# TITLE PAGE

# ASSESSMENT OF THE EXTENT OF UTILIZATION OF e-MARKETING APPLICATION BY SMALL AND MEDIUM ENTERPRISES IN SOUTH EASTERN STATES OF NIGERIA

BY

# OKEKE, KELECHI CHARLES REG. NO: 2008197006F

# A FACULTY DISSERTATION SUBMITTED TO THE DEPARTMENT OF VOCATIONAL EDUCATION FACULTY OF EDUCATION NNAMDI AZIKIWE UNIVERSITY AWKA

# IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF THE DEGREE OF DOCTOR OF PHILOSOPHY (PH.D) IN BUSINESS EDUCATION

## **AUGUEST**, 2015

### Vocational Education, Faculty of Education, Nnamdi Azikiwe University

**APPROVAL PAGE** 

This dissertation has been approved for the award of the Doctor of

Philosophy (Ph.D) degree in Business Education of the Department of

By

Ven. Prof. B.C Okeke Supervisor

Awka.

**Prof. K.R.E Okoye** Head of Department

**External Examiner** 

**Prof. E. C. Agbanusi** Dean. Faculty of Education

**Prof. H.I. Odimegwu** Dean. School of Post Graduate Studies Date

Date

Date

Date

Date

## CERTIFICATION

This is to certify that I, Okeke Kelechi Charles, Reg. No. 2008197006F, is responsible for the research study embodied in this dissertation. The original work is mine except as certified in the acknowledgements and references. To the best of my knowledge, neither the dissertation nor the original work contained therein has been submitted to this University or any other institution for the award for any degree.

Okeke, Kelechi Charles

### DEDICATION

This dissertation is dedicated to my beloved parents (late) Mr & Mrs Gabriel Ibekwe Okeke.

#### ACKNOWLEDGEMENTS

The researcher expresses his immense appreciation to his supervisor, Ven. Prof. B.C Okeke, for his inestimable patience and support towards the success of this research work. He is equally grateful to his Head of Department, Prof. K.R.E Okoye, and other lecturers in the Department and Faculty in the likes of Prof. G.I Ndinechi, Prof. T.I Eze, Prof. O.T. Ibeneme, Prof. U.J. Obidiegwu, Dr C.A.N Nwankwo and Dr. J.I. Ezenwafor for their constructive criticism and inputs in developing and fine-tunning this report. He is also thankful to Dr. C.M Ile, Dr C. I. Okoli, Dr. C.C Okolocha, Dr. J.C. Nwazor, Dr. A.U Okeke and Rev. Sr. (Dr). M.N Obi for their wonderful encouragement and advice at different times in the course of this study.

The researcher thanks in a special way his wife, Mrs Chinonso Okeke, and children, Charles Jr, and Kizito. He acknowledges also his brothers, Emmanuel and Onyekachi, his sisters Nkechi, Caroline and Miracle, his inlaw Engr. C.F. Njoku and other relatives for their love and moral support throughout the duration of this research study. May God bless you all.

#### Okeke, Kelechi Charles

v

#### ABSTRACT

The need for small and medium scale enterprises to utilize Information and Communication Technology (ICT) applications to boost their business necessitated this study which bordered on assessing the extent Small and Medium Enterprises (SMEs) utilize e-marketing applications in their business operations in South- Eastern States of Nigeria. Five research questions guided the study and five null hypotheses were tested. Survey research design was adopted for the study. The population of the study consisted of 1,846 SMEs (owners / managers) in the area. Stratified random sampling techniques was used for the study. The instrument for data collection was a 5-point rating scale questionnaire which has 80 items in five clusters. The arithmetic mean was used to analyze data in respect of research questions while t-test statistics was used to test the hypotheses at 0.05 level of significance. Finding of the study indicated that the extent SMEs in the area of the study utilize all the identified emarketing applications was low. Significant difference was found in the respondents mean ratings on the extent which they utilize all the applications as a result of their experience, gender, level of computer literacy and educational attainments. The findings therefore suggest that the widely reported failure of SMEs in Nigeria could be attributed to their inability to adapt to the new etechnology of the present time. It was concluded among others that for SMEs owners/managers to survive and experience growth in business, they should acquire more advanced computer skills and integrate fully e-marketing applications into their businesses to enhance their business growth and survival in the present globalized marketing competitive age.

