FEDERAL UNIVERSITY OYE-EKITI

DEPARTMENT OF COMPUTER SCIENCE

ONLINE ORDERING AND DELIVERY

(A CASE STUDY OF RASMED PUBLICATIONS LTD)

BY:

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MATRIC NO: CSC/11/0272

A PROJECT SUBMITTED TO THE DEPARTMENT OF COMPUTER SCIENCE

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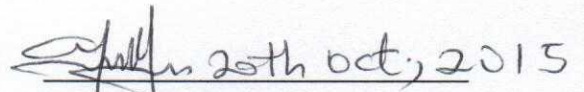
SCIENCE

OCTOBER 2015

CERTIFICATION

This is to certify that this project titled: "Online Ordering And Delivery System", was carried out by AYINDE, SODIQ DOLAPO with matriculation number CSC/11/0272 of the Department of computer science, Faculty of science, Federal university Oye Ekiti, Ekiti state, Nigeria; in partial fulfilment of the requirements for the award of bachelor of science (B.Sc) in computer science.
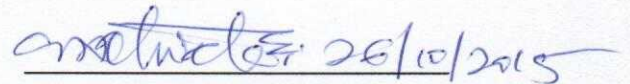
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DEDICATION

Dedicated To: Almighty Allah; The giver of wisdom, understanding and knowledge.

Also to my parent and siblings: S.O Ayinde esq, Alhaja S.O Ayinde, Ms Abdul-Malik Ayinde, Ms Abdul-Basit Ayinde.

ACKNOWLEDGEMENT

I am most grateful to the almighty God for his grace which never ceases from the inception of my programme till this present moment. I thank HIM for his help.

I cannot resist the urge of expressing my appreciation to, my project supervisor in person of Mrs C.Y Daramola, who amidst her numerous academic and personal obligations found time to read, criticizes, correct and advice me on this project research write-up. Also the head of computer science department, Dr Olabode, and my lecturers;Dr Adetunmbi, Mr Fagbuagun, Mr Folorunsho, Mr Lawrence, Mr J ugwu, Dr Kinsley, Dr Daodu, Dr T.M Fagbola. To mention but few all technologist in the department. Non-academic staff of the department on their advice and notification on important issues concerning my purpose in the institution. Thank you all.

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ABSTRACT

Since the inception of business process, sales/order sheet, then delivery of goods are part of the important process/ aspect of business organization. Exploring electronic means of taking order and shipment billing to improve the quality of services offered.

Online ordering and delivery system have turned to be essential tool for business organization. Developing means of how best to serve customers, and maintain a high competition amongs related service provider.

This research provens that there are great expectationabout the importance of online ordering and delivery. Examining the problems of existing ordering and delivery method then developing the web application to assist the sales department to overcome the problems of manual ordering method.

The web application was developed using wordpress. The research methodology used was personal interview, review of manuals and order/sales sheets of Rasmed publications Ltd. The work considers order tracking, electronic receipt, shipping options, and ensure online payment.

The use of this system helps expand company competitiveness and increase access to the company. The system brings relieve to the manufacturing company and the customer using the system.

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CHAPTER ONE

INTRODUCTION

1.0 Background of the study

English entrepreneur 'Michael Aldrich' invented online shopping in 1979. His system connected a modified domestic TV to a real-time transaction processing computer via a domestic telephone line. During the 1980s he designed, manufactured, sold, installed, maintained and supported many online shipping systems, using videotext technology providing voice response and handprint processing predating internet and world wide web (Bhatnagar, 2006).

Online ordering and delivery to a layman is when someone/manufacturer/producer offers a product(s) for sale on a website and a consumer/final-user buys the product through a website, while the order is also been delivered to the consumer of the product. It may sound simple, but there are different things that must be put together to make the sale possible over the web. According to Clinton, W.J (2000) many of these considerations are similar to what the traditional physical store front deals with, When product are advertised for sale on the web, these products must be marketed, sold, paid for and delivered through services of the website through/via the internet.

Online shopping or ordering also known as e-tail from electronic retail is a form of e-Commerce, which allows consumer to directly buy goods or services from a seller over the internet using a web browser. (Odesser-Torpey, 2008) Other names are e-webstore, e-shop, e-store, and Virtual store. Mobile commerce describes purchasing from an online retailer's mobile-optimized online site or application. Examples are Alibaba.com, ebay.com, Amazon.com, jumia.com, konga.com

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Growing interest by consumers to point and click their way through nearly all aspects of daily life has fuelled the Internet economy to develop services and sell products online even in areas that were once the sole domain of traditional businesses, such as grocery stores and pharmacies. (ugba 2008)

Ordering is the act of putting things in a sequential arrangement. Online ordering is the act of online shopping whereby a customer adds up goods into a cart, then at the end of shopping submits and proceeds to payment. Online ordering system refers to set of detail methods that are being used in handling the ordering process of products or goods. (webopedia.com 2015)

Ordering can be computerized or done manually. Online ordering helps the customer to order their goods themselves which is known as the customer self-ordering system. The customer online self-ordering system can be defined as a computerized system that is being used by customers to place their own orders and allow the orders to be tracked, in order to prepare and deliver them.

Delivery process is the transportation of goods from a source location to a predefined destination. There are different delivery types:

i. Cargo (physical goods) is primarily delivered via roads and railroads on land
ii. Shipping lanes on the sea
iii. Airline networks in the air.

Certain specialized goods may be delivered via other networks, such as:

i. Pipelines for liquid goods,
ii. Power Grids for electrical power and
iii. Computer Networks e.g the Internet or broadcast networks for electronic information (Brickers, 2013).

The general process of delivering goods is known as distribution. The study of effective processes for delivery and disposition of goods and personnel is called logistics. Firms that specialize in delivering commercial goods from point of production or storage to point of sale are generally known as distributors, while those that specialize in the delivery of goods to the consumer are known as delivery services. Postal, courier, and relocation services also deliver goods for commercial and private interests(Tim meadows 2011). Orders can be received from businesses, consumers, or a mix of both, depending on the products. Offers and pricing may be done via catalogs, websites, or broadcast network advertisements.

Electronic commerce or e-commerce is the exchange of goods and services by means of the internet or other computer networks (Garret, 2012). Electronic commerce is also the sharing of business information, maintaining business relationships and conducting business transactions by means of communication networks. It includes the relationship between companies (business-to-business), between customers (customer-to customer) as well as between companies and customers (business- to-customer). Business to business segment currently dominates the e-commerce while customer oriented segment is significantly lagging behind and current estimate places it at less than 10% of the total volume, even though they are all experiencing an exponential growth (Vladimir, 1998).

E-commerce offers buyers convenience. They can visit the internet or website of different vendors 24hours a day and seven days a week to compare prices and make purchases, without having to leave their homes or offices. Number of internet users are growing, improved access to international broadband, cloud computing raises new opportunities and risks. Exploiting all possible grounds for impact on business process such as marketing, advertising, ordering, delivery, inventory, purchase etc.

Due to the great increase in the awareness of internet and the technologies associated with it, several opportunities are coming up on the web. So many businesses and companies now venture into their business with ease because of the internet. One of such business that the internet introduced is an online food ordering system. In today's age of fast food and take out, many restaurants have chosen to focus on quick preparation and speedy delivery of orders rather than offering a rich dining experience. Until recently, most of this delivery orders were placed over the phone, but there are many disadvantages to this system (consumingexperience.com 2015).

It is possible for anybody to order any goods via the internet and have the goods delivered at his/her doorsteps. But while trying to discuss the transfer method of the goods and services, attention is focused on the payment mode. In other words, how possible is it to pay for goods and services via the internet? This then leads to the discussion of the economic consequences of digital cash. What are the implementations from the view point of economic? Since the world is fast becoming a global village, the necessary tool for this process is communication of which telecommunication is a key player. (edesiri, 2013)

1.2 Statement Of The Problem

Ordering and Delivery System is a vital task in our societies and businesses today. The project will be aimed to solve some problems that may be facing an organisation ordering and delivery system. Some of the problems are:

i. Time wastage: a customer going to shop will spend a minimum of 1 hour in traffics, 45 minutes in comparing price across stores and shops, or just window shopping, 30minutes on ordering and final purchase (affected by long customer queue in the case of shoprite, Ibadan.). this would reduces, with just 10-15

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minutes, at customers convenience e.g. work, home, kitchen, room; shopping and ordering can be done.

ii. Wrong goods order placement: there might be error in taking order, either from the sales officer or the customer. The sales officer might misinterpret customer order, by hearing wrong customer order information, or inability to see order being written by the customer.

iii. Inability by customer/ customer to know delivery stage: while customer might need the product early, it might be delayed by the manufacturing chain, or courier services.

iv. Difficulty in stock level maintenance: bulk goods could be difficult to count, because of the large quantity at the warehouse. This will make the company unable to prepare for large order, if the available quantity of Goods or product are not correct or accurate.

v. Inappropriate delivery time: making delivery to a customer brings relief and less stress, while making the delivery at the right time gives convenience and trust. A retailer might have to send goods to individuals. And it will be expected to get delivered before use or the exact time the product is needed.

1.2 Aim And Objectives

1.2.1 Aim

To provide online platform where people can shop for goods/products with door step delivery. To ensure that the system provides convenience to the customers followed by best value for money backed by quality and satisfaction with an additional note of less risk during transaction.

1.2.2 Objectives

The specific objectives are to:

i.   Ensure that Goods tracking for customers is maintained.

ii. Ensure a Proper data record for sales, stock keeping, inventory.

iii. Ensure an easy access retrieval of daily ordered goods.

iv. Ensure a network (correspondence, feedback) between manufacturer/producers and customer/consumer.

v.   Provide a better user friendly environment between the customer and the sales officer.

vi. Create a website platform for customers to get reliable information about goods, viewed under different categories of consumers choice.

vii. Provide a user friendly environment between the customer and the employees.

viii. Create a website which will provide online purchase form to facilitate automated ordering.

1.3 Scope And Limitations Of Study

1.3.1 Scope Of Study

This Project will focus on an integrated order management system which may encompass these modules:

i.   Product information (descriptions, attributes, locations, quantities).

ii. Online Purchasing. (online payment platform)

iii. Marketing (catalogs, promotions, pricing, newsletter).

iv. Financial processing "e-payment"(online financial institute, e-wallet)

v.   Order processing including selection, printing, picking, packing, shipping

vi. Data analysis and report generation.

1.3.2 Limitations Of Study

There are quite a wide numbers of activities that would limit this research project. Other limitations are:

i.   Financial constraints, creating a website that covers only the aspect of ordering and payments.

ii. Affordable ICT infrastructure.

iii. Digital literacy among producer and users

iv. Electronic payment systems platform

v.   Delivery and distribution networks (physical transportation)

vi. Legal framework to build trust in the ordering system, such as electronic signature and authentication, consumer protection.

vii. Circumvention of trade barriers.

1.4 Significance Of Study

In appreciation of the rapid development of computer technology in almost all the fields of service provision and usefulness in information management, it has become important to look into the development of online ordering systems for firms to meet up with customers demands. The importance of online ordering and delivery system to the customers and service provider:

i.   Provide a concise list of available product in the company

ii. Reduce the workload in the present for better efficiency

iii. Less time on data and order request processing.

iv. It allows keep accurate record on purchased order and delivery.

1.5 Expected Contribution To Knowledge

At the end of the project, considering similar methods and providing solutions to problems facing online ordering and selected delivery means. The use of WORDPRESS CMS (content management system) in developing shopping website and additional feature of tracking order goods, quick time delivery method.

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1.6 Organization of project work

1.6.1   Inception Phase

This will define all the projects requirements. This phase will include the production of a vision document, a project plan and project proposal. The vision document will include the projects requirements and overview, purpose, goals, risks, constraints and direction. Its gives the listing of the main requirements and their respective use case models to illustrate the functionality. This phase will be completed after my chapter three has been approved by my project supervisor.

1.6.2   Elaboration phase

This phase defines the projects architecture. This phase will include the production of revisions to the project plan and the vision document, an architecture design plan, a formal specification, test plan, formal technical presentation will be submitted to my project supervisor i.e. Mrs Daramola. Revision of vision document will be an updated version to provide a complete representation of all requirements. These requirements will be ranked according to importance. Changes suggested by my supervisor will be implemented.

1.6.3   Production phase

The production phase defines the project implementation and testing. Its includes the user manual, component design, assessment evaluation, project evaluation, references and application presentation and assessment. The user manual includes an overview and explanations of common usage, user commands, error messages and data formats.

Component design of each component will be documented using sequence diagram and state chart/activity diagrams. Source code will be attached at the appendixes. Assessment

evaluation will include a document detailing the testing on the project and an analysis on users satisfaction using questionnaire. References will also be documented.

This project includes five chapters. Chapter one explains the introductory part of this project. Chapter two looks into existing articles, journals and revised note on the research topic as giving a laying foundation to the research. Chapter three gives an insight to the research method and its methodology. Chapter four explains the system design, its requirement then the implementation of the proposed design. Chapter five explains the conclusion of the project, a summary of the research and a recommendation on online ordering and delivery, giving a validation on the research work.

1.7 Definition Of Terms

i. **Ordering -** is the act of putting things in a sequential arrangement, an ordering system is referred to as a set of detail methods that is being used in handling the ordering process.

ii. **Delivery -**is the process of transporting goods from a source location to a predefined destination.

iii. **Category Management** – A retailer organizes the products they carry into distinct groups or groups of related products. Each group is recognized as a product category and is run like a mini business

iv. **Customer Loyalty Card** – A customer loyalty card is a paper or plastic card which identifies a card holder as a member of a retailer's customer loyalty program.

v. **Market Study -** A research tool used to analyze attributes of a given market for a particular product need.

vi. **Point of Sale System (POS)** – A point of sale system is a retail checkout system. It is often used to describe the place in a store where the customer pays for their goods, although the POS actually refers to the hardware

vii. **Cash register, scanner** and software that enables the transaction to occur.

viii. **Sales per Transaction** – a key measurement of revenue generation. If the sales per transaction decrease, the retailer needs to increase either the size of each sale or the store's traffic.

ix. **Scanners** – equipment used at the cashier to read prices automatically.

x. **Slotting Allowances** – discounts provided by the manufacturer through the wholesaler as an inducement to the products favorably on shelves.

xi. **Shrinkage** – inventory reductions caused mostly by theft or spoiled goods.

xii. **SKU** – SKU stands for stock keeping unit, a unique identifier for each product a business offers.

xiii. **Target market** - a subgroup of the overall market usually segmented by geography, demography and/or lifestyle preferences.

xiv. **Trade area** – the vicinity from which a retailer gets a majority of its consumer base.

xv. **Wholesaler** - a distributor of goods in large quantities sold mainly to retailers who resell to individual users.

xvi. **Automation** - This is the use of technology or computers to control and process data reducing the need for human intervention.

CHAPTER TWO

LITERATURE REVIEW

2.0 INTRODUCTION

Since 1991, when the commercialization of the internet began, the World Wide Web has been the home for business and organisation. Buying and selling have been made easy, and the purchasing power of customers has increased with the emergence of e-commerce, which is a major facilitator for online ordering. A variety of options are now available for customers to choose from unlike the old system which lets customer buy whatever price is been dictated by the retailer without ability to compare price, leading to a wide range of competition in terms of price, quality, customer service, feedback and customization of products.(petguide.com 2011)

One important aspect of electronic commerce that must not be forgotten so soon is its stances as a benchmark to the completion of online ordering process permitted by interconnectivity of computer using the INTERNET.(IEEE Journal 2012)

Amazon and Ebay both dominated online ordering in its early days, providing means for consumers to access and buy a variety of products under one unify umbrella without wandering about in local traditional markets, and trying to remember the price and specifications of a particular product by another retailer previously visited. Also, e-commerce allows people with physical deficiencies to get products or services of any kind without leaving their houses or been a burden to their caretakers. Amazon provided a purchase of all kinds of books and music from all sectors, scholars' materials, business books, novels, poetry, news and a lot more while Ebay provides an online system where buyers and sellers

meet to exchange old or new products either scarce or present commodity in trend. (webopedia.com 2015)

As customers increased thus was the demand for products, then came the question of how to meet the demands of each buyer to keep the online incentive bubbling, courier services were all involved in it to facilitate delivery of products to customers without leaving their convenience. And this created a new market for DHL, FEDEX, UPS and local post office. (Pet guide 2011)

An ordering system is referred to as set of detail methods that is being used in handling the ordering process. Ordering can be done manually or through a computerized method. This helps the customer to order their products themselves, known as the customer self-ordering system. (Chris Brooke 2010)

According to Zeithaml, customer self-ordering system can be defined as a computerized system that is being used by customers to place their own orders and allow the orders to be tracked, in order to prepare and deliver them to the computers.(Zeithaml 2011)

Online services capability such as online ordering, online payment, online shopping are substantially more complicated than simply providing information. Increasing online provision of transactional services such as payments indicates maturity as well as greater integration because payments made through single site may need to be routed a bank account held by the organisations account.

