TITLE PAGE

EXTENT OF UTILIZATION OF E-COMMERCE BY SOFT DRINK MANUFACTURING COMPANIES IN ANAMBRA AND ENUGU STATES

BY

OKEKE-EZEANYANWU, JOY AMECHI. PG/Ph.D/06/40979

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DOCTOR OF PHILOSOPHY IN BUSINESS EDUCATION

SUPERVISOR: PROF. E. E. AGOMUO

NOVEMBER, 2016 APPROVAL PAGE

This thesis has be	This thesis has been approved for the Department of Business Education, University of		
Nigeria, Nsukka.			
	Ву		
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Prof. E. E. Agomuo Supervisor		Internal Examiner	
External Examiner	. —	Prof. C. A. Obi d of Department Business	

Prof. C. A. Igbo

Dean, Faculty of Vocational and Technical Education

CERTIFICATION

This is to certify that Okeke-Ezeanyanwu, Joy Amechi., a postgraduate student in the Department of Business Education and with Registration Number PG/Ph.D/06/40979 has satisfactorily completed the requirements for the research work for the degree of Doctor of Philosophy (Ph.D) in Business Education. The work in this thesis is original and has not been submitted either in part or in full for any diploma or degree of this or any other university.

Prof. E. E. Agomuo Okeke-Ezeanyanwu Joy Amechi.

Prof. E. E. Agomuo (Supervisor)

Okeke-Ezeanyanwu Joy Amechi.
(Student)

DEDICATION

I dedicate this work to God Almighty for His Light, Love, Divine Mercies and Protection throughout the period of this programme of study.

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ABSTRACT

This study was undertaken to determine the extent of utilization of e-commerce by Soft Drink Manufacturing Companies in Anambra and Enugu States of Nigeria. Six research questions and six null hypotheses guided the study. The study adopted a survey research design .Six components of e-commerce namely: transaction server, Internet communication line, database and database server, web server, router and Client or workstation were studied. The population for the study was comprised of 296 employees of the Soft Drink Manufacturing Companies from the two States. No sample was taken due to the manageable size of the population. A structured 82- item questionnaire with five response categories on the degree of utilization was used as instrument for data collection. The instrument was validated by three experts from the University of Nigeria, Nsukka. The internal consistency of the questionnaire items was determined using Cronbach Alpha reliability method which yielded .50, .82, .76, .59, .78 and .82 for the six clusters respectively while the overall reliability coefficient of the instrument was .71. Copies of the questionnaires returned were 280 constituting 95 percent of the targeted population. Mean and standard deviation were used to answer the research questions. The six null hypotheses were tested using Analysis of Variance (ANOVA) statistic as they involved more than two groups in each case at 0.05 level of significance. The result of the study revealed that while router component of e-commerce was moderately utilized, all the other components of ecommerce were found to be utilized at low extent and very low extent leaving a far reaching implications for marketing education and Soft Drink Manufacturing Companies in Nigeria. The result of the null hypotheses showed that there was no significant difference in the mean ratings of the opinions of Marketing Managers, Sales Managers, IT Managers, Accounts Managers and Sales Representatives on the extent of utilization of Web Server and Client or Workstation with respect to their years of experience in marketing of the organization's products and their educational qualifications. There was however, significant differences in the mean ratings of the opinions of Marketing Managers, Sales Managers, IT Managers, Accounts Managers and Sales Representatives on the extent of utilization of Transaction Server, Internet Communication Line, Database and Database Server and Router components of e-commerce. It was recommended among others that educational institutions offering marketing education should urgently review their curriculum contents to fall in line with current global practices. This will help Lecturers to teach properly and the graduates to acquire the right knowledge and skills.

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INTROLUCION

Background of the Study

There is a fundamental shift in the way business is conducted nowadays. People are now moving rapidly away from a world in which national economies were relatively within a country and where there is no interaction with other countries to where the barriers to cross-border trade are crumbling and where perceived distance is shrinking due to innovations in transportation and telecommunication technology. Globalization, internationalization and the internet had greatly lowered barriers in terms of trade, politics, economies and technology, forcing many organizations to either conform to modern trends of doing business or be left behind in their old ways and become extinct in no time. Globalization largely driven by Information and Communication Technology (ICT) is radically changing ways of doing things at home, school, in government and in business. This change has brought about a new method in buying and selling through the internet known as electronic commerce.

Electronic commerce (E-Commerce) is the buying and selling of goods and services over a variety of computer networks (World Trade Organisation, 2013 and Oborah, 2011). Chaffey (2009) added that e-commerce is all electronically mediated information exchanges between an organization and its external stakeholders. Osuala (2009) argued that many business leaders might think of e-commerce simply as the exchange of goods and services for payment over the Internet. The author argued that e-commerce in its broadest sense, encompasses any commercial activity that takes place directly between a business, its partners or its customers through a combination of computing and communication technologies. E-commerce has become the most

popular application in marketing, earning large revenues and forging a rapid growth in related technology. Companies are now adopting social computing technologies that were designed for individual use (such as blogs, wikis, file sharing and social networks) to increase the effectiveness and efficiency of their operations (Turban, King, Lee and Chung, 2008). Today, the ever-changing manufacturing company is more global than ever.

E-commerce is an innovation in Information and Communication Technology that is changing the way marketing is being conducted globally and is a driving force of the current globalization by ensuring that marketing activities take place with minimum barrier in terms of location and time. Trepper (2000) emphasized that electronic commerce can be used to create brand equity and improve an organization public image, as well as to develop and strengthen direct relationship between an organization and its customers, distributors, suppliers and retailers. According to Owens and Beynon-Davies (2001), e-commerce is conventionally divided into different domains such as Business to Business (B2B), Business to Consumer (B2C), Consumer to Business (C2B) and Consumer to Consumer (C2C) e-commerce. Business to Business Electronic Commerce is the use of Information and Communication Technology to facilitate payment management, inventory management and distribution management between business organizations. Business to Business e-commerce concentrates on supply chain and procurement issues. Business to Consumer Electronic Commerce on the other hand, involves online selling of goods to the final consumers. The business offers a set of merchandise at given prices, discounts, shipping and delivery options. Consumer to Consumer e-commerce involves the online exchange of goods and services and information among consumers. E-commerce usually takes place at B2B although individuals who are organizing events like burial ceremonies, naming ceremonies, parties etc engage in e-commerce by ordering for products

online and the products are delivered to them. E-commerce activities are carried out in organizations with the help of e-commerce technical components (Vaithianathan, 2010). E-commerce technical components include Client or PC Workstation, Transaction Server, Internet Communication Line, Database and Database Server, Web Server and Router (Osuala, 2009 and Agomuo, 2005). A workstation is a special computer designed for technical or scientific applications intended primarily to be used by one person at a time. They are commonly connected to a local area network and run multi-user operating systems. Transaction Server is a software component for e-commerce that is used in implementing business transactions. It includes e-mail, Linkedin, Facebook etc (Osuala, 2009). The duty of transaction server is to process business transactions according to the business transaction rules established by the organization. The Transaction Server processes business transactions and is usually done using the Internet Communication Line.

Internet communication line is an e-commerce component that enables organizations to communicate with their customers and other business partners. It is a system for linking computers around the world (Perrault and McCarthy, 2005). Internet is an enabling technology that helps an organization to exchange information with its business partners and customers. Another component of e-commerce is Database and Database server. Database stores detailed data about the operations of an organization. A database is an organized collection of data for one or more purposes, usually in digital form. A database server is a computer in a network dedicated to database storage. Workstation in one organization is used to update data in a database server. When the data is correct, the user tells the system to transmit the data via a Web Server.

A web server is used to transmit data. It can be referred to as either hardware or the computer application—that helps to deliver content which can be used to access information through the internet. The Web Server transmits the data over the Internet to another organization via the router. A router is a device that forwards data packets (units of information) from one network address in each transmission and make a decision on how to send it based on the most expedient route determined by traffic load, line cost, speed and bad lines (Trepper, 2000). Many organizations utilize these e-commerce components since the race for survival in business in this digital age is defined by the effective and efficient utilization of e-commerce components (Oborah, 2011 and Kotler, 2004). In this study, the use of e-commerce components refers to the utilization of e-commerce for business and marketing activities.

Utilization connotes the use of an item, idea or object to solve a problem or to achieve an objective. To utilize, according to Hawkins (2005), is to find a use for something. The utilization of e-commerce components has brought a new trend in the concept of marketing. Global marketing realities indicate that the extent of utilization of e-commerce determines successful marketing in todays internet-driven marketing environment. The failure of organizations to embrace e-commerce could result to lack of business expansions, poor revenue generation, inability to create more jobs for the unemployed and above all closure of businesses like Nigeria Mineral Water Onitsha (Oborah, 2011 and Iddris, 2012). This confirmed the views of Owens and Beyon-Davis (2001) and Ogunyemi (2006) that the general level of utilization of e-commerce is not only low in some parts of developed and developing countries. E-commerce is utilized by soft drink manufacturing companies.

Soft Drink Manufacturing Companies are those companies that manufacture soft drinks or beverages without alcoholic content. Soft drink manufacturing companies in Nigeria include:

Seven-up Bottling Company Nigeria Plc, Nigeria Breweries Plc, Nigeria Bottling Company Limited, and Intafact Beverages Nigeria Limited. The products of the companies include Maltina, Amstel Malta, Guinness malt, Malta gold, Grand malt, Coke, Sprite, Mirinda, Fanta, Schweppes Bitter lemon, Savanna Apple drink, Pepsi, Soda Water, Maltex, Beta Malt, Mountain Dew and Five Alive. Many of these soft drink manufacturing companies are located in Enugu and Anambra States. These companies may utilize e-commerce in marketing of their products through different categories of employees. For the purpose of this study, these employees include Marketing Managers, Sales Managers, Information Technology (IT) Managers, Accounts Managers and Sales Representatives.

A Marketing Manager is one who creates value for customers and build strong customer relationships in order to capture value from customer in return. Marketing Managers plan the best ways of promoting their organizationsøproducts, services or message to as many people as possible (Kotler, 2004). The Marketing Managerøs aim is to find, attract, keep and grow target customers by creating, delivering, and communicating superior customer value. The Marketing Manager also researches and analyses market trends and also manages a team of marketing executives and assistants. The study considered this category of employees because e-commerce involves on line marketing activities engaged by Soft Drink Manufacturing Companies through electronic applications.

Similarly, a Sales Manager on the other hand, is concerned with managing personal selling (Perrault and McCarthy, 2005). The Sales Manager is in charge of the sales unit of any organization with full accountability for results and people whilst advancing the service standards of the organization and abiding by organization policy. Sales Managers are relevant for

e-commerce utilization in Soft Drink Manufacturing Companies. Apart from Sales Managers, IT Managers are also relevant in utilization of e-commerce in soft drink manufacturing companies.

The IT Managers are responsible for selecting hardware and software products appropriate for an organization, integrating these products with organizational needs and infrastructure, and installing, customizing and maintaining those applications for the organization computer users (Kotler and Armstrong, 2005). The IT Managers are relevant in this study because they perform network administration, software development and installation, and the planning and management of Soft Drink Manufacturing Companies technology life cycle, by which hardware and software are maintained, upgraded and replaced.

Accounts Managers are in charge of all organizationøs financies, recording all forms of payments or transactions made in the organization (both cash and electronic). Accounts Managers have a stake in any companyøs success or failure and at all times are poised to assist, advise, provide support, or withdraw it (Perrault and McCarthy, 2005). Accounts Managers occupy key positions in the Soft Drink Manufacturing Companies as these Managers take care of the revenues and cost activities of the companies. Accounts Managers are considered in this study based on the fact that these Managers handle all on line monetary transactions in e-commerce utilization in Soft Drink Manufacturing Companies. Apart from these Managers, Sales Representatives are also involved in the utilization of e-commerce in marketing of products of soft drink manufacturing companies. The Sales Representatives are those employees that personally contact and secure new business account/customers and coordinate sales effort with Marketing Managers, Sales Managers, Accounts Managers and IT Managers.

The Sales Representatives of an organization help the organization to achieve maximum sales profitability, growth and penetration within an assigned territory and/or market segment by

effectively selling the organization products and/or related services (Kotler and Armstrong, 2005). Apart from these managers, there are other demographic variable such as experience and educational qualifications that also aid the managers in their daily business and marketing operations in organizations. Experience refers to the knowledge and skill that one possesses through doing something for a period of time (Hornby, 2001). These knowledge and skills gained over time influence the way one thinks and behaves. Employees of Soft Drink Manufacturing Companies have various experiences depending on their years of working in the companies and the more the experience, the more efficient they become in performance of their duties.

Another demographic variable considered in the study is educational qualification. This refers to the achievement of individuals in the acquisition of learning experience and is often certificated at the end of such achievement. Acquisition of educational qualifications attests to the fact that the individuals who acquired such qualifications have been to school over a period of time and have acquired some knowledge and skills. Marketing Managers, Sales Managers, IT Managers, Accounts Managers and Sales Representatives in Soft Drink Manufacturing Companies, therefore, possess classes of degrees and certificates which include First degree, Masters Degree, Doctoral degree and Professional Certificate. The level of qualifications of the managers can help them in the way they think, solve problems and relate with others in the organization of the company, irrespective of which state they are located.

Anambra and Enugu States are chosen for this study because the two States have the highest number of Soft Drink Manufacturing Companies (one and three respectively) in the south Eastern States as against the other three States with less number of or without any Soft Drink Manufacturing Companies. For instance, Imo State has only one, Ebonyi State has none

and Abia State has none. Anambra State has one Soft Drink Manufacturing Company (Intafact Beverages Limited) and large Business Districts and Mega Depots of other Soft Drink Manufacturing Companies. Onitsha is the commercial nerve centre of Anambra State and is strategically located with bulk of the marketing of these soft drinks. These two States take the lead in the production and marketing of soft drinks in the South East of Nigeria and hence their choice for the study.

A preliminary study was carried out by the researcher to determine whether e-commerce is in use in the Soft Drink Manufacturing Companies in the two states. The study revealed that e-commerce is in use in the Soft Drink Manufacturing Companies especially to exchange information on the internet with their business partners like e-mail and web. However, it was observed that soft drink manufacturing companies are experiencing low sales, mismanagement of funds, ineffective and inefficient marketing of products and loss of global profitability (Oborah, 2011). There is uneven distribution of soft drinks in the states especially in the hinterland. This creates artificial scarcity of products especially during festive periods. Most often, this situation leads to price increase. It is therefore expected that determining the extent of utilization of e-commerce by Soft Drink Manufacturing Companies will address these issues. Hence, the need to explore the extent of utilization of e-commerce components by Soft Drinks Manufacturing Companies in Anambra and Enugu States.

Statement of the Problem

E-commerce is one of the innovations which have brought fundamental changes in the traditional market and marketing. E-commerce affects every aspect of how business is conducted. E-commerce is redefining the business landscape as it offers a new paradigm to businesses, thus having the potential of enriching a business venture and creating business

values. E-commerce enhances global reach, reduces cost of operation, increases sales and improves supply chain, and customer service relationship. These potentials have become strong motivations for the utilization of e-commerce by organizations all over the world.

Many organizations in Nigeria such as banks, oil companies and manufacturing companies, have adopted e-commerce in their business operations. This is because the quest for survival in business in this digital age is determined by the utilization of e-commerce components. Business organizations have understood that to be competitive in todayøs marketplace, such organizations should effectively utilize e-commerce in their business and marketing activities (Akintola, Akinyede and Agbonifo, 2011).

However, irrespective of various organizationsø adoption of e-commerce, it has been observed that many soft drink manufacturing companies are losing competition in favour of their contemporaries in todayøs globalized economy. Many of them are experiencing low sales, leakages, and mismanagement of funds, wastages and at times loss of products as a result of ineffective and inefficient marketing of product (Oborah, 2011).

Many intermediaries are involved in the channel of distribution of soft drink manufacturing companiesø products and this adversely makes the prices of the products to be exorbitant. With the exorbitant prices, consumers resort to buying cheaper or adulterated soft drinks and other beverages which they can easily place order and make payments online and the products delivered at their doorsteps no matter the quantity requested and location of residence. It has also been observed that there is uneven distribution of soft drinks especially in the hinter land. Online ordering and payment of products are done only by distributors, thus, leading to creation of artificial scarcity of the products especially during festive periods thus making of marketing operations of the soft drink manufacturing companies to be ineffective and inefficient.

Again, it has been observed that some customers still place order and make payments for soft drinks through sales representatives instead of using bank channels and electronic platforms, and this most often make the companies to experience loss of revenue as the Sales Representatives at times divert the fund and end up giving excuses to the customers that the products are not available at the time of request. These funds are delayed before they are paid into the organization accounts or at times are totally mismanaged or not accounted for thus leading to the loss of revenue. The products are sometimes delayed before they are supplied, thus, making their marketing operations to be ineffective and inefficient and losing global profitability. These products most times are lost while on transit resulting to colossal loss. Based on the above stated facts, this study therefore, was aimed at determining the extent of utilization of e-commerce by soft drink manufacturing companies in Anambra and Enugu States.

Purpose of the Study

The major purpose of the study was to determine the extent of utilization of e-commerce by Soft Drink Manufacturing Companies in Anambra and Enugu States of Nigeria. Specifically, the study sought to determine the extent to which:

- transaction server is utilized by soft drink manufacturing companies in Anambra and Enugu States;
- internet communication line is utilized by soft drink Manufacturing companies in Anambra and Enugu States;
- database and database server is utilized by soft drink manufacturing companies in Anambra and Enugu States;
- 4. web server is utilized by soft drink manufacturing companies in Anambra and Enugu States:

- 5. router is utilized by soft drink manufacturing companies in Anambra and Enugu States;
- Client or PC Workstation is utilized by soft drink manufacturing companies in Anambra and Enugu States.

Significance of the Study

The findings of this study would be beneficial to soft drink manufacturing companies, curriculum planners, the government, business educators, consumers and researchers.

The findings of this study would be of immense benefit to soft drink manufacturing Companies as the findings would provide strategic information on marketing of products to the companies. Management of the companies would use the information so provided by the study to plan and improve their products and customer-oriented service delivery. Prospective soft drink manufacturers would use the findings as reference materials to equip themselves with the desired e-commerce marketing tools before venturing into soft drink manufacturing. Soft drink manufacturing companies would also utilize the e-commerce components to ensure an up-to-date tracking of development in global soft drink marketing. The findings would also add to marketing literature which will be useful to future researchers in the field of marketing and e-commerce.

The findings of the study would be beneficial to curriculum planners as the findings are expected to open a new horizon in marketing education. The findings would provide content for curriculum enrichment in institutions of higher learning in Nigeria. The findings of the study would be utilized by curriculum planners (National Universities Commission, National Board for Technical Education and National Commission for Colleges of Education) for review and update of curriculum in business education especially with regards to integration of e-commerce in marketing education.

Government would also benefit from the findings of the study as it would expose the real situation with the e-commerce driven business. Government would use the findings as the basis for investment into and acquisition of Information Technology infrastructure.

The findings of the study would be of great benefit to consumers as the use of ecommerce by the companies will help in delivery and the consumers would be able to negotiate order from anywhere and anytime.

The findings of the study would be of immense significance to researchers who may want to continue research on other aspects of e-commerce. It is expected that the findings will give clue to the trend in contemporary marketing especially in the use of e-commerce. Researchers would also use the findings to increase their literature in their further research efforts in marketing studies and practices more especially in relation to e-commerce.

The findings of the study will be theoretically significant as it would form the basis upon which organizations adopt e-commerce as innovation in marketing of their products with its advantage over brick and mortar marketing. It would also form the basis for organizations to acquire state-of-the-art on e-commerce components to enable them achieve competitive advantage over others.

Research Questions

The study answered the following research questions:

- 1. To what extent is transaction server utilized by soft drink manufacturing companies in Anambra and Enugu States?
- 2. To what extent is internet communication line utilized by soft drink manufacturing companies in Anambra and Enugu States?

- 3. To what extent is database and data base server utilized by soft drink manufacturing companies in Anambra and Enugu States?
- 4. To what extent is web server utilized by soft drink manufacturing companies in Anambra and Enugu States?
- 5. To what extent is Router utilized by soft drink manufacturing companies in Anambra and Enugu States.
- 6. To what extent is PC workstation utilized by soft drink manufacturing companies in Anambra and Enugu States?

Hypotheses

The following null hypotheses were tested at 0.05 level of significance:

- Ho1: There is no significant difference among the mean ratings of Marketing Managers, Sales Managers, IT Managers, Accounts Managers and Sales Representatives on the extent of utilization of transaction server by Soft Drink Manufacturing Companies in Anambra and Enugu States.
- Ho2: There is no significant difference among the mean ratings of Marketing Managers, Sales Managers, IT Managers, Accounts Managers and Sales Representatives on the extent of utilization of internet communication line by Soft Drink Manufacturing Companies in Anambra and Enugu States.
- Ho3: There is no significant difference among the mean ratings of Marketing Managers, Sales Managers, IT Managers, Accounts Managers and Sales Representatives on the extent of utilization of database and database server by Soft Drink Manufacturing Companies in Anambra and Enugu States.

Ho₄: There is no significant difference among the mean ratings of Marketing Managers, Sales Managers, IT Managers, Accounts Managers and Sales Representatives on the extent of utilization of Router by Soft Drink Manufacturing Companies in Anambra and Enugu States.

Ho₅: There is no significant difference among the mean ratings of respondents with respect to their years of experience (1-5, 6-10 and 11+ years) on the extent of utilization of Web Server by Soft Drink Manufacturing Companies in Anambra and Enugu States.

Ho₆: There is no significant difference among the mean ratings of respondents with respect to their qualifications on the extent of utilization of PC workstation by Soft Drink Manufacturing Companies in Anambra and Enugu States.

Scope of the Study

The study was delimited to utilization of electronic commerce (e-commerce) by soft drink manufacturing companies. Specifically, the study focused on the six components of e-commerce namely PC Workstation, transaction server, internet communication line, database and database server, web server and router. The opinions of managers, their educational qualification and years of experience, were used to accomplish the objectives of this study. The four Soft Drink Manufacturing Companies in Anambra and Enugu States namely Seven-up Bottling Company Limited, Nigerian Bottling Company Limited, Nigerian Breweries Plc. and Intafact Beverages Limited were studied to determine the extent e-commerce is utilized in their operational and marketing activities.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

The literature related to this study was reviewed under the following sub headings;

Conceptual Framework

- E-commerce
- Utilization
- Manufacturing companies
- Utilization of Electronic commerce by Business Organizations

Theoretical Framework

- The Innovation Diffusion Theory
- Resource-Based View (RBV) Theory
- Transaction Theory Cost

Related Empirical Studies

Summary of Related Literature Reviewed

Conceptual Framework

E-commerce

Technology is continually reshaping the marketplace and business activities. E-commerce is growing at an incredible pace. E-commerce is an important marketing tool in the present information driven global market place. The concept of e-commerce is an emerging one and has evolved in phases since the late 1970\omegas. The concept of e-commerce has expanded in scope to be regarded as merely the use of the World Wide Web (www). There is no universal definition of electronic commerce because the internet market place and its participants are so

numerous and their intricate relationships are evolving so rapidly. Osuala (2009) stated that electronic commerce in its broadest sense encompasses any commercial activity that takes place directly between a business, its partners, or its customers through a combination of computing and communications technologies. Kirb in Amadi (2008) defined electronic commerce as that which covers any form of business or administrative transactions or information exchange that is executed using any information and communication technology. This is in line with the views of Turban, King, Lee and Chung (2008) who argued that electronic commerce is not only limited to buying and selling over the internet but it is also concerned with transferring or exchanging products/ services and or information via computer networks, including the Internet, Extranet and Intranet. The authors stressed that it includes activities such as servicing customer online, collaborating with business partners and exchanging business documents within an organization over the internet or other private networks. Electronic commerce in this sense, involves the use of computer networks, Intranet, Extranet and the Internet for marketing and administrative purposes.

Electronic Commerce, according to Nanehkaran (2013), is the conducting of business communication and transactions over networks and through computers. A more expansive and detailed definition is: that e-commerce is the buying and selling of goods and services and transfer of funds through digital communication (Boamah and Kwaku, 2011). However, e-commerce also includes all inter- company and intra ó company functions (such as marketing, finance, manufacturing, selling and negotiation) that enable commerce and use of electronic mail, Electronic Data Interchange (EDI), File transfer, fax, video conferencing, work flow or interaction with a remote computer. E-commerce also includes electronic funds transfer, smart cards, digital cash and all other ways of doing business over digital networks. In its broadest

term, electronic commerce can be referred to as a general concept covering any form of business transaction or information exchange executed using information and communication technology (Trepper, 2000). The internet and electronic commerce are global from the start. Consequently, it is natural to look at trade as a means of encouraging the uptake of the internet and the development of electronic commerce. In many countries, government leadership in using internet and electronic commerce that can support and develop environment through which the private sector can learn to succeed on its own ventures, with clear overall benefits for the whole country.

Agomuo (2005) stated that the Internet was built to solve the key problem of communication between computers that were thousand miles away but needed to work together. Agomuo maintained that originally, electronic commerce meant the facilitation of commercial transactions electronically usually using technology like Electronic Data Interchange (EDI) and Electronic Funds Transfer (EFT), where both were introduced in the late 1970s for sending commercial documents like purchase orders or invoices electronically, but for the last 33 years, the meaning of electronic commerce has changed. Meanwhile the -eø in e-commerce refers to the technology or systems; the commerce refers to the traditional business model. Agomuo (2005) emphasized that e-commerce is the complete set of processes that support commercial business activities on a network. In 1970s and 1980s, this would also have involved information analysis. The growth and acceptance of credit cards, Automated Teller Machines (ATM) and telephone banking of recent are also forms of e-commerce. From 1990s onwards, e- commerce included Enterprise Resource Planning System (ERP), data mining and data ware housing. In the dotcom era it came to include activities more precisely termed oweb commerce which is the purchase of goods and services over the World Wide Web usually with secure connection through HTTP (Hyper Text Transfer Protocol): a special server protocol that encrypts confidential ordering of

data for customer protection with e- shopping carts and with electronic payment services like credit cards payment. E-commerce is defined as the use of digital information processing technology in business transactions to create, transform and redefine relationship for value creation between or among organizations and between organizations and individuals (Angus Reid Group, 2000).

In this study, eócommerce is the use of Information and Communication Technology (ICT) facilities for carrying out business and marketing activities of an enterprise. The ICT facilities include the various networks such as the Intranet, Eternet and the Internet. The specific applications in these facilities include e-mail, e-payment and the World Wide Web (WWW) among others. This definition applies to the soft drink manufacturing companies.

Soft Drink Manufacturing Companies are those companies that manufacture drinks or beverages without alcoholic content. The domains of e-commerce outlined by Turban, King, Lee and Chung (2008) include the following: Business-to-Business (B2B), Business-to-Consumer (B2C), Consumer-to-Consumer (C2C), People-to-People (P2P), Consumer-to-Business (C2B), Intra-organization, Business-to-Employee (B2E), Government-to-Citizen (G2C), Business-to-Administration (B2A), Exchange-to-Exchange (E2E) and Mobile Commerce (M-Commerce).

• Business-to-Business (B2B) - All participants in this domain are businesses or other organizations. It requires two or more business entities interacting with each other directly or through an intermediary. Its business application can be utilized to facilitate almost all factors of the interactions among organizations such as inventory management, channel management, distribution management, order fulfillment and delivery and payment management.

- Business-To-Consumer (B2C) These transactions involve online selling to the final consumers. The business offers a set of merchandise at given prices, discounts and shipping and delivery options.
- Consumeróto-Consumer (C2C)- This involves the online exchange of goods/ services and information among consumers.
- People to People (P2P) This is a special C2C where people are involved in exchange situations.
- ConsumeróTo óBusiness (C2B) ó This involves individuals who are on the internet to sell products or services to organizations, as well as those individuals who seek sellers, interact with them and conclude transactions online. It enables a consumer to determine the price of a product and/or service offered by a company.
- Intraóorganization ó This involves all internal organizationsø activities, mainly performed on the intranets or corporate Portals that include the exchange of goods, services, or information among various units and individuals in that organization.
- Businessóto-Employees (B2E) ó This is a subset of intra- organization e-commerce where the organization provides all the needed information to the employees of an organization.
- Governmentsóto-Citizens (G2C)óIn this domain, government establishments buys or sells goods, services or information to business or individual citizens.
- Business-to-Administration (B2A) In this domain, business communities interact electronically with public sector organizations, for example, submission of planning applications, VAT returns, income Tax or patent registration.
- Exchangeóto-Exchange (E2E) This involves interactions between portals connected to one another.

• Mobile commerce (M-commerce) - In this domain, e-commerce takes place in wireless environment. It deals with conducting the transactions with the help of mobile phone.

E-commerce has developed from Electronic Data interchange (EDI) used for sending commercial documents between the supplier and the customer in late 1970s to the present internet and the World Wide Web used for global marketing in current market place (Goldstein and OøConnor, 2000). According to Kotler and Armstrong (2006) internet was used as a mere communication tool with the marketing significance, until the development of the WWW and the web browsers in the 1990s. It was estimated that, by the final decade of the twentieth century, the number of internet users worldwide grew to almost 400 million. The number of web surfers worldwide reached 53.3 million in 2003 and itos expected to approach 1.5 billion by 2007 (Kotler and Armstrong, 2006).

The web became a marketing innovation that drew the attention of business in the 1990s. According to the Economic Times (2014), e-Bay was an early adopter of e-commerce through the creation of a portal for buyers and sellers of goods and services in 1995 and by 1999 had registered 150 million users. Other early adopters were Amazon, Google and Yahoo. The success recorded by these firms became motivating forces for other firms to go online. Kotler and Armstrong (2006) asserted that the late 1990 witnessed a golden rush into what was described as the dot.com business (online business). Consequently, there was the technology bubble burst in 2001 and many firms folded up because the hype was not based on informed research and planning (Kotler and Armstrong, 2006). However, the bubble burst was a lesson for the firms to learn from and because there are relatively low barriers to entry, millions of people have already set up some web business and millions more will do so (Kraemer, Gibbs and Dedrick, 2002).

In this vein, Kotler and Armstrong (2006) have introduced three marketing models in the current global marketing as: (1) Brick-and-mortar marketing. This is traditional marketing through the store channel. (2) Click only marketing. This is popularly described as the dot.com firms that operate only online without any brick-and-mortar marketing presence, and (3) Click-and-mortar marketing. The marketers in this model adopt the combination of the traditional store channel and the online and this model is currently popular worldwide.

In Nigeria, e-commerce began with large financial institutions and public corporations from the late 1990s. Oborah (2011) wrote that between 1999 and to date, a great deal of impetus has been put to the development of ICT, resulting in the development of e-commerce in Nigeria, especially in the banking industry. Abengule (2003) stated that banks in their bid to deliver quality services and expand their reach have taken giant strides into e-banking.