## TABLE OF CONTENTS

TITLE PAGE	I
APPROVAL PAGE	11
CERTIFICATION	
DEDICATION	IV
ACKNOWLEDGEMENTS	V
ABSTRACT	VI
TABLEOFCONTENTS	VIII
LIST OF TABLES	IX
LIST OF APPENDICES	Х

## CHAPTER ONE: INTRODUCTION

Background to the Study	1
Statement of the Problem	10
Purpose of the Study	12
Significance of the Study	12
Scope of the Study	14
Research Questions	14
Hypotheses	15

## CHAPTER TWO: REVIEW OF RELATED LITERATURE Conceptual Framework

Technological Innovation	17
e-Marketing	21
Small and Medium Scale Enterprises (SMEs)	22
Theoretical Framework Schumpeter's Economic Development Theory Roger's Innovation Diffusion Theory	24 25

Theoretical Studies	
Traditional and Conventional Methods of Marketing	26
Small and Medium Scale Business Failure in Nigeria	28
Marketing Problems of SMEs	29
SMEs and Internet Utilization	32
e-Marketing Application	34
Utilization of e-Commerce in Business Operation	42
Utilization of e-Invoicing in Business Operation	47
Utilization of e-Advertising in Business Operation	51
Utilization of e-Purchasing in Business Operation	55
Utilization of Marketing Software	66
Review of Related Empirical Studies	67
Summary of the Review of Related Literature	76
CHAPTER THREE: METHOD	
Research Design	79
Area of the Study	80
Population of the Study	80
Sample and Sampling Technique	80
Instrument for Data Collection	81
Validation of the Instrument	82
Reliability of the Instrument	82
Method of Data Collection	83
Method of Data Analysis	83
CHAPTER FOUR: PRESENTATION AND ANALYSIS OF DATA	05
Analysis of Data	85
Analysis of Data Related to Hypothesis	84
Summary of Major Findings	95
CHAPTER FIVE: DISCUSSION, CONCLUSION AND	
RECOMMENDATIONS	404
Conclusion	101
Implication of the Study	101
Recommendations	102
Limitation of the Study	104
Suggestions for Further Study	105

# REFERENCES

# LIST OF TABLES

	TABLE	PAGE
1.	Mean Ratings on the Extent SMEs Managers utilize e-commerce in their operation	85
2.	Mean Ratings on the Extent SMEs Managers utilize e-Invoicing in their operation.	87
3.	Mean Ratings on the Extent SMEs Managers utilize e-Advertising in their operation	88
4.	Mean Ratings on the Extent SMEs Managers utilize e-Purchasing in their operation	89
5.	Mean Ratings on the Extent SMEs Managers utilize e-Marketing Software in their operation	90
6.	z-test on Extent of Utilization of e-Commerce by SMEs Managers based on years of Experience	92
7.	z-test on Extent of Utilization of e-Invoicing by SMEs Managers based on Gender.	92
8.	z-test on Extent of Utilization of e-Advertising by SMEs Managers based on level of Computer Literacy	93
9.	z-test on the Extent of Utilization of e-Purchasing by SMEs Managers based on Gender	94
1(	<ol> <li>z-test on the Extent of Utilization of e-marketing software based on their level of educational attainment</li> </ol>	95

## LIST OF APPENDICES

NO

## PAGE

Appendix A	Letter of Transmittal	125
Appendix B	Questionnaire on small and medium enterprise extent of utilization of e-marketing applications.	126
Appendix C	Population and sample distribution of registered SMEs with NASME in South Eastern Nigeria	132
Appendix D	Validated instrument	133
Appendix E	Mean (x) rating of the extent of utilization of e-commerce by SMEs in South Eastern Nigeria	149
Appendix F	Mean (x) rating of the extent of utilization of e-invoicing by SMEs in South Eastern Nigeria	150
Appendix G	Mean (x) rating of the extent of utilization of e-advertising by SMEs in South Eastern Nigeria	151
Appendix H	Mean (x) rating of the extent of utilization of e- purchasing in South Eastern Nigeria.	152
Appendix I	Mean (x) rating of the extent of utilization of e- marketing softwares in South Eastern Nigeria.	153
Appendix J	z-test of the mean (x) rating of extent of utilization of e-commerce by SMEs based on their gender.	154
Appendix K	z-test of the mean (x) rating of extent of utilization of e-invoicing by SMEs based on their educationa attainments	al 155

