Thesis Article Summary

The shift from traditional business and commerce practices in developing countries or third world countries to information technology especially E-commerce and online business transaction in terms of buying and selling, advertising, marketing and banking is fast gaining ground as an accepted and used business paradigm today. While Papua New Guinea as a developing country in the neighboring Indonesia and the Pacific Islands moves toward e-commerce, more effect needed to be put and apply in the areas of information technology industry towards solving the issue of traditional business of advertising, auctioning, marketing of properties, products and goods locally and in mainstream media from newspapers, televisions to the website on the internet to provide a more robust business approach, growth, development and to deliver an effective and efficient service delivery to doorstep of each provinces with its 8 million plus population. More and more business houses are implementing web sites providing functionality for performing governmental, commercial and business transactions over the web. Papua New Guinea (PNG) is rapidly growing with the trend but the creation and development of an online information system especially e-commerce is of a greater challenge to website and software developers to create, develop and to implement on a local approach. It is reasonable to say that the process of Auctioning, bidding and shopping on the web is becoming a must commonplace on the World Wide Web and PNG is no exception.

The objective of this project is to develop a general purpose e-commerce Auctioning website where any product (such as books, CDs, computers, mobile phones, electronic items, and home appliances with properties such as cars and trucks even houses) can be auction, bid and bought from the comfort of home through the Internet.
However, for implementation purposes, this paper will deal with an Online Auctioning Store An online store is a virtual store on the Internet where customers can browse the catalog and select products of interest. The selected items may be collected in a shopping cart. At checkout time, the items in the shopping cart will be presented as an order. At that time, more information will be needed to complete the transaction. Usually, the customer will be asked to fill or select a billing address, a shipping address, a shipping option, and payment information such as credit card number. An e- mail notification is sent to the customer as soon as the order, bid or auction is placed.

The move from traditional business and commerce methods comes about with the creation of Information System to e-business or e-commerce. Information system uses computer based resources like its servers,hardwares and softwares that communicates over the network system of wifi,public and private networks and optic fiber cables to the internet or World Wide Web to gather and receive the intended data and information for conducting businesses and transactions daily. Most people over the world uses internet with Google or yahoo as the search engines to disseminate information and data. For instance, online retail in the United States is a multi-billion dollar sector of business-to-consumer transactions where goods are sold via the internet. There are different online retail website categories: some retailer websites are based on brick-and-mortar stores whereas others are designated online retailing companies. There are also auction sites which allow third party or private sellers to market their goods.

Most online retail sites require an on-site registration where users provide their payment and shipping details. Online retail sites enable customers to browse a range of products before placing them into an electronic shopping cart. Customers can usually select one of several digital payment options before completing the transaction and having the items shipped to them. Online retail sites are not bound to a physical location or regulations such as store opening times, and as such, have proven themselves immensely convenient for consumers.
In the United States, Amazon.com is the by far most popular online retail site. The market leader averages more than 150 million unique visitors per month and is also leading in terms of revenue and reach. The site's broad assortment of goods as well as various online offers such as Amazon Prime or third-party selling make it the perfect platform for online shoppers to advertise, market and to sell products online. E-bay is betting on regions of the world where consumers and merchants are starting buy and sell more over the Internet. The company predicts that 25 percent of its users will be in developing countries at the end of 2015, up from about 5 percent in 2012, as EBay works to narrow Amazon.com Inc.'s lead in global e-commerce, according to Bloomberg business reports. In order to be with the trend of e-commerce B2C and C2C we have to be smart in creating and developing online e-commerce information systems and to sell and buy, auction and conduct business regularly online. One such information system that will be discuss throughout this paper about its system development is Online Auctioning Information System which is part of a web based E-commerce business over the internet that will serve the need of customers/clients in Papua New Guinea especially.

Papua New Guinea (PNG) Consist of twenty two (22) provinces with more than a hundred (100) plus small islands. Port Moresby is the capital city. Geographically, it similar to Indonesia with its outer islands, mainland is mountainous with terrains and it is a difficult place to conduct business because of the geography. PNG mainly has two major telecommunication companies which provide telephone, internet and broadband services to its clients throughout the country. Other small companies and businesses provided and offer internet services in each provinces as a way to access data and information online. When it comes to e-commerce and business transaction online people are still used to the old ways of conducting trades and services.

The main trend of marketing products, advertise properties, selling and buying and do business is via:

1. Television
2. Social media-Facebook (recently)
3. Newspaper
4. Radio

Auction and bidding of traditional products and artefacts, local properties-houses, cars electronic equipment and home furniture's among others mostly are done at a designated location, broadcast or advertise on mainstream media for time and location. Considering the problem of location, time and the business environment to conduct such business deals and transaction only a few get the privilege of advertising ,marketing, auction and bid their new or old products to only a few. That is where the Online auctioning information system comes in to assist in location and time and to conduct business in a more suitable and user friendly environment, that's the magic of information technology.

1.1 PROBLEM IDENTIFICATION AND FORMULATION

From the background description, some of the issues and obstacles in the current environment in PNG as to how people conduct their system of auctioning, bidding, buying and selling of properties and goods are:

1. Only few customers have access to auction, bid goods and properties and to sell and to be bought
2. The business transaction is conducted in a closed, centralized environment
3. Customers/clients are often late to buy properties, goods and are not given the maximum opportunity to choose to buy a resell property or products.
4. Bidding and Auctioning of properties and resell goods or items is still done traditionally, not via electronic wise.

Therefore based on the identified issues stated above, the current problems of the shift from traditional to e-commerce and e-business method can be directly approach and formulated by creating or developing an online e-commerce specifically Auctioning Information System.