Least developed countries had the lowest availability of e-commerce, which were barely those of developed countries. Many of these countries are in Africa which, the continent posses the least ready electronic services region in the world. Senegal, Cameroon, Ghana, Lesotho and Zimbabwe all had utilization levels ranging from 26-30percent. Other included

Democratic People 's Republic of Korea, which came online in 2012, at 10percent; Myanmar, Chad, and equatorial Guinea (united nation E-government survey 2012)

Delivery is the most integral part of the online ordering and purchase. A business on the World Wide Web is solely incomplete if the recipient of the product or service does not receive its product or service. (Rayport 2000).

Delivery methods are important aspect of service delivery to customer. Online purchasing typically involves the use of a delivery serve because of the physical separation between the buyer and seller. For the consumer, this separation brings a concern about the time lag between when a products is ordered and when it is received as well as the potential added cost of delivery. These concerns has a negative effect on online shopping (klassen and gylnn 2011)

As the problem of delivery continues to grow, customers are becoming irritated while retailers and delivery services are having sleepless nights on how to create a better way of reaching out to customers. A lasting solution to the problem of adequate delivery is if there is more retail or pick up outlets within the parameter of every city, the rate of undelivered goods will reduce to a minimal. (Chang, 1998)

A review on online service provision during the last decade indicates two notable trends. First, united nations member states have steadily made progress in establishing an online presence. In 2003, when the united nations started tracking, 18 countries were not online. Since then many have begun online offerings, including Chad, Dominica and Eritrea. In 2012, only three countries (Central African Republic, Guinea and Libya) did not have a web presence. These countries are excluded from the 2012 survey on the journal of progress in online service delivery. Second, it was noticeable that whereas the collective world progress

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improved over the years, a few countries were sporadic in their offerings by being online in one year and offline the next. (united nation e-government survey, 2012)

Zambia, which had a presence in 2003, went offline in 2004-2005 and again had no web presence in 2008, similarly, Turkmenistan, which was online until 2004, discontinued its offerings in 2005 but came back online again in 2008.guniea, which had been online since 2003, was not available to its citizen at the time of 2012 survery. (edesiri, 2013)

A survey at the characteristics of online presence of countries in 2014 indicates a greater number of features than in previous years and a growing recognition of the importance of [providing relevant and up-to-date information and services.

Consistency of online service can be a key factor in building trust in the institutions of the government has it is the sole administrator of all resources; thus all information technology techniques falls and depends on the full participation of the government, e-government: e-commerce, e-health, e-education, e-security, e-finance etc. It is important to recognize that an important precursor for an effective utilization of ICT for sustainable development is the maintenance of services even at basic level. (edesiri, 2013)

Notwithstanding domestic conflict and/or natural disasters; which may affect the ability of a country to provide online services to its citizens, intermittent provision of services does not build trust in government. It may be that during times of natural disaster and/or conflict the citizen could be more in need of vital information, especially in far flung cut off areas, and such information could be provided to the outermost reaches via the use of ICT.

The fact that only 96 countries provided an advanced search feature on the website, fewer 79 had privacy statement and only 39 countries offered a secure website. This indicates the large

number of countries that still have a long way to go in terms of exploiting the full potential of online ordering and other online capabilities. (united nations journal on ecommerce 2014)

Despite progress, service availability levels are generally low around the world, with greater percent coming from Africa. Except for the top performers most countries have a long way to go in providing online services, which remain between low and non-existent.

In Nigeria, there has been a full service of online ordering and delivery for close to 4 years. With the likes of konga.com, jumia.com providing an exclusive free Delivery to customers in Lagos then extending their service to other parts of the country and providing free delivery. Its introduction to the Nigeria economy was of much disapproval with customers asking the durability, usage, reliability.

The introduction to the Nigerian economy has shown high acceptance and adoption. After a lot of adoption from the customer after evaluating and learning about the new service. Adoption implies that a customer accepts the new technology and uses it on a regular basis. In the case of internet purchasing the use of internet as shopping tool is serving such a phased adoption of use (Agarwal and Prasad 2003).

According to Lee and Johnson (2002), internet purchasers and internet non-purchasers had different attitudes about internet shopping. Among them were different levels of comfort in providing financial information over the internet. Other research has suggested that the current internet store browsers were likely to be future buyers because of their familiarity with the internet browsers were also more aware of a product before going online, tended to have a greater level of confidence in their online shopping ability and had higher satisfaction for a product researched and purchased (lee and Johnson 2002)

Top 20 countries in online service delivery are: united kingdom, Canada, Netherlands, Finland, France, Australia, Bahrain, Japan, United Arab emirates, Denmark, Norway, Israel, Colombia, Sweden, Estonia, Saudi Arabia, Republic of Korea, Singapore, united states, Malaysia. (united nations online shopping survey 2014)

2.1 RELATED WORKS

2.1.1 Online food ordering

Eatery or cafeteria provide services using websites that features interactive menus allowing customers to place orders on selected meals. Much like ordering consumer goods online, many of these allow customers to keep accounts with them in order to make frequent ordering convenient. A customer will search for a favourite restaurant, choose from available items, and choose delivery or pick-up. Payment can be amongst others by credit card or cash, with the restaurant returning a percentage to the online food company.

2.1.1.1 Advantages for Online food Ordering

There are advantages for both the customer and the online restaurants company. First, a customer can order at will when they have time to. Also, the customer is able to customize their order the way they like it without errors in communication between the customer and the person taking the order. The restaurant is able to take more orders with less staff. The restaurant does not need a waiter to take the order. The order can go straight to the kitchen.

2.1.1.2 Disadvantage for Online food Ordering

Customers are not able to ask about quality of food or ask for any specialized diet foods. It is more difficult to ask for gluten free or allergy free foods with online ordering. Also, it is more possible for a customer to place an order, but never pick up the order which can lead to waste of food and possibly a loss of profits.

2.1.2 Online Ticket Reservation System

This has to do with online ticket booking and reservation for passengers. This features e-payment use, then the print out of payment receipt and an e-ticket (as reservation tender). It is been used in the railway transport, airline transport and public transport system in foreign countries.

2.1.3 E- Grocers

Businesses that sell consumer products online have been coined as "e-tailers" and as "e-grocers" in the case of online grocery retailers. Some of the reasons why an increasing number of consumers buy groceries online are common to all Internet purchases, including better prices, larger selection, convenience, and time savings (Stephen, 2000). Home delivery of items purchased online is appealing to those for whom going out to shop is difficult for various reasons, such as physical disability, the need to care for small children, the lack of adequate or convenient transportation, and/or a busy lifestyle. Buying groceries and other products online unchains consumers from physically driving to and shopping in traditional stores.

2.2 Internet

The history of the internet goes back to 1960, one of the authors (HMD) was a graduate student of MIT. His research at MITs project Mac (now the laboratory for computer science-the home of the world wide web consortium) was funded by ARPA – Advance Research Projects Agency of the department of defence. During a conference ARPA rolled out the blueprints for networking the main computer systems of about dozen ARPA-funded universities. Tim burners- lee of CERN (the European laboratory for particle physics) developed the World Wide Web and several communication protocols that form the

backbone of the internet; such as IP- internetworking protocol and TCP- transmission control protocol. (IEEE journal retrieved 20 July 2015)

The internet will be listed among mankind best creations. Giving a platform to connect without leaving ones space, state, country or continent. The internet mixes computing and communications technologies. It makes our work easier. It makes information instantly and conveniently accessible worldwide. Individuals and small businesses can receive worldwide exposure on the internet. It is changing the nature of the way business is done. People can search for the best prices on virtually any product or service.

2.2.1   Connection To The Internet

One can connect to the internet through several ways depending on the needs, purse and size of the organization or individual wishing to join the Net. It's of less importance to be a computer expert or a manager of a big corporation to get connection to the internet. All one needs is PC, a telephone line, a modem (Modulation and Demodulation machine). Connection to the internet can either be direct or indirect (through a service provider). The ways one can connect to the internet are:

    i.   Direct connection

    ii.   Through internet service provider (ISP)

    iii.   Through commercial on-line service provider (OSP)

Direct Connection: This gives one a permanent and dedicated link to the internet. It involves setting up an internet account using a dedicated computer called gateway. It is quite - expensive and generally only available to users in large corporations, ISPs, Research Institutions, Oil Companies, Academic and Government Agencies.

Internet Service Provider (ISP): In this method, the internet service provider (ISP) are commercially-oriented companies that connect one's computer and other computer networks owned by individuals and organization to the internet at some cost, payable either monthly, bimonthly or yearly. They allow their users to access the internet using an ordinary telephone line, SLIP (serial line internet protocol) and PPP (point-to-point protocol).

Commercial on-line Service Provider (OSP): Commercial service provider like AOL (American On-line), CompuServe, and Microsoft Network (MSN) offer the Dial-up/terminal connection. They charge the customers on a monthly basis to their internet gateway. One is connected to their system (commercial service provider), which in turn is connected to the internet

2.3 Payment Method

Online shoppers commonly use different methods for payment, however some systems require users to create accounts and fill in credit card details for purchase, or redirect to an online credit facilitator. Alternative measures are:

i. Cash on Delivery (C.O.D)

ii. Cheque

iii. Debit card

iv. Electronic money

    a. Paypal

v. Gift cards

vi. E-wallet

vii. Postal money order

viii. Wire transfer

    a. Western union

      b. Moneygram

ix.   Bitcoin or other cryptocurrencies.

2.4 Delivery

Delivery is the process of transporting goods from a source location to a predefined destination. There are different delivery types. Cargo (physical goods) which are primarily delivered via roads and railways on land, ship through the shipping lane on the sea and airline networks in the air. (Wikipedia 2015). The general process of delivering goods is known as distribution. The study of effective process of delivery and disposition of goods and personnel is called logistics. (CHANG, 1998)

Most consumer goods are delivered from a point of production (manufacturing industry or factory) through one or more points of storage (warehouses) to a point of sale, where the customer buys the good.

Products sold via catalogue or the internet may be delivered directly from the manufacturer or warehouse to the consumers house or to an automated delivery booth. Passenger vehicles are used to deliver goods. This includes buses, vans, pick-ups, cars, motorcycle and bicycles. (Wikipedia 2015)

2.5 Logistics

Logistics is part of the supply chain process, that plans, implant, and controls the efficient, effective forward and reverse flow and storage of goods, service and related information between the point of origin and the point of consumption I order to meet customers' requirements. (Chang, 1998)

2.5.1 Logistics facility

In developed economies the growth of online retail has been stronger in sectors such as fashion, electrical and ICT goods, as opposed to food ordering. Unlike the era when orders were distributed via postal or parcel network. Online ordering logistics models have led to a wave of new demand for three distinct types of logistics facility. (CHANG, 1998)

i.   Mega e-fulfillment centers: where the merchandise is stocked and picked at item level. These facilities are either operated by the retailer or a logistics service provider, with provision of large space and operate all hours of the week.

ii. Parcel hubs: this section sorts orders by zip or post code so that they can be delivered to the relevant parcel delivery centre for final delivery to the customers' home or designated collection point in rare cases.

iii. Parcel delivery centers: which handle the last mile delivery to the customer. Either using a bus to ply the way or motorcycle.

2.6 Role Of Transportation In Delivery Of Quality Service

The role that delivery (transportation) plays in logistics system is more complex than carrying goods for the proprietors or manufactures. Its complexity can take effect only through highly quality management. By means of well handle delivery system, goods could be sent to the right place at the right time in order to satisfy customers' demands. It brings efficiency, and also it builds a bridge between producers and consumers. Therefore the efficiency of delivery relies on good transportation method. Transportation is the base efficiency and economy in business logistics and expands other functions of logistics system. Bringing delivery into the business activities brings benefit to both the consumer and the producer, increasing the company competitiveness and relief to the consumer. (sreenivas .m., 2012)

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2.7 Consumers readiness for internet shopping in Africa

A study carried out by Stephen nabareseh, Christian Nedu & Petr Klimek (2014) on consumers in two African emerging economies: Ghana and Nigeria, revealed that with the existence of internet shopping in western world since the mid 1990s, it is yet to fully take off in the African continent. (Stephen & christain. 2014)

Some of the infrastructure and socioeconomic challenges in Africa, it appears that the digitally-savy African consumer, who are predominantly young Africans, are getting ready to take full advantage of the internet as not only a medium of communication and entertainment but also as a shopping platform. For internet shopping to thrive in African countries, the role of government as an enabler cannot be underscored. (Aminu, 2013)

Some studies within the African context have equally shown that trust, privacy concern and demographic variables are major determinants of consumers' willingness to purchase items on the web. (Aminu. 2013, Stephen & christain. 2014)

2.8 E-Commerce In Nigeria's Economic Growth

With the emerging growth in e-commerce, Nigeria is fast- approaching an increase in economic growth, a major player in the e-commerce industry. According to kehinde, Nigeria recorded an estimated 25per cent growth in online shopping with revenues valued at ₦62.4 million in 2011, which is ₦ 12.5 billion increase from 2010 as reported by Euromonitor international, a global market research organisation. Stating that with over 160million people, Nigeria stands a great chance to become the next e-commerce hub of Africa.(Thisday Newspaper 2015)

Online shopping has changed the way customers and retailers think. Customers seeks to comfortably shop endlessly while retailers are constantly seeking new paths to growth.

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(Thisday Newspaper 2015). A country's prospects for online retail success are closely related to how many people use the Internet and how many are comfortable purchasing products online in terms of security and customer satisfaction.(Udah 2010)

2.9 Online Ordering In Nigeria

Online shopping or ordering is becoming popular in Nigeria, due to its conveniences and reasonable prices of goods and services which are available online. Online shopping has been gaining momentum in Nigeria for more than three years now and it is allowing Nigerians to buy goods and services through the convenience of the internet.

Admittedly the concept of doing transactions across the internet has always been a field best left to developed nations, those countries whose information technology mechanism and financial system possess the necessary flexibility to make this possible.

Over the last few years however, online shopping trend was jjust to window shop as the only thing been used for by Nigerians. Few minutes to hours spent ogling at goods and services on a website that one had netiher means of making payments to nor the method of acquiring purchase.

This isn't the case anymore, a whole slew of online shopping stores based in Nigeria have emerged over the past few years.

Online storesoffering Nigerians the oppourtunity to utilize local currency to purchase all manner of goods at a decent fee. Top online shops in Nigeria are: Dealdey, Jumia, Konga, Mystore, Sunglasses, Hellofood, Shopaholic NG, Kaymu, Taafooo (multidox 2015)

2.9.1 Konga

Konga was founded 2012, by Sim Shagaya. which has its headquarters located in Yaba, Lagos, Nigeria. With its website as www.konga.com. As at January 2015, the total number of employees are close to 1500. It offers a third-party direct retail spanning various categories including consumer electronics, fashion, home appliances, books, children items and personal care products. (Wikipedia 2015). The site initially functioned as a Lagos-only retailer focused on merchandise in the baby, beauty, and personal care categories, but broadened its scope to all of Nigeria on December 2012. In January 2015, konga was ranked as the most visited Nigerian website by Alexa internet. Konga announced it acquired the assets and mobile money license of Zinternet Nigeria limited in June 2015, thereby meeting the central bank of Nigerias legal requirement for provision of mobile payment services. (Wikipedia.com)

2.9.2 Jumia

JUMIA www.jumia.com is a Nigerian online shopping site for a wide range of electronics, fashion, home appliances and kids items. The business was founded in 2012 by a team that included Jeremy hodara, sacha poignonnec, Tunde kehinde, Rapheal afaedor, and Leonard stiegeler.(Wikipedia.org). its starting fund was from rocket internet. As of 2015 Jumia has warehouses on ten other countries outside Nigeria. (Wikipedia.com)

2.10 Major obstacles of E-commerce in Nigeria

According to Afaedor (2015), e-commerce could integrate several nations into global market, which in turn improves and strengthens the economic well-being of these nations. Afaedor an expert in the e-commerce industry highlighted some basic factors, which he turned obstacles tot he growth of e-commerce in Nigeria. According to him lack of basic infrastructure like steady power supply, good roads as well as limited access to telecommunication

infrastructure and high cost of Internet, could hinder the growth of e-commerce in Nigeria. In the area of poor infrastructure, he said the issue revolved primarily around power, available technological expertise and poor funding for startups. (Thisday live, 2015)

According to him, existing in an environment with need for further enlightenment as to the business of e-commerce, not forgetting the menace of cyber-crime associated with our society, Jumia Nigeria constantly seeks to educate individuals about e-commerce; through its operations.

Afaedor (2015)stated that with e-commerce, the idea of people buying goods and services that could not see and touch physically was not the type of risk most people might want to take because they are not confident whether online merchants are trust worthy enough to deliver products and services as promised.

In terms of Logistics, Afaedor (2015) said companies had to deal with the issues of bad road network, and increased cost of transportation, pointing out that with no excuses for disappointing the customers, the company had increased their fleet to serve increasing customer base and even extended bases to other state or regional distribution centre.

He furthered his explanation writing that having realised the potential of e-commerce in any developing nations, all concerned bodies must co-operate to make a big difference. The government, experts in the e-commerce industry, online merchants, banks and all other stakeholders must work together collaborate, in order to avoid obstacles and benefit the nations from the outputs of e-commerce. (Thisday LIVE 2015)

2.11   Boosting E-Commerce In Nigeria

The role of government towards the growth of e-commerce in the developing nations cannot be over emphasized. In Nigeria for instance, Afaedor called for the government to take

advantage of the potentials inherent in e-commerce for the development of the nation. According to him, because of poverty, under development and lack of accurate internet penetration, most people in the country are not benefiting from the e-business industry both from the customer and merchant perspective. (afaedor, 2014).