Appendix L	z-test of the mean (x) rating of extent of utilization e-advertising by SMEs based on their level of compliteracy	
Appendix M	z-test of the Mean(x) rating of extent of utilization of purchasing by SMEs based on their years of experience	of e- 157
Appendix N	Internal consistency reliability instrument	161

### CHAPTER ONE

#### INTRODUCTION

#### **Background to the Study**

Small and medium scale enterprises (SMEs) are important pillars and the backbone of every economy. They are essential elements in the growth strategy of many developing countries. They have the potentials for wealth creation, development and industrialization in every economy particularly the developing nations. They are at the forefront of making meaningful input in the economy and hold strongest promise to industrial growth.

According to Adelaja (2012) SMEs are important to almost all economies in the world, especially to those in the developing countries with major employment and income distribution challenges. He also noted that SMEs contributes to the creation of jobs and are nursery for the larger firms. He further averred that SMEs contribute directly and significantly to aggregate savings and investments and are involved in the development of appropriate technology for production of goods.

In support of the pivotal position of the SMEs in developing economy, Schnuemann (2009) asserted that SMEs are the key drivers for a country's economic growth. Small and medium scale enterprises cannot be overlooked in the economic development of any country

xii

because they are the major source of employment and economic development. In consonance with Schnuemann's view, Okongwu (2001) noted that SMEs are the main source of economic growth and a major factor in promoting private sector development and partnership in developing countries. Economic growth and development in Nigeria can be achieved through the emergence of strong SMEs, which will later grow to become major players in the economy (Mutula & Brakel, 2006).

There is no universally acknowledged definition of SMEs as the definitions differ across industry sectors and countries (Awa, Nwibere & Inyang, 2010). Varied criteria have been employed by authors in an effort to delimit the sector with number of employees, gross assets, sales turnover and level of investment as the most prevalent criterion (Gibson & Van der Vaart, 2008). In South Africa, the government general definition of SMEs is any business with fewer than 200 employees; where fewer than 50 employees are deemed as small enterprises and between 50 and 200 employees are categorized as medium sized. In addition, the government of South Africa specified that the SMEs must have an annual turnover of R5 million and the owners are involved directly in the daily management issues (Republic of South Africa, 2004).

xiii

In Nigeria, SMEs are classified based on a composite criterion of sales volume, capital or asset base and employment (Okafor, 2004). A simple definition of SMEs is a firm with 0-199 employees (Gohary & Trueman, 2008).

However, the Small and Medium Enterprises Development Agency of Nigeria (2007), stated that SMEs include cottage/micro enterprise and small/medium enterprises. Small and medium enterprises development agency of Nigeria defined cottage/micro enterprise as an industry whose total cost (inclusive of working capital but excluding cost of land) is over N5 million but not more than N50 million, with a labour force of between 10 and 49 workers. The organization also defined medium scale enterprise as an industry whose total cost (inclusive of working capital but excluding cost of land) is above N50 million but not more than N500 million with a labour force of between 50 and 199 workers.

Following the relevance of SMEs as expressed by authors cited earlier, SMEs can enhance the productivity of their enterprises, promote a vibrant economy and compete on a global scale if they effectively utilize electronic-marketing applications.

Organizations in Nigeria commenced adoption of e-marketing in the 1990s, when Nigeria linked to the internet (Adekeye, 2007). By the late 1990s, a lot of organizations have started to adopt some form of e-

xiv

marketing such as the use of e-mail and e-payment. However, the use of e-marketing in the 1990s was mostly by large organizations, financial institutions and publishing houses. It was until the early 2000 that small and medium scale enterprises started adopting e-marketing (Ibene & Obi, 2001).

Electronic marketing is an interactive digital technology which is used to administer and control on-line business of a firm (Gilmore & Gallagher, 2007). e-marketing has a significant positive impact on organizational performance (Maldeni & Jayasenne, 2008) and is vital to SMEs' survival in the current information technology driven- economy. emarketing generally provides new ways and opportunities for organizations to broaden their knowledge and penetrate into both national and international markets, (Levey, Powell & Worral, 2005). emarketing has become a household name among industries, both the multinational and SMEs (Forcht & Wex, 2006). Every SME needs to utilize e-marketing applications to enhance its performance. e-marketing involves using marketing packages and softwares through the internet for marketing transaction (Osuala, 2001). It is a deviation from manual process to computerized procedure. It implies coding marketing procedures into computer instruction, this enables the computer to carry out the operations immediately the input is fed-in. e-marketing is known

xv

as a major catalyst and enabler of organizational change (Hazbo, Arnela & Chun-Yan 2008).