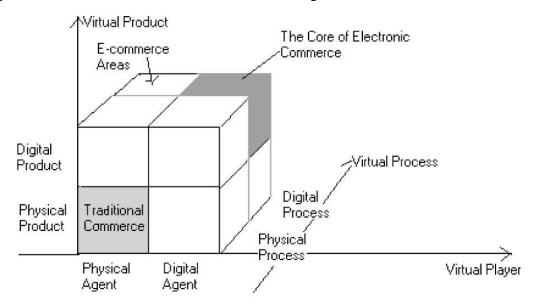
Amadi (2008) stated that banks in Nigeria became the first clearing organization to offer itos personal current account and credit card holders full on-line internet banking services at no extra cost. Other sectors also made frantic efforts for e-commerce adoption. Okafor in Amadi (2008), stated that by 2004, many Nigerians were shopping online as a result of the introduction of shopfor-less (a portal). This was described as the first online shopping mall in Nigeria. It was asserted by Okafor that the portal made it convenient for products to be purchased online, payment made online and have the selected items delivered to the buyeros door steps. There are different dimensions of e-commerce which organizations can adopt to suit their individual organizationos needs (Iddris, 2012).

Dimensions of E-Commerce

E-commerce takes several forms depending on the *degree of digitization* (the transformation from physical to digital) these are: the product (services sold), the process (e.g. ordering,

payment, fulfillment), and the delivery method.

Choi, Whinstone and Stahl (1997) created a framework which explains the possible configuration of these three dimensions as shown in figure 1 below.



Source: Adapted from Choi et al. (1997)

Figure 1- The three dimensions of e-commerce

A product may be physical or digital, the process may be physical or digital, and the delivery method may be physical or digital. These alternatives create eight cubes. In traditional commerce, the three dimensions of the cube are physical (low-left cube). All other cubes include a mix of digital and physical dimensions.

The Electronic Commerce Framework

The e-commerce field is a diverse one, including many activities, organizational units and technologies. The framework shown in figure 2 below describes its contents.

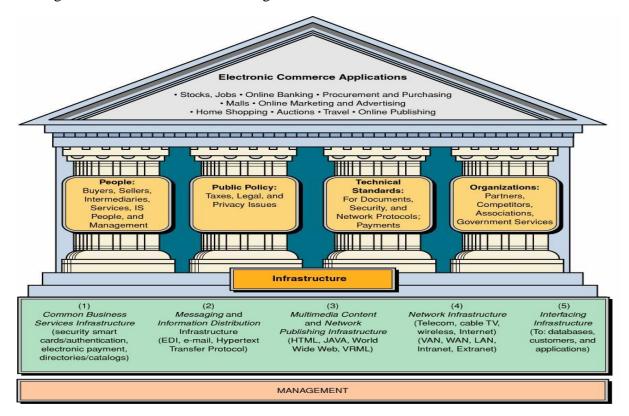


Figure 2: The E-Commerce Framework

Source: A framework for electronic commerce. (Source: Kalakota and Whinstone (1997), p.12, cited in Turban et al, (2008)

There are many e-commerce applications as portrayed by the diagram above. These applications are supported by infrastructure and the following support areas:

- É *Peopl*e include buyers, sellers, intermediaries, information system specialist, other employees and any other people participants. This is an important support area.
- É *Public policy* includes legal and other policy and regulatory issues, such as privacy protection and taxation, which are determined by government.

- É *Technical standards* include all issues regarding documents, security issues which are establish by government or industry-mandated policy-making group. Other technical issues range from content creation to payments to order delivery.
- É *Organizations* deals with partners including joint ventures and business partnerships of various types common in electronic commerce. Also, competitors, associations and government services.

The infrastructure for E-commerce as shown in figure 2 is a description of the hardware, software and networks used in e-commerce. Finally all the components of e-commerce require good managerial practices. This means that companies need to plan, organize, motivate, devise strategy, and restructure processes as needed to optimize the business use of e-commerce models and strategies.

Classifications of e-commerce

There are several different e-commerce business models that an industry or a company can choose from. According to Weill and Vitale (2001), there are eight elementary or õatomicö e-business models that can be combined in different ways to create operational e-business initiatives. These are: Direct marketing, Intermediary, Content provider, Full-service provider, Shared infrastructure, Value net integrator, Virtual community, Consolidator of services for large organizations. Each strategic model can be described by four characteristics: strategic objectives, sources of revenue, critical success factors and core competencies required. Also, according to McKay and Marshall (2004), a comprehensive e-business model is composed of the following six elements: a description of the *customers* to be served and the company® relationship with these customers, including what constitutes value from the customers perspective (customer

value proposition);a description of all *products* and services the business will offer; a description of the *business process* required to make and deliver the products and services; a list of the *resources* required and the identification of which ones are available, which will be developed in-house and which will need to be acquired; a description of the organization *supply chain*, including *suppliers* and other *business partners* and a description of the revenues expected (revenue model), anticipated cost, sources of financing, and estimated profitability (financial viability).

Forces driving e-commerce

According to Turban et al (2008), economic, legal, and technological factors have created a highly competitive business environment in which the æustomer is kingøand has become more powerful. These environmental factors change rapidly and quickly in an unpredictable manner. Thus companies need to react quickly to both the problems and opportunities these factors offer so as to stay above their competitors. This phenomenon results in using fewer resources to produce more products faster. Due to the limitations of the traditional methods of doing business, e-commerce is used to achieve this feat.

According to Huber (2004), the new business environment is as a result of advances in science occurring at an accelerated rate. The rapid growth in technology results in a large variety of complex systems that feeds on itself. This creates a lot of business pressures. This evolution moves managers into finding suitable solutions leading to trying newer ways of grabbing opportunities and solving problems leading them to the use of e-commerce. To Turban et al. (2008), the business pressures that drive e-commerce are divided into three categories of: market and economic pressures, societal pressures and technological pressures.

According to Klein (1998), by market forces and pressures companies use e-commerce to

capture international markets because it is much easier to provide their customers with much detailed information on the products and services they offer. Dholakia (2000), stated that because of economic efficiency resulting from the reduction in communication costs, low cost technological infrastructure, speedier and more economic interactions with suppliers and cheaper customer service alternatives, low global information sharing and advertising cost, companies are pressurised to implement e-commerce. Dholakia (2000) grouped economic integration into two categories; internal integration: which involves the networking of the operations and processes of the various departments within an organisation so as to make the stored information more accessible to all users in the organization. In external integration, Dholakia (2000) refers to electronic commerce as networking of corporations, suppliers, customers, and independent contractors into one community communicating in a virtual environment (with the internet as a medium).

Societal pressures drive e-commerce as a result of changing nature of work force, government deregulation leading to more competition, shrinking government subsidies, increased importance of ethical and social issues, increased social responsibility of organizations and rapid political changes around the world. According to Turban et al. (2008), the final business pressures that drives e-commerce is technological ó Here, increasing innovations and new technologies, rapid technological obsolescence, increases in information overload and rapid decline in technology cost versus labour cost also fuel e-commerce.

From Kleinøs (1998) point of view, technological advances in digitizing content, compression and the promotion of open systems have paved the way for the convergence of communication services into one single platform. Thus communication has become more efficient, faster, and easier as there is no need to set up multiple systems to receive one message.

Global trends in e-commerce

According to Sandoval (2000), business models across the world also continue to change drastically with the advent of e-commerce. Other countries are also contributing to the growth of e-commerce. For example, the United Kingdom has the biggest e-commerce market in the world when measured by the amount spent per capita. The internet economy in UK is likely to grow by 10% from 2010 to 2015. This has led to changing dynamics for the advertising industry. Among emerging economies, China's e-commerce presence continues to expand. With 384 million internet users, China's online shopping sales rose to \$36.6 billion in 2009 and one of the reasons behind the huge growth has been the improved trust level for shoppers. The Chinese retailers have been able to help consumers feel more comfortable shopping online. E-Commerce has become an important tool for businesses worldwide not only to sell to customers but also to engage them (Sandoval, 2000). E-commerce activities are carried out in organizations with the help of e-commerce components (Vaithianathan, 2010).

E-Commerce Components

Osuala (2009) emphasized that when an organization includes an e-commerce system as part of a larger internal digital nervous system, e-commerce provides much more than just an electronic scale. A digital nervous system allows an organization to communicate and accomplish its tasks digitally while simultaneously enabling the sharing of information through the organization improves organizational thinking and collaboration via; technology by connecting all computers in an organization and uncompressing all computer-to-computer exchange of information. The flow of information through a business via a digital nervous system is as unique as the specific organization and its business patterns. Yet in order to capture

and maintain competitive advantages in its markets, the organizations and its patterns need to create their digital information systems (Kuzic, Fisher and Scollarry, 2002 and Trepper, 2002).

The technical components of e-commerce are the Client or PC workstation, transaction server, web server, Database server, Database, Router and internet communication line. Most people are familiar with at least one type of electronic fund transfer, an ATM automatic teller machine transaction. ATMs have long allowed people to deposit funds to checking point and savings accounts, withdraw funds from those accounts, and transfer funds between accounts (Osuala, 2009 and Agomuo, 2005). Soft Drink Manufacturing Companies and their business partners can use electronic funds through bank to make payment for transactions made and communicating the amount and date of the transaction and other relevant information. On a large scale e-commerce enables organizations to exchange money via the internet or via virtual private networks (VPN). In this way, one organization can purchase goods from another by sending a purchase order over the internet. The buying organization can pay for that purchase via the internet by using EFT to transfer funds to the seller account at the same or different bank. Ecommerce technology consists of computing devices connected over various types of communication lines and networks using software to communicate and to process business transactions. Decision makers need at least a basic understanding of e-commerce technology to help them make informed e-commerce decisions (Trepper 2000).

To manage e-commerce, it is necessary to understand at least the fundamentals of electronic commerce technology. Many pieces of hardware and software both inside and outside the organization need to work together to enable business-to-business and business-to-consumers exchanges of transaction. Organization must first link all of its own system together and ensure accurate data and transaction-process capabilities; various combinations of computer

and hard ware can work together to make electronic commerce happen. However, most ecommerce-oriented hardware performs one or more of the following tasks. Generally, server
stores and also, it process data. Routers, bridges, gateways, hubs and switches, communicate and
or routes data. An organization can purchase this hardware and house it on site. Alternatively,
internet services providers (ISPs) and Web- Hosting providers (WHPs) provide organizations
with hard and software to perform all the tasks remotely with minimal hardware and software
required at the organizations physical site.

Client or PC Workstation

A workstation is a special computer designed for technical or scientific applications. Intended primarily to be used by one person at a time, they are commonly connected to a local area network and run multi-user operating systems. The term *workstation* has also been used loosely to refer to everything from a mainframe computer terminal to a PC connected to a network, but the most common form refers to the group of hardware offered by several current and defunct companies such as Sun Microsystems, Silicon Graphics, Apollo Computer, DEC, HP and IBM which opened the door for the 3D graphics animation revolution of the late 1990s. Workstations offer higher performance than mainstream personal computers, especially with respect to CPU and graphics, memory capacity, and multitasking capability. Workstations were optimized for the visualization and manipulation of different types of complex data such as 3D mechanical design, engineering simulation (e.g. computational fluid dynamics), animation and rendering of images, and mathematical plots. Typically, the form factor is that of a desktop computer, consist of a high resolution display, a keyboard and a mouse at a minimum, but also offer multiple displays, graphics tablets, 3D mice (devices for manipulating 3D objects and

navigating scenes), etc. Workstations were the first segment of the computer market to present advanced accessories and collaboration tools (Lewandowski, 2005)

Transaction Server

A transaction server is a software component of e-commerce that is used in implementing business transactions. It includes e-mail, Linkedin, Facebook, share this etc. A transaction server basic duty is to process business transactions according to the business transaction rules established by an organization. It has traditionally processed business transactions for internal users. However, transactions servers are now required to handle both internet and external request. Many organizations have separate, highly secured transactions because of transaction volume and security request from concerns.

Trepper (2000) confirmed that a transaction is an activity or request. Orders purchase data changes, additions and deletions are typical business transactions. Transactions update one or more files or database and serve as both an audit trail and history for future analysis. Transactions volume is a major concern in configuring transaction server sizes and spreads, and transaction servers in general must be powerful computers to handle what are typically high processing needs. The transaction server may need to communicate with organization business partners to validate payments if the payment is made via credit card.

Internet Communication Line

Internet communication line is an electronic commerce component that enables organizations to communicate with their distributors and suppliers. Perrault and McCarthy (2005) confirmed this by stating that it is a system linking computers around the world. Internet is an enabling technology that helps an organization to exchange information with its business

partners and customers. The internet helps to solve the key problem of communication between computers that were thousands of miles apart but needed to work together.

Database and Database Server

Database, as an e-commerce component stores detailed data about the operations of an organization. A database is an organized collection of data for one or more purposes, usually in digital form. Perrault and McCarthy (2005) went further to state that the data are typically organized to model relevant aspect of reality in a way that supports processes requiring this information. The term database refers both to the way its users view it and to the logical and physical materialization of its data, content, in files, computer memory and communication.

A database server is a computer in a network dedicated to database storage and retrieval. The database server is a key component in a web environment. It holds the database management system (DBMS) and the database management system server must be able to serve many clients simultaneously. Websites in the business to consumer market may receive thousand hits each hour. The database server must be able to serve the transaction fast enough to provide good response time to users. The database server provides the customer record based on search criteria set by the transaction server. The data is passed back to the transaction server, which then passes it on to the web server or to the client computer. Database Server may also have preset routines that run to keep data clean and accurate. Such routines are stored procedures. Store procedures are usually run when a tripper is activated. A tripper is a mechanism that initiates an action when an event occurs. Events can include reaching a certain time or data or receiving particular input, a tripper causes a database routine to be executed, which updates the database.

The core of electronic commerce is the ability to communicate over both internal network and the internet. Various communication devices enable customers to exchange information

between computers. Internal communication devices may link one computer to another, or might link computers to database, transaction or web servers. Some communication devices also provide security capabilities, as the case of router's access lists. These devices can be hooked together, or can work independently to move data over internal and external networks. The network is composed of a group of computers may be simple as two computers linked with communications circuits or as complex as a worldwide system with communication terminals, fiber optics, satellite links, and internet (Trepper, 2000).

Router

A router, according to Trepper (2000), is a device that forward data packets (units of information) from one network address in each transmission and make a decision how to send it based on the most expedient route determined by traffic load, line cost, speed, bad lines. Routers are used to segment network to balance and fill traffic for security purpose and policy management. Router also used at the edge is transmitted by a routable protocol such as that of the internet, (IP= Internet Protocol) because workers have to inspect the network address in the protocol, and then process data thus add overtrade.

Web Server

A web server can be referred to the hardware (the computer) that helps to deliver content that can be used to access through the internet. The most common use of web services is to host websites but there are other uses like data storage or for running enterprise applications. This is in line with the views of Trepper (2000) who defined a web server as a computer that provides web services for other computers connected to it via a network. Web server means software that tells it how to deliver or serve up, web pages then requested by other computers. Sometimes the term web server encompasses hardware, software, computer operating system (OS) and website

content. A web server offers various services including authentication (a security measure intended to validate a user or transaction), transmissions of web pages or data and processing of data or web pages (depending which programmes runs on the web server. It is solely devoted to serve documents that are requested by clients. The client computer receives the document, which contains content and information and renders the document on its screen. This operating model reduces the amount of work performed by the server in order to maximize efficiency and accommodate several clients simultaneously. Web servers use large amounts of memory and hard drive space and require high processors speeds. In some cases, web servers require multiple processors called parallel processing. In designing proper system for an internet, the server can be difficult because usage on the internet is expanding at exponential rate. The combination of redundant hard drives, multiple processors, redundant power supplies, self- monitoring and selfcorrecting hardware and software, also temperature monitors and other internet survival gear these components have, help ensure that single component failure will not cause the system to lock up or shut down, the goal is to make the system as reliable as possible in order to have information flowing on demand. However, Oborah (2011) and Kotler (2004) cautioned that utilization of these e-commerce components is very necessary for organizations including Soft Drink Manufacturing Companies. This they maintained is because the race for survival in business in this digital age is defined by effective and efficient utilization of e-commerce components.

Utilization

The word, õutilizationö has its origin from a French word, as õutilizerö and from an Italian word as õutilizzareö and was derived from the word utilize (Okongwu, 2014). Chau and Wong (2011) defined utilization as to put to use, especially to find a profitable or practical use for something. This was corroborated by Williams (2005) who defined utilization as the state of

having been made use of. Utilization refers to the employment of any tool or resources to facilitate performance (Oborah, 2011). For Sjoqvist and Birkett (2003), utilization is the marketing, distribution and use of products, services ideas or concepts in a society, with special emphasis on the resulting social and economic consequences. Utilization takes place in manufacturing companies.

Manufacturing Companies

According to Singh (2006), manufacturing is the backbone of industrialization. Manufacturing is derived from the Latin word manufactus, meaning made by hand, in modern context, it involves making products from raw material by using various processes, by making use of hand tools, machinery or even computers. Manufacturing companies are those companies that make or process raw materials into finished products, especially by a large scale industrial operation. It involves making or processing (a product) especially with industrial machines. Manufacturing companies establish an operating goal that they will achieve. They assess their performance by benchmarking themselves against their competitors and against other operational functions, even in other industries. These companies use this information to establish organizational goals and objectives, which they communicate to all members of the enterprise, and they continuously measure and assess the performance of the system against these objectives (Singh, 2006).

Manufacturing companies integrate all elements of the manufacturing system to satisfy the needs and wants of its customers in timely and effective manner. They eliminate organizational barriers to permit improved communication and to provide high quality products and services. The manufacturing companies of discussion in this study are the soft drink manufacturing companies. Soft drink manufacturing companies are those companies that manufacture drinks or

all those beverages without alcoholic content. Those in Anambra and Enugu States include Nigerian Breweries Plc, Seven-up Bottling Company Plc, Nigerian Bottling Company Limited and Intafact Beverages Limited. With the development in internet connectivity, many manufacturing companies are now online (Amadi, 2008). Soft drink manufacturing companies in Anambra and Enugu States are not left out. However, the extent is not certain. There is need for efficient utilization of e-commerce by the Soft Drink Manufacturing Companies for them to survive in this digital age.

Utilization of E-commerce by Business Organizations

The volume and spread of transactions of Soft Drink Manufacturing Companies have improved tremendously as a result of a quantum growth in Information and Communication Technology (ICT) and this has created business opportunities for the companies. The development of information and communication technology has contributed immensely to this growth of e-commerce (Oborah, 2008). Information and Communication Technology is now a revolution which has penetrated almost all fields of human activity, thus transforming our economic and social life. It now brings business right to the door steps of business people. One can comfortably transact business in the comfort of his bedroom. Information and Communication Technology is utilized for processing, transmitting or communicating data and information. There are at present a lot of resources in e-commerce for marketing various goods and services (consumer and industrial goods). Businesstown.com in Oborah (2008) identified the resources in e- commerce as follows: Electronic Data interface (EDI), e- mail, electronic bulletin boards, fax transmission and Electronic Fund Transfer (EFT). Electronic Fund Transfer which is being utilized by soft drink manufacturing companies and their business partners is done through electronic commerce banking such as Western Union Money Transfer. Abengule (2003) shared

the view that the great improved technology break through that is electronic banking has been enhanced with the introduction of internet banking.

Belch and Belch (2001) agreed that the internet is the network of computers connected by a common communication protocol which spread across most countries of the World. The massive network enables computers of all sorts to communicate and share services throughout the globe. It is a huge mass of shared information knowledge, means of collaboration and cooperation among the teaming population of the world. It is estimated that millions of computers are linked up to the internet and the number is increasing daily by geometric progression. They further asserted that the World Wide Web (WWW) is the most popular component of the internet and the e- commerce resources. They stressed that the www is a very vital marketing tool. Rouse (2006) wrote that the web is a system of computers that share information by means of hypertext links on electronic pages. Turban, et al (2008) stated that the www is a collection of multimedia documents created by organizations all over the world. These documents are linked in a hypertext web that allows users to explore far and wide with simply a mouse chick.

The web is used for many marketing purposes such as promotion, selling, buying and other marketing strategies. Kotler and Armstrong (2006) maintained that a well-designed website is an important marketing tool for the marketing mix and management. Turban, et al (2008) identified the sub resources in the web such as e-catalogue, e-shopping, cart, e-mail, e-procurement, web casting and web chatting. E-catalogue is the virtual equivalent of the traditional product catalogue which contains written description and photos of product, along with important information about various promotions, discounts, payment methods and methods of delivery. E-shopping cart is an order processing technology that allows customers to accommodate items they wish to buy; Web chatting is used to host various chat groups, while

web casting is internetóbased broadcasting of audio and video communications. The enterprise portal is an e-commerce resource that is gaining prominence in the global market. It is used as internet gateway for businesses (small and large) (Turban et al 2006). E-Commerce resources for soft drink manufacturing companies vary according to the respective needs, resources and skills available (Ives and Learmonth, 2001).

One very important tool that has added much value to the use of the web is the development of the search engine. Seyed and Mohammad (2014) wrote that to find information on the web, one often has to go looking for it and this requires the services of a search engine. Search engines are complicated creatures but essentially they roam the web and compile a searchable index of all they find. Examples of search engines are, Google, Yahoo and Microsoft Search engines. The Google (www.google.com) is the most effective. Search engines are becoming very important for market research tool on the web, in addition to e-shopping and other marketing communication activities (Turban, et al, 2008).

The level of e-commerce activities undertaken determines the extent of utilization of the e-commerce resources by soft drink manufacturing companies. Kraemer, Dedrick, Melville and Zhu (2006) identified four levels of e-commerce utilization by soft Drink manufacturing Companies as follows: First level- this include the use of basic e-commerce resources including, e-mail and World Wide Web; the second level- the development of a simple website for presenting company information and promoting product and services. This is using e-commerce for promotional strategy. The third level- involves business process online. That is doing business online, such as having a website with an ordering system, payment system or delivery system. The fourth level is using e-commerce for both internal and external transactions (Intranet). These include company operating system such as accounting, inventory and to create

business value chain activities with business partners over the Internet (e.g. Supply Chain Management). Korir (2005) identified two major levels as follows: (1) The Basic- a must have! The resources include e-mail, specialized industry/professional information and product information. (2) Reaching Customers of the final frontier. These resources are building the website, advertising on the website, website management tools, counting website visitors and e-commerce solution (e.g. The Portal).

Based on the identified levels of e-commerce utilization, it is expected that an organization should at least own an e-mail address and a website for a minimum level of the adoption of e-commerce. There are presently indications all over the world, including Nigeria that soft drink manufacturing companies have adopted some form of e-commerce for marketing of their products (Payne, 2003, and Boamah and Kwaku, 2011). Anna (2013) commented that the emergence of electronic commerce over the past decade had radically transformed the economic growth and development as entrepreneurs from Bangalore to Guadalajara to Dakar can testify. This is an indication of the takeoff of e-commerce in Africa, including Nigeria. There are benefits derivable from the implementation of e-commerce (Iddris, 2012).

Benefits of utilization of electronic Commerce

The uptake of e-commerce is influenced by its potential to create business value and by awareness of its participants of the potential benefits (Salnoske in Kuzic, Fisher and Scollary, 2002). A major reason for most companies, irrespective of size, to participate in business is to extract some benefit from it. E-commerce is not different. Kuzic, etal, 2002) classified benefits of electronic commerce into two main categories: Tangible and Intangible. For them tangible benefits of electronic commerce include; improving business efficiency, increased automation of

process, transformation of traditional market chain, retained and expanded customer base, reduced operation costs and acquisition of a niche market.

The intangible benefits include; enhancing well-being and education of customers, consumer loyalty, competitive advantage and convenient shopping. This is similar to the classification of benefits of using e- commerce into ó benefits to buyers and to sellers by Kotler and Armstrong (2006). To them benefits to buyers include; being convenient, battling of traffic finding parking space, trekking through stores and aisles to find and examine product, helping to do comparative shopping by surfing websites and guaranteeing easy buying and privacy. Electronic commerce channels also give buyers access to a wealth of comparative information about companies, products and competitors good sites often provide more information in more useful forms than even the most solicitors sales person can: With electronic commerce, distributors of soft drinks can have a wealth of comparative information about all the companies manufacturing soft drinks in Nigeria including their products.

Kotler and Armstrong (2006) stated that the benefit of utilizing electronic commerce for the sellers are that the internet and other electronic channels can reduce costs and increase speed and efficiency and also communicating on paper through mail. To them the internet is a powerful tool for customer relationship building because of its one-to-one, interactive nature, companies can interact online with customers to learn more about specific needs and wants, by using the internet to link distributors. This is in line with the views of Turban et al (2008) who stated that the benefits of e-commerce to the organization, the individual customers and society are enormous. To them the benefits of e-commerce to the organization include Global reach, cost reduction, supply chain improvement, Opening of business always, customization/personalization, sellers specialization (niche market), ability to innovate, rapid

time-to-market and increased speed, lower communication cost, efficient procurement, improved customer service and relationship, fewer permits and less tax, up-to-date company material, lower inventories and lower cost of distributing digitalized product.

The benefits of e-commerce to the consumer according to Turban et al (2008) include Shopping any time from any place, having large products/services to choose from, Having cheaper products/services, instant delivery of products, information availability, convenient auction participation, enable telecommuting, socializing online in communities yet be at home and finding unique items. The benefits of e-commerce to the society include enabling telecommuting that is facilitating work at home, more public service, improved homeland security, increased standard of living and closing the digital divide (Turban et al, 2008).

OBrien (2003) wrote that internet based systems are playing a vital role and expanding role in business, stressing that information technology can help all kinds of business to improve the efficiency and effectiveness of their business process, managerial decision making and work group collaboration, thereby strengthening the competitive positions in rapidly changing market place. There are large volumes of potential benefits from adoption of e-commerce. These may be divided into three main areas which are cost savings, including lower logistic costs, lower postal cost, lower shortage costs and lower personnel costs; time savings, including, quicker response time to markets, customers, suppliers, higher flexibility and a reduction in the delivery time and processing of payments and quality improvements, such as access to new markets, new ways of marketing new products and services plus the general improvement in customer relations. (Owens and Beynon-Davies, 2001)

In their contribution, Osuala (2009) and Agomuo (2005) outlined the benefits of utilizing eó commerce as follows.

- Electronic commerce offers new ways to manage supply and value chains; to enhance manufacturing, logistics and distribution systems, and to link business partners together in a seamless business operating environment.
- E-Commerce provides organizations and individuals with the ability to buy and sell
 products, services and information on the internet.
- It automates business transactions and flow of information between organizations.
- It helps organizations cut customer services costs while improving the quality of service and increasing the ability of the organization to better manage the customer relationship.

Furthermore, Asiabugwa and Munyoki, (2012) stressed that manufacturing companies that adopt e- commerce marketing innovation are not constrained by geographical and time barriers as business is done 24 hours daily around the globe.

E-commerce also offers competitive advantage to manufacturing companies. Khairw and Maisarah (2005) stated that e- commerce can be used by manufacturing companies to achieve competitive advantage. This means that manufacturing companies that adopt e-commerce have an edge over those with the traditional brick and mortar marketing strategy. Moreover, Seyed and Mohammad (2014) stated that competitive advantage is achieved when a firm has greater financial strength, more skills superior profitability, high margins and large market share. They asserted that e-commerce can offer these opportunities to the manufacturing companies that are adopt the resources in it. More importantly, e-commerce can also be used to achieve competitive parity (The Economic Times, 2014). Payne (2003) stated that e-commerce provides opportunities for businesses to catch up with the rest in the globe as well as in the industry.

In addition, manufacturing companies benefits from e-commerce as important tool of research, communication, advertising and promotional strategy, (Al-Dimour, Al- shibly, and

Ahjaray, 2008). Lee (2003) stated also that e-commerce is useful in promotional strategy. Thatcher, Foster and Zhu (2006) stressed that manufacturing companies get the promotional benefits derived from e-commerce. For example, Al-Dimour, et al (2006) wrote that the website is the promotional medium as well as the promotional content. The communicational and emotional impact of the website is an important part of the web experience and a major factor in attracting and retaining online customers. Lee (2003) wrote that the e-commerce increases advertising and it allows a broader scope of segments, stressing that it employs various devices such as banners and hyperlinks and Search Engine Optimization (SEO). Scopula (2001) summed the benefits of e-commerce to manufacturing companies by stating that it is used to strengthen customer relationship, reaching raw markets optimizing business processes, reducing costs, improving business knowledge, attracting investment and creating new products and services as well as compensating for the traditional weakness of manufacturing companies in areas of access of new markets and information gathering. It is asserted that through application of ecommerce technologies in manufacturing, firms can benefit from lower cost transactions, reduced staff requirements, shorter procurement cycles, decreased inventory levels, higher degree of transparency, provision of information that enhance quality decision making (Thatcher et al, 2006). Gupta and Dubelaar (2005) stressed that a great deal of reduction in cost is experienced with the application of e-commerce. Kaynak, Tatoglu and Kula, (2005) wrote that ecommerce application ensures high degree of transparency in business. Abbad, Abbad and Sale (2011) emphasized on the benefit of inventory level reduction costs with the application of ecommerce. In as much as there are benefits derived from the implementation of e-commerce, there are also challenges experienced by organisations who have implemented e-commerce (Akintola et al, 2011, Oborah, 2011 and Okonigene and Adekanle, 2009).

Constraints or Challenges to the Utilization of Electronic Commerce

To extract benefits from e-commerce, it is important for businesses to overcome the e-commerce inhibitors and challenges. E-commerce challenges identified from the literature are classified as technological, managerial and business related. Technological Challenges include security, web site issues, and technology issues including costs, software, and infrastructure. Managerial Challenges includes people and organizational issues, and obtaining senior management backing. Business Challenges include customer service, customersøold habits and legal issues (Kuzic et al, 2002).

In their contribution, Kotler and Armstrong (2006) stressed that although expanding rapidly, online marketing still reaches only a limited market space. It is less effective for selling main stream products. Because millions of websites are being offered, navigating the internet can be frustrating, confusing and time consuming for consumers. Further they stated that some negatives associated with internet include unwanted e-mail, annoyance of pop-up ads. There is no online privacy and security. Unscrupulous snoopers may eavesdrop on online transactions or intercept credit cards. Companies on the other hand fear that others will use the internet to invade their computer systems for the purpose of commercial espionage or even sabotage. There appears to be an ongoing competition between the technology of internet security systems and the sophistication of those seeking to break them. Beyond issues of online privacy and security, consumers are also concerned about other legal and ethical issues which include internet fraud: identity theft, investment fraud and financial scams. Another problem is that of access by vulnerable or unauthorized groups. There is also the problem of segmentation and discrimination on the internet and the digital divide.