Afaedor stated that if the three tiers of government could work towards handling some of the afore-mentioned problems of e-commerce in the country, a higher success rate would be made thus the nation can leap frog its economic growth. (afaedor, 2015)

He said: "Effective and satisfactory results will be accomplished if and only if all concerned bodies work together. One of the major concerned bodies is the government. Thus, I would like to indicate some points which the government, as one major concerned body, can do in order to change the situation.

"As Nigeria integrates electronic payment system into its financial institution; a step that is expected to accelerate the nation's e-commerce growth, the negative impact of cybercrime on businesses, and the absence of appropriate laws to guarantee the legality of online transactions, continues to create fear in the mind of users and potential online users."

Afaedor further said that although Nigeria's e-commerce had grown steadily, the lack of legislation that specifically targets cybercrime or cyber security had no doubt continually hampered its accelerated growth; and the concerns raised by such nefarious activities, no doubt, calls for legal intervention.

According to him, the need for a cybercrime law in the country therefore, could not be over-emphasized. Recent studies have shown that people are more likely to engage in offensive or illegal behavior online because of the perception of anonymity, thus cybercriminals exploit the rights and privileges of a free society, including anonymity."

"Jumia.com has however ensured that its online payments systems are as secured as possible through proper arrangements with its e-payments handlers," Afaedor added.

Kehinde afaedor on his part, called for the government to ensure get more public services online to further drive e-business. "How the government itself uses e-commerce has a determining factor for the growth of the industry. "If the government can use the internet to give public services, the general society will adapt itself with the technology easily and this will greatly affect the advancement of electronic way of doing business in the country," he said

He also stated that the government could support the ventures of merchants through different ways such as facilitating loans, organizing trainings, as a sign of encouragement. (Thisday Live 2015).

2.12 CURRENT METHODS IN USE

2.12.1 Manual ordering management system

Manual ordering management system is a non-computerized operating system used by the organisation to handle ordering made by customers. Many small business owners, especially if the business has very few products, keep track of goods manually using a spreadsheet. Spreadsheets are set up to calculate when products are ordered. The sales officer carry paper to take down the order of the customer or the customer makes an order over the counter by writing what is to be purchased. This leads to mistakes because the waiter might misquote order, therefore presenting wrong product. This could raise a big problem if order is not been cross checked by customer till good reaches final destination, and the customer might not take it lightly with the company and might lead to loss of a potential customer.

2.12.2 Warehouse management

This is the management of storage of products and services rendered on the product within the four walls of a store room called warehouse. It helps in optimal cost of timely order fulfilment by managing the resources economically. (Haywood, 2014)

It is a key part of the supply chain and primarily aims to control the movement and storage of materials within a warehouse and process the associated transactions including shipping, receiving, put away and picking. It can be described as the legs at the end of the line that automates the store, traffic and shipping management. Warehouse management systems help to efficiently monitor the flow of products. Once data has been collected, there is either batch synchronization with, or a real time wireless transmission to a central database. The database can then provide useful reports about the status of goods in the warehouse.

The movement and tracking of goods through the manufacturing and supply chain process is still a complex procedure which is difficult to manage. In many instances, the goods being distributed to the retailer must go through one or more third party distribution processes before they reach their final destination. Currently, most material tracking systems employ two dimensional that must be close to and within the "line of sight" of the reader. In addition, manual method cannot ensure the adequate update of good or items available, due to oversights, errors and internal shrinkage. (parcel Deliveries:current practicse and possible solution, 2008)

2.13 Approaches To Be Used In This Study

2.13.1 Self Ordering

Self-service or self-ordering in restaurant industry refers to the restaurant taking orders from customers through applying various types of technologies such as internet and many others.

Self-service or self-ordering is successful when it is applied at restaurants in many other countries. The usage of the self-service or self-ordering technology is proven to benefit most of the investors.

2.13.2 E-Commerce

Electronic business is the use of the internet and other related information technologies for organizational communication and coordination and the management of the firm. By replacing manual and paper based procedures with electronic alternatives and by using information routes in new and active ways, electronic commerce can speed up the process of ordering, delivering and paying for goods and services as well as reducing a companies operating and inventory costs (Maner, 2009). Electronic commerce or E-commerce is the exchange of goods and services by means of the internet or other computer networks. In e-commerce, buyers and sellers transact business over networked computers.

For sellers, e-commerce offers a way to cut costs and expand their markets. They do not need to build staff or maintain a store or print and distribute mail order catalogs. Because they sell over the global internet, sellers have the potential to market their products or services globally and are not limited by the physical location of a store.

E-commerce also has some disadvantages, however. Customers are reluctant to buy some products online. Online furniture businesses for example, have failed for the most part because customers want to test the comfort of an expensive item such as a sofa before they purchase it. Many people also consider shopping a social experience, for instance, they may enjoy going to a store or a shopping mall with 10 friends or family, an experience they cannot get online. Customers also need to be reassured that credit card transactions are secure and that their privacy is respected. E-commerce is not only widening customer's choice of product and services, but also creating new business and compelling established business to develop internet strategies.

2.14 The Concept Of E-Commerce

2.14.1 History of E-commerce

Emergence of e-commerce begun with two organization. Amazon.com incorporated and Ebay incorporation have been the early leaders of the e-commerce industry. Both of them now presently offering different types of product to all parts of the world.

Amazon is founded by Jeff Bazos in 1994 in washingthon and the website was launched in 1995. They started with an online book store. Amazon also provided to consumers to hard to find books as easily as best sellers (Mellahi 2005). Amazon also developed systems, such as 'search inside the book' and 'i-click shopping'(Amazon,2015) which made the company pioneer of innovations. And also made them a trusted brand.

eBay is founded by Pierre Omidyar in 1995 and first product had been sold at the same year. In 1996, the company already reached 1,900,000 users. Since then eBay has a prsecene in 39 markets with more than 90 million users worldwide (ebay 2015)

2.14.2 Categories of E-commerce

There are a variety of different types of e-commerce and many different ways to characterize these types. To distinguish types of e-commerce by the nature of market relationship – who is selling to whom.

i. **Business-to-Consumer (B2C) E-commerce:** This is the most commonly discussed type of e-commerce. In which online businesses attempt to reach individual consumers.

ii. **Business-to-Business (B2B) E-commerce:** business focuses on selling to other businesses, is the largest form of e-commerce, with over $1.5 trillion in transaction in the United States by 2005.

iii. **Consumer-to-Consumer (C2C) E-commerce:** provides a way for consumer to sell to each other, with the help of an online market maker such as eBay. In C2C e-commerce, the consumer prepares the product for market, places the product for auction or sale, and relies on the market maker to provide catalog, search engine and transaction clearing capabilities to ensure products are displayed, discovered and paid for.

iv. **Peer-to-Peer (P2P) E-commerce:** this technology enables internet users to share files and computer resources directly without having to go through a central web server, in e-commerce.

v. **Consumer-to-business (C2B) E-commerce:** E-commerce, by empowering the customer, has been strategically redefining business. An example of C2B model of e-commerce is the site priceline.com, which allows prospective airline travelers, tourists in need of hotel reservations etc to visit its websites and indicate their preferred price for travelling between and two cities. If an airline is willing to issue a ticket on the customers offered price, the consumer can travel to the mentioned destination at his terms.

vi. **Non-business and Government E-commerce:** political, social and not-for-profit organizations also use e-commerce applications for various activities, such as fund raising and political forums. These organizations also use e-commerce for customer service and for purchasing to decrease cost and get better speed.

2.15 Social Commerce

Today's customers are now spending most of their time on the internet surfing social medias such as Facebook, Twitter, Instagram etc. People can always generate and publish or share through the social networks. With today concept of marketing, consumer is the king and

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marketers should try to get along and involved within the online world in order to be successful reaching and listening to the consumer.

Social commerce is emerging and fast growing in which shops are able to connect with other shops in the same online market place (Stephen 2009). Companies also use Facebook or twitter to reach more customers and inform them of free coupons, newly added goods and latest promotions.

E-commerce platform can be fixed into social media pages allowing customers to make quick purchase. And through this medium the company can always get quick review of product, comments whether a particular product is been liked or disliked. (Stephen 2009)

2.16 M-Commerce (Smartphone's, Tablet)

Advances in wireless technology have increased the number of people using mobile devices. Nowadays, mobile devices have become a part of our lives. This trend has brought an opportunity to shop online through mobile devices such as Smartphone, e-readers, tablets, etc (Hillman et al 2012). Moreover, it's no secret anymore that with developments such as Smartphone, tablets and other mobile devices, online shopping have become more convenient. These mobile devices have contributed positively to the increase in sales. With most online shop owners creating a mobile application to ease shopping, less data consumption, ability to save product image on mobile gallery, cache to remind of recently viewed product.

2.17 Security Issues Concerning Online Ordering

Purchasing goods from the comfort of ones' living room certainly is more convenient than actually driving to a store, while offering a virtually unlimited array of choices and ability to compare price without walking from one store to another. While online payment and security

technology have come a long way, one still may experience problem with online shopping from time to time. The security issues attached to the use of online order are

   i. Non-delivery of ordered goods.

   ii. Special concerns when buying from a foreign company.

   iii. Scam activities when making purchase online.

2.17.1 Non-Delivery Of Ordered Goods

There are reported cases of non-delivery of ordered products, there should be a federal law to back customers using e-commerce for retail. If ordered product is not deliver to the customer within 30 days there should be a full refund of the purchase price, and the retailer should give reason why goods were not delivered. Other related problem with non-delivery of ordered good are shipping or delivery of ordered good to wrong address, stolen from customers doorway which is actually a problem by the customer.

2.17.2 Special Concerns When Buying From Foreign Companies

Orders made contacting foreign based retail company is a big problem and hard to resolve. Before making order one has to know how the item is priced, then the price conversion, if the retailer will be shipping to other country, time it will take to receive order, special duties or tax. If such problem arises most vendors require resolving in local court where the retailer office resides, so it is of less worth travelling to assert ones order. A safer alternative is looking at local retail shops for such products.

2.17.3 Scam Activity When Making Purchase Online

When making an online purchase customer should take note of scams or non-legitimate retailers. Suggestion to avoiding scams includes:

i. Gray market: gray market goods maybe illegal in countries such as united state. They are products sold in a way that sidesteps regulations. Products may not work properly or has its instruction written in other languages. And they lack valid warranty. (findlaw.com 2015)

ii. Shipping charges: a retailer may try to squeeze a profit from heavily discounted items by tacking on an extremely high shipping rate, which most of it not actually used for shipping. (findlaw.com 2015)

iii. Phishing or spoofing. (edesiri, 2013)

2.17.4 Security Threats In Online Ordering And E-Commerce

Since online ordering is a technology that has many capabilities and also many potential problems, users are hesitant to use the system. The number of malicious applications targeting online banking transactions has increased dramatically in recent years. (Niranjanamurthy, 2013)

Disclosure of important information that should remain confidential to the customer such as credit card or debit card details being accessed by unauthorized person can cause loose of funds, and lack of trust in the retail company. Alteration of information by entering, modifying or overwriting data into the system without authorization is an attack that could potentially harm greatly the retail company and their customers.

A common mistake made by end user is believing that their online shopping session is perfectly safe when they use an SSL connection. Security experts continually state that everything is safe if there is a yellow padlock symbol in the browser window. But SSL is designed as a secure tunnel from the end user computer to the retail website database and does not protect the end points such as the end user's computer. (edesiri, 2013)

Man-In-the-Middle attack is the type of attack where attackers intrude into an existing connection to intercept messages and selectively modifying data. It involves eavesdropping on a connection, intruding into a connection, intercepting messages. (Halton & Basta, 2009)

Phising attacks use email or malicious websites to solicit personal information by posing as a trustworthy organization. (Halton & Basta, 2009)

Pharming is a type of fraud that involves diverting the client internet connection to a counterfeit website, so even when a user enters the correct address into his browser and ends up on the forged site. Pharming can be conducted either by changing the hosts file on a victims computer or by exploitation of a vulnerability in DNS server software. (Halton & Basta, 2009)

Malware and viruses; malware is short for malicious software and includes such things as viruses, Trojans and worms. A virus is a piece of code that is loaded onto your computer without ones knowledge and may damage the computer system. Computer system gets virus through email messages, use of the internet and software download. (Halton & Basta, 2009, Niranjanamurthy .M., 2013)

2.17.4.1 Structured Query Language (Sql) Injection

A malicious user of the website may attempt to replace the SQL query with their own by entering their own statement in to the form filed on the website. This could allow the malicious user to add, edit or delete data in the database when they should not be able to.

2.17.4.1.1 Blocking SQL Injection

Preventing SQL injection is to ensure that SQL statements are constructed carefully when the variables are received from the users. This can be done by removing any characters that can

be used by a malicious users to construct their own SQL statement to be queried on the website database.

2.17.4.2 Cross Site Scripting (XSS)

For this method of hacking, a hacker uses forms on your website to introduce malicious markup or client side script (i.e. Java Script or VB Script) then relies on other users of the site activating the code. A cross site can be used for session hijacking and stealing users account details

There are two types of Cross Site Scripting (XSS). The first is remote site to Application site. This type of attack is not initiated on your site but from a link on another website or in an email. A user is convinced to fill in a form or follow a link which contains the malicious code. This code now has its affect on the page the user is forwarded to.

The second type of XSS attack is application site to same or remote site. This method relies on what the malicious user enter into a form on your website being displayed to other users of your site. The malicious user enters the markup or script into a form and that information is subsequently displayed elsewhere. The malicious user then waits for another user of the site to activate the script by following a link or with extra coding even just hovering over a link.

2.17.4.2.1 Preventing Cross site scripting XSS

The use of POST requests make a site more secure from XSS attack than using GET requests. So web site developers should use POST requests as much as possible to strengthen their websites again XSS attacks.

Another method of protecting against XSS attacks is to not allow any HTML markup to be entered into forms on a website unless it is absolutely necessary. Any HTML markup can

simply be removed by the program processing the incoming data. If HTML input is required then rather than allowing all tags to be used filter, input and remove certain tags, for instance:

    i.   <applet>

    ii.   <embed>

    iii.   <script>

    iv.   <object>

Scripts should also remove attributes from the tags as these can contain Java Script. Programs should allow filter and URLs that are inputted. Normal procedure for many web applications is to remove any GET variables from the end of the URL.

2.17.4.3 Session Hijacking

Session hijacking is when a malicious user of a site sets up valid sessions on that site to gain access to the site without having to give a username or password to login. The idea of a session was devised to allow for variables to be held in between communications with the servers and clients. Before sessions HTTP was a completely stateless protocol, meaning there was no way for the server to remember what clients it has been communicating with and what it has sent to the server and the client has no memory of which server it has been communicating with and what it has sent. Sessions were introduced to allow information to be remembered between communications.

The session data is held on the server and given a unique session ID which is sent to the client, then the client references this session ID when it communicates with the servers.

Anything saved as a session variable is stored in a temporary file on the server named with the session ID. The session ID can be stored by the client in two ways. The first is to store it

in a cookie if they are enabled. If cookies are disabled then the session ID can be appended onto the end of the URL as a $_GET variable.

There are a number of different ways for hackers to intercept the session ID. They are:

2.17.4.3.1 Listening to network traffic

This is the simplest way for a hacker to collect valid session IDs with simple software that is freely available on the Internet used by network administrators for legitimate reasons that allow users of the program to intercept and read all network traffic.

2.17.4.3.2 Phishing, forwarding and proxies

These forms of session hijacking convince the user's browsers it is connecting to one server when it is actually connecting to another.

Hackers using these methods can often get users to click on a seemingly innocent link for the website they wish to hijack sessions on, but the link does not go to the site it link claim to instead it forwards the user onto the hacker's server which then forwards the user on to the site they thought they were going to. Now the hacker's server is setup as a proxy in-between the client browser and real website's server and is able to collect all session ID and any other information sent between the client and the server including user names, password or credit card details. Internet users can spot a link that does this by its long URL. To the less experienced Internet user the domain looks like it is barcalys.co.uk when actually it is manicte.com.

However many users of the Internet are now wary of the long URLs that are used by hacker for such methods.

Hackers are also making use of the ever-increasing number of available Wi-Fi connections in public places such as pubs, station, cafes and airports. There are two methods hackers use to

intercept session ID and user information on such networks. The first is to set the network up so that all Internet connection goes via a proxy server on the network that collects all the data being transmitted over the network. The second method is a little more complicated to set up and involves the network vender configuring the networks Domain Name Server (DNS) by hand so that when a user enters a URL in their web browser, they believe they are being sent to the real website when actually they are not and again a proxy is being set up and the data being recorded at the proxy.

2.17.4.3.3 Session Fixation

A hacker can make use of the facility for allowing session ID to be passed as $_GET variable and create a link with a falsified session ID in the URL. When a user of the site uses the link to get to the website and logs in the session ID that the hacker made up will know be a valid session ID that the hacker can use.