So questions on a new approach can be formulated as ask as to:

a) How can the web base auctioning information system solve the obstacles and problems verified in point's I-IV above?

b) How can the new developed Auction Information system help to solve in the effectiveness and efficiency of conducting business online from traditional to a more web base approach?

c) How can the new Web Based Information System- Auction Online Information System help deliver and give basic information, data and a win approach to its users?

d) How can the information system be designed, developed and implemented to meet the end needs of its users?

e) Will it meets the customers, clients and end users satisfaction and wants?

1.2 RESEARCH OBJECTIVES

The main purpose and objectives for conducting this research are as follows:

1.2.2 Purpose

The main aim of this final research paper study is to design and develop a reliable web-based (e-commerce) Auction Information System for the customers, clients and end users in PNG which will cover admin dashboard, customer login credentials with products and properties for viewing auction items for bidding and to buy via the World Wide Web.

1.2.3 Objectives

1. To analyze and move from a traditional base approach to e-commerce, e-business approach online.
2. To design a web-based information system approach for Auctioning, bidding and to buy products online
3. To test the new development of Web base information system to meet the end needs of customers, clients and end users.
4. To implement the web-based Auction Information System over the web for usage.

1.3 RESEARCH IMPLICATIONS

It is expected this undergraduate major project paper will be useful by the following parties:

1.3.1 Practical Uses

The development of the web base information system-Auction Information System will be used by anyone in PNG or clients from different countries as well. Basically anyone can use it but it will be develop to tailor the need of e-commerce growth in Papua New Guinea.

1.3.2 Academic Uses

1. Institutions

This undergraduate major research paper will be used as a reference journal for future students working on similar projects, so long as it is cited for referencing.

2. For Researchers

The ideas generated in this research may also be implemented by future researchers who wish to broaden their knowledge about information systems development.

1.4 LIMITATIONS OF STUDY

Because the e-commerce website will be a new site in PNG thus taking into consideration of limited time offer to create and the given space and ability of only a single researcher, the discussion of this study will be restricted to the following regarding the development of the web-based e-commerce information system-Online Auctioning website in PNG.

1. The development of the Auctioning site in PNG This system will cater for customers, clients' sellers and resellers to bidders to get to know what products and property is on the market, online.
2. Shipment and delivery of properties and products bided and auctioned on the new e-commerce information system, online website will be limited to this study only.
3. Payment options and method in conducting the transaction online to will be strictly limited to the purpose of this study paper only.

1.5TIME AND LOCATION

This research was conducted online with several social media PNG users who regularly buy and sell products and properties. The research is also in collaboration with the National Research Institute Office in Papua New Guinea for establishing E-commerce growth in PNG. The duration of time allocated for this research was from January 5th 2015 through to the end of March 2015.

Research Schedule Timetable

Table 1.1 Research Schedule

Research Schedule																	
No	Time Table	January				February				March				April-June			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
1	Data Collection	Interviews & Data Collection															
2	**Prototyping** a) Define Process					Mapping of system processes using DFDs and ERDs											
	b) Define Database								Database Design: Creation of database tables and their relations using MySQL (XAMPP)								
	c) Define Coding											System coding Programming languages using XAMPP, JavaScript, HTML &CSS					
3	Testing and Evaluation														System Testing to meet user requirements.		

1.6 THESIS OUTLINE

CHAPTER I: INTRODUCTION

This chapter proposes the research background, problem identification, research objectives, research usability and the limitations of the research.

CHAPTER II: LITERATURE

This chapter contains the citing of literature and previous studies, related to the development of E-commerce specifically Auction Information System

CHAPTER III: RESEARCH METHODOLOGY

This chapter basically discusses the research methodology and procedures used in the development of the Web Base (online) Auction Information system for e-commerce purposes.

CHAPTER IV: SYSTEM ANLYSIS AND DESIGN-RESULTS AND DISCUSSION

This chapter proposes the analysis and design of the web-based Auction Information System. It discusses the development of the proposed system, including processes, data interpretation, database design, coding and software testing with results and discussion.

CHAPTER V: FUTURE WORK AND CONCLUSION

The final last chapter is the conclusion of the research that will be made, and certain recommendations concerning the usability and maintenance of the developed system will be outlined for its usage in the near future.

The business-to-consumer (B2C) aspects of electronic commerce (e-commerce) is the most viable and visible business use of the World Wide Web in modern technology today. The primary purpose goal of an e-commerce site is to sell goods and services online.
This project deals with developing an e-commerce website for Online Auctioning in Papua New Guinea (PNG).It provides the user with a categories ranging from home furniture to cars and trucks, to properties, electronic gadgets and hardware products to be auction for interested buyers to view, bid and to buy it online. In order to facilitate online purchase a shopping cart is provided to the user. The system is implemented using a 3-tier approach, with a backend database, a middle tier of Apache web server and PHP, all in one XAMPP and a web browser as the front end client. In order to develop an e-commerce website, a number of Technologies must be studied and understood. These include multi-tiered architecture, server and client side scripting techniques, implementation technologies such as ASP.NET, PHP, programing

language (such as C#, VB.NET, JavaScript), relational databases (such as SQL, MySQL, Access).This undergraduate thesis final paper project (Skripsi) main objective is to develop Online Auction management system in PHP with MySQL in XAMPP application, with the aim to develop and implement an Online auction system in PNG where administrator of the site can login and add auction items so user can search and view details of auction items with images, address and auction date / time. It is also provided with a shopping cart application and also to know about the technologies used to develop such an application. This document will discuss each of the underlying technologies to create and implement an e-commerce website for auctioning and bidding for goods and properties and to provide a means of effective and efficient online public services to its customers/clients throughout PNG.