Owens and Beynon-Davies (2001) asserted that the main problem currently experienced with e-commerce is the lack of security associated with e-commerce transactions. A criminal can easily configure a new computer to be recognized as a different user. This new identities including a stolen name, address and social security number is then used to buy goods and services over the internet. The victim can potentially be saddled with paying for items purchased or received and the seller can be stuck with an inventory loss. Barkely et al, (2007) believed that barriers to adoption or to more widespread usage of e-commerce include lack of access, lack of skilled staff, consumer resistance and security concerns. Collaborating Peace and Rowe in Amadi (2008) gave two broad factors-internal and external factors on barriers for small and medium enterprises utilization of e-commerce. Internal factors are lack of awareness and knowledge of e-commerce; lack of skill and time to investigate and implement e-commerce; technology phobia among proprietors; cost of implementation and lack of realization of the benefits associated with the implementation of e-commerce; concerns with security and privacy, Poor business management generally as evidenced by a strategic direction or perspective and high failure rate of new SMEs. The external barriers include lack of suitable software standards; lack of easily accessible; independent and inexpensive advice and assistant to SMEs; electronic authentication issues and bandwidth capacity and infrastructure issues. Van Toorn et al, (2006) believe that the barriers to e-commerce are sectoral barriers (government, private sector, international organization), internal barriers (e.g. security, lack of technical knowledge and lack of time and resources), external barriers (e.g. lack of government support). Turban et al (2008), differ from this view by classifying the barriers to electronic commerce as either technological or non-technological. To them the technological barriers to e-commerce are lack of universal standards for quality, security and reliability; the telecommunication bandwidth is insufficient,

especially for mobile-commerce; software tools are still evolving, difficulty in integrating the internet and e-commerce software with some existing (especially legacy) application and databases; special web servers are needed in addition to the network servers; which add to the cost of e-commerce, internet accessibility is still expensive and/or inconvenient and order fulfilling of large-scale B2C requires special automated warehouses.

The non technological barriers to e-commerce as argued by Turban et al, (2008) are security and privacy concerns deter customers from buying; lack of trust in e-commerce and in unknown sellers hinders buying; people do not yet trust paperless, faceless transactions; many legal and public policy issues, including taxation, have not yet been resolved or are not clear; national and international government regulations sometimes get in the way; difficulty in measuring some of the benefits of e-commerce such as online advertising; some customers like to feel and touch products.

Supporting the issue of technological barrier, Agomuo (2005) opined that one of the problems facing the world of e-commerce is that of achieving a critical mass of technology infrastructures for e-commerce deployment. Doing so requires the existence of adequate infrastructure in terms of affordability and accessibility for the target population (whether consumer or business), support of products and solutions from the IT industry, and the definition of geographical or industrial sectors in which e-commerce will operate. Other problems of e-commerce as specified by Agomuo (2005) are failure to understand customers, why they buy and how they buy: A product with a sound value proposition can fail if producers and retailers do not understand customer habits, expectations and motivation. He also stated that failure to consider the competitive situation is another problem. Here one may have the will to construct a viable book e-mailing business models, but lack the capability to compete with Amazon.

Agomuo (2005) went further to state that failure to coordinate is another problem. He maintained that if the existing reporting and control relationships do not suffice, one can move towards a flat, accountable, and flexible organizational structure, which may or may not need coordination. Other problems include failure to obtain senior management commitment, failure to obtain commitment and under-estimation of time requirement.

Problem of stateless servers

One of the problems of e-commerce according to Smith in Okoro (2014) is that of stateless servers. Web servers are what are known as stateless servers. What this means is that in their pure form they keep no memory of what has previously happened to them between requests; for example, when a request is processed by a web server for a page they have no direct knowledge about whether the page request was made by the same browser that asked for a previous page to be returned. While this was not serious when web servers were being mainly used for dispensing documentation (their original use) it is a serious problem in e-commerce. One example of this is the shopping cart, or as it is known in the United Kingdom, the shopping trolley. When you visit an e-tailer and purchase goods you interact with a simulation of a shopping cart which keeps details of the goods that you have purchased. At the end of your interaction a web page, often known as a checkout page, will display the contents of the shopping cart and present you with the monetary total of your purchases. Web servers as originally envisaged are unable to do this as they have no knowledge of any previous visit: They would not be able to remember the previous purchase.

Another problem of e-commerce as stated by Smith in Okoro (2014) is that the internet is not a particularly secure place. There are two aspects to this: the first is that information is widely published throughout the internet which can be used for criminal and near-criminal

activities. The second aspect is that since the internet is an open system, details of its underlying technologies are freely available to anybody. This means that the way data passes through the internet is in the public domain; the consequence of this is that, theoretically, anyone with the right tools can eavesdrop on data passing from one computer on the internet to another.

Problems of Internet Security

Still on the security of the internet, Smith in Okoro (2014) stated that the possession of an e-mail address can even provide the means whereby someone can bring down part of a networked system. It is relatively easy to program a computer to send many thousands of e-mails to a computer which is handling e-mail communication for a company or organization; the volume of e-mails can be so high that the computer is unable to carry out its main function: that of enabling staff of the company or organization to send and receive e-mails. This is a form of attack known as a denial of service attack or degradation of service attack.

The second aspect of security, according to Smith in Okoro (2014), is that data flow across the World Wide Web and the protocols used to communicate with computers in the internet are public. This means that anyone who wishes to enter a computer system which has a connection to the internet or anyone who wishes to read the data passing through it has a major advantage. There is, however, a contrary point of view which states that by keeping security details open any security breaches can be plugged easily by patches generated from a knowledgeable community of developers.

Problems with Transactions

The problems with transactions as stated by Smith in Okoro (2014) often occur in ecommerce. A distributed transaction is a sequence of operations applied to a number of distributed databases which form a single functional step. For example, a transaction which moves an amount of money from a customer¢s account to an account owned by the same customers is an example of a transaction. It consists of two operations: the operation of debiting one account and the operation of crediting another account. There are a number of problems associated with distributed transaction. This section will briefly concentrate on one. This is the problem of deadlock: the fact that a transaction applied at one server might be waiting for data which is currently contained on another server, with the other server awaiting some resources that is held on the first server.

Problem of Design

Still emphasizing on the problems with e-commerce, Smith in Okoro (2014) stated that designing a distributed system can also be a problem. For example the fact that computers in a distributed system are joined by communication media which can stretch over thousands of miles provides an added dimension to the design process in that response time can be a problem. Another, equally serious problem is that of reliability, for example the fact that a hardware malfunction can bring down a poorly-designed distributed system. As an example of one design problem that a distributed systems developer has to face consider that of replicated data. A replicated database is a database which exists in the same form at a number of points in a distributed system. There are two reasons for having replicated databases: the first is reliability. When a system contains a number of replicated databases and one of them becomes unavailable-perhaps because of a hardware fault-another database can take over its role. The second reason is to improve response time. A designer of a distributed system will try and place a database close to its users, usually connected via a fast local area network. Often the original database that is used is a long distance away and can only be accessed via slow internet

connections; hence replicating the database and placing it close to the users usually results in a large reduction in response time.

In their contribution, Jawabreh, Allahham, Alijou and Ahmad (2012) were of the opinion that; the constraint of e-commerce includes the following;

- Time for delivery of physical products: It is possible to visit a local music store and walk out with a compact disc or a bookstore and leave with a book. E-commerce is often used to buy goods that are not available locally from businesses all over the world, meaning that physical goods need to be delivered, which takes time and costs money. In some cases there are ways around this, for example, with electronic files of the music or books being accessed across the internet, but then these are not physical goods.
- Physical product, supplier and delivery uncertainty: When you walk out of a shop with an item, ito yours. You have it; you know what it is, where it is and how it looks. In some respects, e-commerce purchases are made on trust. This is because, firstly, not having hard physical access to the product, a purchase is made on an expectation of what that product is and its condition. Secondly, because supplying businesses can be conducted across the world, it can be uncertain whether or not they are legitimate businesses and are not just going to take your money. Ito pretty hard to knock on their door to complain or seek legal recourse! Thirdly, even if the item is sent, it is easy to start wondering whether or not it will ever arrive.
- Perishable goods: Forget about ordering a single gelato ice cream from a shop in Rome! Though specialized or refrigerated transport can be used, goods bought and sold via the internet tend to be durable and non-perishable, they need to survive the trip from the supplier to the purchasing business or consumer. This shifts the bias for perishable and/or

non-durable goods back towards traditional supply chain arrangements or towards relatively more local e-commerce based purchases, sales and distribution. In contrast, durable goods can be traded from almost anyone to almost anyone else, sparking competition for lower prices. In some cases this leads to disintermediation in which intermediary people and businesses are bypassed by consumers and by other businesses that are seeking to purchase more directly from manufacturers.

- Limited and selected sensory information: The internet is an effective conduct for visual and auditory information: seeing pictures, hearing sounds and reading text. However it does not allow full scope for our senses. We can see pictures of flowers, but not smell their fragrance: we can see pictures of a hammer, but not feel its weight or balance. Further, when we pick up and inspect something, we choose what we look at and how we look at it. This is not the case on the internet. If we were looking at buying a car on the internet, we would see the pictures the seller had chosen for us to see but not the things we might look for if we were able to see the person. And, taking into account our other senses, we canot test the car to hear the sound of the engine as it changes gears or sense the smell and feel of the leather seats. There are many ways in which the internet does not convey the richness of experiences of the world. This lack of sensory information means that people are often much more comfortable buying via the internet generic goods-things that they have seen or experienced before and about which there is little ambiguity, rather than unique or complex things.
- Returning goods: Returning goods online can be an area of difficulty, the uncertainties surrounding the initial payment and delivery of goods can be exacerbated in this process.

 Will the goods get back to their source? Who pays for the return postage? Will the refund be

- paid? Will I be left with nothing? How long will it take? Contrast this with the offline experience of returning goods to a shop.
- Privacy, security, payment, identity, contract: Many issues arise-privacy of information, security of that information and payment details, whether or not payment details (e.g. credit, card details) will be misused, identify theft, contract, and, whether we have one or not, what laws and legal jurisdiction apply.
- Defined services and the unexpected: E-commerce is an effective means for managing the transaction of known and established services, that is, things that are everyday. It is not suitable for dealing with the new or unexpected. For example, a transport company used to dealing with simple packages being asked if it can transport a hippopotamus, or a customer asking for a book order to be wrapped in blue and white polka dot paper with a bow. Such requests need human intervention to investigate and resolve.
- Personal Service: Although some human interaction can be facilitated via the web, ecommerce cannot provide the richness of interaction provided by personal service. For most
 businesses, e-commerce methods provide the equivalent of an information-rich counter
 attendant rather than a salesperson. This also means that feedback about how people react to
 product and service offering also tends to be more granular or perhaps lost using ecommerce approaches. If your only feedback is that people are (or are not) buying your
 products or services online, this is inadequate for evaluating how to change or improve your
 e-commerce strategies and/or product and service offerings. Successful business use of ecommerce typically involves strategies for gaining and applying customer feedback. This
 helps businesses to understand, anticipate and meet changing online customer needs and

preferences, which are critical because of the comparatively rapid rate of ongoing internetó based change.

• Size and number of transactions: E-commerce is most often conducted using credit card facilities for payments, and as a result very small and very large transactions tend not to be conducted online. The size of transactions is also impacted by the economics of transporting physical goods. For example, any benefits or conveniences of buying a box of pens online from a US-based business tend to be eclipsed by the cost of having to pay for them to be delivered to you in Australia. The delivery costs also mean that buying individual items from a range of different overseas businesses is significantly more expensive than buying all of the goods from one overseas business because the goods can be packaged and shipped together.

Barriers to E-commerce in developing countries

E-commerce barriers in developing countries were analyzed by Ksheri (2007) in terms of three categories of negative feedback systems: economic, sociopolitical and cognitive. The economic and socio-political factors focus primarily on the environmental characteristics, while the cognitive components reflect organizational and individual behaviors. As organizations assimilate sophisticated e-commerce practices, environmental factors play more critical roles.

Economic barriers

Positive economic feedback occurs in the presence of increasing returns to scale. According to Tam (1998), slow internet diffusion in developing countries has led to a low IT business value measured by performance and productivity. Barriers associated with the lack of economies of scale in small developing countries are widely recognized. In their study of õNational Competitive advantage in e-commerce effortsö, Fraser and Wresch (2005) found that

small sizes of many Caribean nations inhibited the development of **clustersö for the IT industry. Pigato (2000), found adverse scale effects in the Tanzanian e-commerce industry. Slow internet diffusion in developing countries can be attributed to market and infrastructural factors controlling the availability of ICTs. According to Mercer (1995), barriers to internet usage in a developing country like Tanzania are many and include: a lack of electrical supply, a low teledensity and a lack of purchasing power. Moreover, manufacturers of ICT products focus on large distributors often located in developed countries for their selling initiates. Unavailability of credit cards is also a major hurdle.

According to Hawk (2004), such problems for B2C e-commerce was found in Russia, India and Latin America. According to Biederman (2000), in Asia, 35-40% of transactions are cash based. All other forms of financial systems are clearly underdeveloped. In Carribean, local banks do not process online credit card transactions or other forms of electronic payments systems. The focus of many developing countries is on the traditional economic sectors (e.g. agriculture and mining), the use of the internet is seen as less attractive and less beneficial. Coppel (2000) indicates that, cost savings from e-commerce- as a percent of total input costs is only 2% for firms in traditional sectors such as coal compared to 40% in electronic components. According to Hawk (2004), rapid growth of e-commerce in the US can be attributed to infrastructure already in place and an easy availability of a physical delivery system. Such systems are rarer in developing countries. In the Carribean region, logistics challenges are among major barriers to e-commerce diffusion. It is extremely difficult for small developing countries to attract FedEx and UPS to provide delivery services. Finally, bandwidth availability is low in developing countries. A lower bandwidth means that it will take a much longer time to transfer data and hence a lower relative advantage of the internet.

Sociopolitical Barriers

According to Scott (2001), sociopolitical barriers can be explained in terms of formal and informal institutions. They often tend to be more difficult and time consuming to overcome than technological barriers. Social barriers are related with informal institutions. As stated by Gibbs et al (2003), in Asia, personal relationships are important in business and anonymous online relationships threaten established interpersonal networks. Preference for personal face-to-face communications over e- and precedence of established relationships over the internet interpersonal efficiency also work against e-commerce. According to Stephens (2001), political barriers are applied in an organized way by formally appointed groups. Issues regarding the legal validity of digital and electronic signatures (DES) arises in developing countries because laws governing e-commerce are just nonexistent. Some developing countries treat ICT products as luxury items and impose import duty, surtax, value added tax, sales tax, etc.

According to Kenny (2003), weak formal institutions also lower consumer trust in e-commerce and willingness to buy online. In Brazil, a survey conducted among consumers indicated that the low dissipation of e- commerce in the country was related to government regulations such as concern about privacy and security, lack of business laws for e- commerce, in adequate legal protection for internet purchasers and concern over internet taxation. Likewise according to Efendioglu (2004), in China, a lack of ‡ransactional and institutional trustø related to the weak rule of laws was a major impediment to eócommerce.

Cognitive Barriers

Cognitive factors as stated by Huff (1990) are related to mental maps of individuals and organizational decision makers. Some analysts argue that cognitive are more serious than other categories of barriers in developing countries. Many effects such as in adequate awareness,

knowledge, skills, and confidence serve as cognitive feedbacks. According to Noda and Collis (2001), top managementsø prior evaluation influences cognitive bias towards e- business. As stated by Moodley and Morris (2004), several factors lead to a negative cognitive assessment of eócommerce in developing countries. These factors include: the organizationøs human, business, and technological resources, lack of awareness and understanding of potential opportunities, risk aversion and inertia. Consumerøs lack of awareness and knowledge of e-commerce benefits and their lack of confidence in service providers have also hindered e-commerce. For instance, according to Hilbert (2001), in Latin America, a low rate of credit card usage can be attributed to the õlack of trust than lack of access toö the credit card system. Kirkman et al (2002) found that the degree of confidence and trust in the postal network for a package worth US\$ 100 was strongly correlated with GNP per capita. Finally, cognitive barriers are investigated in relation to general and computer illiteracy and a lack of English language skills. According to Nunberg (2000), most software, human computer interfaces and content on the Web are in English.

Half of the population of developing countries cannot speak an official language of their own country (Kenny, 2003). Also, according to Gibbs et al (2003), lack of proficiency in English language is a major inhibitor among non ó English- speaking consumers, especially the older generation. Finally, according to Kenny (2002), 75% of the population fluent in English in Slovenia used the internet compared to only 1% of non- English speakers. The number of sites in languages such as Quechua (10 million speakers in Bolivia, Eucador and Peru) or Ibo (15 million speakers in Nigeria) ocan be counted on the fingers of one hand of and none offer interactive features.

The problem of difficulty of websites to provide accurate and relevant information on products was identified by Biederman (2004) as a problem, especially as it applies to goods that

are sold in sizes. The same applies to the products that need to be inspected. Furthermore, ecommerce in developing countries (including Nigeria) is faced with the problems of power supply and inadequate telecommunication, (Chien-Chao, 2008). Ojukwu (2006) stated that one of the major problem facing the utilization of e-commerce by SMEs is irregular/inadequate power supplies, stressing that Nigeria has approximately 5,900megawatts (MW) of installed electric generating capacity, in the form of three hydro-based stations and five thermal stations, but there is the problem of electricity generation from domestic plants. Amadi (2008) wrote that only 40% of Nigeria total population has access to electricity. This problem is further exacerbated by incessant fuel crises in Nigeria (Ojukwu, 2000). On the inadequate telecommunications infrastructure, Abengule (2003) wrote that Nigeriags telecommunications infrastructure is primitive and grossly inadequate, and that the country stele-density of 0.004 (making the ratio of 250 people to one telephone line) makes Nigeria one of the lowest in the world. However, Payne (2003) wrote that the tele-density would greatly improve with the launching of the telecommunication satellite. The implication of the problem is lack of access to the internet by the majority of Nigerians that are prospective online customers to companies (Usman, 2007). The problem of less developed finance sector leading to difficulty of online payment is another major inhibiting factor of e-commerce for SME in Nigeria.

According to Ali (2004), Nigeria is largely a cash-based economy world with over 90% of funds residing outside the banking sector as against the developed world where the money in circulation is 4% and 9% in the UK and US respectively. This situation, according to Ogunyemi (2006), to a greater extent hinders the participation of Nigeria citizen in e-commerce where e-payment is the acceptable means of settling transactions. The major payment cards include: Master card, value card, visa card and ATM card (Ayo and Babajide, 2006). Also, Oyelaren-

Oyeyinka and Adeya (2003) asserted that the problem of e-commerce utilization is a result of under-developed finance sector, online shoppers find it difficult to obtain credit cards and other facilities which make payment difficult. A lot of sharp practices are involved in electronic money transfer in Nigeria. According to Ayo and Babajide in Ogunyemi (2006), Advance Fee Frauds code-named 419, is one of the popular internet frauds and it probably had its origin from Nigeria, and that the country, lately has been very prominent among the list of fraudulent nations. Consequently, there has been outright rejection of payment cards issued by Nigeria banks on the international arena. Oborah (2011) wrote that, in spite of the effort of the Nigeria government, wire scam is on the increase. It is stated that electronic money transfer form a major means of ecommerce payment and has been greatly abused. Amadi (2008) stated further that from scam, it was reported that one person acknowledged loss of money dealing with Nigerians on the internet in 2000, 10 in 2001, 7 in the year 2002, 12 in 2003, 18 in 2004 and forty two (42) in 2005. Average of \$7,000 dollars is lost to cyber-crime. The inadequacies with payment systems, is a discouraging factor to the use of e-commerce by SMEs in Nigeria, and particularly in Lagos, (Ayo and Babajide, 2006). It is however asserted in (Ogunyemi 2006) that the effort of government through bodies such as the National Cyber-Crime Working Group (NCWG); the Economic and Financial Crimes Commission (EFCC), among others, the crime situation with ecommerce would greatly reduce.

There is also the problem of cost which is the major problem of e-commerce utilization by SMEs in Nigeria. Ojukwu (2006) stated that as a result of the low Value of naira, the costs of equipment procurement, service provision and emolument increase dramatically. This amounts to an increased overhead cost and costs of acquiring and maintaining the IT infrastructure. Other problems in order of severity identified by Oyelaran-Oyeyinka and Adeya (2003) include: cost,

skills in effective manipulation of IT equipment, non-access to the internet and connectivity problems. Ojukwu (2006) gave other problems of e-commerce faced by companies as government policies especially with respect to duties being paid on the imported technologies and stocks; economic instability (with very high inflation eating deep into the profit of SMEs), and concerns relating to data and property security. Kaynak et al (2005) summed the problems of e-commerce for SMEs as lack of technological readiness, stating that SMEs lacked appropriate technology to handle the comparative low volume of work and the different lines of products offerings. Many SMEs are not financially strong to support the technical and support staff to fully implement e-commerce that would ensure the envisaged benefits (Ojukwu, 2006).

The problem of inadequate power supply and telecommunication, security issue and costs of IT infrastructure equally influence the utilization of e-commerce by both the consumer and industrial marketers. However, there is the added problem of delivery of industrial products in Lagos where the traffic is usually congested and lack of well-developed transportation system for outsourcing by e-commerce industrial marketers (Oborah, 2008).

Success Factors for Effective E-commerce Utilization

For successful e-commerce transaction, these factors should be considered and adopted; Technical and organizational factors, customers related factors, product related factors and acceptance aspects (Agomuo, 2005).

Technical and organizational factors

Agomuo (2005) emphasized that in most cases an e-commerce company will survive not only based on its product, but by having a competent management team, good post-sales services, well-organized business structure, network infrastructure and a secured, well-designed website, such factors include:

- Sufficient work done in market research and analysis. E-commerce is not exempted from
 good business planning and as such the fundamental law of supply and demand has to be
 inculcated, because business failure is as much a reality in e-commerce as in any other form
 of business.
- Introduction of good management team armed with good and sound information technology strategy. A company IT strategy should be a part of the business re-designing process.
- Provision for customers is an easy and secured access to transactions by the use of credit
 cards which is the most popular means of sending payments in the internet accounting for
 90% of online procession.
- Provision of reliability and security of parallel servers, hardware redundancy, fail-safe technology information, encryption and firewalls can enhance this requirement.
- Construction of a commercially sound business model.
- Provision of a 360 degree view of the customer relationship, defined as ensuring that all employeesø supplies and partners have a complete view and the same view of the customer.
- Setting up an organization of sufficient alertness and agility to respond quickly to any changes in the economic, social and physical environment.

Nevertheless, the e-commerce vendor must also perform such mundane tasks as being truthful about the product and its availability. Through the internet, people have access to more information about the seller, the buyer and the market in a number of factors, especially about two major factors.

Customer Related Factors

For an e-commerce organization to be successful, such organization must provide an enjoyable and rewarding experience to its customers because of the fact that the customers are the consumers of the product. For an e-commerce organization to be successful it should;

- Provide value to customers: this can be achieved by the vendors offering a product-line that attracts potential customers at a competitive price.
- Provide incentives for customers to buy and to return: this implies providing sales
 promotions which could involve coupons, special offers and discounts. Cross-linked
 websites and adverting affiliate programs can also help.
- Provide a sense of community: to this effect, chat rooms, discussion boards, soliciting customer input and loyalty programs can help in this respect.
- Let customers help themselves by providing a self-sense site, easy to use without assistance.
- Providing personal attention: personalized websites purchase suggestions, and personalized special offers may go some of the way to substitute for the face to face human interaction found at a traditional point of sale.

With the adoption of the above mechanisms, customers will highly be involved as they are the bedrock of e-commerce organization.

Product Related Factors

Certain products or services appear more suitable for online sales. Such products generally have a high value to weight ratio, also product items which can fit through a standard letterbox such as music CDs, DVDs and books are highly essential and promotes e-commerce organizations, hence virtual marketers; Amazon.com has historically concentrated on this, because ito highly beneficial. Another successful factor as regards product suitability is providing customers with exact, reliable information about which part number, their particular version of product needs, this can be achieved by having a serial number for every part of their product. In their contribution Kuzic et al (2002) cautioned that to maximize value from e-commerce, business must identify and evaluate factors critical to success. For them the e-commerce success factors identified from literature are also divided into the three categories-technological managerial and business related. These are summarized below

Technological success factors include: secure transactions, Website functionality and features such as catalogues, frequently asked questions, CRM, decision support, Payment issues, credit cards and e-payments, Integration of web site to all business process, Adequate resources and appropriate e-commerce infrastructure (Kuzic et al, 2000).

Managerial success factors, according to Kuzic et al (2002), include: effective project leadership company vision, forming alliances - with suppliers, technology providers, customers, appropriate organizational structure. Business success factors include: advertising on and off line, rapid delivery, disintermediation, more personalized customer service, market responsiveness.

Owens and BeyonóDavies (2001) suggested that the success of the adoption of electronic commerce project will depend upon other factors such as having a product or service well-suited to e-commerce, being flexible to continually innovate and integrate electronic commerce into existing business activities and being able to manage the growth that many result from the investment in electronic commerce. Irrespective of these success factors, organisations (Soft Drink Manufacturing Companies inclusive) cannot utilize e-commerce components without the help of information and communication technology interface. This is because e-commerce components are ICT driven (Laudon and Laudon, 2006). It is inconceivable that real marketing can be conducted in the present day sense without IT. Laudon and Laudon (2006) buttress this fact as they assert that õif you want to achieve a strategic advantage over your rivals, to differentiate yourself from your competitors, IT is one avenue for achieving such advantages along with changes in business practices and managementö. Information technology helps companies organize in more flexible ways, increasing their ability to sense and respond to changes in the marketplace and to take advantage of new opportunities (Laudon and Laudon, 2006). With ICT Soft Drink Manufacturing Companies utilize e-commerce and adopt contemporary marketing practices.

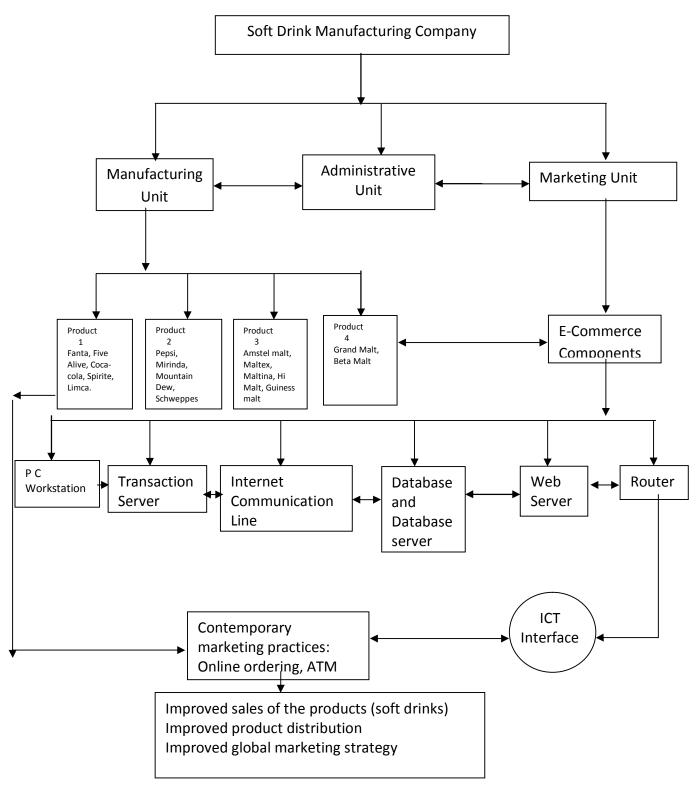


Fig.3: Schematic representation of e-commerce by soft drink manufacturing companies in Anambra and Enugu States of Nigeria. (Source: The Researcher)

Soft Drink Manufacturing Companies have the manufacturing section and the marketing section and Administrative/Management unit which is coordinating both sections. The manufacturing section is responsible for production of different brands of soft drinks. The marketing section is responsible for advertising, distribution, marketing and selling of the manufactured products thus ensuring that these products reach the final consumers through the application of e-commerce components via computer networks instead of the traditional buying and selling of products and services. The e-commerce components are PC Workstation, Transaction server, Internet communication line, Database and Database server, Web server and Router. These e-commerce components function as an Information and Communication Technology (ICT) interface installed in Soft Drink Manufacturing Companies websites thus making it possible for online ordering of products, ATM payments, products promotions and advertisement, online payment, money transfer, sending of business communication e.g. e-mail.

Theoretical Framework

Innovation Diffusion Theory

Innovation diffusion theory was propounded by Rogers in 1995. The theory explains the process involved in adoption of innovation by individuals and also the process involved in the diffusion of innovation by the society or any group in the society. The theory stated that diffusion is the process by which an innovation is communicated through certain channels over time among the members of a social system. Innovations are any objects, ideas or practices perceived as new. Four of the theories discussed by Rogers among the most widely-used theories of diffusion include Innovation Decision Process; Individual innovativeness; Rate of Adoption; and Perceived Attributes.

(1) Innovation decision Process Theory

The innovation decision theory as stated by Rogers is that diffusion is a process that occurs over time and can be seen as having five distinct stages, thus knowledge, persuasion, decision, implementation and confirmation. The first stage is the knowledge stage, when consumers develop an understanding of an innovation and its functions. Both prior conditions such as consumers previous practice and characteristics of the decision 6 making unit influence knowledge in this stage and shape beliefs regarding innovations in the next stage. The second stage tagged persuasion is the stage when consumers develop attitudes towards the innovation based on knowledge of the innovation and their belief structures. In the third stage, Decision consumers decide to adopt or reject the innovation based on their attitudes and underlying belief structures. The fourth stage is the implementation stage, when consumers act on their decision made in stage three. The Confirmation stage is when consumers reconsider adopting the innovation as a function of their satisfaction or dissatisfaction and make decision regarding continued use of it.

According to this theory, potential adopters of an innovation must learn about the innovation, be persuaded as to the merits of the innovation, decides to adopt, implement the innovation and confirm (reaffirm or reject) the decision to adopt the innovation. This theory is relevant for this study in that soft drink manufacturing companies who adopt e-commerce will first need to be aware of it, be persuaded of its merits and then decide to implement their business in line with the adopted innovation. They however will need a confirmation of its efficacy in enhancing their businesses. On the other hand, lack of awareness and persuasion on the part of the adopters will impede their decision to make e- commerce a necessary adjunct in their businesses.

(2) Individual Innovativeness Theory

The individual innovativeness theory according to Rogers in 1995 stated that individuals who are predisposed to being innovative will adopt an innovation earlier than those who are less predisposed. The following figure shows the bell shaped distribution of individual innovativeness and the percentage of potential adapters theorized to fall into each category.

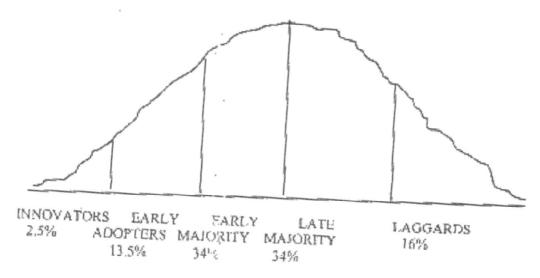


Fig.4: Bell shaped curve categories individual innovativeness within each category. Source: Okoro (2014)

The implication of the individual innovativeness theory is that all the adopters will not embrace innovations at the same time. This theory is relevant to this study because soft drink manufacturing companies that will adopt e-commerce to facilitate their business will do so at staggered periods even when they are fully aware of the fact that e-commerce will enhance their business operations. Besides, the percentage of adopters will vary significantly depending on the individual behaviors of adopters.

(3) Rate of Adoption Theory

The third widely- used diffusion theory discussed by Rogers is the theory of Rate of adoption.

Rate of adoption theory stated that innovations are diffused over time in a pattern that resembles

an sóshaped curve. Rate of Adoption theorizes that an innovation goes through a period of slow, gradual growth before experiencing a period of relatively dramatic and rapid growth. An example of how rate of adoption might typically be represented by an sócurve is shown in figure 5.