2.17.4.3.4 Preventing Session Hijacking

There are number of different ways to prevent session hijacking and abuse, including the following;

2.17.4.3.4.1 Secure Socket Layer (SSL)

The use of SSL is the most highly recommended method for preventing session hijacking. This is because any data being sent between the client and the server and vice versa is encrypted so users are protected against hackers that are listening in on the network traffic.

2.17.4.3.4.2 Disabling the use of session IDs as $_GET Variables

As one of the big security holes in the passing of session IDS is that they can be sent via $_GET variables programmers may decide to disable the ability to pass session ID as $_GET variables. This can be done with some simple programming.

2.17.4.3.4.3 Session Timeout

Session cookies (cookies used to hold the session ID) are by default set to exist up until the browser using them is closed. It is possible for a programmer to override this so that a session will only last for a set amount of time, which is set in seconds.

This method makes it difficult for a hacker to hijack sessions if they are using proxy or forwarding methods to collect session ID, as by the time they have analysed the data the session could have became invalid.

However there are programs that allow hackers to do real time hijacking meaning that the session ID are found faster and may still be used. This method does not protect against this type of attack.

2.17.4.3.4.4 Regenerating Session IDs

When a user logs in or logs out of a website the session ID they are using should be changed. This makes the session ID used from one state invalid and the new state has a completely new session ID. This method of protection stops hackers using session fixation.

2.17.4.4 Password Encryption

All of the passwords for both staff and client sides of the site will be stored in the database. In case a hacker manages to gain access to the database or a malicious employee gains access to the database, all the passwords need to be encrypted so that they can not be read or used. This is particularly important as many people that use the Internet only use one or two different passwords enabling any hacker to make use of this information to gain access to a user's email account or another Internet service. There are a number of different types of encryption available with PHP including:

    i.   MD5

ii. SHA1

iii. CRC32

iv. Blowfish

Passwords should never be encrypted with a reversible encryption and you should only use known encryption like the method listed previously rather than making up your own encryption algorithm.

2.17.4.5 Secure Socket Layer (SSL)

Normally any webpage served up by a HTTP server is not encrypted so any content can be simply read if any transmissions are intercepted. Many websites that deal with sending and receiving of data including address, credit card and other personal data between clients and servers. Do not want this information easily intercepted. So they want to implement some kind of security of the connection between the server and the client machine or encrypt any data being sent between them.

SSL requires the web server hosting the website being set up to use SSL; it also requires a third party to sign the certificate to certify the web server is who it says it is. Finally the programmer of the website has to implement a website that sends the data via the SSL connection

2.17.4.6 Allowing only human users

This is a very popular new idea for websites and has only been seen in extensive use in the last two years. Websites use Text Image CAPTCHAs (Completely Automated Public Turing test to tell Computers and Humans Apart), Audio CAPTCHAs and Cognitive CAPTCHAs. These are used on signup forms to test that the form has been filled in by a human sitting at a computer rather than an artificially intelligent program.

The CAPTCHA test was invented by a British mathematician called Alan Turing in 1950 when the scientist started to conceive the possibility of artificially intelligent computers.

2.17.4.6.1 Text Image CAPTCHAs

A Text Image CAPTCHA uses an image of text that has been distorted in some way to ensure that a computer program cannot recognise text. The user enters the characters into a text field and the backend program ensures that both of the strings match before the program continues to execute.

These strings are randomly picked and an image dynamically created by the underlying program each time the page is loaded. It is done this way to ensure that there is a low change of repetition of the string and make the program secure. If the program was to randomly select an already created image from a file it could be possible a malicious user gains access to the folder and uses the knowledge to break the security of the program. The images are not just made up of plain text string. The program also distorts the text and adds random line and pattern to help distort the image so that it is difficult to use an Optical Character Recognition (OCR) program to recognise the text and then input its attempt to the text field.

2.17.4.6.2 Cognitive CAPTCHAs

A cognitive CAPTCHA relies on the user to make a choice for a selection of possibilities. Some cognitive CAPTCHA present the user with a selection of images and ask the user to select which image does not fit in with the others. The odd image out in this group would be the image of the tent as all the other images are of computers.

2.17.4.6.3 Audio CAPTCHAs

Audio CAPTCHAs are an alternative to the visual CAPTCHAs. The user is played an audio file usually consisting of a word or string of random letters. The user is then asked to enter

the word or random string into a text box. Many audio CAPTCHA correspond with the visual CAPTCHAs so that answer is the same for both the visual and audio CAPTCHAs.

2.18 E-Commerce Security

E-commerce security is a part of the information security framework and is specifically applied to the components that affect e-commerce that include computer security, data security and other wider realms of the information security framework. Security is one of the principal and continuing concerns that restrict customers and organization engaging with e-commerce. (Amtul, August 2011) (Niranjanamurthy .M., 2013)

Web e-commerce applications that handle payments (online banking, electronic transactions using debit cards, credit cards, online transfer, Paypal or other tokens). Have more compliance issues, Digital E-commerce cycle or online shopping, security are at increased risk from being targeted than other websites and there are greater risk from being targeted than other websites and there are greater consequences if there is data loss or alteration. Online shopping through website having certain steps to buy a product with safe and secure. (Ayo, 2006)

There are many different types of systems and programs that are widely used to ensure security during online shopping. These systems are categorized under the following:

i. **Firewalls:** These are program or hardware system that are specially designed and developed to block unauthorized access to a computer system. It can be implemented in both hardware and software or combination of both.

ii. **Anti-virus spyware:** This program provides security against dangerous program and code types like viruses, Trojans, spyware and malwares. Protecting computer system. There are more advanced and effective programs that combine both firewall and anti-virus spyware. These programs are called internet security programs. Users

of the internet prefer the use of internet security program to reduce the risk of dangerous program, malicious factor.

iii. **Monitoring systems:** this are used to watch active processes over the network system. Using this system will deny unwanted activities over the network and necessary precautions can be taken.

iv. **Encryption- decryption system:** there are many encryption-decryption based hardware and software's solutions that provide high-level security for valuable information and data. Encryption is the most effective and popular approach to providing security in all fields of communication.

v. **Intrusion detection system:** it is an additional protection measure that helps ward off computer intrusions. IDS (intrusion detection system) systems are used to monitor connection in determining whether attacks are been launched. Some IDS (intrusion detection system) systems monitor and alert of attacks, whereas others try to block the attack.

2.19 Usability Of Online Ordering

2.19.1 Reliability Of Online Ordering

Making an online order can be disturbed by bad ISP network, gateway error, website backend problem, once customer notice any of these while making a purchase its advised to contact the retailer for tracking information of order good or confirmation if the order was actually placed. There is a major issue both customers and retailers sometimes ignore, from customers view; they need the commodity to meet their needs, while from the retailer wants to boost its sales record, in doing so both parties tend to forget the issue of nature, such as weather while engaging in online ordering. The rate of risk in rainy season is usually high as of today. Even customers know bad weather can trigger a delay in delivery; it will be better if customers can put aside their self-centeredness and try to be realistic. (Niranjanamurthy, Chandar 2013)

2.19.2 Effective Implementation Of Online Ordering

The following are vital pre-requisite for proper implementation of online ordering and delivery.

i. **Computer Literacy Campaigns**: In as much as the existence of computer is not a new thing in Nigeria now, many people yet do not know how the computer can be of importance to them, the business men and women see the computer as a tool that would enable them cope with complex decisions or operations, which would otherwise be impracticable, they can stand a better chance of making effective use of the computer. Many of the manual operations and procedures in their organizations and establishment need to be automated and computerized for effective and competitive age.

ii. **Internet and Telecommunication Facilities**: As internet and telecommunication is one of the backbones for effective e-commerce implementation in Nigeria, the internet service provider (ISP) and telecommunication connectivity should be affordable communications facilities. Some countries like South Africa, Ghana have their internet subscriptions and telephone calls to be easily affordable and at cheaper rate.

iii. **Power Supply**: For Nigeria e-commerce implementation to move forward and effective in this country, power supply must be constant. Government and non-governmental organization should put hands together to enable a steady and effective supply of power.

iv. **Government Participation**: Government participation is very vital, the Federal Government of Nigeria, as the largest single customer of information technology must

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lead by example and set realistic and achievable standards for itself, which will in turn promote the development standards in the other sector of the economy. By so doing, a clear policy on information technology must be put in place. The Federal Government of Nigeria should provide funds for the provision of infrastructure that will serve as a platform for an enabling environment for information technology through the creation of a credit-based economy, i.e. the use of credit cards. According to E-business (2003). The Federal Government should intensify efforts towards the provision of funds for developing the telecommunication facilities in Nigeria. The Federal Government through the National Information Technology Development Agency (NITDA) should encourage large business owners to adopt the best practices for secure computing. The NITDA should also encourage non-governmental organizations to evolve into a national clearing house of information about security intrusion hacks, vulnerabilities and to offer tools to help detect, isolate and prevent attacks. The clearing house will enable companies, large business and individuals to anonymously report incidents without fear of publicizing their vulnerability.

2.20   Influence Of Online Marketing On Consumers

2.20.1 Major characteristics of online buyers

The typical internet users of the twentieth century are young or old, professional and affluent with higher levels of income and higher education (Palumbo and Herbig, 2005). They value time more than money which automatically makes the working population and dual-income or single-parent households with time constraints better candidates to be targeted by non-store retailers (burke 1997). Journals and report have shown that income and purchasing power have consistently been found to affect consumers' prosperity to shift from brick-and-mortar to virtual shops (Co-mor 2000).

Internet usage history and intensity also affect online shopping potential. Consumers with longer histories or internet usage educated and equipped with better skills and perceptions of the web environment have significantly higher intensities of online shopping experiences and are better candidates to be captured in the well-known concept of flow in the cyber world (Sisk, 2000, Hoffman and Novak, 2009)

As bellman et al. (1999) mentioned, demographics are not so important in determining online purchasing potential. Whether the consumer has a wired lifestyle and the time constraints, the person has are much more influential. Risk taking is the utmost task performer by the customer. Consumers with high levels of privacy and security concerns have lower purchasing rates in online markets but they balance this characteristic with their quest for making use of the information advantage of the environment (Kwak et al, 2002). Theses educated individuals, as more confident decision makers, are much more demanding and have greater control over the purchasing process from initiation to completion (Rao et al, 1998).

2.20.2 Online shopping behavior

This helps identify pre-purchase intentions of consumers, to understand why they ultimately do or do not order from a web market, what brought them to the site, purchase purpose. Determinants which affect online order are transaction security, vendor quality, price considerations, information and service quality, system quality, privacy and security risks

Personal Characteristics, Psychological Characteristics, Social Characteristics, cultural Characteristics all affect a consumer's behaviour while making an online order.

Personal characteristics include age, gender, occupation, income status, education, lifestyle.

Psychological characteristics deals with question which the consumer ask themselves. Should they look a better price or should they shop online more often, what site suit their order and lot more of questions.

Social characteristics influence comes from reference group, old user of the site the consumer is willing to visit. The reference groups can be identified as virtual communities, consisting of discussion groups on a website, peoples experience. Opinions have shown that it affects consumer minimally (Christopher 2009).

Cultural characteristics states that different social classes have different behaviours. Consumers from lower social classes would not have the same properties such as higher intention to buy goods with fewer prices. Culture set values and beliefs in the early ages therefore persons want and need are driven by this feature. Almost all we do are influenced by culture, how we give and receive information, decision making, leadership and managing, team work, time management.

2.21 FUTURE TRENDS IN ONLINE ORDERING

i. Less than 24hours delivery systems within a country.

ii. More generic e-commerce website featuring all possible categories.

iii. Maximize benefits and minimize the disadvantages of a common e-commerce website.

iv. Mobile application to support the online ordering system.

CHAPTER THREE

RESEARCH METHODOLOGY

3.0 Introduction

This chapter offers information on design of online ordering and delivery system. It provides also the device or the monitoring process that can enable the application to work effectively. It describes hiw the weakness of the existing system leads to the proposed system and the methodology for the proposed system. The existing system is described first, followed by a specific instance of the proposed system.

Throughout the system analysis, an in-depth, study of end user information is conducted, for producing functional requirement of the proposed system. Data about the existing ordering method is collected through several fact-finding techniques such as website visit and document review at the beginning of this research stage. The data acquired will help facilitate information required during detailed analysis. A study on the current system will be worked out using a questionnaire. At the end of the analysis, requirement and specification will be produced and will support system design.

3.1 Information On Case Study

RASMED PUBLICATIONS Limited was established in the year 1999. It aims at providing satisfaction to the Nigerian population through the publishing and distribution of quality Books. It is second to none and for this reason, the demand is high and the company responds to the increasing demand by stabilizing supply to strike a balance. (Personal Intyerview 2015)

Justifiably, the company has the problem of keeping adequate record of goods transfer and since it is done manually, associated problems of insecurity, high cost of operation and delay

in supply arise. RASMED Publications Ltd ordering operation is presently carried out using people, pens, and paper to control stock and inventory.

The design and development of an automated ordering and delivery control system for RASMED Publications Ltd will no doubt bring immeasurable relief from the problems associated with the manual system.

3.2 Data Collection And Facts Finding

There are various methods of data collection; I have choose the two main sources of data collection in carrying out this study. Which are:

i. Primary data source

ii. Secondary data source

The primary data source refers to the sources of collecting original data using empirical approach such as interviews, questionnaire to achieve best result in knowing user experience of the current ordering system.

The secondary data sources are obtained from magazines, journals, newspaper, article review and library source.

3.2.1 Interview And Questionnaire

An oral interview was conducted by me as the researcher and management of RASMED PUBLICATIONS Ltd, Ibadan with customers making purchases from the management. The interview method of data collection can be defined as a systematic way of collecting data or information from a respondent through asking questions directly from the respondent and also collecting information through the use of questionnaire with the aim of facilitating understanding. Reliable facts will be gotten based on the questions posed to staff and

customers to help in starting work and help in the area of solution presentation of the new design.

3.2.2 Study Of Manuals And Journals

Manuals and journal report based on the company's services will be obtained and studied and a lot of information concerning the system to be produced will be obtained.

3.2.3 Document Review

Some important documents and forms relating to this research will be accessed. These includes the book list, price list, receipts, inventory etc. These forms will help in the design of the new system.

3.3 Problems Of Existing System

The existing system is a non-computerized operating system were all operations are done manually by the sales officer carrying paper to take down order of customer. This leads to mistakes because the store keeper might misinterpret the order list written by the sales officer.

Due to manual means being employed by RASMED PUBLICATIONS Ltd, it is very difficult to satisfy the wants and needs of the customers. Most of the problems include:

i.   A tedious purchase order method, making delivery of goods impossible at the right time.

ii.   Mistake when taking order from customers.

iii. It causes lack of understanding between the customers and the staff.

iv.   Record keeping system is poor. Losses of vital records are reported.

v.   Protecting the file system from unauthorized access is a problem.

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These are the major problems facing the existing system and would be corrected with the help of the new computerised proposed system.

3.4 Objectives Of The Proposed System

The proposed system is developed to manage ordering activities in RASMED Publication limited, Ibadan. It helps to record customer submitted orders. The system should cover functions such as:

The main objectives are:

i. Goods tracking for customers.

ii. To create a Proper data record for file keeping on stock and ordered goods.

iii. An access to easy retrieval of ordered goods made by consumer.

iv. To promote interface that allows promotion and menu.

v. Customer should be able to make order, view order and lead to payment using prepayment card, credit card or debit card or any convenient mode of payment accessible using the internet.

3.5 Importance Of The New System

It is the purpose of the new system to address all the problems plaguing the previous system. This system will do the analysis and storing of information either automatically or interactively. It will make use of WAMP server (wordpress), php-mySQL. This helps in handling of particular information needed by the management viewing via the monitor or can be accessed by printing. The handling of information by the management is the result of input data and record of books, purchased book and inventory that will serve as report.

Expected features of the proposed system:

i. Handling of data.

ii.   The new system will reduce volume of paper work.

iii. Fast rate of operation, orders are worked on immediately the officer in charge gets notified, order list is forwarded to the delivery office, courier service provider.

iv.   Flexibility, increasing the usability. The website is open when the office is close offering a 24hours a day service.

v.   It gives better means of data storage using the system as backup or duplicating CD.

vi.   Error in order handling will be greatly minimized as full book details, specification, category, price are attached to a particular book in the catalogue.

3.6 System Design

System design gives the specification of all the major components of the new system. These parts or component, when properly designed with ultimately result to the purpose for which the application was developed. The two major components which are the output and input design will be discussed below:

3.6.1   Output Design

3.6.1.1 Report To Be Generated

1. User's report

2. Product/item report

3. Login report

4. System report

5. Admin report

The output design takes in to an account the result to be obtained from the developed system, the file format, and logical presentation of processed data.

3.6.2 Input Design

In input design, user – generated inputs are converted to a computer compatible format. The purpose of designing input is to make data accurate as possible. The first step in input design

process is to organize the sources document. Then decision is made as to which media will accommodate data entry into the system.

3.6.2.1 List Of Input Items Required

    i.   First name

    ii.   Las name

    iii.   Email

    iv.   Phone Number

    v.   Username

3.7 Process Design

3.7.1 Programming Activities

When designing a new system, the input design is first designed before the output. At system design stage, the input and output files will be developed as well as database files that will support the proper functioning of the system.