Beheshti and Sangari (2007) also defined e-marketing as the use of electronic data and applications for planning and executing the conception, distribution, promotion and pricing of ideas, goods and services to create exchanges that satisfy individual and organizational objectives. It helps SMEs to internationalize their business, with preorder and post-order processing occurring over the internet platform in other to expedite transaction processing (Awa, Nwibere & Inyang 2010).

Porter (2001) highlighted that SMEs are able to identify and satisfy customer needs and preferences through monitoring website visitations, e-mails, online surveys and chat sites conducted on the internet. Zhao (2005) posits that SMEs can develop custom-made products and services that meet the precise needs of customers. These in turn culminate in high returns for SME businesses.

E-marketing is computerized marketing events and activities which include: e-commerce, e-invoicing, e-advertising, e-purchasing and marketing software done electronically without any paper and pen documentation (Zillman, 2005). Electronic commerce is a term for any type of business or commercial transaction that involves the transfer of information across the internet (Brodie, 2003). Electronic commerce

xvi

applications allow consumers to electronically exchange goods and services with no barriers of time or distance (Daniel, 2005). Electronic commerce has expanded rapidly over the years and in the near future, boundaries or geographical location will not constitute a barrier in business transaction as more businesses move their operations into the internet (Chenery, 2004).

Electronic invoicing is an e-marketing activity which is used to describe any method by which an invoice is electronically presented to a customer for payment (Tieto, 2009). It is a form of electronic billing which is used by trading partners, such as customers and their suppliers, to present and monitor transactional documents among one another and ensure that the terms of trading agreement are being met (Aftab & Rahim, 2009). The documents include, e-purchase orders, e-debit notes, e-credit notes and e-remittance advices. These documents can be exchanged in a number of ways including EDI, XML, or CSC files (Campbell 2005). They can be uploaded using web application sites.

Broadgroup (2009), defined e-advertising as the placement of electronic messages on a website or in e-mail in order to generate interest/preference for a product or service and provide the means to contact the advertiser for information to make a purchase. e-advertising is a unique application in that it can provide a one-tool process from

xvii

introduction of a product to close of sale (Schnuemann, 2009). Brodie (2003), posited that e-advertising allows a company to develop a tool capable of effecting sales transaction by offering a "click here" button, that ensures consumers need never get out of their chairs.

Electronic purchasing is the business-to-business, business-toconsumer or business-to-government purchase and sale of supplies through the internet and other information and technology system, such as electronic interchange and enterprise resource planning (Baily, 2008). Chenery (2004) explained that e-purchasing value chain consists of indent management, e-tendering, e-auctioning, vendor management, catalogue management, purchase order integration, order status, shipment notice, e-payment and contract management. Daniel (2005) observed that indent management is the workflow involved in the preparation of tenders which is optional and allows individual purchasing departments to define their indenting process. Software are written programs, procedures, rules and associated documentation pertaining to the operation of a computer system that are stored in read/write memory (Kilby & Turner, 2003).

Without the utilization of e-marketing applications, it will be very difficult for SMEs in Nigeria to compete in the global market economy. e-marketing has a significant impact on SMEs operations and is crucial for

xviii

their survival and growth (Berisha-Namani, 2009). Chibelushi, (2008) also asserted that e-marketing provides opportunities for business transformation while Jennex, Amoroso & Adelakun, (2004) observed that it provides SMEs the opportunity to conduct business anywhere.

Electronic marketing is an important driver in SMEs operation and if not utilized in the present era of globalization, it can lead to low productivity and high mortality rate of SMEs in Nigeria. In the present knowledge-based economy, it is important for SMEs to utilize processes that will enable them to provide goods and services with a competitive advantage.

However, it seems that SMEs in Nigeria which form large part of the economy are yet to reap these benefits. This is because the SMEs seem unable to utilize the new technology of accessing and utilizing emarketing opportunities that will increase their productivity, growth and business linkages and reduce their high rate of mortality.