The theory also stated that following the period of rapid growth, the innovation is rate of adoption will gradually stabilize and eventually decline.

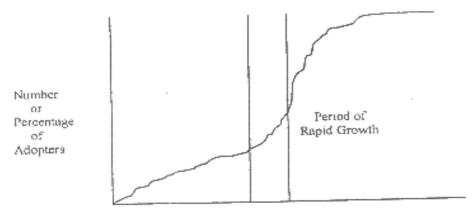


Fig. 5 S-curve representing rate of adoption of an innovation over time Source: Rogers, in Okoro 2014

Following this theory, one postulate that interest in the utilization of e-commerce components by soft drink manufacturing companies will grow gradually and often decline with emerging new technologies. This can easily be understood considering the adoption rate and pattern of General System Mobile (GSM) in Nigeria. Initially, a few people had GSM. At present it has become a necessary appendage to life styles and adopters often change their sets depending on emergent innovations like that of 3G and 3.5G.

(4) Perceived Attributes Theory

The theory of perceived Attributes according Rogers stated that potential adopter judge an innovation base on their perception in regard to five attributes of the innovation. These attributes are: Trialability, Observability; Relative Advantage; complexity; and compatibility.

The theory holds that an innovation will experience an increased rate of diffusion if potential adopters perceive that the innovation: 1) can be tried on a limited basis before adoption; 2) Offers observable results; 3) has an advantage relative to other innovations (or the status quo); 4) is not overly complex; and 5) is compatible with existing practices and values. Perceptions compatibility, complexity, and relative advantage have been found to play a significant role in several IT of related adoption studies. The theory stated that compatibility was the most important attribute among students and school administrators. The important thing to note here is that users of technology would be influenced by their perception of the attributes of the technology. Users would therefore, try, observe, compare and contrast the advantage before adjusting to usage. Innovation diffusion theory is relevant to this study in that the theory will form the basis upon which soft drink manufacturing companies adopt e-commerce as an innovation in marketing of soft drinks.

Transaction Cost Theory

Transaction Cost Theory was propounded by Coase in 1937. The theory stated that a firmøs interactions with the market may not be under its control (for instance because of sales taxes) but its internal allocation of resources. Transaction cost theory also highlights the incentive problem - that is, organizational structures needed to ensure that contractual and administrative arrangements are low cost and they must also deliver desirable outcomes. Organizational systems must provide appropriate incentives to those who operate the systems such that outcomes are satisfactory in terms of the goals of the organization. This theory is related to the study in that e-commerce can cut the cost of getting goods and services to consumers by providing convenience shopping methods like online ordering. This method of

shopping can reduce soft drink manufacturing companies needs to spend money on retail branches also known as brick and mortar operations.

The implication of the theoretical framework is that e-commerce—should be seen by Soft Drink Manufacturing Companies in Anambra and Enugu States to be of relative advantage to the brick and mortar marketing, it fits into the values and experiences possessed to be fully utilized. Other characteristics influencing the full utilization of e-commerce as identified include, the ease with which it can be applied and the extent of limited trials as well as the extent to which the results can be observed by soft drink manufacturing companies

Resource Based View (RBV) Theory

The Resource Based View theory was propounded by Wernerfelt in 1984. The theory was to facilitate the understanding of how organizations achieve sustainable competitive advantages. Rooted in the strategic management literature, the RBV theory focuses on the idea of costly 6 to-copy attributes of the firm as sources of business returns and as a means to achieve superior performance and competitive advantage. The theory argues that sustained competitive advantage is generated by the unique bundle of resources at the core of the firm where business owners build their businesses from the resources and capabilities that they currently possess or acquired. The theory stated that the basis for competitive advantage of a firm lies primarily in the application of a bundle of valuable tangible or intangible resources at the firm disposal. A resource-based view of a firm explains its ability to deliver sustainable competitive advantage when resources are managed such that their outcomes cannot be imitated by competitors, which ultimately creates a competitive barrier. Resource-Based View explains that a firm description sustainable competitive advantage is reached by virtue of unique resources being rare, substitutable, as well as firm-specific. A firm may reach a sustainable competitive advantage through unique

resources which it holds, and these resources cannot be easily bought, transferred, or copied and simultaneously, they add value to a firm while being rare. Major concern in Resource-Based View is focused on the ability of the firm to maintain a combination of resources that cannot be possessed or built-up in a similar manner by competitors. This theory is relevant to this study in that it will form the basis for soft drink manufacturing companies to equip their organizations with state-of-the-art e-commerce components for them to achieve competitive advantage over others.

Related Empirical Studies

Owens and Beynon-Davies (2001) conducted a survey on electronic commerce utilization by small and medium sized enterprises in South Wales. The aim of the survey was to gain a precise picture of the awareness and utilization of E-commerce amongst SMEs in South Wales region, to identify and access the perceived opportunities and benefits of e-commerce amongst SMEs, to determine the main barriers preventing the adoption of e-commerce amongst SMEs. The population of this study consisted of 2000 members of Cardiff Chamber of Commerce. The instrument for data collection was a structured questionnaire. The findings of this study revealed that companies are mainly using the internet for electronic mail (87%), finding information (71%) and advertising (50%). The finding also revealed that the main difficulties experienced with E-commerce are not having sufficient time to devote to it. The main current benefits experienced by companies using E-commerce as revealed by the findings were reduced cost of communication with customers (50%), time savings and quality improvements. This study is related to the present study because this study dealt on e-commerce utilization just like the present study but this study differed with the present study in that the previous study dealt on the awareness and utilization of e-commerce by SMEs in South Wales while the present study dealt

on the extent of utilization of e-commerce by Soft Drink Manufacturing Companies in Anambra and Enugu States.

Another study was carried out by Desai, Fletcher and Wright (2001) on the adoption of database marketing. Desia, et al (2001) conducted a study using a survey research design. This study investigated the adoption of database marketing in the financial services and other industries using a list of barriers and enablers derived from literature on the adoption of Information Technology (IT) system. The population for this study was 1,037 Managers in Australia from where a random sample size of 80% numbering 830 respondents was studied. The overall conclusion from this study was that organizational barriers were more significant than technical barriers in the adoption of database marketing in the financial services industry. The present study is related to the previous study undertaken by Desai et al (2001) because both studies were concerned with the utilization of database marketing which is an aspect of the present study. The gap between this study and the present study is that this study was conducted in Austria while the present study is in Nigeria and the present study encompasses more aspects of e-commerce.

Coviello, Brodie, Danaher and Johnston (2002) conducted a study on the utilization of e-commerce marketing competencies among firms. The main objective of this study was to identify the type of e-commerce utilization in different firms pursuing different organizational strategies in response to the contemporary business environment in Ghana. Survey research design was adopted for this study. The population for this study was 1,200 firms from which a convenient sample size of 120 managers was studied. A 40-item questionnaire titled e-commerce types towards pursuing different organizational strategies in response to changing business environment (EPOSCBE) was utilized for this study. The results of their findings show that most

managers were able to classify their organizational strategies within three categories of prospector, analyzer and defender, with the most common being the prospector strategy (40%), followed by the analyzer strategy (35%) and the defender strategy (25%).

It was found from the study that managers who identified their organizations as pursuing a prospector, analyzer, and defender strategies placed high level of importance on transactional marketing and database marketing as components of their strategies for interacting with their environments. The relationship between this study by (Coviello et al, 2002) and the present study is in the area of identification of types of e-commerce utilization in firms, however, while the previous study focused on organizations in Ghana, the present study is directed at utilization of e-commerce component for organization in the Nigeria Marketing environment.

Kuzic, Fisher, and Scollary (2002) conducted a research on e-commerce benefits, challenges and success factors in Australian Banking and Finance industry. The objective of the study was to examine three key elements in e-commerce from a business perspective, focusing on benefit, challenges and factors leading to success in each area. The research involved a survey of Australia top 500 companies. The findings of this study indicated that the major benefits to the industry sector from adoption of e-commerce were increased sales, business efficiency, competitive advantage, increased automation of processes and retained and increased customer. The key challenges identified for the sector include the costs of the technology, lack of e-commerce knowledge, budgeting etc. This study is related to the present study in that it dealt on e-commerce benefits, challenges and success factors but differed with the present study in scope because it researched on the Australian Banking and Finance Industry while the present study dealt on Soft Drink Manufacturing Companies in Anambra and Enugu States.

Etonyeaku (2005) undertook a study to assess the marketing strategies utilized by Soft Drink Manufacturing Industries in Enugu and Anambra States in marketing their products. The study utilized survey research design. The study answered four research questions and tested four hypotheses at 0.05 level of significance. A structured questionnaire was used as instrument for the study. The population of the study consisted of 340 subjects drawn from five Soft Drink Manufacturing Industries operating in Enugu and Anambra States. The entire population was studied. The research questions were analyzed using frequency count, mean and percentages. T-test statistical tool was used to test the null hypotheses. The study found out that the four utilized marketing strategies by Soft Drink Manufacturing Industries in Enugu and Anambra States were as follows: product innovation strategy, distribution strategy, confrontational strategy and market segmentation strategy. The study is related to the present study as the two studies dealt on Soft Drink Manufacturing Companies in Anambra and Enugu States. The study differed with the present study in scope. While the study dealt on extent of utilization of some marketing strategies, the present study dealt on extent of utilization of e-commerce.

Oborah (2008) undertook a study to explore the utilization of e-commerce by SMEs in marketing industrial products in Lagos metropolis. The population for this study consisted of 532 managers of SMEs that are registered with NASME and NASSI. Survey design was used. There was no sampling because the population was small. The Questionnaire was the instrument for data collection. The findings of this study among others were that SMEs in Lagos metropolis highly utilized e-mail and www as the economic resources in marketing industrial products; sixteen problems were identified by SMEs in the utilization of e-commerce resources. It was recommended that SMEs in Lagos Metropolis should fully integrate e-commerce into their marketing strategies in marketing industry IT. It was also recommended that an appropriate e-

commerce policy for SMEs should be formulated by government. This study which centered on extent of utilization of e-commerce is related to the present study which also focused on extent of utilization of e-commerce but differed in scope.

Furthermore, Hinsen and Dadzie (2009) undertook a study on the changing nature of Ecommerce marketing in Ghana. The objective of the research was to test the miles and snow typology in Ghana West Africa, and to understand the domain of managerial marketing practices in an Africa context. The researchers adopted a survey research design for this study. The population of this study was 2,160 Managers from where a stratified sample Managers were chosen for the study. The results showed that 70% of the managers in the studied sample identify their organizations as following the classification posited by the three types of organizational strategies: prospector, analyzer, and defender. It was found out that firms emphasize transactional marketing and database marketing under all three types of organizational strategies (prospector, analyzer and defender) but that defender firms make the least use of network marketing. These findings show that the dynamics of e-commerce in Ghana is similar to that reported in other economies as well as the usefulness of the miles and snow strategy Typology as a tool for understanding contemporary marketing strategy in an African context. The present study is related to the study of Hinsen and Dadzie (2009), as it is equally aimed at studying the dynamics of e-commerce marketing in Nigeria. This study however, differed from the present study because the present study did not test the miles and snow Typology.

Similarly, Boamah and Kwaku (2011) conducted a study on the extent of adoption of ecommerce in the Ghananian Diary industry and its potential application and benefits. The main objective of the study was to measure the extent of adoption of e-commerce in the Ghananian dairy industry and also appraise its potential applications and benefits. Survey research design was adopted for the study. The population of this study was Heads of department of five men ice cream manufacturing companies in Ghana and workers in the various departments of these companies. Stratified Random sampling technique was adopted for the study and a sample size of 230 was studied. A 70óitem questionnaire was used to collect data for the study. The findings showed that most respondents generally were very much acquainted with the concept and application of e-commerce. The respondents had a positive perception of the importance of eó commerce to their companies. There was also a general acceptance that the adoption of ecommerce provided information on their company goods and services. It was also found out that the adoption of eócommerce has imparted positively on communication with customers and suppliers, internal communication between employees and after sales services and contact, document and design exchange with customers etc. The previous study is, therefore, related to the present study in that both studies are focusing on extent of utilization of eócommerce in industries, but differed in school. The study focus on adoption of e-commerce in dairy industries, the present study is looking at adoption of e-commerce in Soft Drink Manufacturing Companies in Anambra and Enugu States.

In another vein, Okoro (2014) undertook a study to determine the utilization of e-commerce marketing competencies by pharmaceutical business operations in Anambra and Imo States of Nigeria. This study considered five categories of e-commerce marketing competencies namely: webpage marketing competency, database marketing competency, transactional marketing competency, relationship marketing competency and network competency. The population of the study comprised 279 Pharmaceutical Business Operators from Anambra and Enugu States. No sample was taken in view of the manageable size of the population. This study

adopted a survey research design and a structured 87-item questionnaire with five response categories on the degree of utilization was used for data collection. The result of this study revealed that while relationship marketing competencies was identified as highly utilized, all other e-commerce marketing competencies were found to be utilized at low extent, leaving a far reaching implication for marketing education and pharmaceutical businesses in Nigeria. It was recommended among others that institution offering marketing education should as a matter of urgency, review their curriculum contents to fall in line with the current development in marketing education as this will help the lecturers teach properly and the graduates acquire the right knowledge and skills. Okoroøs work is related to the present study in that both studies focused on e-commerce marketing practices but differed in scope. While Okoroøs study focused on the e-commerce marketing competencies of pharmaceutical business operators, the present study focuses on the e-commerce components of soft drink manufacturing companies.

Again, Okoro (2015) assessed the extent of availability and utilization of information and communication technology facilities in teaching Business Education in South-South Universities in Nigeria. Two research questions and four null hypotheses guided the study. The population of the study comprised 130 lecturers in Business Education. No sample was drawn as the entire number was utilized for the study. A questionnaire containing 60 items was used for the study. The questionnaire was structured on 4-point rating scale. Data collected were analyzed using mean and standard deviation and t-test was used to test the null hypotheses. One of the findings indicated that core ICT facilities such as desktop, modem, computers and overhead projectors were available and were being utilized at low extent. This study which centered on utilization is related to the present study which focuses on utilization of e-commerce component but differed

in scope with the present study. However, the previous study covered South-South States of Nigeria while the present study covered South East states of Nigeria.

Summary of Literature Reviewed

Reviewed literature disclosed different views of e-commerce by various authors. The various views show that buying and selling could be done electronically despite the traditional method of buying and selling which is personal selling (face-to-face). The authors were in an agreement that most soft drink manufacturing companies are now globalized through the interconnectivity of information technology.

It was discovered in the existing literature that e-commerce involves electronic communication and digital information processing technology for business transactions. The review of the evolutionary trend of e-commerce revealed that it metamorphosed from electronic data interchange and electronic fund transfer to the present sophisticated internet-driven business model that has made it a necessary adjunct to contemporary business. The literature review also revealed and discussed seven components of electronic commerce. They include Client or PC workstation, Transaction Server, Web Server, Database Server, Database, pouter and internet communication line and they are utilized to facilitate e-commerce marketing operations.

The literature also revealed that e-commerce is Information and Communication Technology (ICT) driven. The new technology innovation has extended the acquisition of knowledge, skills and complex orientation to the individual and society in general. The authors were in agreement with the benefits of utilizing electronic commerce in the operations of soft drink manufacturing companies. Available literature reveals that suppliers, business partners and distributors of soft drink manufacturing companies are now able to transact business without stepping into the companies. Literature dealing with the constraints faced by soft drink

manufacturing companies utilizing electronic commerce in their operation indicates that fraud is of very serious concern to all the companies. Literature further revealed the success factors that are required in order to make electronic commerce operations to be effective. These includes: technical and organizational factors, customer related factors, and product related factors

Eleven empirical studies conducted in the area of e-commerce practices were also reviewed. Most of the empirical studies were on the utilization of e-commerce in marketing operations. The greater percentage of the empirical studies reviewed were conducted outside Nigeria. Incidentally, none of the empirical studies reviewed or any other one known to the researcher was on the extent of utilization of e-commerce by Soft Drink Manufacturing Companies in Anambra and Enugu State of Nigeria which is the gap this study sought to fill.

CHAPTER THREE

METHODOLOGY

This chapter presents the procedure adopted for this study. Specifically it described in details the design of the study, area of the study, population for the study, sample and sampling technique, instrument for data collection, validation of the instrument, reliability of the instrument, method of data collection and method of data analysis.

Design of the Study

The study adopted descriptive survey research design. Descriptive survey research design, according to Azuka (2011), is a research method that uses questionnaire or interview to collect data from a sample that has been selected to represent a population in which the findings of the data analysis can be generalized. Descriptive survey, according to Osuala (2004), focuses on people, fact about people, their beliefs, opinions, attitudes, motivation and behavior. Descriptive survey is considered appropriate for this study because it sought to find out the opinions of employees of soft drinks manufacturing companies on the extent of utilization of e-commerce components in the business and marketing operations of the companies.

Area of the Study

The study was carried out in Anambra and Enugu States. These two States are in the South Eastern geopolitical zone of Nigeria. Enugu State was chosen because there were many soft drink manufacturing companies operating in the state. These include Nigeria Bottling Company Limited, Seven-up Bottling Company Plc and Nigeria Breweries Plc. Anambra State which shares boundary with Enugu State has Intafact Beverages Nigeria Limited located at Onitsha the commercial nerve centre of the State. There are also depots of these Soft Drink Manufacturing Companies in Awka, Onitsha, Nnewi, Enugu, Awgu and Nsukka. The States

were therefore chosen for the study in view of the concentration of the factories and depots of the Soft Drink Manufacturing Companies in these areas. These companies also have computers, Internet facilities, and electronic bill boards used for advertising etc which support e-commerce operations.

Population for the Study

The population for this study was 296 staff of Soft Drink Manufacturing Companies in Anambra and Enugu States. This population consists of 17 Marketing Managers, 21 Sales Managers, 7 IT Managers, 6 Accounts Managers and 245 Sales Representatives. The population is further composed of 182 respondents in Anambra State and 114 respondents in Enugu State. The population distribution is attached as appendix $\pm \emptyset$ (pp 145-146).

Sample and Sampling Technique

No sample was taken owing to the manageable size of the population. Hence, the entire population of 296 was studied.

Instrument for Data Collection

A structured questionnaire titled õE-commerce Questionnaire for Soft Drink Manufacturing Companies (EQSDMC)ö was used for the study. The Questionnaire items were developed in line with each of the research questions. The structured questionnaire was developed from the literature reviewed by the researcher. The questionnaire is divided into two parts. Part one contained 5 items that sought information on personal data of the respondents. Part two contained sections A, B, C, D, E, and F with 82 items. Section A contained 11 items (1-11) designed to determine the extent to which soft drink manufacturing companies utilize transaction server in their business operations in Anambra and Enugu States. Section B comprised of 24 items (12-35) designed to determine the extent to which soft drink

manufacturing companies utilize internet communication line in their business operations in Anambra and Enugu States. Section C comprised of 21 items (36-55) designed to determine the extent to which soft Drink Manufacturing companies utilize database and database server in their business operations in Anambra and Enugu States. Section D has 15 items (56-70) designed to determine the extent to which soft drink manufacturing companies utilize Web-server in their business operations in Anambra and Enugu States. Section E contains 8 (71-78) items designed to determine the extent to which soft drink manufacturing companies utilize router in their business operations in Anambra and Enugu States. Section F comprise 4 (79-82) items designed to determine the extent to which Soft Drink Manufacturing Companies utilizes client or PC workstation in their business operations in Anambra and Enugu States.

The questionnaire items were structured on a five-point rating scale. The response categories for sections A-F were Very High Extent (VHE) 5points, High Extent (HE) 4points, Moderate Extent (ME) 3points, Low Extent (LE) 2points and Very Low Extent (VLE) 1point. The respondents were required to tick (ç) against the response categories that best satisfy their opinions.

Validation of the Instrument

The instrument was subjected to face-validation by three experts. Two of the experts were from the Department of Business Education while one expert was from the Department of Computer Education in the Faculty of Vocational and Technical Education, University of Nigeria Nsukka (UNN). Each validate was presented with a copy of the questionnaire, research question, purpose of the study and hypotheses. They were requested to verify whether the instrument would help to achieve the objectives of the study and to make recommendations

based on their opinions. Their suggestions were taken into consideration in the production of the final copy of the instrument which had 82 items against 78 items sent for validation.

Reliability of the Instrument

The reliability of the instrument was determined by administering 21 copies of the questionnaire to Marketing Managers, Sales Managers, IT Managers, Accounts Managers and Sales Representatives of Papod Breweries Limited Port-Harcourt in Rivers State. The choice of selecting this company was informed by the number of common characteristics it has with the Soft Drink Manufacturing Companies. Cronbach Alpha reliability method was used to ascertain the internal consistency of questionnaire items. The reliability coefficients obtained for sections A, B, C, D, E, and F were as follows: .50, .82, .76, .59, .78 and .82 respectively. The overall reliability co-efficient of the entire instrument was .71.

Method of Data Collection

In order to foster easy coordination of the questionnaire administration and retrieval, 296 copies of the questionnaire were administered through personal contact by the researcher with the help of four research assistants. The researcher briefed the research assistants on how to administer the instrument in order to ensure good completion and return of the questionnaire. Two research assistants covered one State. The researcher personally supervised the questionnaire administration and retrieval. The number of copies of the questionnaire returned was 280 and this constituted 95 percent of the studied population. The analysis was based on the 280 copies of the questionnaire that were returned.

Method of Data Analysis

The data generated from the questionnaire were analyzed using Mean, Standard Deviation and Analysis of Variance (ANOVA). The analyses were done with Statistical Package for the Social Sciences (SPSS) in order to ensure that precision is attained.

Mean and Standard deviation were used to answer the research questions. Each item was interpreted based on the real limit of the mean corresponding to each item categories as follows:

Very High Extent = 4.50-5.00

High Extent = 3.50-4.49

Moderate Extent = 2.50-3.49

Low Extent = 1.50-2.49

Very Low Extent = 1.00-1.49

Analysis of Variance (ANOVA) statistic was however used to test the null hypotheses. This was adopted because the hypotheses involve more than two groups in each case. The null hypothesis of no significant difference was not upheld where the significance value to the F-value is less than the criterion P-value of 0.05. However, the null hypothesis was upheld where the corresponding significant value to F-value is greater or equal to the criterion P-value of 0.05 level of significance.

CHAPTER FOUR

PRESENTATION AND ANALYSIS OF DATA

This chapter presents the summary of the analyzed data and the results in line with the research questions and formulated hypotheses.

Research Question 1

To what extent is transaction server utilized by soft drink manufacturing companies in Anambra and Enugu states?

The data used for answering this Research Question are presented in Table 1:

Table 1:
The Mean Ratings and Standard Deviation of Respondents on the Extent of Utilization of Transaction Server by Soft Drink Manufacturing Companies in Anambra and Enugu states.

(N=280)

S/NO	Item Statements	\overline{X}	SD	Remarks
1	Use of Facebook facilities for e-conversations with customers	1.16	.71	VLE
2	Using e-hubs for sales promotion purposes	4.49	.98	HE
3	Making use of e-mail, fax facilities to facilitate business transaction	2.32	.64	LE
4	Use of server to obtain information concerning customerøs records	1.49	.57	VLE
5	Using transaction server to validate payment made with a credit			
	card	1.24	.54	VLE
6	Utilization of twitter to create awareness, connect customers and			
	drive sales	1.13	.41	VLE
7	Effecting online transaction made by customers	2.30	.57	LE
8	Effecting online fund transfers and e-payments using electronic			
	banking e.g. money transfer	2.97	.71	ME
9	Effecting automated clearing of financial instruments	1.42	.71	VLE
10	Utilizing computer for the preparation of customer utility bills.	1.59	.77	LE
11	Generating revenue from purchase and sale transactions	2.23	.82	LE
*	Overall Mean	2.03	.29	LE

Key: X = mean, SD = Standard Deviation, N = Number respondent, VLE = Very low Extent, LE = Low Extent, ME = Moderate Extent, HE = High Extent, VHE = Very High Extent

Table 1 presented the mean ratings of respondents on the extent of utilization of transaction server by soft drink manufacturing companies in Anambra and Enugu states. The analysis of the Table 1 revealed that item 2 had mean rating of 4.49 implying that it was utilized to a high extent. While item 8 had mean rating of 2.97 indicating that it was utilized to a moderate extent. However, items 3, 7, 10, and 11 had mean ranging from 1.59 to 2.32 indicating

low extent of utilization. On the other hand, items 1, 4, 5, 6, and 9 had their mean ranging from 1.13 to 1.49 indicating that they were utilized to a very low extent. The standard deviation of all the items ranged from 0.41 to 0.98 indicating that the respondents were not far from each other in their opinions. With an overall mean and standard deviation of 2.03 and 0.29 respectively, Table I indicated that Transaction Server was generally utilized to a low extent by Soft Drink Manufacturing Companies in Anambra and Enugu States.

Research Questions 2

To what extent is internet communication line utilized by Soft Drink Manufacturing Companies in Anambra and Enugu states?

The data used for answering this Research Question are presented in Table 2:

Table 2:
The Mean Ratings and Standard Deviation on the Extent of Utilization of Internet Communication Line by Soft Drink Manufacturing Companies in Anambra and Enugu States.

(N=280)

States.	(N=)	28U)		
S/NO	Item statements	\overline{X}	SD	Remarks
1	Taking orders for products and services on the internet	1.55	.61	LE
2	Utilization of Internet Relay Chat (IRC) for discussion on internet	1.13	.43	VLE
3	Utilization of search Engines to obtain information that facilitate			
	business operations e.g Google, yahoo	2.97	.61	ME
4	Utilization of user nets (News-Groups) for receiving and sharing news	1.09	.38	VLE
	with customers.			
5	Utilization of FTP (File Transfer Protocol) to transfer files between			
	B2B and C2B via the internet.	1.76	.93	LE
6	Utilization of Hosting (making information available to others on the	1.09	.36	VLE
	internet)			
7	Utilization of mailing list (e-mail messages) forwarded to everyone on			
	a special internet list.	1.21	.53	VLE
8	Utilization of e-catalogue to promote new products	2.47	.80	LE
9	Utilization of e-shopping cart to enhance sale of product without	1.77	.75	LE
	difficulty.			
10	Utilization of teleconference to share ideas on business operations	1.23	.83	VLE
11	Utilization of bulletin boards for advertisement and promotions of	4.45	1.15	HE
	brands product.			
12	Use of Electronic Data Interface (EDI) to exchange business document			
	in a standard electronic format between company and business	2.46	.93	LE
	partners.			
13	Use of Enterprise Portal for recording details about product	1.77	1.00	LE
	components.			
14	Use of Electronic Auction for quick sale of products	1.29	.67	VLE
15	Use of ETF (Electronic Fund Transfer) for payment to business			
	partners and payments by customers	3.16	.98	ME
16	Use of World Wide Web (www) to obtain and give out information.	3.06	.74	ME
17	Use of VOIP (Voice of Internet Protocol) to deliver voice	1.35	.82	VLE
1.0	communication		o =	
18	Utilization of gateway to communicate between different types of	2.53	.85	ME
10	network.	2.00	0.7	
19	Use of LAN Server to link computers together within the company.	3.99	.97	HE
20	Use of e-procurement to obtain raw materials from suppliers.	3.45	.85	ME
21	Utilization of different word processing packages to enhance	1	1.00	IF
22	communication between company and customers.	1.66	1.03	LE
22	Utilization of stored information to plan call timers	2.22	1.01	LE
23	Utilization of intranet to communication within the company.	4.33	1.17	HE
24	Utilization of HTML (Hypertext Markup Language) to present a web	2.22	1.15	LE
*	Overall Mean	2.26	25	LE

Key: \overline{X} = Mean, SD = Standard Deviation, N = Number respondent, VLE = Very low Extent, LE = Low Extent, ME = Moderate Extent, HE = High Extent, VHE = Very High Extent

In Table 2, there are 24 item statements out of which three items have mean scores of 3.99, 4.43 and 4.45 implying that they were utilized to a high extent, while five items with mean scores of 2.97, 3.16, 3.06, 2.53 and 3.45 respectively were thus adjudged to be utilized to a moderate extent. Nine of the items (items 1, 5, 8, 9, 12, 13, 21, 22 and 24) have their mean scores range from 1.55 to 2.47 implying that they were utilized to a low extent. The remaining seven items on the Table have their mean scores as 1.13, 1.09, 1.09, 1.21, 1.23, 1.29 and 1.35, respectively, which showed that they were utilized to a very low extent. The overall mean of 2.26 implied that all the items in the cluster were generally utilized to a low extent. The standard deviation of all the items ranged from .36 to 1.17 indicating that the respondents were not too far apart in their opinions.

Research Question 3

To what extent is database and database server utilized by Soft Drink Manufacturing Companies in Anambra and Enugu State?

The data used for answering this Research Question are presented in Table 3.

Table 3: The Mean Ratings and Standard Deviations on the Extent of Utilization of Database and Database Server by Soft Drink Manufacturing Companies in Anambra and Enugu States.

S/No	Item Statements	$\overline{\overline{X}}$	SD	Remarks
1	Utilization of database to draw inferences about customerøs needs and responses	1.57	.70	LE
2	Utilization of database software for inventory control	2.35	.75	LE
3	Utilization of database records for online ordering of products	1.67	.72	LE
4	Creation of form using access tools for customers	1.41	.57	VLE
5	Identification of types of queries through customersødata	1.40	.70	VLE
6	Preparation of tables to facilitate business operations	2.13	.82	LE
7	Using table records to create queries in database	1.66	.84	LE
8	Creation or designing of reports from database for effective business operations.	2.82	62	ME
9	Utilizing database to identify prospects	2.73	.63	ME
10	Updating of customers queries using customer database	1.66	.74	LE
11	Utilization of macros for operations such as opening a form or printing a report		.86	LE
12	Utilization of operational database to facilitate business operation		1.11	ME
13	Utilization of customer database to record contact, credit and demographic information about customers	1.97	1.01	LE
14	Use of enterprise resource planning to record details about product components and parts inventory	1.75	.83	LE
15	Utilization of database server for order and purchase confirmation	1.74	.69	LE
16	Utilization of database server for payment confirmation	1.82	.88	LE
17	Utilization of information resources to validate data in database	2.26	1.19	LE
18	Banking of data in database	3.63	1.23	HE
19	Utilization of database software for analysis of inventory management records	3.14	.78	ME
20	Utilization of database to facilitate the installation of automatic mailing programme for sending out birthday or anniversary cards, Christmas shopping reminders or off-season promotions	3.40	1.08	ME
*	Overall Mean	2.19	.41	LE

Key: \overline{X} = Mean, SD = Standard mean, N = Number of respondents, VLE = Very low extent, LE = Low extent, ME = Moderate extent, HE = High extent, VHE = Very High extent

Table 3 presents the mean ratings of respondents on the extent of utilization of database and database server by Soft Drink Manufacturing Companies in Anambra and Enugu States. The Table 3 has 20 items statement out of which one item (item 18) had mean score of 3.63 implying that it was utilized to a high extent. Five of the items (items 8, 9, 12, 19 and 20) have mean scores of 2.82, 2.73, 2.81, 3.14 and 3.40 indicating that they were utilized to a moderate extent.