The things to put into consideration at system development stage include the following:

    i.   The modules specification

    ii.   Design of interface and/or style sheet

    iii.   Procedures for system usage

The specification of what output the users want from a system dictates both the requirement for input files.

3.9.2 Program Modules

    i.   Welcome Page

    ii.   Login page

    iii.   Home page

    iv.   Product/item updating module

    v.   Registration module

3.8 Storage Design

3.8.1 Description Of Database Used

The application program used in this project for data storage is mySQL database if file system is to hold the searched data.

Field Name	Type	Size
FirstName	Varchar	100
LastName	Varchar	100
State	Varchar	50
Country	Varchar	50
Mobile	int	11
Gender	Varchar	50
Address	Varchar	200
E-mail	Varchar	50
Username	Varchar	50
Password	Varchar	50
Cash	Varchar	50

Table 3.1: User registration database

3.11   Hipo Chart
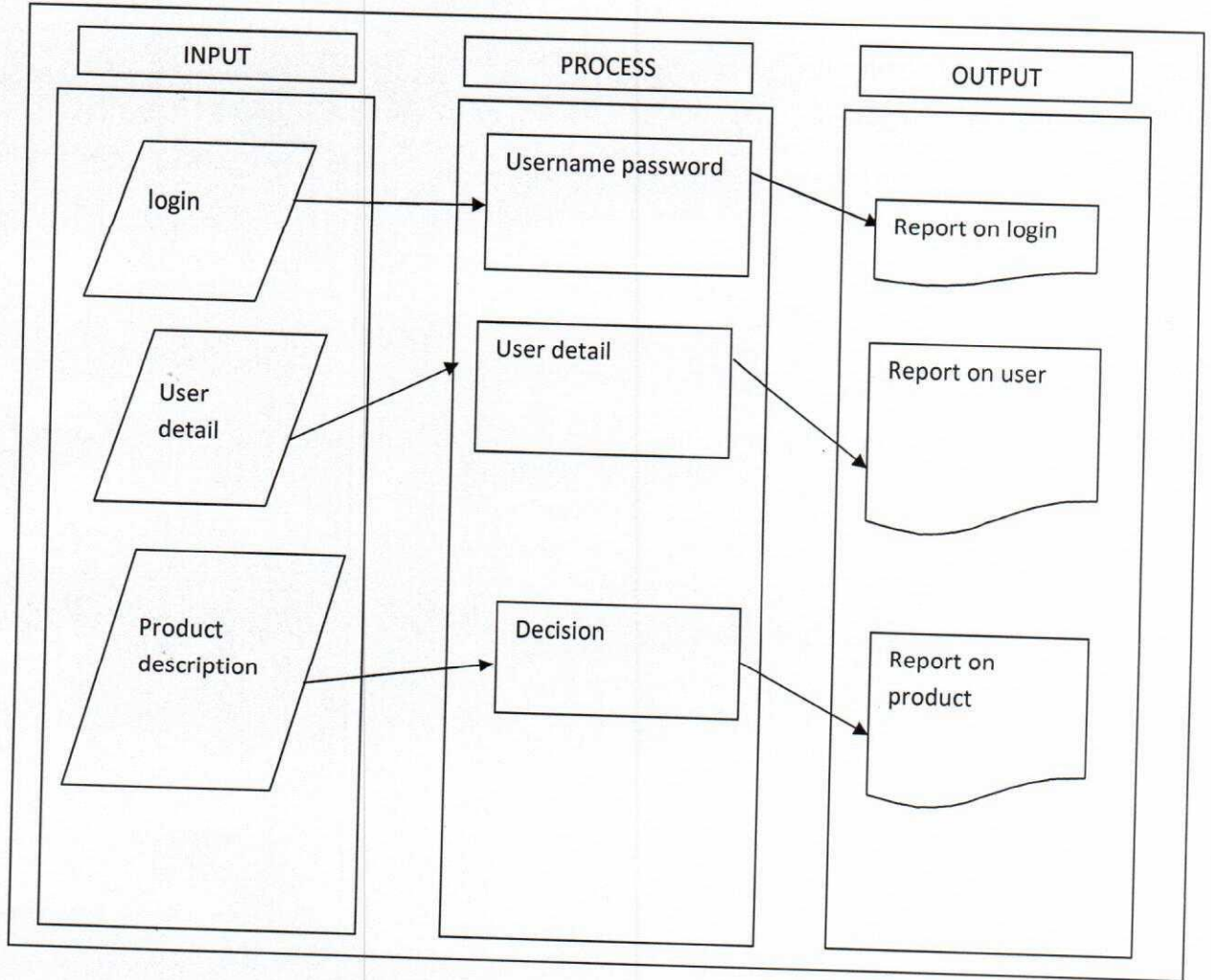
Figure 3.1: input-output interface

3.12 Use Case Diagram
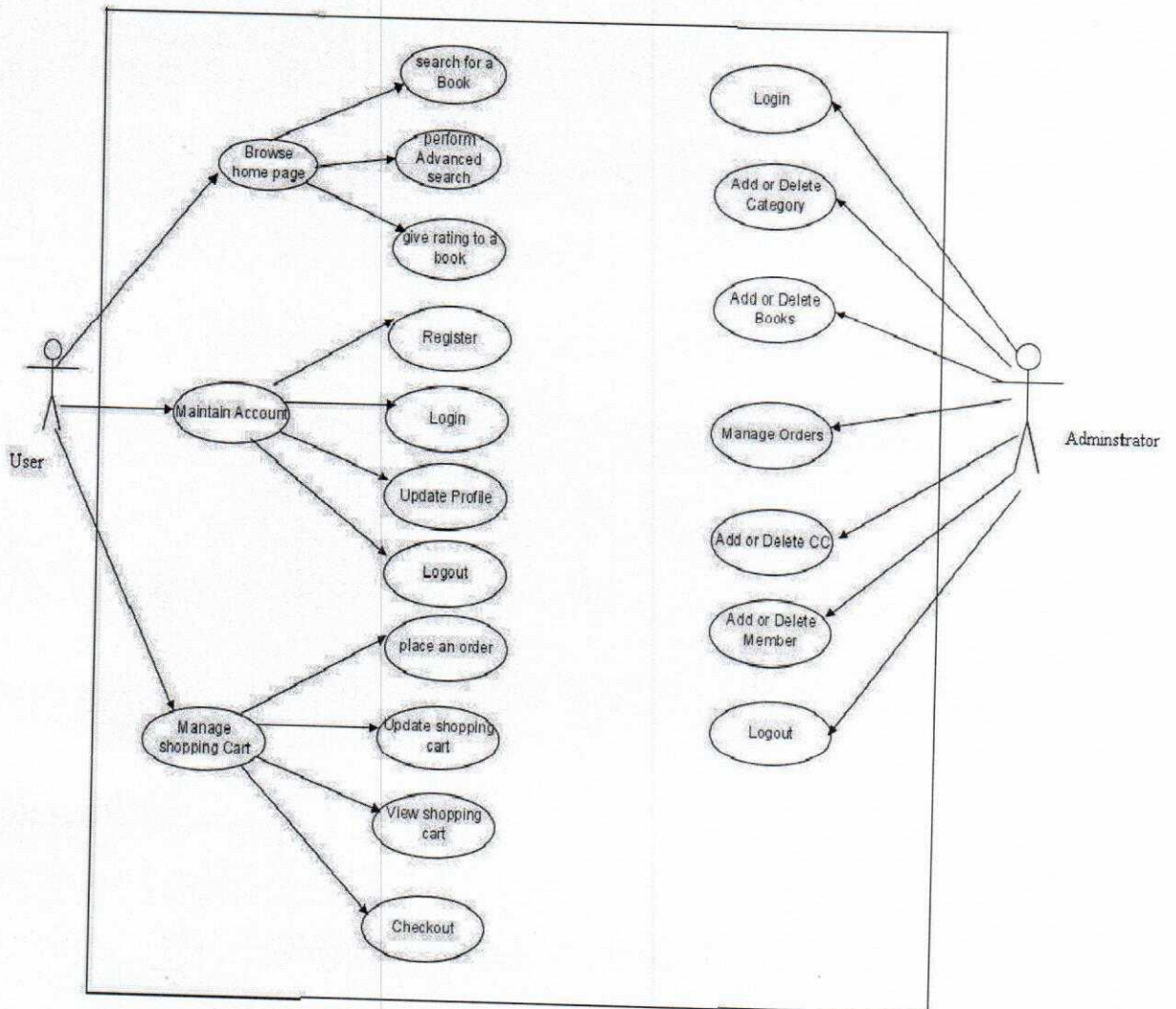
Figure 3.2: System Functionality

3.13   System Flowchart
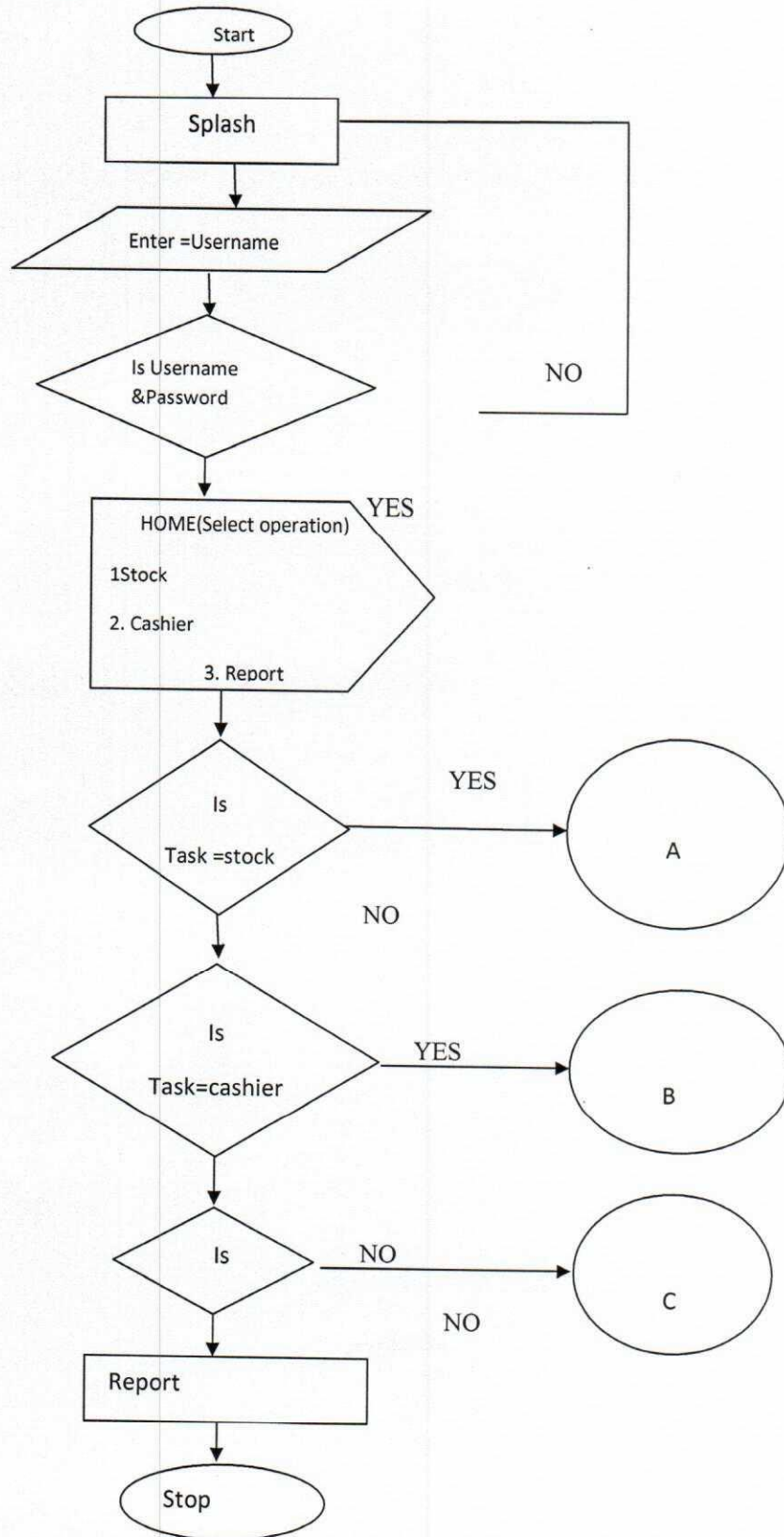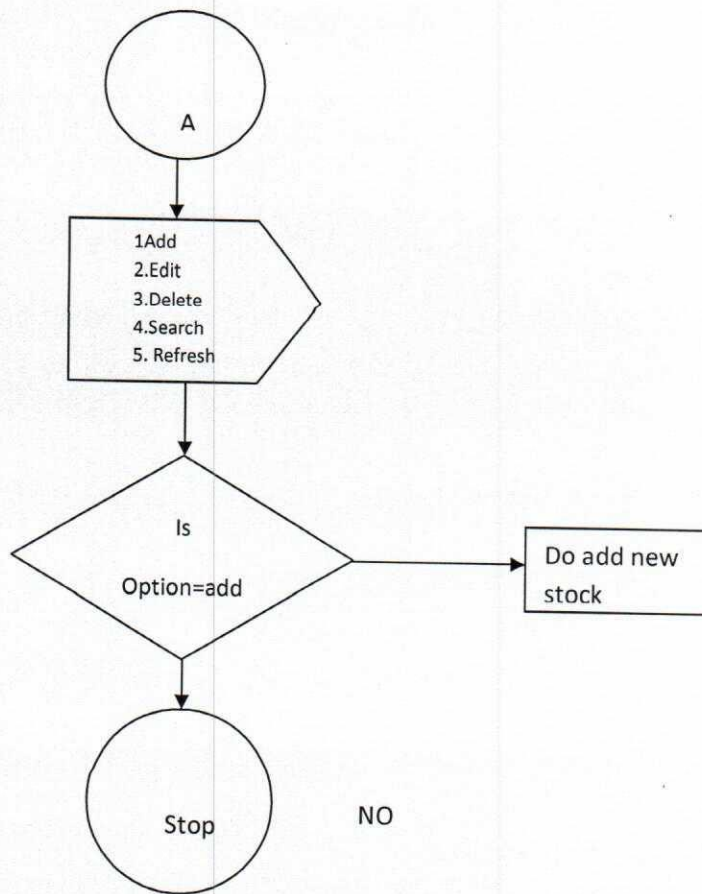

Figure 3.3: Admin login and store keeping

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Figure 3.4: stock record keeping
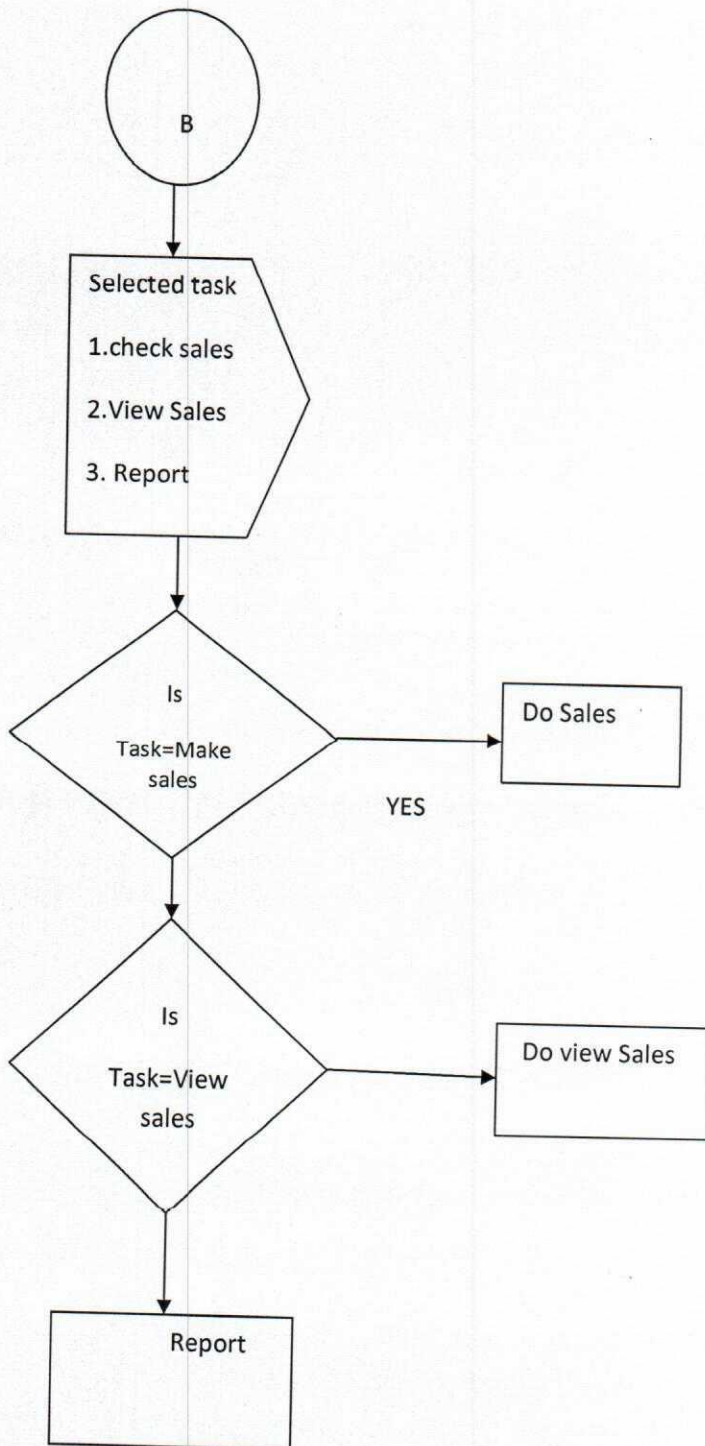
Figure 3.5: sales sheet

```
                    ⭕
                    C


                    │
                    ▼
    ┌──────────────────────────┐
    │ Select                   ╲
    │ 1.Add new stock           ╲
    │ 2.Stock Balance            │
    │ 3.Edit stock master       ╱
    └──────────────────────────┘
                    │
                    ▼
               ◇ Is
         Operation=Add new          ──────►  ┌─────────────────┐
              stock                           │  Do new stock   │
                                    YES       └─────────────────┘
                    │
                    ▼
               ◇ Is
        Operation= Stock            ──────►  ┌─────────────────┐
            Balance                           │    Do stock     │
                                              └─────────────────┘
                    │
                    ▼
    ┌──────────────────────────┐
    │      Edit Stock          │
    └──────────────────────────┘
```
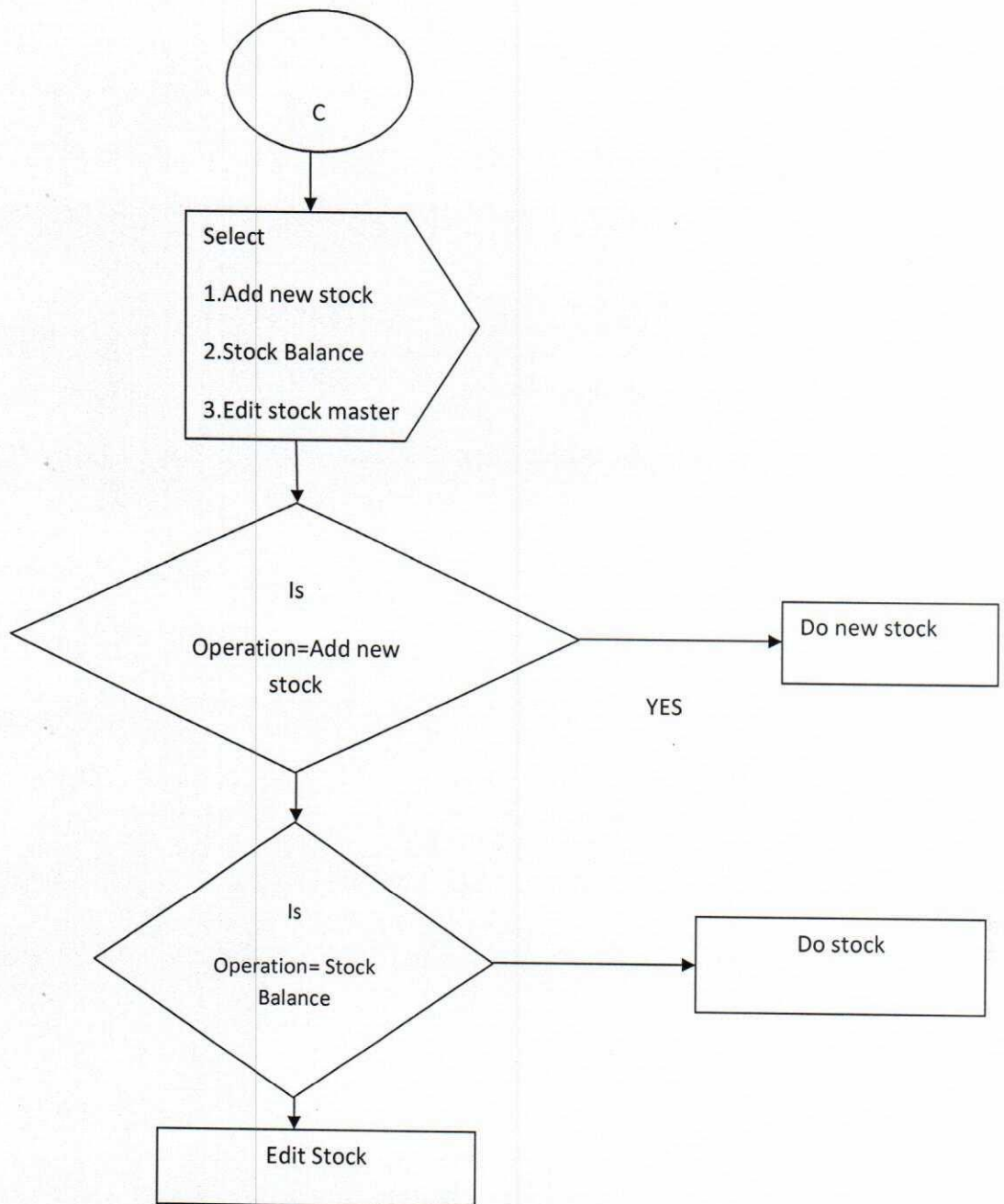
Figure 3.6: Adding product to stock and stock keeping

CHAPTER FOUR

SYSTEM DEVELOPMENT AND IMPLEMENTATION

4.0 System development

4.1 System implementation and documentation

This describes how the system works and how best computers together with other resources may be applied to perform data storage, management and retrieval for decision making. System design and specification is very important in every software development. At this stage, I will put every factor into consideration while making this project system design. In the course of the design, the system has to be designed in a way that there will be a close relationship between the inputs and outputs. Also, the design format must be acceptable to the end users.

4.2   Implementation and Testing

4.2.1   Procedure design

The procedural design describes the system generally. It describes the various main programs in the system as well as the relationship that exist between all subprograms included. The procedural designs in this new system are of 5 menus (home, about us, categories, best seller, contact us) of which each menu has its sub menu.

The application also contains several modules of which each module has its own specific function. The purpose of dividing the program into modules is because it enhances maintainability, readability and easy debugging.

4.2.2 Implementation

Implementation is a very important aspect in the development of any computerized system, and this also applies to the development of the online ordering and delivery system. Pro-development Implementation usually involves two main steps, these are;

i.   **System Construction**: The system is built and tested to make sure it performs as designed.

ii.   **Installation**: Preparation is made to support the installed system. This involves associated documentation

Under system construction, the main task is testing. In the next section is a detailed description of how this was carried out in the design of online ordering and delivery system;

4.2.3 Testing:

Testing is critical for a newly developed system as a prerequisite for it being put into an environment where the end users can use it. Exhaustive testing is conducted to ensure accuracy and reliability and to ensure that bugs are detected as early as possible. In the process of designing the online ordering system, three levels of testing was conducted, namely, unit testing, integration tests and system testing.

4.2.3.1 Unit Test

Unit test is where the system is tested partially and independently, component by component, to ensure that particular portion or module is workable within it. In the development of the online ordering system, each component was tested independently before finally integrating each of them into one system. This test was carried out in other to verify that every input of data was assigned to the appropriate tables and fields. Most of the modules were rather similar and therefore required a rather easy reusable testing process. However, the customer (user) accounts module accessible to the system administrator was one of the unique components that needed to be carefully tested in the online ordering system. This involved testing each module. This was necessary to ensure that everything is working fine independently.