Chacko and Harris (2005) affirmed that there is a growing need for SMEs in Nigeria to integrate into the global supply chain by adopting and utilizing e-marketing applications that will increase their productivity and efficiency. This is because productivity needs to be enhanced for profit to be maximized. Hence, the researcher was motivated to assess the extent of utilization of e-marketing applications by SMEs in South

xix

Eastern States of Nigeria in order to unravel where there is need for improvement.

The respondents of this study comprise male and female of different work experience, levels of computer literacy and educational qualifications, which are likely to influence their opinions. According to Wolin & Korgaonkar (2003) males exhibits more positive attitudes towards innovation usage than female. Kim, Lehto & Marrison (2007) affirmed that gender differences are noticed in information processing and decision making in terms of internet usage.

Work experience of SMEs owners plays significant role in emarketing utilization. Kai-Uwe (2002) asserted that SMEs owners that have long business experience will very often avoid any form of innovation intervention that threatens to disrupt their long-held business practices. Another business characteristic that appears to be significantly associated with innovation usage is the level of information technology expertise (level of computer literacy). According to Thong & Yap (2005) level of information technology skill within the SMEs are strong determinant of the type of information technology acquired as well as the level of ongoing success with the innovation.

Finally, educational qualifications are credentials received upon completion of an educational programme of study. It enables employers

ХΧ

and employees to be adaptable and cope with latest technological advancement (Wamale,2006). Educational qualifications of SMEs owners may likely influence the opinion of SMEs owners utilization of emarketing applications (Gradon & Pearson, 2005).

#### **Statement of the Problem**

The new information economy, which emerged from the current trend in globalization as a result of advancement in information and communication technology (ICT), has given rise to the new marketing innovation known as electronic marketing. Electronic marketing helps in changing the way SMEs operate in this era of globalization by changing business structure and increasing competitive advantage for businesses.

Small and medium scale enterprises in Nigeria have adopted the new marketing innovation (Adekeye, 2007), but it seems that the effective utilization of the innovation is still low. According to Okongwu (2001), SMEs in Nigeria are yet to begin effective utilization of the marketing innovation that would ensure their growth and survival. Hence, Ongori (2011) stated that about 66% of the SMEs in Nigeria wind-up before their fifth year of operation because of lack of utilization of e-marketing applications. Olaoye (2010), also stated that 75% of SMEs fold up within sixth year of their operation. Nwachukwu (2010)

xxi

blamed the low productivity and high mortality rate of SMEs to low access to market, poor information, weak business linkage and low level of e-marketing application usage, which has deprived the SMEs the access to engaging in the regional and global economic business.

There are many SMEs operating in the South Eastern States of Nigeria, but there is no significant evidence that they are powering development in the area as expected because of their low productivity and high mortality rate. This study borders itself on assessing the extent SMEs utilize e-marketing applications for the growth and survival of their business. The problem of this study therefore is that many SMEs have adopted e-marketing innovation but it seems they are not effectively utilizing the application. This, has resulted in many of the SMEs winding up and this creates unemployment and economic hardship to both the owners and their employees.

### **Purpose of the Study**

The major purpose of the study was to determine the extent of utilization of e-marketing applications by SMEs in South Eastern States of Nigeria. Specifically, the study seeks to determine the extent to which the SMEs utilize:

- 1. e-commerce in their operations.
- 2. e-invoicing in their operations.
- 3. e-advertising in their operations
- 4. e-purchasing in their operations.
- 5. e-marketing softwares in their operations.

### Significance of the Study

Findings of this study would be of immense benefit to the following group of people. The owner/manager, organized private sector associations, government, educational institutions and future researchers. To the owner/manager, the result of the study would create an insight for SMEs owners to understand the tremendous impact effective utilization of e-marketing applications would have in their businesses, when they become aware and utilize marketing innovations in their businesses, they would appreciate the need to carry out most of their transactions through the internet.

To the organized private sector association such as Nigeria Association of Small and Medium Enterprises (NASME), the outcome of the study will reveal the gap in the utilization of e-marketing by the SMEs. This will inform NASME on the intervention programmes they will plan for the SMEs, which could be in form of workshops, seminars and conferences on internet operation. The government desire to use SMEs as a fulcrum for achieving her poverty reduction and wealth creation programme may not be realizable with the continuous folding up of many SMEs. The result of the study will encourage the government to assist the SMEs in the area of training and re-training on internet operation.

