder groups; and Lower Cost of providing goods and services to the market place. Examples under Value Creation include Improvement in internal and external communication through effective e-marketing, Increment of sales through an e-commerce website integrated with a back office systems and Improvement in supplier relations and productivity through collaborative workspaces (Basu and Muylle, 2007).

And examples under Lower cost are: reduction in communication and travel costs using online meeting tools; shared workspaces and; benefit from license free open source alternatives to proprietary software.

According to (David Whiteley, 2001), In banks the online banking facility allows the customer to check their balance or pay a bill at any time of the day or night. The services offered by online banks typically include

1. Online balances and statements giving up-to-the minute information. The statement can be used to check that any specific debit or credit has gone through;
2. Credit transfers so that bills can be paid online. Included, is the facility to set up a transaction now for the bill to be paid at a later date;
3. Maintenance of the standing orders and direct debits

Windrum and Berranger (2002) suggest that the commercial benefits of e-commerce lie in five areas. Firstly, firms are able to expand their geographical reach. Secondly, important cost benefits lie in improved efficiency in procurement, production and logistics processes. Thirdly, there is enormous scope for gaining through improved customer communications and management. Fourthly, the Internet reduces barriers to entry for new market entrants and provides an opportunity for small firms to reorient their supply chain relationships to forge new strategic partnerships. Finally, e-commerce technology facilitates the development of new types of products and new business models for generating revenues in different ways.

According to Windrum and Berranger (2002) it is hypothesized that many of the factors affecting the successful adoption of new technologies such as e-commerce are generic in nature and that the successful adoption of internet technologies in part depends on how these are used in conjunction with the other technologies and management practices that form a ‘technology’ Cluster.

Ayo (2006) investigated the prospects of e-commerce based on ability, motivation and opportunities (AMO) model and observed that virtually all companies have online presence. The paper reported the motivation and opportunities for e-commerce as low based on lack of e-Payment infrastructure and access to information and communication technology (ICT) facilities.

Another important factor in the design of an e-commerce site is feedback. The interactive cycle between a user and a web site is not complete until the web site responds to a command entered by the user. According to Norman(2008), "feedback--sending back to the user information about what action has actually been done, what result has been accomplished--is a well known concept in the science of control and information theory. Imagine trying to talk to someone when you cannot even hear your own voice, or trying to draw a picture with a pencil that leaves no mark: there would be no feedback".

Web site feedback often consists of a change in the visual or verbal information presented to the user. Simple examples include highlighting a selection made by the user or filling a field on a form based on a user's selection from a pull down list. Another example is using the sound of a cash register to confirm that a product has been added to an electronic shopping cart.

Completed orders should be acknowledged quickly. This may be done with an acknowledgment or fulfillment page. The amount of time it takes to generate and download this page, however, is a source of irritation for many e-commerce users. Users are quick to attribute meaning to events. A blank page, or what a user perceives to be "a long time" to receive an acknowledgment, may be interpreted as "there must be something wrong with the order." If generating an acknowledgment may take longer than what may be reasonably expected by the user, then the design should include intermediate feedback to the user indicating the progress being made toward acknowledgment or fulfillment.

Finally, feedback should not distract the user. Actions and reactions made by the web site should be meaningful. Feedback should not draw the user's attention away from the important tasks of gathering information, selecting products, and placing orders.

### 2.1: OVERALL DESCRIPTION:

1. Any member can register and view available products.
2. Only registered member can purchase multiple products regardless of quantity.
3. Contact Us page is available to contact Admin for queries.
4. There are three roles available: Visitor, User and Admin.
5. Visitor can view available products.
6. User can view and purchase products.
7. An Admin has some extra privilege including all privilege of visitor and user.
8. Admin can add products, edit product information and add/remove product.
9. Admin can add user, edit user information and can remove user.
10. Admin can ship order to user based on order placed by sending confirmation mail.

**2.2: WEB PAGE DETAILS**

1. Home page
2. About us page
3. Contact us page
4. Login page
5. Register page
6. Order page
7. Admin page

**CHAPTER THREE**

**SYSTEM DESIGN**

In order to design a web site, the relational database must be designed first. Conceptual design can be divided into two parts: The data model and the process model. The data model focuses on what data should be stored in the database while the process model deals with how the data is processed. To put this in the context of the relational database, the data model is used to design the relational tables. The process model is used to design the queries that will access and perform operations on those tables.

**3.1: E-COMMERCE SYSTEM REQUIREMENT SPECIFICATION**

The system requirements specification is a structured documents that collects information which encompasses the requirements of a system. This section would focus mainly on the functional requirements of the proposed system and this include:

**Content Management / Make and Change Pages**

E-commerce provides non-technical, easy to use tools for the management of your site content, images, documents and members. Built right into your site, these tools allow for the day-to-day management and control of your site from any Internet capable computer in the world.

**Online Retail**

The E-commerce system provides tools for creating and managing your own web-based catalogue. Use the image upload facility to place product and page images on your site. Combine preview and feature images with text details to promote your product in any page of your site. Clone products so they show in multiple categories.

**Site Members / Content Subscription**

Offer site membership and access to member only pages. Choose what details to collect and keep in touch with electronic document mail outs. Create and manage member only pages where content is only accessible to authenticated members of your site.

**Online Ordering**

Allow site visitors to compile an order by adding items, setting quantities. Users must register as members to submit an order. Set up re-occurring orders for ongoing charging of a particular order.

**Contact Form**

Use supplied page template to create a contact page, which site visitors can complete to send an email to the site administrator.

**3.2** Data Model

A data model is a conceptual representation of the data structures that are required by a database. The first step in designing a database is to develop an Entity- Relation Diagram (ERD). The ERD serves as a blue print from which a relational database maybe deduced. Figure 1 shows the ERD for the project and later we will show the transformation from ERD to the Relational model

Purchase History

State tax

Credit card 1:1 has 1:1 Customer 1:1 write: 0:M Review

1:1 1:1 0:M

has files has

1:1 1:M 1:1

Shipping Type 1:1 has 0:M Order details Shopping cart items Inventory

0:M 0:M

is in has

0:1 1:1

3.3 **USE CASE DIAGRAM**

The use case diagram is a UML diagram that shows the users of a system and various interactions that exists between the user and the system.

Admin

User