4.2.3.2 Integration Test

Integration test is where a combination of several portions or components/sub components of programs are being tested sequentially and continuously. At this stage, all the system components were integrated and a test was based on how they worked together example is the ability of the admin to access purchase made by customers, and ability to issue receipt, correct order number issuing. This involved observing the interaction of the database and the interfaces. After which the system test followed.

4.2.3.3 System Test

A system normally consists of all components that makeup the total system to function. It is required to ensure the smooth running of the system as a whole, and it should perform as expected and as required. Here, technical and functional testing was performed. The technical testing involved the process of testing the systems compatibility with the hardware, operating system, data integrity in the database and user authorization access rights. Functional testing was also carried out to establish how the system would function in its intended working environment.

4.2.3.4 User Acceptance Test

Due to a few constraints, this part of testing was not done, however, after the oral presentation of this project work, I intend to review the system with the intended system users so as to analyze acceptability and usability and also to identify areas that may require modification before the system can fully be commissioned for use by RASMED PUBLICATIONS ltd (Ibadan head office.)

4.3 System Documentation

The software (Application program) was written using PHP, HTML and CSS and can be run on window operating system not less than windows XP. To run the system, the folder that

contains the application program is open and the form by selecting any of the option provided.

Also good maintenance should be adopted to see that the system is continuously and correctly working for long period of time.

4.3.1 Program documentation

The need for documentation of a program arises from the fact that the program may develop problems usually referred to as 'bugs' long after it had been written. In this project work a detailed documentation is given for each module, therefore will ease the maintenances of the project work.

4.3.2 System Usability

Before this project work can be used it requires the user to be oriented by the programmer, therefore, will enable the user to be familiar with the modules contained in the program and the function of each modules are expected to be explained in details by the programmer. Before the running of the program, it has to be installed on a PC and launched by the user, and then continues all orientated modules.

4.3.3 Input design

In input design, user – generated inputs are converted to a computer compatible format. The purpose of designing input is to make data accurate as possible. The first step in input design process is to organize the sources document. Then decision is made as to which media will accommodate data entry into the system. Below are the input interface in the proposed design and description on how to use the software. System design gives the specification of all the major components of the new system. These part or components, when properly designed with ultimately result to the purpose for which the application was developed. The online

ordering system will be designed and develpped using wordpress ecommerce. This I resulted too due to time frame in implementing php, mySQL for the website building. The two major components in the design are the output and input design.
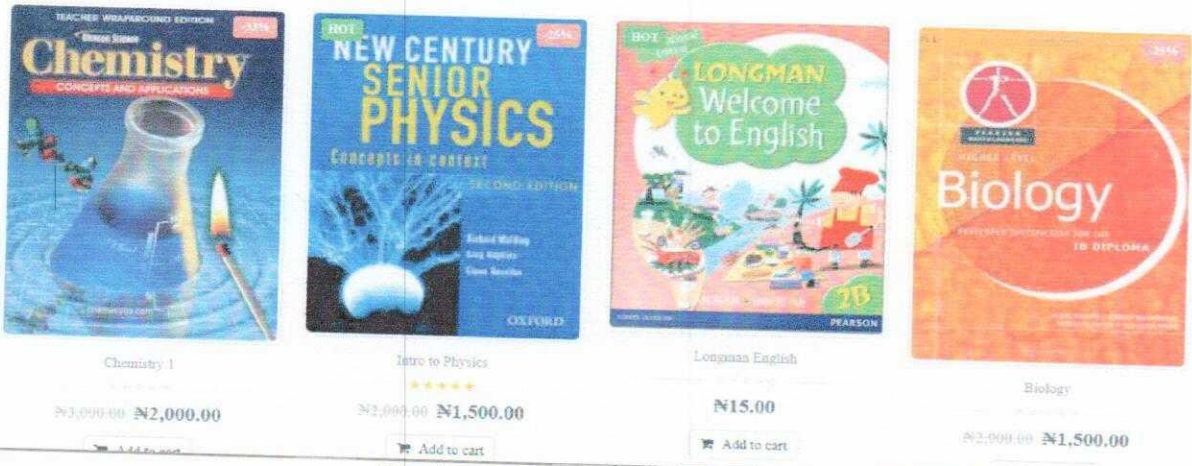
4.4 Output Specification

The system is designed in such a way that it efficiently provides output to the user promptly and in a well organized manner. Output can be relayed using the following page modules:

i. Catalogue.php: this displays output information for the list of books which are currently available.

ii. Search_result.php: this displays output information for desired book by the customer.

iii. About_us.php: displays output information that talks about the website owner, i.e. RASMED PULICATION LIMITED.

4.4.1   BEST SELLING PAGE

This displays list books that are most purchased on the website by the customer. Books with 5 star rating also get to feature in this category.

Fig 4.1 best selling page

4.4.2   BOOKS SCREEN

This is the page which shows list of available books. It shows recently added books, most viewed.
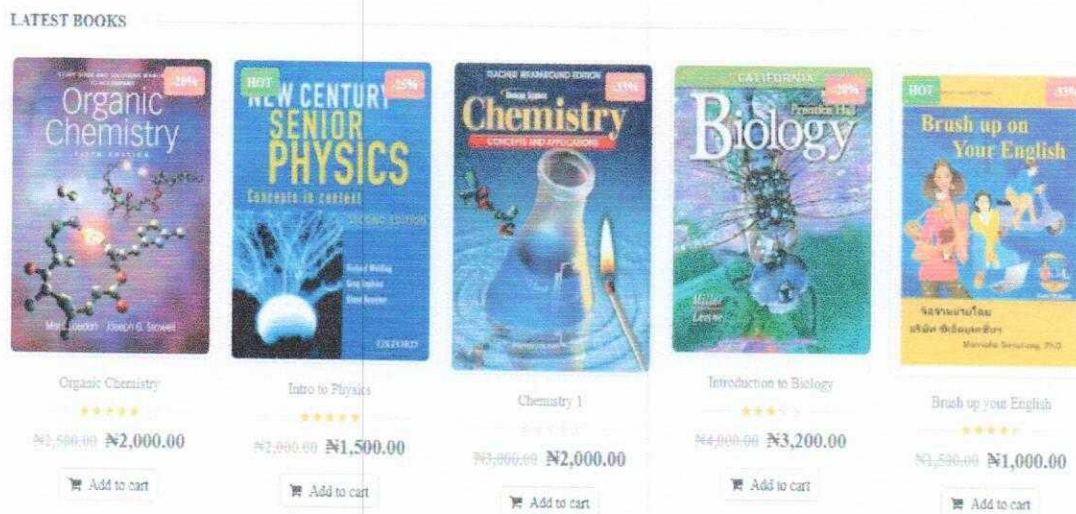
Fig 4.2 books screen page.

4.4.3   Home page

This is the first interface of the Online Ordering System, it provides the basic page where user and admin can click on to access the online book ordering system. The home, about us, search, and Contact us sections are entailed in this page. Both the admin and the users of the system can access the home page of the Online Ordering System as it has been authorized and authenticated for use. Below is the screen shot of the homepage of the Online Ordering System.
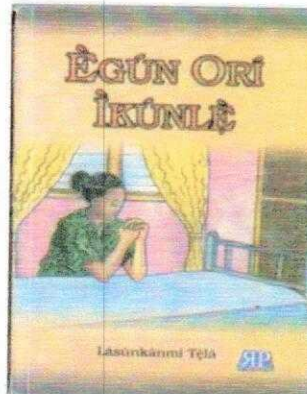
Fig 4.3 Home page

4.4.4 Check Out Page

It is also referred to as the cart, the final check-out phase of shopping. All selected goods while shopping will be added together, with summed up price total and total list of books. Then customer proceeds to the payment interface after confirming the total books in the cart.

Fig 4.4 check out page

4.4.5 Order Tracking Page

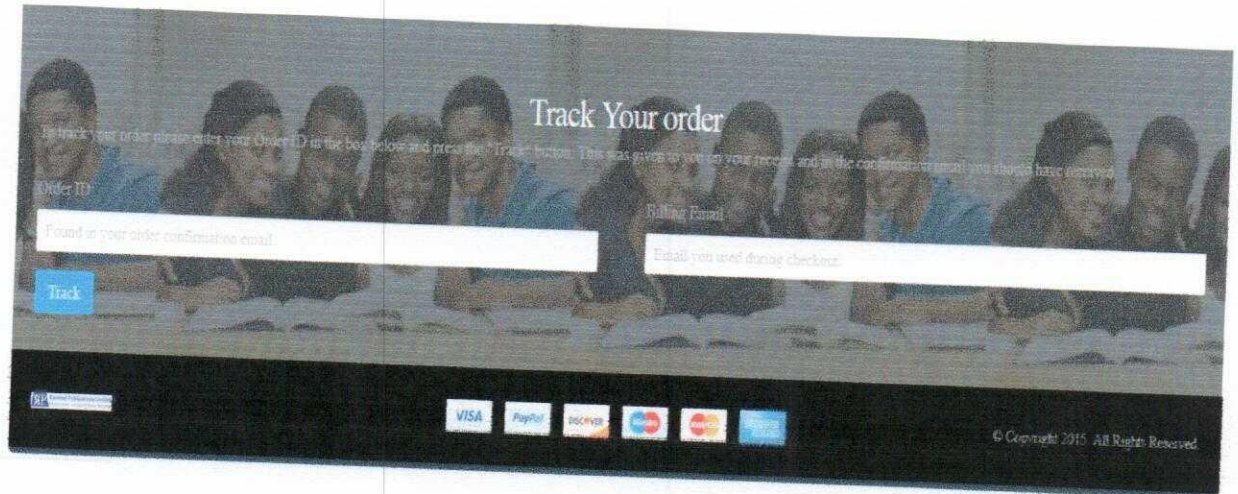This gives the user the opportunity to know the delivery process level of their ordered goods.

Fig 4.5 Order Tracking Page.