However, items 1, 2, 3, 6, 7, 10, 11, 13, 14, 15, 16, and 17 have mean scores ranging from 1.50 to 2.26 implying that they were utilized to a low extent. Only items 4 and 5 have mean scores of 1.41 and 1.40 respectively indicating that they were utilized to a very low extent. The overall mean of 2.19 however, indicated that the items in the cluster were utilized to a low extent. The standard deviation of the items ranged from .57 to 1.23 indicating that the respondents were not too far apart in their opinions.

Research Questions 4

To what extent is Web Server utilized by Soft Drink Manufacturing Companies in Anambra and Enugu States?

The data used for answering this Research Question are presented in Table 4

Table 4
The Mean Ratings and Standard Deviation on the Extent of Utilization of Web Server by Soft Drink Manufacturing Companies in Anambra And Enugu States. (N = 280)

S/No	Item Statements	\overline{X}	SD	Remarks
1.	Use of Web Browser by company and customers to communicate ideas or obtain information	1.69	.85	LE
2.	Utilization of Server-side sampling to generate dynamic Web Page	2.75	1.13	ME
3.	Navigating for Web sites using search engines	1.61	1.05	LE
4.	Use of Web Chatting to host various groups	1.12	.49	VLE
5.	Use of Web casting to broadcast audio and video communications	1.21	.56	VLE
6.	Use of Web Crawler for web indexing	1.21	.55	VLE
7.	Use of Bandwith Throttling to limit the spread of responses	2.13	.88	LE
8.	Use of Hyperlinks (web links) to link other sites for business operations	1.39	.80	VLE
9.	Use of web conference to communicate ideas to wider audience	1.12	.49	VLE
10.	Utilization of interactive features of web pages to hold consumersø attention or to capture detailed information about consumer tastes and interests.	1.09	.44	VLE
11.	Utilizing web features to improve customersø experiences and creating additional value	1.07	.36	VLE
12.	Utilization of chick stream tracking to get detailed information about customer behaviour, preferences, needs and buying patterns	1.06	.37	VLE
13.	Utilization of chick stream tracking to ask visitors to websites to register online and provide information about them	1.16	.63	VLE
14.	Creation of unique personalized web pages that display contents or adds for products of services of special interest to prospective consumers	1.36	.96	VLE
15.	Utilization of web design features to collect data on customers activities at websites and store them in a blog	2.93	1.49	ME
*	Overall Mean	1.59	.48	LE

Key: \overline{X} = Mean, SD = Standard Deviation, N = Number of Respondents, VLE = Very Low Extent, LE = Low Extent, ME = Moderate Extent, HE = High Extent, VHE = Very High Extent

Table 4 presents the mean ratings of respondents on the extent of utilization of Web Server by Soft Drink Manufacturing Companies in Anambra and Enugu States. The table has 15 items statements out of which two items (items 2 and 15) have mean score of 2.75 and 2.93 respectively indicating that they were utilized to a moderate extent. Items 1, 3, and 7 have mean scores of 1.69, 1.61 and 2.13 respectively implying that they were utilized to a low extent. However, items 4, 5, 6, 8, 9, 10, 11, 12, 13 and 14 have mean scores ranging from 1.06 to 1.39 indicating that they were utilized to a very low extent by Soft Drink Manufacturing Companies in Anambra and Enugu States. Furthermore, the overall mean of 1.59 showed that all the items in the table were utilized to a low extent. The standard deviation of the items ranged from .36 to 1.49 indicating that the respondents were not too far apart in their opinions.

Research Questions 5

To what extent is Router utilized by Soft Drink Manufacturing Companies in Anambra and Enugu States?

The data used for answering this Research Question are presented in Table 5

Table 5
The Mean Ratings and Standard Deviation on the Extent of Utilization of Router by Soft Drink Manufacturing Companies in Anambra and Enugu States. (N = 280)

S/NoItem Statement\$\overline{X}\$SDRemarks1Use of Router to establish network connections for business operations3.21.99ME2Forwarding of data packet across computer network3.13.88ME3Use of Border Gateway Protocol (BGP) to establish link to computers in different offices2.78.77ME4Use of Access Servers or gateways to establish network to link the server2.74.82ME5Connection of multiple networks to facilitate business operation2.641.12ME6Use of Tail drop to manage congestion when packets arrive at a rate higher than the router can process3.371.63ME7Use of internet banner advert for advertisement of product and publicity of business operations2.671.79ME8Use of video conference by the company and customers to communicate ideas for wider audience1.50.96LE*Overall Mean2.74.52ME	Drink.	Manufacturing Companies in Anamora and Enugu States.	(11 - 1)	40U)	
Forwarding of data packet across computer network Use of Border Gateway Protocol (BGP) to establish link to computers in different offices Use of Access Servers or gateways to establish network to link the server Connection of multiple networks to facilitate business operation Use of Tail drop to manage congestion when packets arrive at a rate higher than the router can process Use of internet banner advert for advertisement of product and publicity of business operations Use of video conference by the company and customers to communicate ideas for wider audience 3.13 .88 ME 2.78 .77 ME 2.74 .82 ME 3.37 1.63 ME 3.37 1.63 ME	S/No	Item Statement	$\overline{\overline{X}}$	SD	Remarks
Use of Border Gateway Protocol (BGP) to establish link to computers in different offices Use of Access Servers or gateways to establish network to link the server Connection of multiple networks to facilitate business operation Use of Tail drop to manage congestion when packets arrive at a rate higher than the router can process Use of internet banner advert for advertisement of product and publicity of business operations Use of video conference by the company and customers to communicate ideas for wider audience 2.78 .77 ME 2.74 .82 ME 2.64 1.12 ME 3.37 1.63 ME 3.37 1.63 ME	1	Use of Router to establish network connections for business operations	3.21	.99	ME
in different offices Use of Access Servers or gateways to establish network to link the server Connection of multiple networks to facilitate business operation Use of Tail drop to manage congestion when packets arrive at a rate higher than the router can process Use of internet banner advert for advertisement of product and publicity of business operations Use of video conference by the company and customers to communicate ideas for wider audience 2.74 .82 ME 2.64 1.12 ME 3.37 1.63 ME 4.82 ME 4.82 ME 4.82 ME 5.64 1.12 ME 6.65 Use of video conferences and customers arrive at a rate higher than the router can process 7.65 ME 8.76 LE	2	Forwarding of data packet across computer network	3.13	.88	ME
server 2.74 .82 ME Connection of multiple networks to facilitate business operation 2.64 1.12 ME Use of Tail drop to manage congestion when packets arrive at a rate higher than the router can process 3.37 1.63 ME Use of internet banner advert for advertisement of product and publicity of business operations 2.67 1.79 ME Use of video conference by the company and customers to communicate ideas for wider audience 1.50 .96 LE	3	• • • • • • • • • • • • • • • • • • • •	2.78	.77	ME
Use of Tail drop to manage congestion when packets arrive at a rate higher than the router can process Use of internet banner advert for advertisement of product and publicity of business operations Use of video conference by the company and customers to communicate ideas for wider audience 2.67 1.79 ME 1.50 .96 LE	4	Ç ,	2.74	.82	ME
higher than the router can process Use of internet banner advert for advertisement of product and publicity of business operations Use of video conference by the company and customers to communicate ideas for wider audience 3.37 1.63 ME 2.67 1.79 ME 1.50 .96 LE	5	Connection of multiple networks to facilitate business operation	2.64	1.12	ME
publicity of business operations Use of video conference by the company and customers to communicate ideas for wider audience 2.67 1.79 ME 1.50 .96 LE	6	higher than the router can process	3.37	1.63	ME
communicate ideas for wider audience 1.50 .96 LE	7	publicity of business operations	2.67	1.79	ME
	8		1.50	.96	LE
	*		2.74	.52	ME

Key: X = Mean, SD = Standard Deviation, N = Number of Respondents, VLE = Very Low Extent, LE = Low Extent, ME = Moderate Extent, HE = High Extent, VHE = Very High Extent

Table 5 presents the mean ratings of respondents on the extent of utilization of router by Soft Drink Manufacturing Companies in Anambra and Enugu States. The table has eight items statements out of which seven items (items 1, 2, 3, 4, 5, 6, and 7) have mean scores of 3.21, 3.13, 2.78, 2.74, 2.64, 3.37 and 2.67 respectively implying that they were utilized to a moderate extent. The remaining item has mean score of 1.50 indicating that it was utilized to a low extent. Furthermore, the cluster Mean of 2.74 showed that the items in the cluster were generally utilized to a moderate extent. The standard deviation of the items ranged from .77 to 1.79 indicating that the respondents were not far apart in their opinions.

Research Question 6

To what extent is PC workstation utilized by Soft Drink Manufacturing Companies in Anambra and Enugu States?

The data used for answering this Research Question are presented in Table 6.

Table 6
The Mean Ratings and Standard Deviation on the Extent of Utilizations of PC Workstation by Soft Drink Manufacturing Companies in Anambra and Enugu States. (N = 280)

S/No	Item Statements	$\frac{\overline{X}}{X}$	SD	Remarks
1	Use of Graphical User Interface (GUI) to make each resource accessible by the user as an independent			
	object	1.53	.82	LE
2	Use of client to offer services to other clients	1.42	.79	VLE
3	Use of client to enable other components communicate in a structured manner	1.38	.67	VLE
4	Use of client for looking up a customer record in database or retrieving a portion of a file on the serverøs hard disk	1.55	.76	LE
*	Overall Mean/Grand Mean	1.45	.53	VLE

Key: X = Mean, SD = Standard Deviation, N = Number of Respondents, VLE = Very Low Extent, LE = Low Extent, ME = Moderate Extent, HE = High Extent, VHE = Very High Extent

Table 6 presents the mean ratings of respondents on the extent of utilization of PC workstation by Soft Drink Manufacturing Companies in Anambra and Enugu States. The Table

has four item statements out of which two items (items 1 and 4) have mean scores of 1.53 and 1.55 implying that they were utilized to a low extent while the remaining two items have mean scores of 1.42 and 1.38 indicating that they were utilized to a very low extent. The cluster table indicated a Mean value of 1.45 implying that all the items were utilized to a very low extent. The standard deviation of the items ranged from .67 to .82 indicating that the respondents were not too far apart in their opinions.

Null Hypothesis 1

There is no significant difference in the mean ratings of Marketing Managers, Sales Managers, IT Managers, Accounts Managers and Sales Representatives on the extent of utilization of transaction server by Soft Drink Manufacturing Companies in Anambra and Enugu States

The data for testing this null hypothesis 1 are presented in Table 7

Table 7
Result of Analysis of Variance (ANOVA) on the mean ratings of the Marketing Managers, Sales Managers, IT Managers, Accounts Managers and Sales Representatives on their extent of utilizing transaction server by Soft Drink Manufacturing Companies in Anambra and Enugu states.

Sources of Variance	Sum of Squares	Df	Mean squares	F	P-value	Remarks	
Between groups	7.155	4	1.789	29.177	.000	C	
Within groups	16.859	275	.061	29.177	9.177 .000	S	
Total	24.016	279					

Key: Level of significance = 0.05, S = significant

The Analysis of Variance (ANOVA) presented in Table 7 show the F-value to be 29.177 with a significance P-value of .000 which is less than 0.05. Hence, the null hypothesis was therefore rejected at 0.05 level of significance. With this result, there is a significant difference between, the mean ratings of Marketing Managers, Sales Managers, IT Managers, Account Managers and Sales Representatives on the extent of utilization of transaction server by Soft Drink Manufacturing Companies in Anambra and Enugu States.

Table 8
Scheffe Post Hoc Tests of Means for cluster A (Hypothesis 1)

		Subset for alpha = 0.05		
POSITION	N	1	2	3
SLALES REPRESENTATIVES	227	1.9596	,	
SALES MANAGERS	24	2.2538	2.2538	
MARKETING MANAGERS	16		2.2898	2.2898
IT MANAGERS	7		2.5455	2.5455
ACCOUNTS MANAGERS	6			2.5909
Sig.		.080	.084	.068

Means for groups in homogeneous subsets are displayed.

Data presented in Table 8 showed the Scheffe Post Hoc Test of Means for cluster A. The pair wise comparison of means using Scheffe showed that the mean differences did not follow a given pattern. Although the respondents disagreed on the extent of utilization of transaction server by soft drink manufacturing companies in Anambra and Enugu States. This means that Sales Representatives ($\overline{X}=1.9596$) was less than the means of Sales Managers, Marketing Managers, IT Managers and Accounts Managers thus indicating that a significant difference lies in the direction of Sales Representatives, whereas the means of Sales Managers, Marketing Managers, IT Managers and Accounts Managers showed no significant difference. Therefore Sales Representatives is the group reflecting the source of the major difference with the lowest mean.

Null Hypothesis 2

There is no significant difference in the mean ratings of Marketing Managers, Sales Managers, IT Managers, Accounts Managers and Sales Representatives on the extent of utilization of internet communication line by Soft Drink Manufacturing Companies in Anambra and Enugu States

The data for testing this null hypothesis 2 are presented in Table 9.

Table 9
Result of Analysis of Variance (ANOVA) on the mean ratings of the responses of Marketing Managers, Sales Managers, IT Managers, Accounts Managers and Sales Representatives on their extent of utilizing internet communication line by Soft Drink Manufacturing Companies in Anambra and Enugu States.

Sources of Variance	Sum of Squares	Df	Mean squares	F	P-value	Remarks
Between groups	.864	4	.216			
				3.574	.007	S
Within groups	16.619	275	.060			
Total	17.483	276				

Key: Level of significance ó 0.05, S - significant

The Analysis of Variance (ANOVA) presented in Table 9 show an F-value to be 3.574 with a P-value of .007 which is less than 0.05. Hence, the null hypothesis was therefore rejected at 0.05 level of significance. With this result, there is significant difference between the mean ratings of Marketing Managers, Sales Managers, IT Managers, Accounts Managers and Sales Representatives on the extent of utilization of Internet Communication Line by Soft Drink Manufacturing Companies in Anambra and Enugu States.

Table 10
Scheffe Post Hoc Tests of Means for cluster B (Hypothesis 2)

	=	Subset for alp	oha = 0.05
POSITION	N	1	2
MARKETING MANAGERS	16	2.2292	
SALES REPRESENTATIVES	227	2.2450	2.2450
SALES MANAGERS	24	2.2760	2.2760
ACCOUNTS MANAGERS	6	2.4375	2.4375
IT MANAGERS	7		2.5536
Sig.		.370	.054

Means for groups in homogeneous subsets are displayed.

Data presented in Table 10 showed the Scheffe Post Hoc Test of means for cluster B. The pair wise comparison of means using Scheffe showed that the mean differences did not follow a given pattern. However, the respondents disagreed on the extent of utilization of Internet Communication line by soft drink manufacturing companies in Ananbra and Enugu States. The mean of IT Managers (\overline{X} =2.5536) was higher and significantly different from means of Marketing Managers (\overline{X} = 2.2292) but not significantly different from means of Sales Representatives (\overline{X} = 2.2450), Sales Managers (\overline{X} = 2. 2760) and Accounts Managers (\overline{X} = 2.4375). Therefore, Marketing Managers is the group reflecting the source of the major difference with the lowest mean.

Null Hypothesis 3

There is no significant difference in the mean ratings of Marketing Managers, Sales Managers, IT managers, Accounts Managers and Sales Representatives on the extent of utilization of database and database server by Soft Drink Manufacturing Companies in Anambra and Enugu States.

The data for testing this null hypothesis 3 are presented in Table 11.

Table 11
Result of Analysis of Variance (ANOVA) on the mean ratings of the responses of Marketing Managers, Sales Managers, IT Managers, Accounts Managers and Sales Representatives on their extent of utilizing database and database server by Soft Drinks Manufacturing Companies in Anambra and Enugu States.

Sources of Variance	Sum o Squares	of Df	Mean Squares	F	P-value	Remarks
Between						
groups	2.288	4	.572			
				3.583	.007	S
Within groups	43.902	275	.180			
Total	48.190	279				

Key: Level of Significance ó 0.05, S - Significant

The Analysis of Variance (ANOVA) presented in Table 11 shows the F- value to be 3.583 with a significance of .007 which is less than 0.05. Hence, the null hypothesis was therefore rejected at 0.05 level of significance. With this result, there is significant difference

between the mean ratings of Marketing Managers, Sales Managers, IT Managers, Accounts Managers and Sales Representatives on the extent of utilization of database and database server by Soft Drink Manufacturing Companies in Anambra and Enugu States.

Table 12
Scheffe Post Hoc Tests of Means for cluster C (Hypothesis 3)

		Subset for $alpha = 0.05$
POSITION	N	1
SLALES REPRESENTATIVES	227	2.1528
SALES MANAGERS	24	2.2729
MARKETING MANAGERS	16	2.3562
ACCOUNTS MANAGERS	6	2.4667
IT MANAGERS	7	2.5500
Sig.		.209

Means for groups in homogeneous subsets are displayed.

Data presented in Table 12 showed Scheffe Post Hoc Tests of Means for cluster C. The pair wise multiple comparison of means using scheffe showed that means differences did not follow a given pattern. Although, the five groups of respondents disagreed on the extent of utilization of database and database server by soft drink manufacturing companies in Anambra and Enugu States. The means of IT Managers ($\overline{X} = 2.5500$) and Accounts Managers ($\overline{X} = 2.4667$) was higher and significantly different from the means of Sales Representatives ($\overline{X} = 2.1528$) but not significantly different from the means of Sales Managers ($\overline{X} = 2.2729$) and Marketing Managers ($\overline{X} = 2.3562$). Therefore, Sales Representatives is the group reflecting the source of the major difference with the lowest mean.

Null Hypothesis 4

There is no significant difference in the mean ratings of Marketing Managers, Sales Managers, IT Managers, Accounts Managers and Sales Representatives on the extent of utilization of Router by Soft Drink Manufacturing Companies in Anambra and Enugu States

The data for testing this null hypothesis 4 are presented in Table 13

Table 13
Result of Analysis of Variance (ANOVA) on the mean ratings of the responses of Marketing Managers, Sales Managers, IT Managers, Accounts Managers and Sales Representatives on the extent of utilization of Router by Soft Drink Manufacturing Companies in Anambra and Enugu States.

Sources of Variance	Sum Squares	of Df	Mean squares	F	P-value	Remarks
Between groups	4.120	4	1.030	4.633	.001	S
Within groups	61.135	275	.222			
Total	65.255	279				

Key: Level of significance - 0.05, S ó Significant

The Analysis of Variance (ANOVA) presented in Table 13 show the F-value to be 4.633 with P-value of .001 which is less than 0.05. Hence, the null hypothesis was therefore rejected at 0.05 level of significance. With this result, there is a significant difference between the mean ratings of Marketing Managers, Sales Managers, IT_Managers, Accounts Managers and Sales Representatives on the extent of utilization of router by Soft Drink Manufacturing Companies in Anambra and Enugu States.

Table 14 Scheffe Post Hoc Tests of Means for Cluster D (Hypothesis 4)

-	Subset for alpha = 0.05	
N	1	2
6	1.5333	
227	1.5436	
16	1.6625	1.6625
24	1.8306	1.8306
7		2.1429
	.667	.188
	6 227 16 24	N 1 6 1.5333 227 1.5436 16 1.6625 24 1.8306 7

Means for groups in homogeneous subsets are displayed.

Data presented in Table 14 showed the Scheffe Post Hoc Tests of Means for Cluster D. The pair wise multiple comparison of means using Scheffe showed that the means differences did not follow a given pattern, although the five groups of respondents disagreed on the extent of utilization of Router by soft drink manufacturing companies in Anambra and Enugu States. The means of Accounts Managers ($\overline{X} = 1.5333$) and Sales Representatives ($\overline{X} = 1.5436$) showed no significant difference but a significant difference exists between IT Managers with means ($\overline{X} = 2.1429$) and Accounts Managers and Sales Representatives. Again, while the means of Marketing Managers and Sales Managers is not significantly different from that of the IT Managers, but significantly different from that of Accounts Managers and Sales Representatives. Therefore, Accounts Managers and Sales Representatives were the groups reflecting the source of the major difference with the lowest means.

Null Hypothesis 5

There is no significant difference in the mean ratings of responds with respect to their years of experience (1-5, 6-10, and 11+years) on the extent of utilization of web server by Soft Drink Manufacturing Companies in Anambra and Enugu States.

The data for testing this null hypothesis 5 are presented in Table 15.

Table 15
Result of Analysis of Variance (ANOVA) on the mean ratings of the respondents with respect to their years of experience (1-5, 6-10 and 11+years) on the extent of utilization of web server by Soft Drink Manufacturing Companies in Anambra and Enugu States.

Sources of Variance	Sum of Squares	f Df	Mean Squares	F	P-value	Remarks
Between groups	1.424	4	.356	1.317	.254	NS
Within groups	74.317	275	.270			
Total	75.741	279				

Key: Level of significance, NS ó Not significant

The Analysis of Variance (ANOVA) presented in Table 15 shows the F-value to be 1.317 with P-value of .254 which is greater than 0.05. Hence, the null hypothesis was accepted at 0.05 level of significance. With this result, there is no significant difference between the mean ratings of Marketing Managers, Sales Managers, IT Managers, Accounts Managers and Sales Representatives with respect to their years of experience on the extent of utilization of Web Server by Soft Drink Manufacturing Companies in Anambra and Enugu States.

Null Hypothesis 6

There is no significant difference in the mean ratings of respondents with respect to their qualifications on the extent of utilization of e-commerce by Soft Drink Manufacturing Companies in Anambra and Enugu States.

The data for testing this null hypothesis 6 are presented in Table 16

Table 16
Result of Analysis of Variance (ANOVA) on the mean ratings of the respondents with respect for their qualifications on the extent of utilization of PC workstation by Soft Drink Manufacturing Companies in Anambra and Enugu States

Sources of Variance	Sum of Squares	Df	Mean Squares	F	P-value	Remarks
Between groups	.327	3	.109	.382	.766	NS
Within groups	78.815	276	.286			
Total	79.142	279				

Key: Levels of significance ó 0.05, NS ó Not Significant

The Analysis of Variance (ANOVA) presented in Table 16 show the F-value to be .382 with a P-value of .766 which is greater than 0.05. Hence, the null hypothesis was accepted at 0.05 level of significance. The above result implies that there is no significance difference between the mean ratings of Marketing Managers, Sales Managers, IT Managers, Accounts Managers and Sales Representatives with respect to their qualifications on the extent of

utilization of PC workstation by Soft Drink Manufacturing Companies in Anambra and Enugu States.

Findings

The following findings emerged from the study based on the research questions answered and the hypotheses tested.

1. Extent of utilization of Transaction Server

- (a) The study revealed that the following activity on the utilization of transaction server was to a high extent:
 - i. Using e-hubs for sales promotion purposes
- (b) The study revealed that this activity on the utilization of transaction server was to a moderate extent:
- i. Effecting online fund transfers and e-payments using electronic banking e.g. money transfer
- (c) The study revealed that the following activities on the utilization of Transaction Server were to a low extent:
 - i. Making use of e-mail, fax facilities to facilitate business transaction,
 - ii. Effecting online transaction made by customers,
- iii. Utilizing computer for the preparation of customer utility bills, and
- iv. Generating revenue from purchase and sales transactions.
- (d) The study revealed that the following activities on the utilization of Transaction Server were utilized to a very low extent:
 - i. Use of Face Book facilities for e-conversation with customers.
 - ii. Use of server to obtain information concerning customergs records.

- iii. Using Transaction Server to validate payment made with a credit card.
- iv. Utilization of twitter to create awareness, connect customers and drive sales.
- v. Effecting automated clearing of financial instruments.

2. Extent of utilization of Internet Communication Line

- (a) The study revealed that the following activities on utilization of Internet Communication Line were utilized to a high extent:
 - i. Utilization of bulletin boards for advertisement and promotions of brand products.
 - ii. Use of LAN Server to link computers together within the company.
- iii. Utilization of intranet to communication within the company.
- (b) The study revealed that the following activities on utilization of Internet Communication Line were to a moderate extent:
 - i. Utilization of Search Engines to obtain information that facilitates business operations,
 e.g. Google, yahoo.
 - ii. Use of ETF (Electronic Fund Transfer) for payment to business partners and payments by customers.
- iii. Use of World Wide Web (www) to obtain and give out information.
- iv. Utilization of gateway to communicate between different types of network.
- v. Use of e-procurement to obtain raw materials from suppliers
- (c) The study revealed that the following activities on the utilization of Internet Communication Line were to a low extent:
 - i. Taking orders for products and services on the internet.
 - Utilization of FTP (File Transfer Protocol) to transfer files between B2B and C2B via the internet.

- iii. Utilization of e-catalogue to promote new products.
- iv. Utilization of e-shopping cart to enhance sale of product without difficulty.
- v. Use of Electronic Data Interface (EDI) to exchange business document in a standard electronic format between company and business partners.
- vi. Use of Enterprise Portal for recording details about product components.
- vii. Utilization of different word processing packages to enhance communication between company and customers.
- viii. Utilization of stored information to plan call timers.
- ix. Utilization of HTML (Hypertext Markup Language) to present a web.
- (d) The study revealed that the following activities on the utilization of internet communication line were to a very low extent:
 - i. Utilization of Internet Relay Chat (IRC) for discussion on internet.
 - ii. Utilization of user nets (News-groups) for receiving and sharing news with customers.
- iii. Utilization of Hosting (making information available to others on the internet).
- iv. Utilization of mailing list (e-mail messages) forwarded to everyone on a special internet list.
- v. Utilization of teleconference to share ideas on business operations.
- vi. Use of Electronic Auction for quick sale of products.
- vii. Utilization of VOIP (Voice of Internet Protocol) to deliver voice communication.

3. Extent of utilization of database and database server

- (a) The study revealed that this activity on the utilization of database and database server were to a high extent:
 - i Banking of data in database.

- (b) The study revealed that the following activities on the utilization of database and database server were to a moderate extent:
 - i. Creation or designing of reports from database for effective business operations.
 - ii. Utilizing database to identify prospects.
- iii. Utilization of operational database to facilitate business operations.
- iv. Utilization of database software for analysis of inventory management records.
- Utilization of database to facilitate the installation of automatic mailing programme for sending out birthday or anniversary cards, Christmas shopping reminders or off-season promotions.
- (c) The study revealed that the following activities on the utilization of database and database server were to a low extent:
 - i. Utilization of database to draw inferences about customersøneeds and responses.
 - ii. Utilization of database software for inventory control.
- iii. Utilization of database records for online ordering of products.
- iv. Preparation of tables to facilitate business operations.
- v. Using table records to create queries in database.
- vi. Updating of customers queries using customer database.
- vii. Utilization of macros for operations such as opening a form or printing a report.
- viii. Utilization of customer database to record contact, credit and demographic information about customers.
- ix. Use of enterprise resource planning to record details about product components and parts inventory.
- x. Utilization of database server for order and purchase confirmation.

- xi. Utilization of information resources to validate data in database.
- (d) The study revealed that the following activities on the utilization of database and database server were to a very low extent:
 - i. Creation of form using access tools for customers.
 - ii. Identification of types of queries through customersødata.

4. Extent of utilization of web server

- (a) The study revealed that the following activities on the utilization of web server were to a moderate extent:
 - i. Utilization of server-side sampling to generate dynamic web page.
 - ii. Utilization of web design features to collect data on customersø activities at web sites and store them in a blog.
- b. The study revealed that the following activities on the utilization of web server were to a low extent:
 - i. Use of web browser by company and customers to communicate ideas or obtain information.
 - ii. Navigating for web sites using search engine
- iii. Use of Bandwidth Throttling to limit the spread of responses.
- c. The study revealed that the following activities on the utilization of web server were to a very low extent:
 - i. Use of web chatting to host various groups.
 - ii. Use of web casting to broadcast audio and video communications.
- iii. Use of Hyperlinks (Web links) to link other sites for business operations.
- iv. Use of web conference to communicate ideas to wider audience.

- v. Utilization of interactive features of web pages to hold consumersøattention or to capture detailed information about consumer tastes and interests.
- vi. Utilizing web features to improve customersøexperiences and creating additional value.
- vii. Utilization of click stream tracking to get detailed information about customer behaviour, preferences, needs and buying patterns.
- viii. Utilization of click stream tracking to ask visitors to websites to register online and provide information about them.
 - ix. Creation of unique personalized web pages that display contents or adds for products or services of special interest to prospective consumers.
 - x. Use of web crawler for web indexing.

5. Extent of utilization of router

- a) The study revealed that the following activities on the utilization of router were to a moderate extent:
 - i. Use of Router to establish network connections for business operations.
 - ii. Forwarding of data packet across computer network
- iii. Use of Border Gateway Protocol (BGP) to establish link to computers in different offices.
- iv. Use of Access Servers or Gateways to establish network to link the server.
- v. Connection of multiple networks to facilitate business operation.
- vi. Use of Tail drop to manage congestion when packets arrive at a rate higher than the router can process.
- vii. Use of internet banner advert for advertisement of product and publicity of business operations.
- b) The study revealed that this activity on the utilization of router was to a low extent:

i Use of video conference by the company and customers to communicate ideas for wider audience.

6. Extent of utilization of PC workstation

- a) The study revealed that the following activities on the utilization of PC Workstation were to a low extent:
 - i. Use of Graphical User Interface (GUI) to make each resource accessible by the user as an independent object.
 - Use of client for looking up a customer record in database or retrieving a portion of a file on the serversø hard disk.
- b. The study revealed that the following activities on the utilization of PC Workstation were to a very low extent:
 - i. Use of client to offer services to other clients.
 - ii. Use of client to enable other components communicates in a structured manner.
- 7. The results of the test of hypotheses indicated that there was significant difference in the mean ratings of Marketing Managers, Sales Managers, IT Managers, Accounts Managers and Sales Representatives on the extent of utilizing transaction server, Internet communication line, database and database server and router by Soft Drink Manufacturing Companies in Anambra and Enugu States. However, no significant difference was found in the mean ratings of Marketing Managers, Sales Managers, IT Managers, Accounts Managers and Sales Representatives on the extent of utilization of web server and PC workstation by Soft Drink Manufacturing Companies in the two states.

Discussion of Findings

The extent to which Soft Drink Manufacturing Companies utilize Transaction Server in their marketing operations in Anambra and Enugu States of Nigeria.

From the analysis of result presented in Table 1, it was found that some items on transaction server were utilized to a very low extent. The items include: utilization of facebook facilities for e-conversation with customers, use of server to obtain information concerning customerøs records, utilization of transaction server to validate payment made with a credit card, utilization of twitter to generate awareness, connect with customers and drive sales and effecting automated clearing of financial instruments. However, some other items such as utilizing e-mail, fax facilities to facilitate business transaction, effecting online transaction made by customers, utilizing computer for the preparation of customer utility bills, and generating revenue from purchase and sales transactions were utilized to a low extent. Incidentally, only one item was utilized to a high extent. This was utilizing e-hubs for sales promotion. This confirmed the view of Lee (2003) who stated that e-commerce is useful in promotional strategy. Similarly, the result of the hypothesis 1 (Ho₁) showed that there was a significant difference between the mean ratings of Marketing Managers, Sales Managers, IT Managers, Accounts Managers and Sales Representatives on the extent of utilization of transaction server by Soft Drink Manufacturing Companies in Anambra and Enugu States. The hypothesis 1 (Ho₁) was therefore rejected. This result is in line with a study carried out by Oyeleran and Adeya (2006). It was found that ecommerce is rarely used by business organizations in Nigeria. The poor utilization of transaction server by Soft Drink Manufacturing Companies could be attributed to lack of infrastructure and non possession of skills by the employees. This is in line with the view of Chime (2004) who noted that some of the new technologies are not yet being utilized in Nigeria due to lack of infrastructure and professionals to support them.