Educational institutions are likely to find the results of this study useful because it would enable SMEs operators become aware of the importance of e-marketing in teaching and learning. The study would become particularly useful to education planners, curriculum developers, teachers and students. Finally, the study would be of benefit to future

xxiv

researchers as the outcome will give them a base line information for future research.

### Scope of the Study

The study was delimited to the assessment of the extent of utilization of e-marketing applications by SMEs in South Eastern states of Nigeria. It covered the extent of utilization of e-commerce, einvoicing, e-purchasing and marketing software and packages by SMEs in the area. Only managers of the SMEs took part in the study while other categories of workers did not.

### **Research Questions**

The following research questions guided the study:

- 1. To what extent do SMEs utilize e-commerce in their operations?
- 2. To what extent do SMEs utilize e-invoicing in their operations?
- 3. To what extent do SMEs utilize e-advertising in their operations?
- 4. To what extent do SMEs utilize e-purchasing in their operations?
- 5. To what extent do SMEs utilize e-marketing software in their operations?

### **Hypotheses**

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

- 1 There is no significant difference in the mean ratings of the SME managers on extent of utilization of e-marketing applications according to years of experience.
- 2 Male and female SME managers do not differ significantly in their mean ratings on the extent to which SME managers utilize emarketing applications in their operations.
- 3 SME managers with computer skills and those without computer skills do not differ significantly in their mean ratings on the extent to which SMEs utilize e-marketing applications in their operations.
- 4 Male and female SME managers do not differ significantly in their mean ratings on the extent to which SMEs utilize e-marketing applications in their operations according to their sex.

5 SME managers do not differ significantly in their mean ratings on the extent to which they utilize e-marketing applications in their operations according to educational qualifications.

### **CHAPTER TWO**

## **REVIEW OF RELATED LITERATURE**

This chapter deals with the review of related literature and is organized under the following headings:

### **Conceptual Framework**

Technological innovation

E-marketing

Small and medium scale enterprises

## **Theoretical Framework**

Schumpeter's economic development theory

Roger's innovation diffusion theory

### **Theoretical Studies**

Traditional and conventional method of marketing Small and medium scale business failures in Nigeria Marketing problems of SMEs SMEs and internet utilization E-marketing applications Factors that influence utilization of e-marketing applications Utilization of e-commerce in business operation Utilization of e-invoicing in business operation Utilization of e-advertising in business operation Utilization of e-purchasing in business operation Utilization of marketing software in business operation

### **Review of Related Empirical Studies**

### Summary of Review of Related Literature

**Conceptual Framework** 

#### **Technological Innovation**

Technology is a broad concept that deals with the usage and knowledge of tools and crafts, and how it affects the ability to control and adapt to the environment. Stewart (2002) stated that human use of technology began with the conversion of natural resources into simple tools. The pre-historical discovery of the available to control fire increased the available sources of food and the invention of the wheel helped humans in traveling in and controlling their environment. Recent technological developments, including the printing press, the telephone and internet have lessened physical barriers to communication and allowed humans to interact on a global scale.

Barclays (2003) defined technology as the process by which humans modify nature to meet their needs and wants. He argues that most people think of technology in terms of artifacts, computers, pesticides, water treatment plants and microwave ovens to name a few. Technology however, is more than these tangible products. Technology is a product of engineering and science, the study of the natural world. Bauer and Danes (2005) hold the view that science has two parts:

(a) a body of knowledge that has been accumulated over time and

xxix

(b) a process, scientific inquiry that generates knowledge about the natural world. Engineering consists of a body of knowledge, in this case knowledge of the design and creation of human-made products and a process for solving problems.

According to them, science aims to understand the "why" and "how" of nature, engineering seeks to shape the natural world to meet human needs and wants. Engineering therefore, could be called "design under constraint" with science – the laws of nature – being one of a number of limiting factors. They outlined other constraints to include cost, reliability, safety, environmental impact, ease of use of available human and material resources, manufacturability, government regulations laws, and politics.

Myer and Kenter (2008) maintained that technology has been a motivating factor for many SMEs in advanced countries. In recent years, technology has become increasingly important to the evolution, survival and growth of many SMEs. The ability to deliver new advanced technological products through e-marketing has become a central theme in the marketing strategies of most SMEs.

In the view of Julian & Ramaseshen (2004) innovation may be linked to performance and growth through improvements in efficiency, productivity, quality, competitive positioning, market share.

ххх

Organizations, especially SMEs that do not innovate effectively may be put out of business by those that have embraced innovation, hence there is need for effective utilization of innovations.