4.5 INPUT SPECIFICATION

The system is designed to accept input efficiently through input forms and user clicks. Data are captured through clicks on modules on the system and relayed to the admin for processing. Input is collected using the following modules:

i.   Admin_login.php: this is used to capture information about the administrative personnel who controls content and display on the system. The administrator can add, delete and update the reservation system only when the username and password is provided.

ii.   Comment_form.php: allows customer give feedback of service.

iii.   Add_books.php: allows add new book by the admin. Book images, reviews and details.

iv.   Feedback_form.php: user who uses the site can send his/her comment or recommendation about the website and services provided.

4.6 Design Standard

The design of the system will be the interaction of several cues on each web page that make up the web application. These cues are well-defined such as to make several functionality that the application exposes to collect, process and output data. Some of the modules are as follows:

i. Cart

ii. Login

iii. Inventory_details

iv. Payments

v. Catalogue

vi. Order_track

vii. About_us

viii. Contact_us

ix. Search_result

4.7 Database Specification

The database system used to implement the back end of the system is MySQL. Access to the system was made possible by a graphical interface (phpMyadmin). Database name is bookstore. The structure of the data table in the database are as follows:

i. Admin

ii. Post

iii. user

iv. Products

Admin

Field	Type	Null	Key	Default	Length
Id	Int	No	PRI		11
Username	Varchar	No			24
Password	Varchar	No			24
Last-log	Date	No			
Date	Int				

Table 4.1: admin database

Post

Fig 4.6: Post database

User

Fig 4.7: User database

Product

Fig 4.8: Product database

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Comment

Fig 4.9: Customer comment database

4.8 Environment Used For Development

4.8.1   Wordpress And Woocommerce

Wordpress is an open source blog software package that works exceptionally well as a content management system, or a traditional website. It makes it easy for anyone to setup, manage and maintain a website. Wordpress is more than a blogging platform, it is a full content management system. A content management system (CMS) is a platform that gives you the capability to run a full website on your domain, adding pages, additional features.

There is a simple difference between a website and a blog even when using wordpress. A blog is a chronological display content, most often posts or articles written by the blog author. Post are usually categorized into topics and achieved by date. Blog post can have comments activated. A website is a collection of published pages and sections that offer the visitor a variety of experiences or information. Part of a website can be a blog that enhances

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the overall visitor experience, but it is usually includes other sections and features that might include things such as photo galleries, e-commerce store, discussion forums, social community, feedback forms.

Woocommerce is the most popular ecommerce platform on wordpress. A free ecommerce plugin that allows sell anything beautifully. It is built to integrate seamlessly with wordpress. It gives both the developer and store owners complete control. With thousands of extensions, it powers over 30% of all online store in the world.

4.8.2   Benefits Of Using Wordpress

i.   **SOFTWARE IS FREE:** the website and its application is totally free to use. It also saves lot of money when adding premium themes and plugins.

ii.   **EASY TO USE:** adding pages, post, sidebar elements etc without accidentally messing up the overall design of the site.

iii.   **SITE OWNER CONTROL:** this application, software allows to make changes to the site. Its an online freedom. Without relying on an expensive web designer to make the changes and fix a tiny error.

iv.   **SEARCH ENGINE ADVANTAGES:** search engines like sites that are easy to index, and Wordpress is. The post section allows the interaction between the admin and customers of the web store there making a reliable feedback method.

4.9 Using Online Ordering

4.9.1   Advantages Of Online Ordering

There are advantages for both the customer and company who participate in online ordering.

i.   A customer can order at will when they have time to.

ii.   It reduces distribution chain fragmentation.

iii. Also, the customer is able to customize their order the way they like it without errors in communication between the customer and the person taking the order.

iv. In addition to company advantages, the company is able to take more orders with less staff.

v. In the case of online food ordering, the restaurant does not need a waiter or hostess to be on the phone to take the order. The order can go straight to the kitchen.

vi. Access to goods and services at lower prices.

vii. There is a variety to choose from, than those provided by physical stores.

viii. Expanded geographical reach,anyone with internetenabled devices canaccess products and services offered.

4.9.2 Disadvantage Of Online Ordering

i. In the case of online food ordering, customers are not able to ask about quality of food or ask for any specialized diet foods. It is more difficult to ask for gluten free or allergy free foods with online ordering.

ii. Also, it is more possible for a customer to place an order, but never pick up the order which can lead to waste of food and possibly a loss of profits.

4.10 SYSTEM REQUIREMENTS

Wordpress requirements are simple. The server supports

i. PHP version 5.2.4 or greater

ii. mySQL version 5.0 or greater

iii. macromedia dreamweaver or WAMP server.
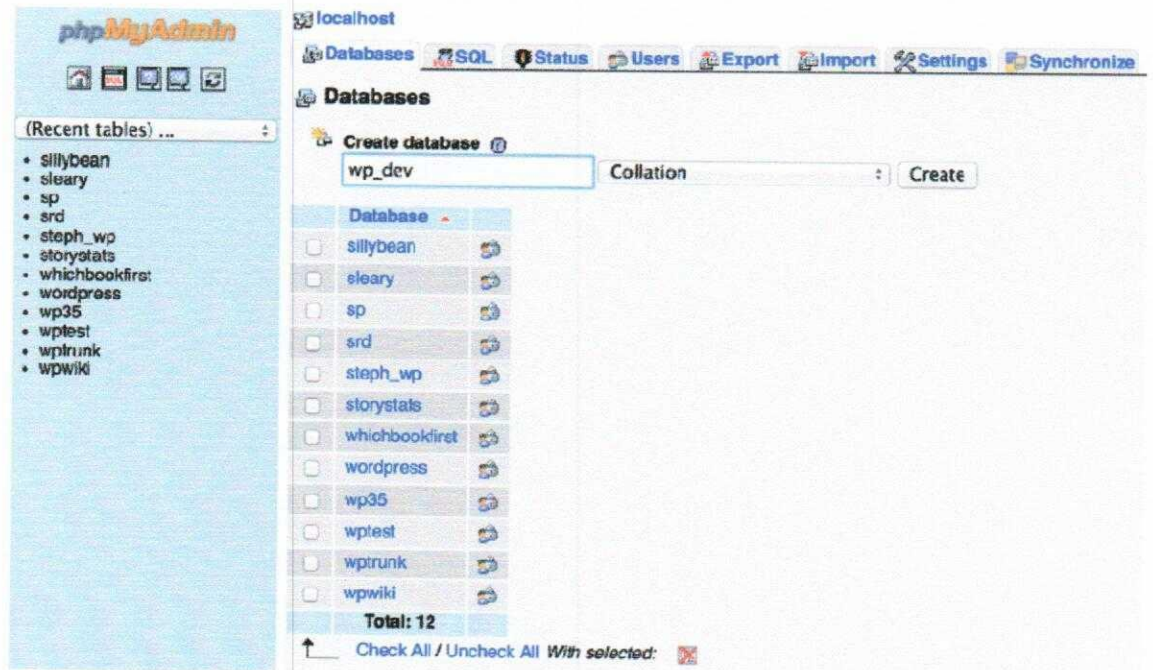
Fig 4.9: **Creating database in phpMyadmin**

4.11 WORDPRESS DASHBOARD

The dashboard is the first thing seen when logged in. The dashboard is an online web access tool which can be used to control different activities on the website via the admin login.
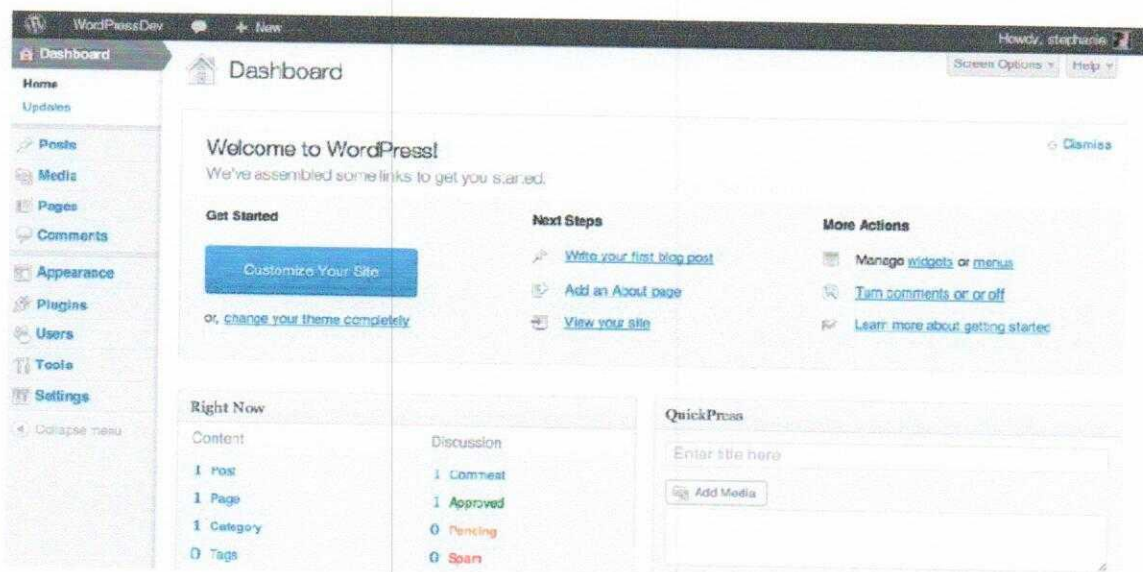
Fig 4.10: wordpress dashboard
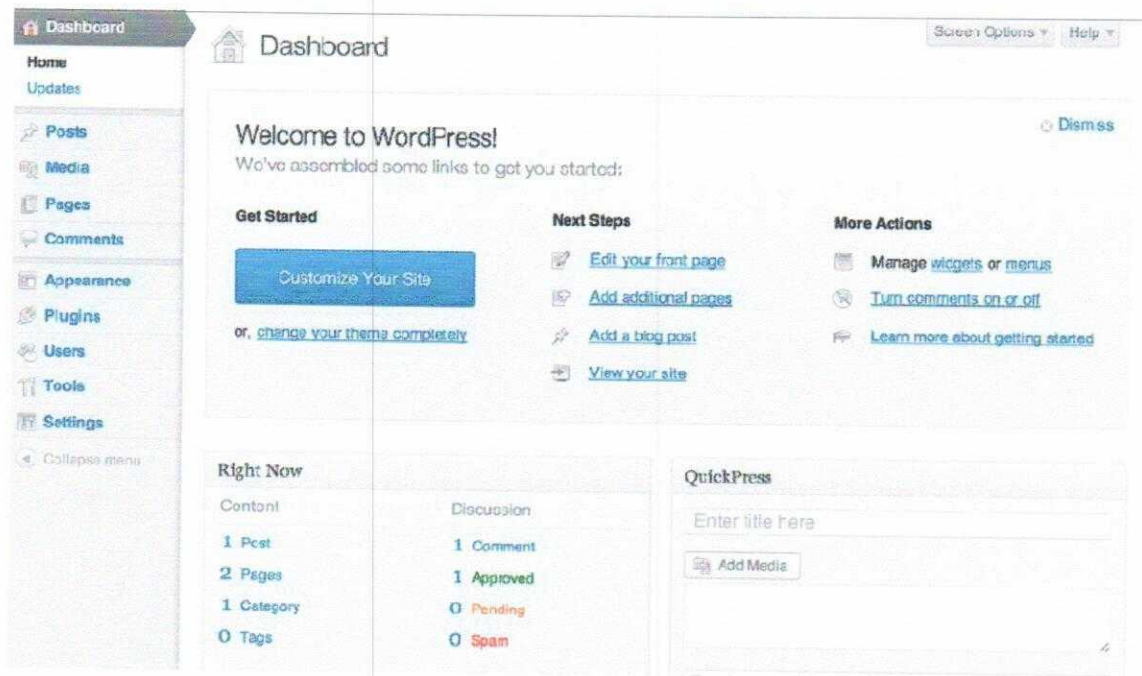
Fig 4.11: wordpress dashboard (custom)

Each box on the dashboard (right now, quickpress, recent comments, categories, etc) is a widget.

4.11.1 Plugins

Plugins extend and expand the functionality of wordpress. Once a plugin is installed, it may be activated or deactivated in the plugins section. (wordpress 2015) There are a lot of plugins available for huge range of functionality. The plugin that will be used in these project are

i.   Woocommerce: this is a plugin created by woothemes. It is an ecommerce plugin for wordpress.

ii.   Akismet: it checks comments against spam. It checks and filters comment which looks like spam.

iii. Js composer: this is the visual composer, a front-end of the website. It allos to add drag and drop functionality to the site. Also it allows to save templates.

iv.   Porto content type: it allows use of custom content type.

v.   Porto widgets: it enhances customization possibilities. Allowing one to create widget displaying posts (most viwed book, new arrival books)

vi.   Wordpress importer: it allows the import of content from Wordpress content: custom fields and post meta, posts , pages, and other custom post types.
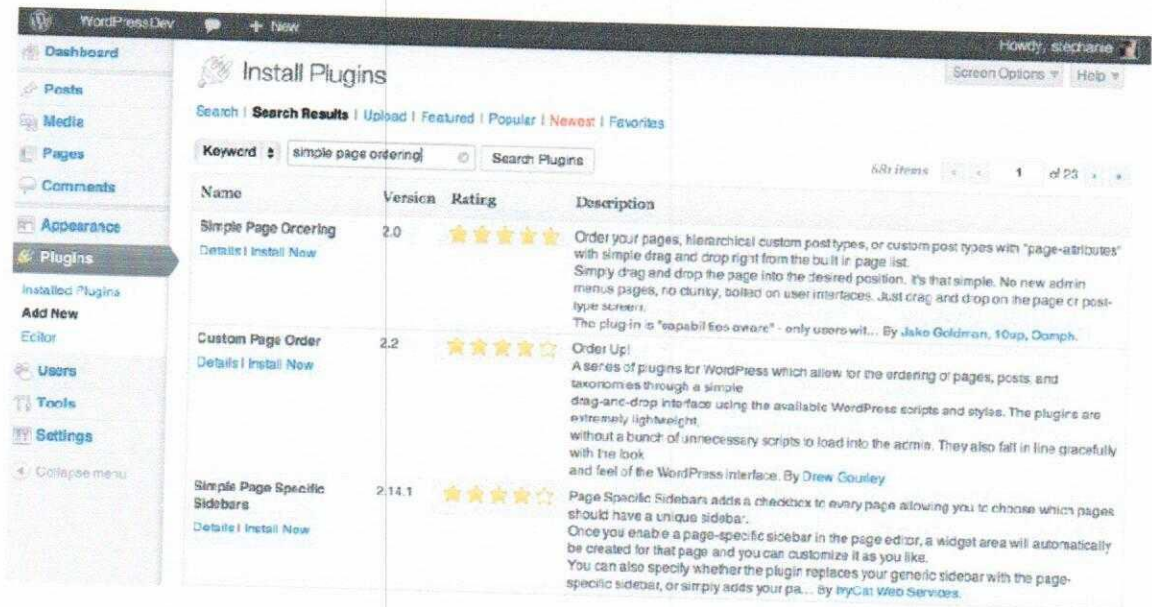
Fig 4.12: installing plugin

4.11.2 USERS

This screen lists all the existing users for RASMED Publications website. Users with roles other than the administrator will see fewer options when they are logged in. New users can be added and their roles can be managed by the admin.

4.11.3 CATEGORIES

The category section can be used to define sections of the site and group related posts. The default category is uncategorized but this can be easily changed in the settings. Pages cannot be associated with categories. Categories can be associated to a post. There are two ways of

adding a category, it can be added whilst adding or editing post or via the categories menu option. List of existing categories on the ordering system website:

i. Literature

ii. Religion

iii. Vocational

iv. Jss 1- 3

v. Ss1- 3

vi. Pry 1-5

4.12   System Documentation

The need for documentation of a program arises from the fact that the program may develop problems usually referred to as 'bugs' long after it had been written. In this project work a detailed documentation is given for each module, therefore will ease the maintenances of the project work.

4.12.1 Operating The System

Before this project work can be used it requires the user to be oriented by the programmer, therefore, will enable the user to be familiar with the modules contained in the program and the function of each modules are expected to be explained in details by the programmer. Before the running of the program, it has to be installed on a PC and launched by the user, and then continues all orientated modules.

4.12.2 Functions Of Program Modules

i. LOGIN: This is the interface through which both existing customers that have registered login to make transactions and new customers that are yet to register login to register.

ii. SIGN IN: For authorized customer(s) to have access to ordering information page.

iii. MAKE PAYMENT: This is the page that displayed to customers that their payment have been accepted and will be process as soon as possible.

iv. LOG OUT: To terminate operation after customer(s) have confirm that their payment is accepted for processing

v. CANCEL: For both old and new customers to end processing if they have no information to supply.

4.13 SYSTEM CHANGEOVER METHOD

The process of putting the new information system into use and retiring the old (manual) system is known as system changeover. Listed below are the four changeover methods:

i. **Direct cutover**: The direct cutover approach causes the changeover from the old system to the new system to occur immediately when the new system becomes operational. It is the least expensive but involves more risks than other changeover methods.

Advantage

As we know rasmed publication ltd does not have enough funds for implementing the new system so it would be easier to implement direct cutover method in the rasmed publication ltd.