In e-commerce marketing operations, transaction server is a necessary component. It is used in implementing business transactions. This agrees with Iwundu in Nwabufo (2012) who asserted that this age is a computer age whereby technology is taking over manual, mundane and strenuous methods of transactions. For organizations to effectively utilize e-commerce, all their business transactions must be implemented electronically. This was why in a study by Hinsen and Dadzie (2009) to ascertain the nature of contemporary marketing practices, it was found out that firms in Ghana emphasize transactional and database marketing in their marketing practices. The Ghana experience is in keeping with current global marketing realities. That only one item was highly utilized gives the hope that other identified items could be highly utilized in future. Therefore the need to stimulate marketing interest in the Nigerian marketing context along that line has become a necessity. Transaction server is often utilized to facilitate business strategy that focuses on single, δ Point of Saleö (POS) transactions. Utilization of this e-commerce component is often targeted at maximizing the efficiency and volume of individual sales rather than developing a relationship with the buyer.

The extent to which Soft Drink Manufacturing Companies utilize Internet Communications Line in marketing operations in Anambra and Enugu States

From the analysis of result presented in Table 2 which sought to determine the extent to which Soft Drink Manufacturing Companies utilize Internet Communication Line in Anambra and Enugu States, it was shown that only three items (items 11, 19 and 23) out of the 24 items in the cluster were utilized to a high extent. These were utilization of bulletin board for advertisement and promotions of brands products, use of LAN Server to link computers together within the company and utilization of internet to communicate within the company. It is not surprising that these three Internet Communication Line components were scored high as Nigerians are gradually trying to bridge the gap in communication especially in organizations.

This agrees with Trepper (2000) who asserted that the core of electronic commerce is the ability to communicate over both internal network and the internet. Five items were utilized to a moderate extent while the remaining 16 items in this cluster were utilized to a low and very low extent. No item in this cluster was rated very highly utilized. Furthermore, result of null hypothesis 2 (Ho₂) presented in table 9 showed that the significant difference between the mean ratings of Marketing Managers, Sales Managers, IT Managers, Accounts Managers and Sales Representatives on the extent of utilization of Internet communication line by Soft Drink Manufacturing Companies in Anambra and Enugu States. Hypothesis 2 (Ho₂) was therefore rejected. Internet was found to be utilized to a low and very low extent in the findings is worrisome considering the importance of internet in business. Confirming low utilization of Internet, Nwabufo (2012), in his study on the extent of customersø awareness and utilization of technological innovation in the banking industry, concluded that one cogent reason for the low utilization of internet technology by bank customer is low internet awareness and connectivity in Nigeria. The close association with awareness and connectivity offers the need for internet infrastructure which facilitates network. Individuals and private organizations cannot fully develop internet infrastructure. A lot is required from the government to boost the development of internet infrastructure to enable individuals tap from such infrastructure as some companies would need V/Sat, Internet Service Protocols, etc to enable them get properly connected. Internet infrastructure remains a pivot under whichever effort any ICT development must hinge (Garvin, 2007). Despite the reality, the inadequacy of infrastructure keeps reverberating.

To buttress the place of technology in today's world, Nwabufo (2012) observed that technological advancement in the world is engulfing every aspect of the world's system. This finding is in line with the view of Oyelaran and Adeya (2006) who pointed out that Nigeria, with

her vast human resources, have the potentials to be a major player and beneficiary of the internet economy but regretted that the internet economy has not been fully utilized by Nigerians. It is therefore unthinkable that this e-commerce component is utilized to a low and very low extent in an area of marketing that one can rightly say is paramount to the survival of the Nigerian people and the economy.

The extent to which Soft Drink Manufacturing Companies utilize database and database server in their marketing operations in Anambra and Enugu States

It was revealed from the study that database and database server were mostly utilized to a low and very low extent by Soft Drink Manufacturing Companies in Anambra and Enugu States. Only five items were found to be utilized to a moderate extent while only one item was highly utilized. The items utilized to a low and very low extent include: utilization of database to draw inferences about customers needs and responses, utilization of database software for inventory control, utilization of database records for online ordering of products, preparations of tables to facilitate business operations, using table records to create queries in database, updating of customers queries using customers database, utilization of macros for operations such as opening a form or printing a report, utilization of customer database to record contact, credit and demographic information about customers, use of enterprise resource planning to record details about product components and parts inventory, utilization of database server for order and purchase confirmation, utilization of information resources to validate data in database, creation of form using access tools for customers and identification of types of queries through customersødata while banking of data in database was utilized to a high extent. This implies that no item under this cluster of the study was utilized at very high extent. The implication of this study is that database component of e-commerce did not serve better than the previously discussed e-commerce components (Transaction Server and Internet Communication Line). This

can easily be seen from its cluster Grand Mean of 2.19 over a range of 5.00. It is disturbing that database and database components of e-commerce were found to be utilized at low and very low extent considering the importance of database software in business. This findings is in line with the findings of Okoro (2014) who found out that transactional, database, webpage, and networking competencies were utilized to a low extent. Database is a collection of data that is organized so that its contents can easily and regularly be accessed, entered and updated in the course of business. Furthermore, the result of null hypothesis 3 (Ho₃) presented on table 11 showed that there was significant difference between the mean ratings of Marketing Managers, Sales Managers, IT Managers, Accounts Managers and Sales Representatives on the extent of utilization of database and database server by Soft Drink Manufacturing Companies in Anambra and Enugu States. Hypothesis 3 (Ho₃) was therefore rejected.

Its absence jeopardizes business transactions. Okoli (2012) in a study of database management competencies in the electronic offices as perceived by Office Managers in public owned organizations and corporations, discovered that seven of the listed database competencies were not utilized by office managers and asserted that the absence of some of these database competencies among office managers means that data/information processing that need these competencies would not be done efficiently. This position is exactly the same with that of the Soft Drink Manufacturing Companies who need data and information efficiency for effective marketing of Soft drinks. Agomuo (2005) had earlier noted that database have become so important due to the level of efficiency required in the production, storage and retrieval of information in the required format as necessitated by the information age. The inference made in this study is that database and database server components of e-commerce are under utilized for

marketing of Soft drinks and this implies that information dissemination in that market sector is fraught with problems.

The Extent to Which Soft Drink Manufacturing Companies Utilize Router in Their Marketing Operations in Anambra and Enugu States

The analysis of result presented in table 4 showed that the Soft Drink Manufacturing Companies in Anambra and Enugu States utilize seven out of the eight items in the cluster to a moderate extent. These items had mean ratings ranging from 2.64 to 3.37. The items are as follows: use of Router to establish network connections for business operations, forwarding of data packet across computer network, use of Border Gateway Protocol (BGP) to establish link to computers in different offices, use of Access Servers or gateways to establish network to link the server, connection of multiple networks to facilitate business operations, use of Tail drop to manage congestion when packets arrive at a rate higher than the router can process and use of internet banner advert for advertisement of product and publicity of business operations. The remaining one item had a mean score of 1.50 and was rated as being utilize to a low extent. This implies that no item under this cluster of the study was utilized to a high extent. Furthermore, the result of null hypothesis 4 (Ho₄) presented on table 13 showed that there was significant difference between the mean ratings of Marketing Managers, Sales Managers, IT Managers, Accounts Managers and Sales Representatives on the extent of utilization of router by Soft Drink Manufacturing Companies in Anambra and Enugu States. Hypothesis 4 (Ho₄) was therefore rejected. This calls for serious concern. This findings is in line with the view of Okoro (2015) who found that core ICT facilities were available and were being utilized to a low extent. Router is required to be utilized to a high extent in order to connect different levels of marketers for the purpose of achieving an organization marketing objective. It is also necessary for establishment and connection of multiple networks to facilitate business operations. A Router is a special

communication processor used to route packets of data through different networks ensuring that the message sent gets to the correct address. It enables the practice of expanding the number of oness business or social contacts (Laudon and Laudon, 2006). Soft Drink Manufacturing Companies ineffective utilization of Router will be seriously affecting their marketing operations since it is based on the company distributing services or products through a big network of individual distributors and contractors (Quirk, 2011). Effective utilization of the router will offer Soft Drink Manufacturing Companies in Anambra and Enugu States the chance for their sales force to be compensated not only for sales they personally generate, but also for the sales of others they recruit, creating a down line of distributors and a hierarchy of multiple levels of compensation.

The Extent to Which Soft Drink Manufacturing Companies Utilize Web Server in their Marketing Operations in Anambra and Enugu States

The analysis of result presented in Table 5 showed that Soft Drink Manufacturing Companies in Anambra and Enugu States utilize ten items of Web Server component of e-commerce to a very low extent. These include the following items: use of web chatting to host various groups, use of web casting to broadcast audio and video communications, use of web crawler for web indexing, use of Hyperlinks (web links) to link other sites for business operations, use of web conference to communicate ideas to wider audience, utilization of interactive features of web pages to hold consumersøattention or to capture detailed information about consumer tastes and interests, utilizing web features to improve customersø experiences and creating additional value, utilization of click stream tracking to get detailed information about customer behaviour, preferences, needs and buying patterns, utilization of click stream tracking to ask visitors to websites to register online and provide information about them and creation of unique personalized web pages that display contents or adds for products or services

of special interest to prospective consumers. This was closely followed by three items which were rated as utilized to a low extent. These items include use of web browser by company and customers to communicate ideas or obtain information, navigating for web sites using search engines and use of Bandwidth Throttling to limit the spread of responses. Only two items viz: utilization of Server Side Sampling to generate dynamic webpage and utilization of web design features to collect data on consumers activities at websites and store them in a blog were utilized to a moderate extent. No item in this cluster was highly utilized. Furthermore, the result of null hypothesis 5 (Ho₅) presented on table 15 showed that there was no significant difference in the mean ratings of respondents with respect to their years of experience on the extent of utilization of web server by Soft Drink Manufacturing Companies in Anambra and Enugu States. Hypothesis 5 (Ho₅) was therefore upheld.

The implication of this low utilization of web server component of e-commerce by Soft Drink Manufacturing Companies in Anambra and Enugu States is that they are not engaging or experiencing marketing innovation. This agrees with Economic Times (2014) which stated that the web became marketing innovation that drew the attention of business in the 1990. However, Oborah (2011) and Kotler (2004) asserted that utilization of web server is very necessary for organizations including Soft Drink Manufacturing Companies since the race for survival in business in this digital age is defined by effective and efficient utilization of e-commerce components. It is therefore unthinkable that this e-commerce component is utilized at very low extent in an area of marketing that can rightly say is paramount to the survival of business organizations and the economy.

The Extent to Which Soft Drink Manufacturing Companies Utilize Client or Workstation in their Marketing Operations in Anambra and Enugu States

The analysis of result presented in Table 6 revealed that the four items were identified as utilized to a low and very low extent. Those items identified as utilized to a low extent were use of Graphical User Interface (GUI) to make each resource accessible by the user as an independent object and use of client for looking up a customer record in database or retrieving a portion of a file on the serverøs hard disk. The following two items were identified as utilized to a very low extent. Use of client to offer services to other clients and use of client to enable other components communicate in a structured manner. Furthermore, the result of null hypothesis 6 (Ho₆) presented on Table 16 showed that there was no significant difference in the mean ratings of respondents with respect to their qualifications on the extent of utilization of client or workstation by Soft Drink Manufacturing Companies in Anambra and Enugu States. Hypothesis 6 (Ho₆) was therefore not rejected. This finding confirmed the views of Ogunyemi (2006) and Owens and Beyon-Davis (2001) who found out that the general level of utilization of e-commerce is not only low in some part of the developed but also in developing countries including Nigeria.

The implication of this low utilization of Client or Workstation is that Soft Drink Manufacturing Companies in Anambra and Enugu States will not be achieving high performance in terms of multi task capability, graphics and memory capacity. This was collaborated by Lewandowski (2005) who asserted that workstation were optimized for the visualization and manipulation of different types of complex data such as 3D mechanical design, engineering simulation, animation and rendering of images and mathematical plots.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

This chapter presents the summary, conclusion and recommendations. The sub-headings discussed in this chapter include the following: restatement of the problem; description of the procedures used; summary of findings; conclusion; recommendations; implications for marketing education; suggestions for further study and suggestions for further research.

Re-Statement of the Problem

Globalization, internationalization and the internet had greatly lowered barriers in terms of trade, politics, economies and technology forcing many organizations to either conform to modern trends of doing business or be left behind in their old ways and become extinct in no time. As a result of this development, the new phenomenon of a network world has radically changed ways of doing things at home, schools, in government and in business. This change has brought about new methods in buying and selling through the use of internet known as electronic commerce (e-commerce). There are many potentials of e-commerce and these potentials have become strong motivations for the utilization of e-commerce by organization all over the world including Soft Drink Manufacturing Companies.

Furthermore, emerging new consumer capabilities now influence business. Consumers now have greater ease in interacting, placing and receiving orders anywhere and anytime. Irrespective of the utilization of e-commerce by Soft Drink Manufacturing Companies, it has been observed that many of them are losing competition in favour of their contemporaries in today& globalized economy. Many of the soft drink manufacturing companies are experiencing low sales, leakages, and mismanagement of funds, wastages and at times loss of products as a result of ineffective and inefficient marketing of products. Many intermediaries are involved in

the channel of distribution of soft drink manufacturing companies and this adversely makes the prices of the products to be exorbitant. With the exorbitant prices, consumers resort to buying cheaper, low quality or adulterated soft drinks and other beverages which they can easily place order and make payments online and the products are delivered at their doorsteps no matter the quantity requested and location of residence. To address this problem, the study sought to determine the extent to which:

- transaction server is utilized by soft drink manufacturing companies in Anambra and Enugu States;
- 2. internet communication line is utilized by soft drink Manufacturing companies in Anambra and Enugu States;
- database and database server is utilized by soft drink manufacturing companies in Anambra and Enugu States;
- 4. web server is utilized by soft drink manufacturing companies in Anambra and Enugu States;
- 5. Router is utilized by soft drink manufacturing companies in Anambra and Enugu States;
- 6. PC Workstation is utilized by soft drink manufacturing companies in Anambra and Enugu States.

Summary of the Procedures Used for the Study

The study adopted descriptive survey research design. Six research questions were answered and six null hypotheses were tested at 0.05 level of significance at relevant degree of freedom. An 82-item structured questionnaire on a five-point rating scale were used to collect data for the study. The population for the study comprised of 296 respondents which was made up of 17 Marketing Managers, 21 Sales Managers, 7 IT Managers, 6 Accounts Managers and

245 Sales Representatives of Soft Drink Manufacturing Companies in Anambra and Enugu States of Nigeria, hence, the entire population was studied. Survey research design was used for the study. The research instrument was subjected to face validation by three experts. The reliability coefficient of the instrument was .71, which was obtained through Cronbach Alpha Reliability test. The questionnaire was administered by the researcher with the help of four research assistants to facilitate timely distribution and retrieval of questionnaire. The number of questionnaire returned was 280 representing 95% return rate. The research questions were answered using mean statistic while the null hypotheses were tested using Analysis of Variance (ANOVA) at 0.05 level of significance.

Summary of Findings

Based on the data analyzed, the following major findings were made:

- Soft Drink Manufacturing Companies in Anambra and Enugu States. utilize Transaction
 Server to a low extent in their business operations.
- 2. Soft Drink Manufacturing Companies in Anambra and Enugu States utilize internet communication line to a low extent in their business operations.
- 3. Soft Drink Manufacturing Companies in Anambra and Enugu States utilize database and database server to a low extent in their business operations.
- 4. Soft Drink Manufacturing Companies in Anambra and Enugu States utilize Web server to a low extent in their business operations.
- Soft Drink Manufacturing Companies in Anambra and Enugu States utilize Router to a moderate extent in their business operations.
- 6. Soft Drink Manufacturing Companies in Anambra and Enugu States utilize Workstation to a very low extent in their business operations.

- 7. There was significant difference in the mean ratings of Marketing Managers, Sales Managers, IT Managers, Accounts Managers and Sales Representatives on their extent of utilizing transaction Server, internet communication line, database and database server and router by Soft Drink Manufacturing Companies in Anambra and Enugu States.
- 8. However, no significant difference was found in the mean ratings of Marketing Managers, Sales Managers, IT Managers, Accounts Managers and Sales Representatives on the extent of utilization of web server and PC workstation by Soft Drink Manufacturing Companies in Anambra and Enugu States.

Conclusion

The study examined the extent of utilization of e-commerce by Soft Drink Manufacturing Companies in Anambra and Enugu States of Nigeria. The six components of e-commerce namely transaction server, internet communication line, database and database server, web server, router and PC workstation were investigated. The result of the study revealed that while router component was identified as moderately utilized, all other components of e-commerce were found to be utilized to a low extent leaving a far reaching implication. The level of e-commerce activities undertaken determined the extent of utilization of e-commerce resources by soft drink manufacturing companies. There were four identified levels of e-commerce utilization. Since the study revealed that e-commerce components were utilized to a low extent by soft drink manufacturing companies implies that soft drink manufacturing companies are at the first level of e-commerce utilization.

Recommendations

Based on the findings and conclusions drawn from the study, the following recommendations were made:

- Business training institutions should ensure that the possession of laptops should be made
 compulsory for those intending to study business education in all tertiary institutions. This
 will enhance the practice of ICT and e-commerce skills, and thus buttress the efforts of the
 facilitators whose tutelage ends at school.
- 2. Educational institutions offering marketing education should as a matter of urgency, review their curriculum contents to fall in line with current development and best practices in e-commerce marketing. This will help the lecturers to teach properly and the graduates to acquire the right knowledge and skills for doing business online.
- Tertiary institutions that offer marketing education courses should be provided with elearning facilities and platforms by governments in order to ensure the facilitation of ecommerce competencies.
- 4. Federal, state and local governments should provide the necessary Information Technology (IT) infrastructure that will enhance the learning of e-commerce usage and other ICT-enabled applications for doing business globally.
- Government and management of educational institutions should regularly organize conferences, workshops and seminars for the capacity building of lecturers in the use of ecommerce facilities and applications.
- 6. Business organizations should devote part of their profits for developing their employees on how to do business online through various e-commerce applications and resources.

Implications of the Study

The findings of this study have far reaching implications both for marketing education as domiciled in Business education. The findings have provided a compendium of information that would be invaluably utilized for the development of marketing education.

One of the implications of the study is that it would provide very useful reference material for researchers in marketing education. This study has also expanded the horizon for understanding issues in contemporary marketing. Researchers will utilize the contribution of this study as input into further research efforts in marketing orientation studies and practices which is a new area in Nigeria.

Another implication of this study is that it would expose teachers of marketing education to the new demand of teaching marketing and that is skill acquisition. The knowledge of the findings would spur teachers of business education to seek for skills for the use of e-commerce. The acquisition of such skills would help the teachers to teach the students the concepts of e-commerce or e-marketing effectively. Teachers skilled in the utilization of e-commerce can also offer consultancy services to both soft drink manufacturing companies and other businesses.

The findings of this study would assist in the review and update of the curriculum especially with regards to the use of e-commerce components to do business. The findings of this study would also make government to provide IT infrastructure in schools. It would provide consumers with firsthand information on the level of utilization of e-commerce by soft drink manufacturing companies and help to step up the interest in e-commerce driven businesses in line with global practices. The findings would help to provide clue to the trend in contemporary marketing and introduce a new phase of disintermediation. A situation where delivery of products and services by intermediaries such as the distributors hold sway, would have given way to a new development where such intermediaries would be shoved aside. A new phase in the traditional flow of goods through distribution channels would have emerged when e-commerce is fully utilized. Furthermore, the future trend of marketing operations of soft drink manufacturing companies will be such that such companies which do not fully utilize e-commerce will not be

able to operate effectively. This will then imply that the soft drink manufacturing companies will compulsorily equip their companies with the state-of-art e-commerce facilities.

Suggestions for Further Studies

- 1. A study on skills required by marketing education Lecturers for the teaching of ecommerce operations and competencies in tertiary institutions should be undertaken
- 2. The present study should be replicated in other business organizations in Nigeria to ascertain the extent of utilization of e-commerce resources by them.
- 3. A study on development of programme required for the training of business and marketing employees on utilization of e-commerce in the marketing of their products and services.

REFERENCES

- Abbad, M. Abbad, R. & Saleh, M. (2011). Limitations of E-Commerce in Developing Countries: Jordan Case, Education, Business and Society, Contemporary Middle Eastern Issues, 4 (4), 280-291.
- Abengule, A. (2003). Banking Strategies in Information Technology. Lagos: Goodwill House.
- Adebola, A.A. (2002). Information Technology Literacy and electronic commerce. *Journal of Professional Administration*, 2(1), 52-62.
- Agomuo, E.E.(2005). *Modern office technology;* Issues, Procedures and Practice, Nsukka: University Press Limited.
- Akintola, K.G., Akinyede, R.O. & Agbonifo, C.O. (2011). Appraising Nigeria readiness for Ecommerce Towards Achieving Vision 20: 2020 *IJRRAS*, *9*(2), 10-17.
- Al-Dimour, H., Al-Shibly, H. & Aljaray, F. (2008). Experiences of E-Commerce Use and Perceptions of Export Barriers among Jordanian Businesses, *Jordan Journal of Business Administration*. 4 (4), 503-517.
- Ali, A.(2004). Information and Communication Technology and Enhancement of Education in the 21st Century. In C. V. Nnaka & A. A. Okafor (eds.) Umunze, FCE(T) Research and Conference Unit.
- Amadi, E., A. (2008). Utilization of Electronic Commerce in Commercial Banks Operating in Rivers State. An unpublished PhD thesis of the Department of Vocational Teacher Education, University of Nigeria Nsukka.
- Angus Reid Group (2000). *Shopping around the world*. Retrieved from the web on June 152011. http://www.nua.ie/surveys/index.cgi?f=VS&art_id=905355830&rel=true
- Anna, R. (2013). Basic E-Business and E-Marketing Principles. Retrieved from the web on September 20, 2014 From: http://www.linkedin.com.
- Asiabugwa, M. A. & Munyoki, J. M. (2012).E-commerce strategy and performance of Commercial Banks in Kenya. *AIBUMA International Business and Management conference paper*, University of Nairobi.
- Ayo, A. and Babajide, C. (2006). Internet Banking. http://www.worldbank.org/data/wdi. Retrieved: 8th February, 2013.
- Azuka, E.B. (2011). *Research Methods: Theory and Application* (1st Edition) Onitsha: Noben Press Limited.

- Barkley, D.L., Lamie, D.R. & Markley, D.M. (2007). Case studies of E-Commerce in small and medium-sized Entreprises: A Review of the Literature.
- Belch, G.A., & Belch, M.A. (2001). *Advertising and promotion: An integrated Marketing Communication*. 5thed. New York: McGraw-Hill.
- Biederman, D., (2000) E-commerce comes to Asia. Traffic World, 26(9),23.
- Boamah, R.A. & Kwaku, J.M. (2011). The Extent of Adoption of E-Commerce in the Ghanian Diary Industry And its Potential Applications and Benefits An unpublished Masterøs the Thesis presented to the Department of Business Administration, Technology and Social Sciences, Lulea University of Technology.
- Caldeira, M.M. & Ward, J.M. (2003). Using resource-based theory to interpret the successful adoption and use of information systems and technology in manufacturing small and medium-sized enterprises. *European Journal of Information Systems*, 11, 15-27.
- Chaffey, D. (2009). *E-business and E-commerce management: Strategy, Implementation and Practice* 4th Edition. England: Pearson Education Limited.
- Chau, K.W. & Wong, M.S. (2011). Factors affecting the Efficiency of Internet Resource Utilization in Shopping Center Management. An Unpublished PhD thesis presented to the Department of Business Management, University of Hong Kong.
- Chien-Chao, C. (2008). Study on Application of E-commerce and Organizational Performance in Taiwanese Professional Sports Event Promotion Organizations. *The Journal of Human Resource and Adult Learning*, 4(1), 66 ó 73.
- Chime, C.A. (2004). E-Learning: A great tool towards educational quality and growth. In the Science Teacher Today, *the Journal of School of Sciences*, 2(1), 20 ó 31.
- Coase, R. (1937). The nature of the firm. *Economica*, 4,386-405.
- Choi, S.Y., Whinstone, A.B. & Stahl, D.O. (1997). *The Economics of electronic commerce*. Indianapolis, *IN*: Macmillan Technical Publishers.
- Conner, K.R. (1991). A Historical Comparison of Resource-based Theory and a New Theory of the Firm. *Journal of Management*, 17(1), 121-154.
- Coppel, J. (2000).E-Commerce impacts and policy challenges. Economics department working paper No. 252, Organization of Economic Cooperation and Development (OECD), 2000 online at http://www.ohs.oecd.org/ohs/2000doc.nsf/asce8ffa41835d64cl25685d00.5300b0/c/2568d100be03f7Cl2569070052efe3/SFILE/0007976.

- Coviello, N.E., Brodie, R.J., Danaher, P. & Johnston, W. (2002). How firms relate to their market: an empirical examination of contemporary marketing practices. *Journal of marketing*, 66(3), 33-46.
- Desai, J., Fletcher, L. & Wright, K. (2001). Drivers in the Adoption and Sophistication of Database marketing in the Services Sector, *The Service Industries Journal*, 21(4), 17-32.
- Dholakia, U.M., (2000). Temptation and Persistence: An intergrated modes of consumption impulse formation and enactment *Psychology and marketing*, (17), 882-955.
- Efendioglu, M.A & Yip, V.F. (2004). Chinese Culture and e-commerce: An exploratory Study, *Interacting with computers*, 16(1), 45-62.
- Etonyeaku, E. A. C. (2005). The extent of utilization of some marketing strategies by Soft Drink Manufacturing Industries for Enugu and Anambra States. An unpublished Ph.D Thesis presented to the Department of Vocational Teacher Education, University of Nigeria, Nsukka.
- Fraser, S., & Wresch, W.,(2005). National competitive advantage in e-commerce efforts; a report from five Caribbean nations perspectives. *Global development and technology* 4(1) 27-44.
- Garvin, A. (2007). Global Electronic Commerce: Macroeconomic Benefits and Policy Choices. Invited Op-Ed, *Nikkel Journal* (Tokyo), 10(4),70-81.
- Gibbs, J., Kraemer K. I. & Dedrick, J.(2003). Environment and policy factors shaping global ecommerce diffusion; a crossocountry comparison, *Information Society*, 19(1),5-18.
- Goldstein, A. & OøConnor, D. (2000). *E-Commerce for Development: Prospects and Policy Issues.* Paris: OECD Development Center.
- Gupta, S. & Dubelaar, C. (2005). Examining the Impact of E-commerce on Business Performance in a Business-to-Business Environment: A Buyer® Perspective. *International Journal of Physical Distribution and Logistics Management*, 24(6), 4-10.
- Hawkins, J. M. (2005). Oxford Mini-reference Dictionary. Oxford: Oxford University Press, Great Clarendou Street, Oxford OX2 6DP.
- Hawk, S. (2004). Comparison of B2C e-commerce in developing countries, *Electronic commerce research*, 14(3),151-162.
- Hilbert, M. (2001). Latin American on its path into the digital age: Where are we? CEPAL/ECLAC, Santiago.
- Hinsen, R. & Dadzie, k. (2009). The influence of organizational Environment on Contemporary Marketing Practices (CMP) in Ghana A test of the Miles and Snow Strategic Typology. Working paper no. 50.

- Hornby, A.S. (2001). Oxford Advanced Learner's Dictionary. Oxford: Oxford University Press, Great Clarendon Street, Oxford, OX2, 6DP
- Huber, G. (2004). *The necessary nature of future firms*. San Francisco: Sage Publications, 100-108.
- Huff, A. S. (1990). Mapping strategic thoughts. Wiley: Chichester, England.
- Iddris, F. (2012). Adoption of E-commerce Solutions in Small and Medium Sized Enterprises in Ghana. *European Journal of Business And Management*, 4(10), 48-57.
- Ives, B. & Learmonth, L.V. (2001). *The E-Commerce as a competitive weapon*. Communications of the ACM, 34(12), 1193-1201.
- Jawabreh, O.A.A., Allahham, M., Alijoub, A. & Ahmad, M. (2012). Impact of Information Technology on Profitability of Airlines Industry: A case Study of Royal Jordanian Airlines. *International Journal of Business and Management*, 7(18), 149-162.
- Kaynak, E., Tatoglu, E.& Kula, V. (2005). An analysis of the factors affecting the adoption of electronic commerce by SMEs: Evidence from an emerging market. *International Marketing Review*, 22(6), 623-640.
- Kenny, C. (2003). The internet and economic growth in less developed countries: a case of managing expectations. *Oxford Development Studies*, 31(1), 99-113.
- Khairwl, A. A. & Maisarah, A. (2005). Adoption of web site and E-Commerce technology among Malaysian public companies. *Industrial Management and Data Systems*, 105(9), 1172 1187.
- Kirkman, G., Johnson, E & Kenny C.,(2002). *The global information technology report 2001-2002*. New York: Oxford University Press.
- Klein, L. (1998). Evaluating the potential of interactive media through a new lens: Search versus experience goods. *Journal of Business Research*, *41*, 195-203.
- Korir, A.N. (2005). Impact of e-commerce as a facilitating tool for business on Tour operators in Nairobi. *Unpublished* MBA project, University of Nairobi.
- Kotler, P. and Armstrong, G. (2006). *Principles of Marketing*. New Jersey: Pearson Education, Inc. Upper Saddle River.
- Kotler, P. & Keller, K. L. (2009). *Marketing Management 13th ed.* New Delhi, India: Prentice Hall Incorporated Learning Private Limited, M-97, Donnaught Circus, 110001, 19.

- Kotler, P. (2004). *Marketing Management*. New Delhi: Prentice Hall of Indian Privates.
- Kraemer, K. L., Gibbs, J. & Dedrick, J. (2002).Impacts of Globalization on E-Commerce Adoption and Firm Performance: A Cross-Country Investigation. *Center for Research on Information Technology and Organizations* University of California, Irvine.
- Kraemer, K.L. Dedrick, J., Melville, N. & Zhu, K. (2006). *Global E-Commerce: Impacts of National Environments and Policy*, Cambridge :Cambridge University Press.
- Ksheri, N. (2007). *Barriers to e-commerce and competitive business models in developing countries*. Electronic Research and Applications 6(2007) 443-452.
- Kuzic, J., Fisher, J. & Scollary, A. (2002). Electronic, benefits, challenges and success factors in the Australian Banking and Finance industry. ECIS conference, June 6-8 Gdarisk, Poland, 1607-1616.
- Laudon, K. C. & Laudon, J. P. (2006). *Management Information Systems-Managing the Digital Firm*. Pataparganji, Delhi 110092, India Dorling Kindersley (India) Pvt. Limited, 482, F.I.E.
- Lee, J. (2014).Traditional vs. Digital Marketing Retrieved on July 20, 2014 from http://www.impemarketing.com.
- Lewandowski, E. (2005). *E-Commerce in organizations*. England: Pearson Educational Limited.
- Longmanøs Dictionary of Contemporary English (2000) Edinburgh Gate Harlow, Essex CM 20, 2JE, England.
- McKay, J. & Marshall, P. (2004). *Strategic Management of e-Business*, Brisbane: John Wiley and Sons.
- Mercer, C. (2006). Telecentres and transformations: modernizing Tanzania through the internet. *Africa Affairs*, (105), 243-264.
- Moodley, S. & Morris, M. (2004).Does e-commerce fulfill its promise for developing country (South African) garment export producers? Oxford Development Studies, 32(2), 155-178.
- Nanehkaran, Y.A. (2013). An introduction of Electronic Commerce. *International Journal of Scientific and Technology Research* 2(4) 190-193.
- Noda, T. & Collis, D. J. (2001). The evolution of intra-industry firm heterogeneity: insights from a process study. *Academy of Management Journal*, 44(4,) 897-925.
- Noor, A.H. (2009). E-Commerce and Small and Medium Enterprises. The need for caution . *Prometheus*, 27(2), 10.

- Nunberg, G. (2000). Will the internet always speak English? *The American Prospect*, 10(2), 40-43.
- Nwabufo, B. (2012). Extent of Customersø Awareness and Utilization of Technological Innovations in the Banking Industry. *Business Education Journal*, *VII*(2), 247
- Oborah, J.O. (2008). Utilization of e-commerce by Small and Medium Enterprises in Marketing Industrial Products in Lagos Metropolis An unpublished PhD Thesis presented to the Department of Vocational Teacher Education, University of Nigeria, Nsukka.
- Oborah, J.O. (2011). Status of the Utilization of E-Commerce Resources by Small and Medium (SMEs) Enterprises in Nigeria. *International Journal of Business and Information Technology*, (1)2, 165-173.
- Oßerien, M. (2007). Information Technology a Competitive Advantage: The role of Human, Business and Technology Resources, *Strategic Management Journal*, 18(5), 375-405.
- Ogunyemi, D., (2006). Key Challenges to implementing e-commerce in Ghana. downloaded from the web from http://uneca.org/keychallenges in implementing e-commerce in Ghana.
- Ojukwu, D. (2006). Achieving Sustainable Growth Through The Adoption Of Integrated Business And Information Solution: A Case Study Of Nigerian Small & Medium Sized Enterprises. *Journal of Information Impact*, 6(1), 47-60.
- Okenigene, R.E.& Adekanle, B. (2009). Cybercrime in Nigeria. www.saycorporation.com/saycouk/BIJ/journal/.../Article 7.pdf
- Okoli, B. E. (2012). Database Management Competencies in the Electronic Offices as Perceived by Office Managers in Public owned Organisations and Corporations. *Business Education Journal*, VII(2), 168.
- Okongwu, C.E. (2014). Utilization of E-marketing in the Distribution of Automobile Products in Nnewi-North Local Government Area Of Anambra State. An unpublished B.Sc Project presented to the Department of Vocational Teacher Education, University of Nigeria, Nsukka.
- Okoro, F. (2014). Utilisation of E-Commerce Marketing Competencies By Pharmaceutical Business Operators In Anambra And Imo States Of Nigeria. An unpublished Ph.D Thesis Presented To The Department Of Vocational Teacher Education University Of Nigeria Nsukka.
- Okoro, J. (2015). Extent of Availability of ICT facilities in teaching Business Education Programme in Nigeria universities. *Delta Business Education Journal*, 5(1), 164-172.

- Osuala, E.C. (1998). Fundamental of Nigeria Marketing. Onitsha: Cape International Publishers.
- Osuala, E.C. (2004). *Principles and methods of Business Computer Education*. New Edition, Enugu: Cheston Agency Limited, 104 Agbani Road.
- Otagburuagu, E.J. & Eze, V.O. (2007). English Language Teaching in Nigeria Universities and the ICT Revolution. Information Communication Technology in the services of Education. Enugu. Timex publishers: Ogui Road, 87.
- Owens, I. & Beynon-Davies, P. (2001). A Survey of Electronic Commerce utilization in Small and Medium sized Enterprises in South Wales: A paper presented at the 9th European Conference on Information Systems Bled, Shovema, June 27-29.
- Oyelaran-Oyeyinka, B.& Adeya, C.N. (2003). Internet Access in Africa: Empirical Evidence from Kenya and Nigeria. Retrieved December, 15, 2006 from http://www.intech.unu.edu
- Oyeyinka, O. & Adeye, C. (2006). An empirical Investigation of the Nigerian Consumerøs

 Perception of Internet Banking Services. http://www.worldbank.org/data/wdi: Retrieved: 8th February, 2013.
- Payne, J.E. (2003). E-commerce Readings for Small and Medium Enterprises in Developing Countries: A Guide for Developing Professionals. Retrieved December 15, 2005 from http://www/blake.Montelair.edu/ubc.
- Perrault, W.D.& McCarthy, E.J. (2005). *Basic Marketing: A global-managerial Approach*, New York: McGraw-Hill/Irwin.
- Pigato, M.(2000). Information and Communication Technology, poverty and Development in sub-Saharan Africa and South Asia, World Bank, Washington, DC.
- Quirk eMarketing (2011). A look at how eMarketing differs from traditional Marketing www.quirk/biz. Retrieved 20th April.
- Rogers, E.M. (2003). *Diffusion of Innovations (5th edition)*. New York, NY, Free Press. Retrieved from: *http://intro.base.org/docs/diffusion* on 28th May, 2012.
- Rouse, M. (2006). õDevelopment of E-commerce. techterms@whatis.comRetrieved 19th June, 2014.
- Sandoval, G. (2000). Women top shoppers on line, study finds. *Cnet News* (May 26)
- Scopula, N, S. (2005). *E-Commerce Implementation*. Communications of the ACM, 34(12), 1001 ó 1012.

- Seyed, H.J. & Mohammad, S. (2014). An Investigation about the Impacts of E-Commerce Adoption on Export Performance. *Journal of Modern Management and Foresight*, 1(3) 129-138.
- Shimp, T. A. (2000). *Advertising promotion: supplemental aspects of integrated marketing communications*. USA: Harcourt College Publishers. (5th ed.)
- Singh, R. (2006). Introduction to Basic Manufacturing Processes and Workshop Technology. New Delhi: New Age International (P) Limited Publishers.
- Sjoqvist, F. & Birkett, D. (2003). Internet Utilization. Research Journal, 11 (15), 77-84.
- Stephens, D. O. (2001). Digital signature and global e-commerce: Part We-U.S. initiatives. *Information Management, Journal, 3(1),* 68.
- Tam, K. Y. (1998). The impact of information technology investments on firm performance and evaluation: evidence from newly industrialized economies. *Information Systems Research*, 9(1),85-98.
- Thatcher, S., Foster, W.& Zhu, L. (2006). B2B e-commerce adoption decisions in Taiwan: The interaction of cultural and other institutional factors. *Electronic Commerce Research and Applications*, 5(3), 92-104.
- The Economic Times, (2014). Definition of Distribution. Retrieved on September 10, from: http://www.economictimes.indiantimes.com.
- Trepper, C. (2000). Requirements gathering for web-based development *Application Development Trends Magazine*, March.
- Trepper, C.H. (2000). Electronic Commerce Strategies 11.Measuring Electronic Commerce online for Business Website. *Http://www.business. aau.dh/ivo* Retrieved 10th February 2015.
- Turban, E., Lee, D., & Chung, M., (2008). *Electronic commerce: a managerial perspective*, New Jersey: Pearson Education Inc,
- Usman, K. O. (2007). Information and Communication Technology (ICT) Competencies for the Implementation of Mathematics Curriculum. *Information Communication Technology in the Service od Education*. Enugu: Timex Publishers, 29 Ogui Road.
- Viathianathan, S. (2010). A review of E-Commerce Literature on India and Research Agenda for the Future. *Electronic Commerce Res*, 10, 83-97.
- Van Toorn, C., Pigato, M. & Redruello, F. (2006). The barriers to the adoption of ecommerce by Micro Business and Medium Enterprises, *Sixth conference on Knowledge, culture and change in organizations, Prato, Tuscany, Italy.* (July 11-14 2006).

- Weill, P. & Vitale, M. R. (2001). *Place to space: migrating to e-business models*. Boston: Harvard Business School Press.
- Wernerfelt, B. (1984). A resource-based view of the firm. *Strategic Management Journal*, 5, 171-180.
- Wikipedia, (2011). Electronic business. [Online] Available at: http://en.wikipedia.org/wiki/Ebusiness [Accessed on 3 February, 2015]
- Williams, O. (2005). Utilization of Business Resources. London: Harper Collins Publishers.
- htt://www.business.aau.dh/ivoRetrieved, 10th February 2015.
- World Trade Organization (2013). Electronic Commerce, Development and Small and Medium Enterprises.

APPENDIX A

REQUEST FOR FACE VALIDATION

Department of Vocational Teacher Education University of Nigeria Nsukka 13th January, 2005

Researcher.

Nsukka 13 th January, 2005
Dear Sir,
Request for Validation of Instrument
I am undergoing a post graduate program in the University of Nigeria Nsukka. The ongoing
research is aimed at determining the extent to which Soft drink manufacturing companies in
Anambra and Enugu States are utilizing e-commerce in their business operations.
In view of the following, you are kindly requested to vet the instrument for clarity,
appropriateness and objectively needed for its suitability for collecting date for the study. Your
observation will be considered for incorporation in the final design of the instrument.
The following are attached for your perusal: Purpose of the study, Research Questions
and the hypotheses.
I look forward to your assistance
Thanks
Yours faithfully,
Okeke-Ezeanyanwu Joy

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APPENDIX B

LETTER TO THE RESPONDENTS

Department of Vocational Teacher Education, University of Nigeria,

Nsukka

13th March, 2015.

Dear Respondents,

REQUEST FOR THE COMPLETION OF QUESTIONNAIRE

I am a post graduate student of the above named institution, conducting a research work

on the extent to which Soft Drink Manufacturing Companies in Anambra and Enugu States

utilize e-commerce marketing tools.

The attached questionnaire contains items that will be used as data for the purpose of

eliciting information towards the completion of the research work. I will be grateful if you would

fill them accordingly. You are assured that the information you give will be used for academic

work only and your confidentiality will be preserved.

Thanks for your anticipated co-operation.

Yours faithfully,

Okeke-Ezeanyanwu Joy A.

APPENDIX C

QUESTIONNAIRE FOR MARKETING MANAGERS, SALES MANAGERS, IT MANAGERS, ACCOUNTS MANAGERS AND SALES REPRESENTATIVES PART 1- GENERAL INFORMATION

Instruction: Please indicate (ç) y	our response for the items in the boxes.
Name of Company	
Position occupied; Marketing M	anager Sales Manager
IT Manager	Accounts Manager
Sales Repr	esentative
Location: a. Anambra State	Enugu State
Educational Qualifications:	
a. First Degree	b. Masters Degree
c. Doctoral Degree	d. Professional certificate
Years of Experience:	
a. 1-5yrs b. 6-10 yrs	c. 11 and above
PART 2- SECTION A	
The extent to which soft Drink m	anufacturing companies utilize transaction server in business
operations in Anambra and Enug	u States.
Key: Very High Extent	(VHE)-5 points
High Extent	(HE)-4 points
Moderate Extent	(ME)-3 points
Low Extent	(LE)-2 points
Very Low Extent	(VLE)-1 point

Utilization of Transaction Server

S/N0	IZATION OF FRANSACTION SERVER ITEM STATEMENT	VHE	HE	ME	LE	VLE
1	Use of Facebook facilities for e-conversations with	1				,
	customers.					
2	Using e-hubs for sales promotion purposes					
3	Making use of e-mail, fax facilities to facilitate					
	business transactions					
4	Use of server to obtain information concerning					
	customerøs records					
5	Using Transaction server to validate payment made					
	with a credit card.					
6	Utilization of twitter to create awareness, connect					
	customers and drive sales					
7	Effecting online transaction made by your					
	customers.					
8	Effecting online fund transfers and e-payments					
	using electronic banking e.g. money transfer.					
9	Effecting automated clearing of financial					
	instruments					
10	Utilizing Computer for the preparation of customer					
	utility bills.					
11	Generating revenue from purchase and sale					
	transactions					
	<u>l</u>		1		1	<u> </u>

SECTION B

The extent to which Soft Drink Manufacturing Companies utilize Internet Communication line in their business operations in Anambra and Enugu States.

12	Taking orders for products and services on the		
	internet		
13	Utilization of internet Relay Chat (IRC) for		
	discussion on internet		
14	Utilization of Search Engines to obtain information		
	that facilitate business operations e.g. Google, yahoo.		
15	Utilization of user nets (News óGroups) for		
	receiving and sharing news with customers.		
16	Utilization of FTP (File Transfer Protocol) to		
	transfer files between B2B and C2Bvia the internet.		
17	Utilization of Hosting (making information available		
	to others on the internet).		
18	Utilization of mailing list (e-mail messages)		
	forwarded to everyone on a special internet list.		
19	Utilization of e-catalogue to promote new products		
20	Utilization of e-shopping cart to enhance sale of		
	product without difficulty.		
21	Utilization of teleconference to share ideas on		
	business operations		
22	Utilization of bulletin boards for advertisement and		
	promotions of brands product.		
23	Use of Electronic Data interface (EDI) to exchange		
	business document in a standard electronic format		
	between your company and business partners.		

24	II CE (' D (1C 1' 1 (1)
24	Use of Enterprise Portal for recording details about
	product components.
25	Use of Electronic Auction for quick sale of products.
26	Use of ETF (Electronic Fund Transfer) for payment
	to business partners and payments by customers.
27	Use of World Wide Web (WWW) to obtain and give
	out information.
28	Utilization of VOIP (Voice of internet Protocol) to
	deliver voice communication
29	Utilization of gateway to Communicate between
	different types of network
30	Use of LAN server to link computers together within
	your company.
31	Use of e-Procurement to obtain raw materials from
	suppliers.
32	Utilization of different word processing packages to
	enhance communication between your company and
	customers.
33	Utilization of stored information to plan call timers
34	Utilization of Intranet to communicate within your
	company.
35	Utilization of HTML (Hypertext Markup Language
	to present a Web document).

SECTION C

The extent to which Soft Drink Manufacturing Companies utilize Database and Data based server in their Business operations in Anambra and Enugu States.

36	Utilization of Database to draw inferences about			
	customerøs needs and responses			
37	Utilization of Database software for inventory			
	control			
38	Utilization of database records for online ordering of			
	products.			
39	Creation of form using access tools for customers.			
40	Identification of types of queries through customersø			
	data.			
41	Preparation of tables to facilitate business			
	operations.			
42	Using table records to create queries in database			
43	Creation or designing of reports from database for			
	effective business operations.			
44	Utilizing database to identify prospects			
45	Updating of customers queries using customer data			
	base.			
46	Utilization of macros for operations such as opening			
	a form or printing a report			
47	Utilization of operational data base to facilitate			
	business operation.			
48	Utilization of customer database to record contact,			
	credit and demographic information about customers			
49	Use of Enterprise resource planning to record details			
	about product components and parts inventory			
50	Utilization of data base server for order and purchase confirmation			

51	Utilization of database server for payment confirmation			
52	Utilization of information resources to validate data in database			
53	Banking of data in database			
54	Utilization of database software for analysis of inventory management records			
55	Utilization of database to facilitate the installation of automatic mailing programme for sending out birthday or anniversary cards, Christmas shopping reminders or off- season promotions			

SECTION D

The extent to which Soft Drink Manufacturing Companies utilize Web server in their business operations in Anambra and Enugu States.

56	Use of Web browser by your company and your			
	customers to communicate ideas or obtain			
	information.			
57	Utilization server-side sampling to generate dynamic			
	web page			
58	Navigating for web sites using search engines			
59	Use of web chatting to host various groups			
60	Use of web casting to broadcast audio and video			
	communications.			
61	Use of web crawler for web indexing.			
62	Use of Band with Throttling to limit the spread of			
	responses			
63	Use of Hyperlinks (Web Links) to link other sites			
	for business operations			
64	Use of web Conference to communicate ideas to			
	wider audience			

<i>(5</i>	III'll t'			
65	Utilization of interactive features of web pages to			
	hold consumersøattention or to capture detailed			
	information about consumer tastes and interests.			
66	Utilizing web features to improve customerøs			
	experiences and creating additional value			
67	Utilization of click stream tracking to get detailed			
	information about customer behavior, preference,			
	needs and buying patterns.			
68	Utilization of Clickstream tracking to ask visitors to			
	websites to register online and provide information			
	about them			
69	Creation of unique personalized web pages that			
	display contents or adds for products or services of			
	interest to prospect customers			
70	Utilization of web design features to collect data on			
	customer activities at websites and store them in a			
	blog.			

SECTION E

The extent to which Soft Drink Manufacturing Companies utilize Router in business operations in Anambra and Enugu States.

71	Use of Router to establish network connections for			
	business operations			
72	Forwarding of data packet across computer network			
73	Use of Border Gateway Protocol (BGP) to establish link to computers in different offices.			
74	Use of Access servers or gateways to establish network to link the server.			
75	Connection of multiple networks to facilitate business operation.			
76	Use of Tail drop to manage congestion when packets arrive at a rate higher than the router can process.			

77	Use of internet banner advert for advertisement of			
	product and publicity of business operations.			
78	Use of video conference by your company and			
	customers to communicate ideas for wider audience.			

SECTION F

The extent of utilization of PC workstation by Soft Drink Manufacturing Companies in their business operations in Anambra and Enugu States.

79	Use of Graphical User Interface (GUI) to make			
	each resource accessible by the user as an			
	independent object			
80	Use of client to offer services to other clients.			
81	Use of client to enable other components			
	communicate in a structured manner			
82	Use of client for looking up a customer record in			
	database or retrieving a portion of a file on the			
	serverøs hard disk.			

APPENDIX D

THE RESULT OF PRELIMINARY STUDY

A preliminary study was conducted on the utilization of e-commerce components by Soft Drink Manufacturing Companies in Onitsha Anambra State. The study was aimed at identifying whether Soft Drink Manufacturing Companies are utilizing e-commerce components. This pilot study was necessitated by the need to identify Soft Drink Manufacturing Companies utilizing e-commerce before determining the extent to which Soft Drink Manufacturing Companies utilizes e-commerce components in their day-to-day activities. Six research objectives and corresponding research questions guided the pilot study. The data collected with the instrument developed for the study are presented in tables.

Table 1 Mean ratings of the responses of Soft Drink Manufacturing Companies on utilization of transaction server component (N=30)

S/No.	Item on transaction server component	\overline{X}	SD	Decision
1.	Exchanging and processing business			
	information using internet facilities may be			
	adopted in soft drink marketing.	3.53	0.86	Utilized
2.	Tailoring of communication and product			
	offerings to individuals customers boost			
	marketing transaction.	3.43	0.85	Utilized
3.	Internet banking amenities are utilized to			
	facilitate soft drink business transactions.	3.63	0.85	Utilized
4.	Usage of text messages, bulk messaging,			
	chatting, twitting and e-mail to transact soft			
	drink business is a normal marketing practice	3.26	0.90	Utilized

Table 1 above has four items that sought to determine whether Soft Drink Manufacturing Companies are using transaction server component. The result revealed that item 1 had a mean score of 3.53, item 2 had 3.43, item 3 had 3.63 and item 4 had 3.26. Since these mean scores were all above 3.00, it was decided that the Soft Drink Manufacturing Companies are utilizing this component. The standard deviation in this segment of the study ranged from 0.85 to 0.90 and this indicate that the items did not deviate significantly from one another.

Table 2 Mean ratings of the responses of Soft Drink Manufacturing Companies on utilization of internet communication line component (N = 30)

S/No.	Item on internet communication line	\overline{X}	SD	Decision
	component			
1.	A link can be maintained with business			
	associates using network facilities	3.53	0.86	Utilized
2.	Local Area Network or Wider Area Network			
	may be utilized for making business contacts.	3.66	0.71	Utilized
3.	Information on acceptability of products may be			
	monitored using network facilities.	3.63	0.85	Utilized
4.	Network facilities can link up Soft drink			
	manufacturing companies within town.	3.50	0.89	Utilized

Table 2 has four items that sought to determine whether the Soft Drink Manufacturing Companies are using Internet communication line component. The result revealed that item 1 had a mean score of 3.53, item 2 had 3.66, item 3 had 3.63 and item 4 had 3.50. Since these mean scores were all above 3.00, it was decided that the Soft Drink Manufacturing Companies are utilizing this component. The standard deviation in this segment of the study ranged from 0.71 to 0.89 and this indicate that the items did not deviate significantly from one another.

Table 3 Mean ratings of the responses of Soft Drink Manufacturing Companies on utilization of database and database server component (N = 30)

S/No.	Item on Database and database server	$\overline{\overline{X}}$	SD	Decision
	component			
1.	The inventory management of Soft Drink is			
	done using database facilities.	3.56	0.85	Utilized
2.	Keeping of record of customers are done			
	electronically using database	3.46	0.89	Utilized
3.	Usage of database features to maintain and			
	sustain customers during festive periods such as			
	Christmas, Independence celebrations, Birthdays			
	etc in order to sustain their interest and loyalty			
	aids marketing.	3.26	0.78	Utilized
4.	Response rates of customer database to improve			
	sales target precision overtime is utilized in Soft			
	Drink marketing.	3.40	0.89	Utilized

Table 3 has four items that sought to determine whether the Soft Drink Manufacturing Companies are utilizing database and database server component. The result revealed that item 1 had a mean score of 3.56, item 2 had 3.46, item 3 had 3.26 and item 4 had 3.40. Since the mean scores were all above 3.00, it was decided that the Soft Drink Manufacturing Companies are utilizing this component. The standard deviation in this segment of the study ranged from 0.78 to 0.89 and this indicate that the items did not deviate significantly from one another.

Table 4 Mean ratings of the responses of Soft Drink Manufacturing Companies on utilization of Web Server component (N=30)

S/No.	Item on Web server component	\overline{X}	SD	Decision
1.	Web page as a marketing tool helps to capture			
	detailed information about consumer tastes and			
	interests	3.16	1.01	Utilized
2.	Analysis of web features aids direct provision of			
	services to consumers and business partners.	3.36	1.09	Utilized
3.	Information from other Soft Drink			
	Manufacturing Companies within and outside			
	Nigeria may be obtained through the browsing			
	of web sites of manufacturers of Soft Drinks.	3.50	0.86	Utilized
4.	Websites of the Soft Drink Manufacturing			
	Companies can be browsed in order to monitor			
	government policies on marketing of soft drinks.	3.23	1.07	Utilized

Table 4 has four items that sought to determine whether Soft Drink Manufacturing Companies are utilizing Web server component. The result revealed that item 1 had a mean score of 3.16, item 2 had 3.36, item 3 had 3.50 and item 4 had 3.23. Since these mean scores were all above 3.00, it was decided that the Soft Drink Manufacturing Companies are using this component. The standard deviation in this segment of the study ranged from 0.86 to 1.09 and this indicates that the items did not deviate significantly from one another.

Table 5 Mean ratings of the responses of managers of Soft Drink Manufacturing Companies on utilization of Router component (N = 30)

S/No.	Item on Router component	\overline{X}	SD	Decision
1.	Forwarding of data packet across computer			
	network	3.70	0.65	Utilized
2.	Connection of multiple networks to facilitate			
	Soft Drink business	3.50	0.82	Utilized
3.	Usage of Tail drop to manage congestion when			
	packets arrive at a rate higher than the router can			
	process	3.16	0.81	Utilized
4.	Router is used to establish network connections			
	for business operations	3.60	0.84	Utilized

Table 5 has four items that sought to determine whether Soft Drink Manufacturing Companies are utilizing Router component. The result revealed that item 1 had a mean of 3.70, item 2 had 3.50, item 3 had 3.16 and item 4 had 3.60. Since these mean scores were all above 3.00, it was decided that the Soft Drink Manufacturing Companies are utilizing this component. The standard deviation in this segment of this study ranged from 0.65 to 0.84 and this indicates that the items did not deviate significantly from one another.

Table 6 Mean ratings of the responses of Soft Drink Manufacturing Companies on utilization of Workstation component (N=30)

S/No.	Item on Workstation component	$\overline{\overline{X}}$	SD	Decision
1.	Client is used to enable other components			
	communicate in a structured manner	3.46	0.89	Utilized
2.	Client is used for looking up a customer record			
	in database	3.56	0.85	Utilized
3.	Client is used to retrieve a portion of a file on			
	the serverøs hard disk	3.40	0.89	Utilized
4.	Graphical User Interface is used to make each			
	resources accessible by the user as an			
	independent object	3.26	0.78	Utilized

Table 6 has four items that sought to determine whether Soft Drink Manufacturing Companies are utilizing Workstation component. The result revealed that item 1 had a mean

score of 3.46, item 2 had 3.56, item 3 had 3.40 and item 4 had 3.26. Since these mean scores were all above 3.00, it was decided that the Soft Drink Manufacturing Companies are utilizing this component. The standard deviation in this segment of the study ranged from 0.78 to 0.89. This indicates that the item did not deviate significantly from one another.

Summary of Findings of the Preliminary Study

- 1. The result of the preliminary study showed that the Soft Drink Manufacturing Companies are utilizing the six e-commerce components (Transaction server, Internet communication line, Database, Web server, Router and Workstation components). This conclusion is evidence from the ratings, the mean scores of their utilization of the 24 identified items in the six clusters of the study ranged from 3.16 to 3.66 over a range of 14 points.
- 2. The result of this pilot study established the need to provide relevant hints to determine generally, the extent of utilization of e-commerce by the Soft Drink Manufacturing Companies in the two states in order to bridge this knowledge gap.

APPENDIX E

Number of Marketing Managers, Sales Managers, IT Managers, Accounts Managers and Sales Representatives of Soft drink Manufacturing Companies in Anambra and Enugu States submarketing region.

S/N	Name of company	Number of	staff
		Anambra	Enugu
1.			
1.	Seven-up Bottling Company:		
	Marketing Manager	2	3
	Sales Manager	3	3
	IT Manager	1	1
	Sales Representatives	21	8
2.	Nigeria Bottling Company Plc		
	Marketing Manager	1	2
	Sales Manager	1	3
	IT Manager	1	1
	Sales Representatives	8	3
3.	Intafact Beverages Limited Onitsha:		
	Marketing Manager	3	-
	Sales Manager	3	-
	IT Manager	1	-

	Accounts Manager	1	
	Sales Representatives	15	-
4.	Nigaria Brayyanias Blay		
	Nigeria Breweries Plc:		
	Marketing Manager	1	5
	Sales Managers	5	4
	IT Manager	1	1
	Accounts Manager	1	2
	Sales Representatives	113	77
	TOTAL	182	114
	GRAND TOTAL	296	

APPENDIX F

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Notes

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STATISTICS

		POSITION	LOCATION	QUALIFI	EXPERIENCE
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Frequency Table

POSITION

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	MARKETING	16	5.7	5.7	5.7
	SALES MANAGER	24	8.6	8.6	14.3
	IT MANAGER	7	2.5	2.5	16.8
	ACCOUNTS MANAGER	6	2.1	2.1	18.9
	SLALES REPRESENTATIVE	227	81.1	81.1	100.0
	Total	280	100.0	100.0	

LOCATION

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	ANAMBRA STATE	171	61.1	61.1	61.1
	ENUGU STATE	109	38.9	38.9	100.0
	Total	280	100.0	100.0	

QUALIFICATION

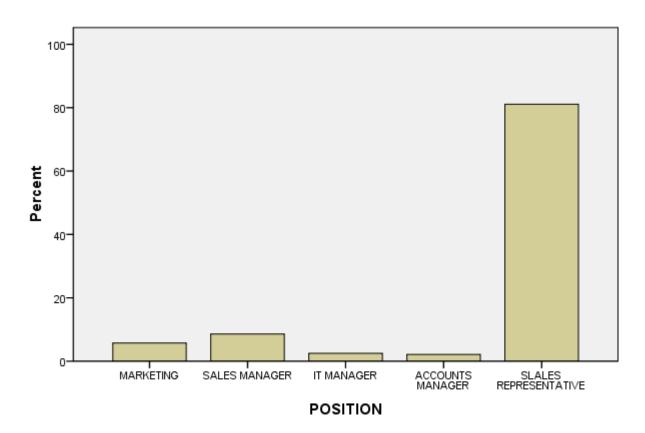
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	FIRST DEGREE	189	67.5	67.5	67.5
	MASTER DEGREE	74	26.4	26.4	93.9
	DOCTORAL DEGREE	7	2.5	2.5	96.4
	PROFESSIONAL CERTFICATE	10	3.6	3.6	100.0
	Total	280	100.0	100.0	

EXPERIENCE

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1-5YRS	46	16.4	16.4	16.4
	6-10YRS	157	56.1	56.1	72.5
	11 AND ABOVE	74	26.4	26.4	98.9
	4	2	.7	.7	99.6
	5	1	.4	.4	100.0
	Total	280	100.0	100.0	

Bar Chart

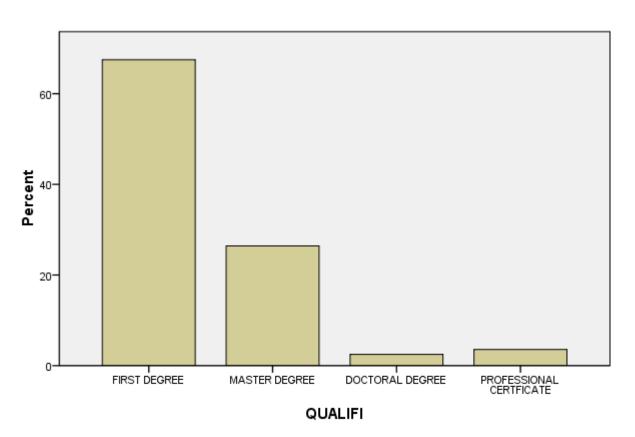
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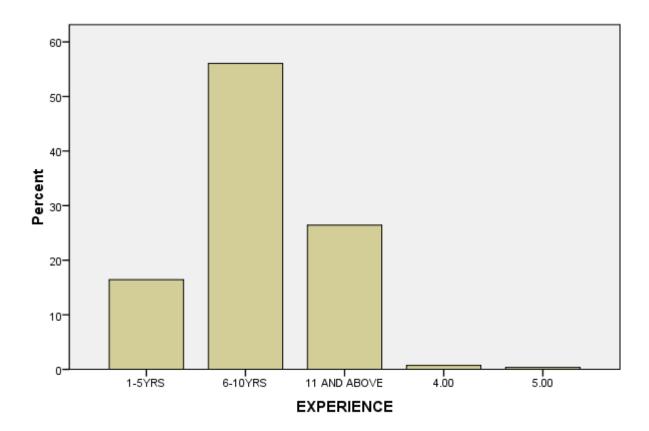
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QUALIFI



EXPERIENCE



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Descriptives

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Descriptive Statistics

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item3	280	2.3214	.64222
item4	280	1.4964	.57423
item5	280	1.2429	.54043
item6	280	1.1286	.41206
item7	280	2.3071	.56665
item8	280	2.9714	.70779
item9	280	1.4214	.70906
item10	280	1.5893	.77081
item11	280	2.2286	.81512
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Descriptives

Notes

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Descriptive Statistics

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item16	280	1.7571	.93034
item17	280	1.0857	.35893
item18	280	1.2143	.52583
item19	280	2.4679	.80257
item20	280	1.7679	.75232
item21	280	1.2250	.82702
item22	280	4.4536	1.15065
item23	280	2.4643	.93449
item24	280	1.7714	1.00067
item25	280	1.2929	.67198
item26	280	3.1571	.97842
item27	280	3.0643	.74015
item28	280	1.3464	.82392
item29	280	2.5321	.85028
item30	280	3.9857	.96524
item31	280	3.4500	.85362
item32	280	1.6643	1.03079
item33	280	2.2214	1.00585
item34	280	4.3250	1.16617
item35	280	2.2214	1.14890
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Valid N (listwise)	280		

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Descriptives

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Descriptive Statistics

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item40	280	1.4000	.70125
item41	280	2.1286	.82386
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item43	279	2.8172	.61655
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item45	280	1.6643	.73918
item46	280	1.9964	.86135
item47	280	2.8107	1.10549
item48	280	1.9679	1.01372
item49	280	1.7500	.82631
item50	280	1.7357	.69417
item51	280	1.8214	.87799
item52	280	2.2607	1.18529
item53	280	3.6321	1.23438
item54	280	3.1429	.78124
item55	280	3.4000	1.08294
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Valid N (listwise)	279		

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Descriptives

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Descriptive Statistics

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item63	280	1.3964	.80098
item64	280	1.1179	.49045
item65	280	1.0857	.43971
item66	280	1.0714	.36205
item67	280	1.0643	.37312
item68	280	1.1571	.63100
item69	280	1.3571	.96216
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Descriptives

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Descriptive Statistics

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item74	280	2.7357	.82184
item75	280	2.6393	1.12414
item76	280	3.3679	1.62762
item77	280	2.6714	1.79183
item78	280	1.5036	.95789
MEANE	280	2.7406	.52103
Valid N (listwise)	280		

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Descriptives

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Descriptive Statistics

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Valid N (listwise)	280		

ONEWAY item1 item2 item3 item4 item5 item6 item7 item8 item9 item10 item11 meanA BY P OSITION

/MISSING ANALYSIS.