Disadvantage

This method of system changeover involves more risks of total system failure and it is preferred for commercial software packages. So if there is a system failure in rasmed publication ltd then it will be difficult to store information of child who visits rasmed publication ltd. And if there is no proper storage then there will be incorrect reports and monitoring of child's health will not be properly done.

ii. **Pilot operation**: The pilot changeover method involves implementing the complete new system at a selected location of a company. The group that uses the new system

first is called the pilot site. By restricting the implementation to a pilot site reduces the risk of system failure as compared with is less expensive than a parallel system.

Advantages

Pilot operation is combination of both direct cutover and parallel operation, which restricts the implementation to a pilot site and reduces risk of system failure as *compared with a direct cutover method.*

Operating system only at pilot site is less expensive than parallel operation for entire rasmed publication ltd and all health centers.

If we use parallel approach to complete the implementation then the changeover period can be much shorter if system proves successful at the pilot site so a lot of time will be consumed at rasmed publication ltd in implementing the new system.

Disadvantage

This method is also costly as compared to the direct cutover.

iii. **Phased operation**: The phased operation changeover method involves implementing the new system in stages, or modules. We can implement each subsystem by using any of the other three changeover methods. In this approach risk of errors or failures is limited to the implemented module only as well as it is less expensive than the full parallel operation.

For implementing child health information system we can use above methods but there are some advantages as well disadvantages of using these systems, which are explained below:

Advantages

As we know in this method we have to implement the new system in stages, or modules, which is less prone to risk of system failure or errors at health centers, as failure is limited to the implemented module only.

It is also less expensive than parallel system because we have to work only with one part of system at a time.

Disadvantage

As the system, which we are implementing, involves various phased operation like treatment, measuring weight, registration, vaccination etc so it can cost more than the pilot approach.

iv. **Parallel operation:** The parallel operation changeover method requires that both the old and the new information systems operate fully for a specified period. Data is input to both systems and output generated by the new system is compared with the equivalent output from the old system. When users, management, and IT group are satisfied that the new system operates correctly then the old system is terminated. It is the most costly changeover method and involves lower risks.

Advantage

The advantage of parallel system is lower risk of system failure so all the tasks can be done properly at rasmed publication ltd. If the new system does not work properly, the rasmed publication ltd can use the old manual system as a backup until appropriate changes are made.

Disadvantage

As we know parallel system is the most costly changeover method as both old and new systems operate fully for specified period and we also know that the budget of rasmed publication ltd is also low so it will be difficult for rasmed publication ltd to follow this changeover process.

From the above information, the parallel approach is the most suitable approach which is a combination of fewer risks as well as less implementation cost because while we are running the Library Information Management System we keep track

with the manual system to verify and validate that the system is working correctly and it also makes it easier to detect error(s) if any occur. Chance of system failure is minimal.

4.14 User's Manual

The user's manual contains the description of the entire package. It involves the following:

1) Allow computer system to boot

2) Insert the CD into the drive

3) Open RASMED bookstore folder

4) Launch the server

5) Launch into the internet information services.

6) Log in form appears requesting for user's name and password.

7) For new users, click on signup on the log in page.

8) Enter correct username and password to have access to ordering page.

4.15 Maintaining the system

Maintenance is any activities carried out after the implementation of the new system to make sure that the system is correctly and constant running. This can be any of the following types of maintenance.

(a)   Corrective maintenance: This is done to correct and defect that discover in the course of using the new system to keep the system in tune with day to day function.

(b)   Adaptive maintenance: This is done to make sure that the system is not obsolete and adapt to any new systems of technology.

(c) Preventive Maintenance: This is a kind of maintenance adopted for continuous improvement in new system without waiting for the failure to occur or for the user to change. This is adopted to prevent the occurrence of failure.

4.16   Evaluations of the System

In an attempt to evaluate the designed system, it is important that we look back at the predefined functionalities, goals and objectives and analyze those in relation to the expectations met by the system. The online ordering system was evaluated based on the set of predefined objectives and expected functionalities it was able to fulfill. The online ordering and delivery system was designed to facilitate efficient records management in customers purchase by providing an efficient, reliable computerized order information system and after a careful evaluation process; it met a considerable portion of those expectations.

The main objective was to implement system that enables faster and more efficient storage, retrieval and convenience to customer and the staff of RASMED Publications ltd. As far as this is concerned, the system met this expectation by giving direct benefit to RASMED publication ltd, such as fast records retrieval. It also included functionalities that enable all data entrants to access the system web base with the assumption that a client-server architecture is in place, retrieve records on demand and execute important reports to support daily reservation tasks.

Fundamentally, the effectiveness of this project depended on meeting the project's specific objectives which were as follows; ease stress on customer when making purchase, database of available books and warehouse record keeping, to ensure system issues an electronic receipt and track number. All the objectives were met by the system, to a certain extent; Analysis was successfully completed. This evaluation is based on the fact that data requirements were collected that successfully enabled the design and development of the system.

The system design and development was carried out in a systematic manner and was based on user requirements defined by the end users. The design objectives of creating an efficient online ordering system was further accomplished with the creation of add, delete, search and edit functionalities in the system that not only enable computerized but rather efficient, reliable and fast data entry. All these functionalities possess a relatively high level of accuracy. In evaluating this objective in relation to the system's performance, it would therefore be accurate to state that it was achieved to a large extent.

Still while evaluating the system design and performance, the system enables the synchronization of records through its server-client architecture with a single database. Therefore data entered from one recording station will be seen on another recording station using the same system.

Critical Evaluation

For an evaluation process to be fully comprehensive, it should also include a critical assessment of the system. Therefore, despite the fact that the findings obtained after an evaluation showed that the system met its expectations to a large extent, it had a few shortcomings. These limitations are discussed in the next section.

4.17 Problems Encountered

In attempting to design the system, the following problems were encountered.

i.   **Accessing Research Material**

Accessing associated research material was quite a challenge. This was particularly the case because of the limited variety of books and journals in relation to the research topic in the local library. To further escalate the challenge, online resources were close to impossible to access due to the university's slow internet speeds that made it impossible to download books and journals.

ii.   Understanding Key Concepts

Limitations as far as understanding the key concepts also posed a major challenge. Considering the fact that most of the concepts were new, I had to spend a considerable amount of time learning the concepts. This took away a lot of valuable time that would otherwise be fully dedicated and utilized to the design of the system.

iii.   Programming skills

Learning PHP, CSS and HTML and MySQL requires considerable practice for one to gain the programming skills. With limited knowledge and ability, this limited the number of functionalities that I could implement into the system.

iv.   Unanticipated Expenditure

Also I was met with a few financial constraints as a result of unanticipated expenditure. In order to cater for the slow internet speeds in the university premises, I had to subscribe for a dial-up internet connection in order to proceed with the project unhindered. This expenditure was however unforeseen and therefore posed a challenge.

CHAPTER FIVE

SUMMARY, CONCLUSION, RECOMMENDATION

5.1 Summary

At the end of this project work, I was able to design and develop a website that can successfully handle online book ordering for RASMED Publications, Ibadan. In the process of the design, data and information was obtained from the organisation about sales process and ordering, and goods delivery method to retailers or interested consumer. Other benefits are:

i. Provision of facility for handling text electronically using, powerful and sophisticated word processors to produce elegant and error free documents.

ii. Storage of organization operational data on disk backing storage.

iii. With the installed software, product ordering and delivery was made easier.

5.2 Conclusion

The use of online shopping at all business organization is a great plus to the company itself, the consumer and the country as a whole.

Its contribution can't be belittle in all ramification. Has all consumer wants variety, convenience and cheap price. I was able to experience and notice problem faced by consumers of product of this particular company.

Ecommerce is widely considered the buying and selling of products over the internet, but any transaction that is completed solely through electronic measures can be considered e-commerce. The role of internet in day to day online retail marketing and people using this technology are increasing all over the world.

The development of online book ordering system involved many phases and step. Using the waterflow model, each step was carefully considered and examined with what first, then how to design, to implementation, moving to successive levels of system development methodology. this research project I have been able to understand more about the act of online shopping and ordering.

In the course of this study, many problems were discovered to have hindered the effectiveness of the existing manual system. These problems, information needs and activities were documented and later used as the basis for system design, which immediately followed the first phase. The design phase was concerned primarily with the specification of the system elements in manner that best met the organization's business needs.

During this phase, strict adherence was made on proven software engineering principles and practices. To implement this design, a computer program was then written and tested in phpMyadmin environment.

It is hoped that effective implementation of this software product would eliminate many problems discovered during systems investigation.

It is not only the manufacturer i.e RASMED PUBLICATIONS Ltd, that will benefit from the delivery. Including goods delivery as a critical element of business service delivery will improve customer satisfaction; reduce loss by developing improved tracking system.

5.3 Recommendation

Based on the problems associated with online ordering process, the following recommendations could facilitate the adoption and usability of online ordering in Nigeria:

i. **Improve marketing campaigns:** online retailers must be persistent in efforts to create effective and relevant advertising campaigns that appeal to the Nigeria populace.

ii. **Increase internet awareness:** strategies mst be put in place to further increase access to the internet and its use. Both public and private organization should solve this problem of computer usage illiteracy.

iii. Customers should be offered a wide range of delivery method.

It is known that for any meaningful computer based information management to be integrated into any organization, proper training and orientation has to be given both to the staff and management. The staff should also be highlighted on the need and advantage of the new system and how it will equally assist them in the field of record keeping.

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APPENDIX

```html
<!DOCTYPE html>

<html lang="en-US">

<head>

<meta charset="utf-8">

<!--[if IE]><meta http-equiv='X-UA-Compatible' content='IE=edge,chrome=1'><![endif]-->

<meta name="viewport" content="width=device-width, initial-scale=1, maximum-scale=1" />

<link rel="profile" href="http://gmpg.org/xfn/11" />

<link rel="pingback" href="http://localhost/bookstore/xmlrpc.php" />


<link rel="shortcut icon" href="//localhost/bookstore/wp-content/themes/porto/images/logo/favicon.ico" type="image/x-icon" />

<link rel="apple-touch-icon-precomposed" href="//localhost/bookstore/wp-content/themes/porto/images/logo/apple-touch-icon.png">

<link rel="apple-touch-icon-precomposed" sizes="114x114" href="//localhost/bookstore/wp-content/themes/porto/images/logo/apple-touch-icon_114x114.png">

<link rel="apple-touch-icon-precomposed" sizes="72x72" href="//localhost/bookstore/wp-content/themes/porto/images/logo/apple-touch-icon_72x72.png">

<link rel="apple-touch-icon-precomposed" sizes="144x144" href="//localhost/bookstore/wp-content/themes/porto/images/logo/apple-touch-icon_144x144.png">
```

```html
<title>Rasmed Publications</title>


<!--[if IE]>

<link rel="stylesheet" href="http://localhost/bookstore/wp-
content/themes/porto/css/ie8.css?ver=2.5.1" />

<![endif]-->

<style rel="stylesheet" property="stylesheet" type="text/css">

  #header .logo {

    max-width: 170px;

  }

  @media (min-width: 1170px) {

   #header .logo {

     max-width: 250px;

    }

  }

  @media (max-width: 991px) {

   #header .logo {

     max-width: 110px;
```

```
        }

    }

    @media (max-width: 767px) {

        #header .logo {

            max-width: 110px;

        }

    }

    #header.sticky-header .logo {

        max-width: 100px;

    }

</style>

<link rel="alternate" type="application/rss+xml" title="Rasmed Publications &raquo; Feed"
href="http://localhost/bookstore/feed/" />

<link rel="alternate" type="application/rss+xml" title="Rasmed Publications &raquo;
Comments Feed" href="http://localhost/bookstore/comments/feed/" />

<link rel="alternate" type="application/rss+xml" title="Rasmed Publications &raquo; Home
Version 2 Comments Feed" href="http://localhost/bookstore/home-version-2/feed/" />

                <script type="text/javascript">
```

```
window._wpemojiSettings =

{"baseUrl":"http:\/\/s.w.org\/images\/core\/emoji\/72x72\/","ext":".png","source":{"concatem

oji":"http:\/\/localhost\/bookstore\/wp-includes\/js\/wp-emoji-release.min.js?ver=4.2.5"}};

!function(a,b,c){function d(a){var

c=b.createElement("canvas"),d=c.getContext&&c.getContext("2d");return

d&&d.fillText?(d.textBaseline="top",d.font="600 32px

Arial","flag"===a?(d.fillText(String.fromCharCode(55356,56812,55356,56807),0,0),c.toDat

aURL().length>3e3):(d.fillText(String.fromCharCode(55357,56835),0,0),0!==d.getImageDat

a(16,16,1,1).data[0])):!1}function e(a){var

c=b.createElement("script");c.src=a,c.type="text/javascript",b.getElementsByTagName("hea

d")[0].appendChild(c)}var

f,g;c.supports={simple:d("simple"),flag:d("flag")},c.DOMReady=!1,c.readyCallback=functio

n(){c.DOMReady=!0},c.supports.simple&&c.supports.flag||(g=function(){c.readyCallback()

},b.addEventListener?(b.addEventListener("DOMContentLoaded",g,!1),a.addEventListener(

"load",g,!1)):(a.attachEvent("onload",g),b.attachEvent("onreadystatechange",function(){"co

mplete"===b.readyState&&c.readyCallback()})),f=c.source||{},f.concatemoji?e(f.concatemoj

i):f.wpemoji&&f.twemoji&&(e(f.twemoji),e(f.wpemoji)))}(window,document,window._wpe

mojiSettings);

</script>

<style type="text/css">

img.wp-smiley,

img.emoji {

    display: inline !important;
```

```css
        border: none !important;

        box-shadow: none !important;

        height: 1em !important;

        width: 1em !important;

        margin: 0 .07em !important;

        vertical-align: -0.1em !important;

        background: none !important;

        padding: 0 !important;

}
```

</style>

<link rel='stylesheet' id='bsf-Defaults-css' href='http://localhost/bookstore/wp-content/uploads/smile_fonts/Defaults/Defaults.css?ver=4.2.5' type='text/css' media='all' />

<link rel='stylesheet' id='js_composer_front-css' href='http://localhost/bookstore/wp-content/plugins/js_composer/assets/css/js_composer.css?ver=4.7' type='text/css' media='all' />

<link rel='stylesheet' id='ultimate-style-min-css' href='http://localhost/bookstore/wp-content/plugins/Ultimate_VC_Addons/assets/min-css/ultimate.min.css?ver=3.13.4' type='text/css' media='all' />

<link rel='stylesheet' id='porto-plugins-css' href='http://localhost/bookstore/wp-content/themes/porto/css/plugins.css?ver=4.2.5' type='text/css' media='all' />

```
<link rel='stylesheet' id='porto-theme-css'  href='http://localhost/bookstore/wp-
content/themes/porto/css/theme.css?ver=4.2.5' type='text/css' media='all' />

<link rel='stylesheet' id='porto-theme-shop-css'  href='http://localhost/bookstore/wp-
content/themes/porto/css/theme_shop.css?ver=4.2.5' type='text/css' media='all' />

<link rel='stylesheet' id='masterslider-main-css'  href='http://localhost/bookstore/wp-
content/themes/porto/css/masterslider.main.css?ver=4.2.5' type='text/css' media='all' />

<link rel='stylesheet' id='porto-skin-css'  href='http://localhost/bookstore/wp-
content/themes/porto/css/skin_1.css?ver=4.2.5' type='text/css' media='all' />

<link rel='stylesheet' id='porto-style-css'  href='http://localhost/bookstore/wp-
content/themes/porto/style.css?ver=4.2.5' type='text/css' media='all' />

<link rel='stylesheet' id='porto-google-fonts-css'
href='//fonts.googleapis.com/css?family=Open+Sans%3A300%2C300italic%2C400%2C400i
talic%2C600%2C600italic%2C700%2C700italic%2C800%2C800italic%7CShadows+Into+
Light%3A300%2C300italic%2C400%2C400italic%2C600%2C600italic%2C700%2C700ital
ic%2C800%2C800italic%7C&#038;subset=latin%2Cgreek-ext%2Ccyrillic%2Clatin-
ext%2Cgreek%2Ccyrillic-ext%2Cvietnamese&#038;ver=4.2.5' type='text/css' media='all' />

<script type='text/javascript' src='http://localhost/bookstore/wp-
includes/js/jquery/jquery.js?ver=1.11.2'></script>

<script type='text/javascript' src='http://localhost/bookstore/wp-includes/js/jquery/jquery-
migrate.min.js?ver=1.2.1'></script>

<script type='text/javascript'>

/* <![CDATA[ */
```

```
var wc_add_to_cart_params = {"ajax_url":"\/bookstore\/wp-admin\/admin-

ajax.php","i18n_view_cart":"View

Cart","cart_url":"http:\/\/localhost\/bookstore\/cart\/","is_cart":"","cart_redirect_after_add":"n

o"};

/* ]]> */

</script>

<script type='text/javascript' src='//localhost/bookstore/wp-

content/plugins/woocommerce/assets/js/frontend/add-to-cart.min.js?ver=2.3.10'></script>

<script type='text/javascript' src='http://localhost/bookstore/wp-

content/plugins/js_composer/assets/js/vendors/woocommerce-add-to-

cart.js?ver=4.7'></script>

<script type='text/javascript' src='http://localhost/bookstore/wp-

content/plugins/Ultimate_VC_Addons/assets/min-js/ultimate-

params.min.js?ver=3.13.4'></script>
```