Oneway

Notes

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	Active Dataset	DataSet1
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	Split File	<none></none>
	N of Rows in Working Data File	280
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics for each analysis are based on cases with no missing data for any variable in the analysis.
Syntax		ONEWAY item1 item2 item3 item4 item5 item6 item7 item8 item9 item10 item11 meanA BY POSITION /MISSING ANALYSIS.
Resources	Processor Time	00:00:00.015
	Elapsed Time	00:00:00.036

ANOVA

	-	Sum of Squares	df	Mean Square	F	Sig.
item1	Between Groups	1.697	4	.424	.849	.495
	Within Groups	137.389	275	.500		
	Total	139.086	279			
item2	Between Groups	40.999	4	10.250	12.643	.000
	Within Groups	222.944	275	.811		
	Total	263.943	279			

item3	Between Groups	21.589	4	5.397	15.877	.000
	Within Groups	93.483	275	.340		
	Total	115.071	279			
item4	Between Groups	11.158	4	2.789	9.489	.000
	Within Groups	80.839	275	.294		
	Total	91.996	279			
item5	Between Groups	40.054	4	10.014	66.465	.000
	Within Groups	41.431	275	.151		
	Total	81.486	279			
item6	Between Groups	2.518	4	.630	3.860	.005
	Within Groups	44.853	275	.163		
	Total	47.371	279			
item7	Between Groups	13.722	4	3.431	12.436	.000
	Within Groups	75.863	275	.276		
	Total	89.586	279			
item8	Between Groups	14.824	4	3.706	8.157	.000
	Within Groups	124.947	275	.454		
	Total	139.771	279			
item9	Between Groups	43.688	4	10.922	31.098	.000
	Within Groups	96.584	275	.351		
	Total	140.271	279			
item10	Between Groups	4.521	4	1.130	1.927	.106
	Within Groups	161.247	275	.586		
	Total	165.768	279			
item11	Between Groups	18.062	4	4.516	7.422	.000
	Within Groups	167.309	275	.608		
	Total	185.371	279			
meanA	Between Groups	7.155	4	1.789	29.177	.000
	Within Groups	16.859	275	.061		
	Total	24.014	279			

ONEWAY item1 item2 item3 item4 item5 item6 item7 item8 item9 item10 item11 meanA BY P OSITION

/MISSING ANALYSIS

/POSTHOC=SCHEFFE ALPHA(0.05).

Oneway

Notes

Output Created		22-Feb-2016 10:42:11		
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	Split File	<none></none>		
	N of Rows in Working Data File	280		
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.		
	Cases Used	Statistics for each analysis are based on cases with no missing data for any variable in the analysis.		
Syntax		ONEWAY item1 item2 item3 item4 item5 item6 item7 item8 item9 item10 item11 meanA BY POSITION /MISSING ANALYSIS /POSTHOC=SCHEFFE ALPHA(0.05).		
Resources	Processor Time	00:00:00.062		
	Elapsed Time	00:00:00.027		

ANOVA

	-	Sum of Squares	df	Mean Square	F	Sig.
item1	Between Groups	1.697	4	.424	.849	.495
	Within Groups	137.389	275	.500		
	Total	139.086	279			
item2	Between Groups	40.999	4	10.250	12.643	.000
	Within Groups	222.944	275	.811		
	Total	263.943	279			

item3	Between Groups	21.589	4	5.397	15.877	.000
	Within Groups	93.483	275	.340		
	Total	115.071	279			
item4	Between Groups	11.158	4	2.789	9.489	.000
	Within Groups	80.839	275	.294	į.	
	Total	91.996	279		į.	
item5	Between Groups	40.054	4	10.014	66.465	.000
	Within Groups	41.431	275	.151		
	Total	81.486	279			
item6	Between Groups	2.518	4	.630	3.860	.005
	Within Groups	44.853	275	.163		
	Total	47.371	279			
item7	Between Groups	13.722	4	3.431	12.436	.000
	Within Groups	75.863	275	.276		
	Total	89.586	279			
item8	Between Groups	14.824	4	3.706	8.157	.000
	Within Groups	124.947	275	.454		
	Total	139.771	279			
item9	Between Groups	43.688	4	10.922	31.098	.000
	Within Groups	96.584	275	.351		
	Total	140.271	279			
item10	Between Groups	4.521	4	1.130	1.927	.106
	Within Groups	161.247	275	.586		
	Total	165.768	279			
item11	Between Groups	18.062	4	4.516	7.422	.000
	Within Groups	167.309	275	.608		
	Total	185.371	279			
meanA	Between Groups	7.155	4	1.789	29.177	.000
	Within Groups	16.859	275	.061		
	Total	24.014	279			

Post Hoc Tests

Homogeneous Subsets

Mean A

Scheffe

		Subset for alpha = 0.05				
POSITION	N	1	2	3		
SLALES REPRESENTATIVE	227	1.9596				
SALES MANAGER	24	2.2538	2.2538			
MARKETING	16	•	2.2898	2.2898		
IT MANAGER	7		2.5455	2.5455		
ACCOUNTS MANAGER	6			2.5909		
Sig.		.080	.084	.068		

Means for groups in homogeneous subsets are displayed.

ONEWAY item12 item13 item14 item15 item16 item17 item18 item19 item20 item21 item22 item23 item24 item25 item26 item27 item28 item29

item30 item31 item32 item33 item34 item35 MEANB BY POSITION /MISSING ANALYSIS /POSTHOC=SCHEFFE ALPHA(0.05).

Oneway

	110165	
Output Created		22-Feb-2016 10:44:40
Comments		
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	N of Rows in Working Data File	280
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics for each analysis are based on cases with no missing data for any variable in the analysis.

Syntax		ONEWAY item12 item13 item14
		item15 item16 item17 item18
		item19 item20 item21 item22
		item23 item24 item25 item26
		item27 item28 item29 item30
		item31 item32 item33 item34
		item35 MEANB BY POSITION
		/MISSING ANALYSIS
		/POSTHOC=SCHEFFE
		ALPHA(0.05).
Resources	Processor Time	00:00:00.062
	Elapsed Time	00:00:00.029

		Sum of Squares	df	Mean Square	F	Sig.
item12	Between Groups	.494	4	.124	.324	.862
	Within Groups	104.806	275	.381		
	Total	105.300	279			
item13	Between Groups	.440	4	.110	.585	.674
	Within Groups	51.671	275	.188		
	Total	52.111	279			
item14	Between Groups	5.564	4	1.391	3.895	.004
	Within Groups	98.207	275	.357		
	Total	103.771	279			
item15	Between Groups	.115	4	.029	.198	.939
	Within Groups	39.828	275	.145		
	Total	39.943	279			
item16	Between Groups	88.177	4	22.044	39.542	.000
	Within Groups	153.309	275	.557		
	Total	241.486	279			
item17	Between Groups	2.178	4	.545	4.435	.002
	Within Groups	33.765	275	.123		
	Total	35.943	279			

item18	Between Groups	.568	4	.142	.510	.728
	Within Groups	76.575	275	.278		
	Total	77.143	279			
item19	Between Groups	1.564	4	.391	.604	.660
	Within Groups	178.147	275	.648		
	Total	179.711	279			
item20	Between Groups	20.071	4	5.018	10.011	.000
	Within Groups	137.840	275	.501		
	Total	157.911	279			
item21	Between Groups	1.009	4	.252	.365	.833
	Within Groups	189.816	275	.690		
	Total	190.825	279			
item22	Between Groups	7.650	4	1.913	1.454	.217
	Within Groups	361.746	275	1.315		
	Total	369.396	279			
item23	Between Groups	3.535	4	.884	1.012	.402
	Within Groups	240.108	275	.873		
	Total	243.643	279			
item24	Between Groups	3.762	4	.940	.938	.442
	Within Groups	275.610	275	1.002		
	Total	279.371	279			
item25	Between Groups	.423	4	.106	.232	.921
	Within Groups	125.563	275	.457		
	Total	125.986	279			
item26	Between Groups	1.620	4	.405	.419	.795
	Within Groups	265.466	275	.965		
	Total	267.086	279			
item27	Between Groups	13.804	4	3.451	6.826	.000
	Within Groups	139.039	275	.506		
	Total	152.843	279			
item28	Between Groups	1.894	4	.473	.694	.596
	Within Groups	187.503	275	.682		
	Total	189.396	279			
item29	Between Groups	3.509	4	.877	1.217	.304
	Within Groups	198.201	275	.721		
	Total	201.711	279			

item30	Between Groups	5.606	4	1.401	1.515	.198
	Within Groups	254.337	275	.925		
	Total	259.943	279			
item31	Between Groups	20.647	4	5.162	7.771	.000
	Within Groups	182.653	275	.664		
	Total	203.300	279			
item32	Between Groups	3.560	4	.890	.836	.503
	Within Groups	292.882	275	1.065		
	Total	296.443	279			
item33	Between Groups	35.681	4	8.920	9.948	.000
	Within Groups	246.591	275	.897		
	Total	282.271	279			
item34	Between Groups	4.412	4	1.103	.809	.520
	Within Groups	375.013	275	1.364		
	Total	379.425	279			
item35	Between Groups	5.387	4	1.347	1.021	.397
	Within Groups	362.884	275	1.320		
	Total	368.271	279			
MEANB	Between Groups	.864	4	.216	3.574	.007
	Within Groups	16.619	275	.060		
	Total	17.483	279			

Post Hoc Tests

Homogeneous Subsets

MEAN B

Scheffe

		Subset for alpha = 0.05		
POSITION	N	1	2	
MARKETING	16	2.2292		
SLALES REPRESENTATIVE	227	2.2450	2.2450	
SALES MANAGER	24	2.2760	2.2760	
ACCOUNTS MANAGER	6	2.4375	2.4375	
IT MANAGER	7		2.5536	
Sig.		.370	.054	

MEAN B

Scheffe

		Subset for alpha = 0.05		
POSITION	N	1	2	
MARKETING	16	2.2292		
SLALES REPRESENTATIVE	227	2.2450	2.2450	
SALES MANAGER	24	2.2760	2.2760	
ACCOUNTS MANAGER	6	2.4375	2.4375	
IT MANAGER	7		2.5536	
Sig.		.370	.054	

Means for groups in homogeneous subsets are displayed.

ONEWAY MEANB BY POSITION /MISSING ANALYSIS /POSTHOC=SCHEFFE ALPHA(0.05).

Oneway

Output Created		22-Feb-2016 10:47:26
Comments		
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	N of Rows in Working Data File	280
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics for each analysis are based on cases with no missing data for any variable in the analysis.

Syntax		ONEWAY MEANB BY POSITION /MISSING ANALYSIS /POSTHOC=SCHEFFE ALPHA(0.05).
Resources	Processor Time Elapsed Time	00:00:00.000 00:00:00.007

ANOVA

MEANB					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.864	4	.216	3.574	.007
Within Groups	16.619	275	.060		
Total	17.483	279			

Post Hoc Tests

Multiple Comparisons

MEANB Scheffe

	-				95% Conf Interv	
						Uppe
		Mean Difference	Std.		Lower	r Boun
(I) POSITION	(J) POSITION	(I-J)	Error	Sig.	Bound	d
MARKETING	SALES MANAGER	04688	.07934	.986	2929	.1992
	IT MANAGER	32440	.11140	.079	6699	.0211
	ACCOUNTS MANAGER	20833	.11768	.537	5733	.1566
	SLALES REPRESENTATIVE	01588	.06359	1.00	2131	.1813
SALES MANAGER	MARKETING	.04688	.07934	.986	1992	.2929
	IT MANAGER	27753	.10560	.144	6050	.0500
	ACCOUNTS MANAGER	16146	.11220	.723	5094	.1865

	SLALES REPRESENTATIVE	.03100	.05277	.987	1326	.1946
IT MANAGER	MARKETING	.32440	.11140	.079	0211	.6699
	SALES MANAGER	.27753	.10560	.144	0500	.6050
	ACCOUNTS MANAGER	.11607	.13677	.949	3081	.5402
	SLALES REPRESENTATIVE	.30853*	.09434	.032	.0160	.6011
ACCOUNTS MANAGER	MARKETING	.20833	.11768	.537	1566	.5733
	SALES MANAGER	.16146	.11220	.723	1865	.5094
	IT MANAGER	11607	.13677	.949	5402	.3081
	SLALES REPRESENTATIVE	.19246	.10168	.467	1229	.5078
SLALES REPRESENTATIVE	MARKETING	.01588	.06359	1.00	1813	.2131
	SALES MANAGER	03100	.05277	.987	1946	.1326
	IT MANAGER	30853 [*]	.09434	.032	6011	.0160
	ACCOUNTS MANAGER	19246	.10168	.467	5078	.1229

^{*.} The mean difference is significant at the 0.05 level.

Homogeneous Subsets

MEANB

Scheffe

		Subset for alpha = 0.0			
POSITION	N	1	2		
MARKETING	16	2.2292			
SLALES REPRESENTATIVE	227	2.2450	2.2450		
SALES MANAGER	24	2.2760	2.2760		
ACCOUNTS MANAGER	6	2.4375	2.4375		
IT MANAGER	7		2.5536		
Sig.		.370	.054		

Means for groups in homogeneous subsets are displayed.

ONEWAY item36 item37 item38 item39 item40 item41 item42 item43 item44 item45 item46 item47 item48 item49 item50 item51 item52 item53

item54 item55 MEANC BY POSITION

/MISSING ANALYSIS.

Oneway

Notes

Output Created		22-Feb-2016 10:49:23
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	N of Rows in Working Data File	280
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics for each analysis are based on cases with no missing data for any variable in the analysis.
Syntax		ONEWAY item36 item37 item38 item39 item40 item41 item42 item43 item44 item45 item46 item47 item48 item49 item50 item51 item52 item53 item54 item55 MEANC BY POSITION /MISSING ANALYSIS.
Resources	Processor Time	00:00:00.000
	Elapsed Time	00:00:00.006

		Sum of Squares	df	Mean Square	F	Sig.
item36	Between Groups	2.555	4	.639	1.292	.274
	Within Groups	136.016	275	.495		
	Total	138.571	279			
item37	Between Groups	3.249	4	.812	1.449	.218
	Within Groups	154.147	275	.561		
	Total	157.396	279			
item38	Between Groups	.559	4	.140	.264	.901
	Within Groups	145.213	275	.528		
	Total	145.771	279			
item39	Between Groups	4.096	4	1.024	3.294	.012
	Within Groups	85.490	275	.311		
	Total	89.586	279			
item40	Between Groups	.558	4	.140	.281	.890
	Within Groups	136.642	275	.497		
	Total	137.200	279			
item41	Between Groups	17.752	4	4.438	7.112	.000
	Within Groups	171.619	275	.624		
	Total	189.371	279			
item42	Between Groups	1.732	4	.433	.611	.655
	Within Groups	195.036	275	.709		
	Total	196.768	279			
item43	Between Groups	1.732	4	.433	1.141	.337
	Within Groups	103.946	274	.379		
	Total	105.677	278			
item44	Between Groups	2.321	4	.580	1.457	.215
	Within Groups	109.504	275	.398		
	Total	111.825	279			
item45	Between Groups	3.142	4	.785	1.447	.219
	Within Groups	149.301	275	.543		
	Total	152.443	279			
item46	Between Groups	10.454	4	2.614	3.657	.006
	Within Groups	196.542	275	.715		
	Total	206.996	279			
item47	Between Groups	24.338	4	6.085	5.285	.000

				I.		•
	Within Groups	316.630	275	1.151		
	Total	340.968	279			
item48	Between Groups	2.360	4	.590	.570	.684
	Within Groups	284.351	275	1.034	i.	i.
	Total	286.711	279	1		
item49	Between Groups	3.083	4	.771	1.131	.342
	Within Groups	187.417	275	.682		
	Total	190.500	279			
item50	Between Groups	8.045	4	2.011	4.376	.002
	Within Groups	126.398	275	.460		
	Total	134.443	279	1		
item51	Between Groups	15.672	4	3.918	5.403	.000
	Within Groups	199.399	275	.725		
	Total	215.071	279	1		
item52	Between Groups	1.946	4	.487	.343	.849
	Within Groups	390.021	275	1.418		
	Total	391.968	279	1		
item53	Between Groups	13.982	4	3.496	2.338	.056
	Within Groups	411.129	275	1.495		
	Total	425.111	279	1		
item54	Between Groups	4.518	4	1.130	1.874	.115
	Within Groups	165.767	275	.603		
	Total	170.286	279	1		
item55	Between Groups	9.466	4	2.367	2.048	.088
	Within Groups	317.734	275	1.155		
	Total	327.200	279	1		
MEANC	Between Groups	2.288	4	.572	3.583	.007
	Within Groups	43.902	275	.160		
	Total	46.190	279			

ONEWAY MEANC BY POSITION /MISSING ANALYSIS /POSTHOC=SCHEFFE ALPHA(0.05).

Oneway

Notes

Output Created		22-Feb-2016 10:50:17
Comments		
Input	Data	C:\Users\User\Documents\OKEKE ZEANYANWU.sav
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	N of Rows in Working Data File	280
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics for each analysis are based on cases with no missing data for any variable in the analysis.
Syntax		ONEWAY MEANC BY POSITION /MISSING ANALYSIS /POSTHOC=SCHEFFE ALPHA(0.05).
Resources	Processor Time	00:00:00.000
	Elapsed Time	00:00:00.005

[DataSet1] C:\Users\User\Documents\OKEKEZEANYANWU.sav

MEANC					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	2.288	4	.572	3.583	.007
Within Groups	43.902	275	.160		
Total	46.190	279			

Post Hoc Tests

Multiple Comparisons

MEANC Scheffe

					95% Confider Interval	
(I) POSITION	(J) POSITION	Mean Difference (I-J)	Std. Error	Sig.	Lower Bound	Upper Bound
MARKETING	SALES MANAGER	.08333	.12896	.981	3166	.4833
	IT MANAGER	19375	.18106	.887	7553	.3678
	ACCOUNTS MANAGER	11042	.19127	.987	7036	.4828
	SLALES REPRESENTAT IVE	.20348	.10335	.425	1170	.5240
SALES MANAGER	MARKETING	08333	.12896	.981	4833	.3166
	IT MANAGER	27708	.17163	.626	8094	.2552
	ACCOUNTS MANAGER	19375	.18237	.889	7593	.3718
	SLALES REPRESENTAT IVE	.12015	.08576	.743	1458	.3861
IT MANAGER	MARKETING	.19375	.18106	.887	3678	.7553
	SALES MANAGER	.27708	.17163	.626	2552	.8094
	ACCOUNTS MANAGER	.08333	.22229	.998	6061	.7727
	SLALES REPRESENTAT IVE	.39723	.15333	.155	0783	.8727
ACCOUNTS MANAGER	MARKETING	.11042	.19127	.987	4828	.7036

	*	_	L			
	SALES MANAGER	.19375	.18237	.889	3718	.7593
	IT MANAGER	08333	.22229	.998	7727	.6061
	SLALES REPRESENTAT IVE	.31390	.16526	.463	1986	.8264
SLALES	MARKETING	20348	.10335	.425	5240	.1170
REPRESENTATIVE	SALES MANAGER	12015	.08576	.743	3861	.1458
	IT MANAGER	39723	.15333	.155	8727	.0783
	ACCOUNTS MANAGER	31390	.16526	.463	8264	.1986

Homogeneous Subsets

MEAN C

Scheffe

		Subset for alpha = 0.05
POSITION	N	1
SLALES REPRESENTATIVE	227	2.1528
SALES MANAGER	24	2.2729
MARKETING	16	2.3562
ACCOUNTS MANAGER	6	2.4667
IT MANAGER	7	2.5500
Sig.		.209

Means for groups in homogeneous subsets are displayed.

ONEWAY ITEM56 item57 item58 item59 item60 item61 item62 item63 item64 item65 item66 item67 item68 item69 item70 MEAND BY POSITION

/MISSING ANALYSIS.

Oneway

	110165	
Output Created		22-Feb-2016 11:21:53
Comments		
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	Active Dataset	DataSet1
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	Weight	<none></none>
	Split File	<none></none>
	N of Rows in Working Data File	280
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics for each analysis are based on cases with no missing data for any variable in the analysis.
Syntax		ONEWAY ITEM56 item57 item58 item59 item60 item61 item62 item63 item64 item65 item66 item67 item68 item69 item70 MEAND BY POSITION /MISSING ANALYSIS.
Resources	Processor Time	00:00:00.000
	Elapsed Time	00:00:00.004

		Sum of Squares	df	Mean Square	F	Sig.
ITEM56	Between Groups	2.662	4	.666	.910	.459
	Within Groups	201.240	275	.732		
	Total	203.903	279	1		
item57	Between Groups	3.229	4	.807	.628	.643
	Within Groups	353.271	275	1.285		
	Total	356.500	279			
item58	Between Groups	9.459	4	2.365	2.173	.072
	Within Groups	299.327	275	1.088		
	Total	308.786	279	1		
item59	Between Groups	.284	4	.071	.289	.885
	Within Groups	67.588	275	.246		
	Total	67.871	279	1		
item60	Between Groups	2.712	4	.678	2.209	.068
	Within Groups	84.431	275	.307		
	Total	87.143	279	1		
item61	Between Groups	.817	4	.204	.675	.610
	Within Groups	83.169	275	.302		
	Total	83.986	279			
item62	Between Groups	1.010	4	.253	.321	.864
	Within Groups	216.361	275	.787		
	Total	217.371	279			
item63	Between Groups	5.042	4	1.261	1.993	.096
	Within Groups	173.954	275	.633		
	Total	178.996	279			
item64	Between Groups	1.208	4	.302	1.260	.286
	Within Groups	65.903	275	.240		
	Total	67.111	279			
item65	Between Groups	.986	4	.246	1.279	.278
	Within Groups	52.957	275	.193		
	Total	53.943	279			
item66	Between Groups	.372	4	.093	.707	.588
	Within Groups	36.199	275	.132		
	Total	36.571	279			
item67	Between Groups	.209	4	.052	.372	.829

	*					
	Within Groups	38.634	275	.140		
	Total	38.843	279			
item68	Between Groups	1.163	4	.291	.727	.574
	Within Groups	109.923	275	.400	Į.	Į.
	Total	111.086	279			
item69	Between Groups	1.638	4	.410	.439	.781
	Within Groups	256.648	275	.933		
	Total	258.286	279			
item70	Between Groups	8.211	4	2.053	.911	.458
	Within Groups	619.500	275	2.253		
	Total	627.711	279			
MEAND	Between Groups	4.120	4	1.030	4.633	.001
	Within Groups	61.135	275	.222		
	Total	65.255	279			

ONEWAY MEAND BY POSITION /MISSING ANALYSIS /POSTHOC=SCHEFFE ALPHA(0.05).

Oneway

Output Created		22-Feb-2016 11:22:25
Comments		
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Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics for each analysis are based on cases with no missing data for any variable in the analysis.

Syntax		ONEWAY MEAND BY POSITION /MISSING ANALYSIS /POSTHOC=SCHEFFE ALPHA(0.05).
Resources	Processor Time	00:00:00.000
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ANOVA

MEAND					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	4.120	4	1.030	4.633	.001
Within Groups	61.135	275	.222		
Total	65.255	279			

Post Hoc Tests

Multiple Comparisons

MEAN D Scheffe

						nfidence erval
(I) POSITION	(J) POSITION	Mean Difference (I-J)	Std. Error	Sig.	Lower Bound	Upper Bound
MARKETING	SALES MANAGER	16806	.15217	.875	6400	.3039
	IT MANAGER	48036	.21366	.285	-1.1430	.1823
	ACCOUNTS MANAGER	.12917	.22571	.988	5708	.8292
	SLALES REPRESENTAT IVE	.11889	.12196	.917	2593	.4971
SALES MANAGER	MARKETING	.16806	.15217	.875	3039	.6400
	IT MANAGER	31230	.20254	.667	9404	.3158

	ACCOUNTS MANAGER	.29722	.21521	.753	3702	.9646
	SLALES REPRESENTAT IVE	.28694	.10120	.093	0269	.6008
IT MANAGER	MARKETING	.48036	.21366	.285	1823	1.1430
	SALES MANAGER	.31230	.20254	.667	3158	.9404
	ACCOUNTS MANAGER	.60952	.26232	.252	2040	1.4230
	SLALES REPRESENTAT IVE	.59924*	.18094	.029	.0381	1.1604
ACCOUNTS MANAGER	MARKETING	12917	.22571	.988	8292	.5708
	SALES MANAGER	29722	.21521	.753	9646	.3702
	IT MANAGER	60952	.26232	.252	-1.4230	.2040
	SLALES REPRESENTAT IVE	01028	.19501	1.000	6151	.5945
SLALES	MARKETING	11889	.12196	.917	4971	.2593
REPRESENTATIVE	SALES MANAGER	28694	.10120	.093	6008	.0269
	IT MANAGER	59924*	.18094	.029	-1.1604	0381
	ACCOUNTS MANAGER	.01028	.19501	1.000	5945	.6151

^{*.} The mean difference is significant at the 0.05 level.

Homogeneous Subsets

MEAN D

Scheffe

		Subset for alpha = 0.05		
POSITION	N	1	2	
ACCOUNTS MANAGER	6	1.5333		
SLALES REPRESENTATIVE	227	1.5436		
MARKETING	16	1.6625	1.6625	
SALES MANAGER	24	1.8306	1.8306	
IT MANAGER	7		2.1429	
Sig.		.667	.188	

Means for groups in homogeneous subsets are displayed.

ONEWAY ITEM71 item72 item73 item74 item75 item76 item77 item78 MEANE BY EXPERI ENCE /MISSING ANALYSIS.

Oneway

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Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics for each analysis are based on cases with no missing data for any variable in the analysis.
Syntax		ONEWAY ITEM71 item72 item73 item74 item75 item76 item77 item78 MEANE BY EXPERIENCE /MISSING ANALYSIS.
Resources	Processor Time	00:00:00.032
	Elapsed Time	00:00:00.009

$[DataSet1] \ C: \ \ Users \setminus User \setminus Documents \setminus OKEKEZEANYANWU.sav$

ANOVA

	-	Sum of Squares	Df	Mean Square	F	Sig.
ITEM71	Between Groups	3.656	4	.914	.932	.446
	Within Groups	269.709	275	.981		
	Total	273.365	279			
item72	Between Groups	4.394	4	1.099	1.423	.226
	Within Groups	212.231	275	.772		
	Total	216.625	279			
item73	Between Groups	3.670	4	.917	1.576	.181
	Within Groups	160.041	275	.582		
	Total	163.711	279			
item74	Between Groups	3.432	4	.858	1.275	.280
	Within Groups	185.011	275	.673		
	Total	188.443	279			
item75	Between Groups	11.047	4	2.762	2.224	.067
	Within Groups	341.521	275	1.242		
	Total	352.568	279			
item76	Between Groups	8.579	4	2.145	.807	.521
	Within Groups	730.531	275	2.656		
	Total	739.111	279			
item77	Between Groups	13.944	4	3.486	1.087	.363
	Within Groups	881.827	275	3.207		
	Total	895.771	279			
item78	Between Groups	4.941	4	1.235	1.353	.251
	Within Groups	251.056	275	.913		
	Total	255.996	279			
MEANE	Between Groups	1.424	4	.356	1.317	.264
	Within Groups	74.317	275	.270		
	Total	75.741	279			

ONEWAY ITEM79 item80 item81 item82 MEANF BY QUALIFI /MISSING ANALYSIS.

Oneway

Notes

Output Created		22-Feb-2016 11:26:09
Comments		
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	N of Rows in Working Data File	280
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics for each analysis are based on cases with no missing data for any variable in the analysis.
Syntax		ONEWAY ITEM79 item80 item81 item82 MEANF BY QUALIFI /MISSING ANALYSIS.
Resources	Processor Time	00:00:00.031
	Elapsed Time	00:00:00.007

	-	Sum of Squares	Df	Mean Square	F	Sig.
ITEM79	Between Groups	1.194	3	.398	.586	.625
	Within Groups	187.507	276	.679		
	Total	188.702	279			
item80	Between Groups	.451	3	.150	.236	.871
	Within Groups	175.821	276	.637		
	Total	176.271	279			
item81	Between Groups	3.875	3	1.292	2.965	.032
	Within Groups	120.235	276	.436		
	Total	124.111	279			
item82	Between Groups	5.423	3	1.808	3.245	.022
	Within Groups	153.773	276	.557		
	Total	159.196	279			
MEANF	Between Groups	.327	3	.109	.382	.766
	Within Groups	78.815	276	.286		
	Total	79.142	279			