According to Bauer (2002) utilization of innovation occurs through a five step process. This is a type of decision-making process that occurs through a series of communication channels over a period of time among member of a similar social system. Bauer categorizes the steps to utilization as awareness, interest, evaluation, trial and utilization. He noted that an individual might reject innovation at anytime during or after utilization process.

Enebe (2004) defined rate of utilization as the relative speed at which members of a social system accept an innovation. It is usually measured by the length of time required for a certain percentage of the members of a social system to accept an innovation. Eric (2002) noted that for technological innovation to be utilized, there should be knowledge about the innovation, persuasion, decision, implementation and confirmation.

Sampson (2005) defined several intrinsic characteristic of technological innovation that influence an individual's decision to use or reject an innovation. The relative advantage is how improved an innovation is, over the previous generation. Compatibility is the second

xxxi

characteristic, the level of compatibility that an innovation has, will be assimilated into an individual's life. The complexity of an innovation is a significant factor in whether it will be utilized by an individual or not. If the technological innovation is too difficult to use, an individual will not likely accept it. The fourth characteristic is determined by how easily an innovation may be experimented with. If a user has a hard time using and trying an innovation, the individual will be less likely to use it. The final characteristics of utilization of technological innovation is the extent, which it is visible to others. An innovation that is more visible will drive communication among the individual's peers and personal network which in-turn create positive or negative reactions.

#### E-Marketing

Chaffey, (2002) defined electronic marketing or e-marketing as the application of marketing principles and techniques through the internet.

E-marketing is the process of marketing a brand using the internet (Salehi, 2012), it encompasses all the activities a business conducts through the worldwide web (www) with the aim of attracting new business, retaining current business and developing its brand identity (Teo & Pain, 2005). The term e-marketing, internet marketing, and online marketing are frequently interchanged and can be considered synonymous.

xxxii

Many of e-marketing operators use commercial online services for accessing general new information. These online commercial and research information sources provide variety, up-to-date information, cost efficiency, and accessibility to far-reaching information. Direct Marketing Association (2002) stated that 60% of marketers were running e-mail marketing campaigns, and that 16% of marketers were using e-mail marketing more than direct mail, that 30% prefer to use email marketing rather than telemarketing, and that more than 55% used e-mail marketing more than short message services (SMS).

Maduka (2005) observed that the arrival of newer generation mobile handsets like blackberry, ipod, ipad etc, signaled a new marketing medium know as multi-media messaging services (mms) technology, which is an upgrade of text messaging and allows pictures and images to be sent via a mobile.

#### Small and Medium Scale Enterprises

The small business sector is recognized as an integral component of economic development and a crucial element in the effort to lift countries out of poverty (Wolfenson, 2001). Sauser (2005) affirmed that small and medium scale businesses are driving force for economic growth, job creation and poverty reduction in developing countries and the means through which accelerated economic growth and rapid industrialization have been achieved. Furthermore, small scale

```
xxxiii
```

business has been recognized as a feeder service to large-scale industries (Fabayo, 2009).

Globally, there seems to be no specific definition of small scale business. Different authors, scholars, and schools have different ideas as to the differences in capital outlay, number of employees, sales turnover, fixed capital investment, available plant and machinery, market share and the level of development. These features equally vary from one country to the other as shown in the following examples.

In Nigeria, the Federal Government of Nigeria, Third National Development Plan (2002) defined a small scale business as a manufacturing establishment employing less than ten people, or whose investment in machinery and equipment does not exceed six hundred thousand naira. The Central Bank of Nigeria (2006) in its credit guidelines, classified small scale business as a business with an annual income/asset of less half a million naira (N500,000). Furthermore the Federal Government Small Scale Industry Development Plan of 1998 defined a small scale business in Nigeria as any manufacturing process or service industry with a capital not exceeding N150,000 in manufacturing and equipment alone.

In addition, the Small Scale Industries Association of Nigeria (2008) defined small scale business as one having investment (i.e. capital, land, building and equipment) of up to N60,000 (pre-SAP Value) including working capital to set up business. Similarly the Federal Ministry of Industries (2005) defined it as an enterprise that cost not more than N500, 000 including working capital to set up while the Centre for Management Development (2002) defined small scale industry as, a manufacturing, processing, or servicing industry involved in production, and employing up to 50 full-time workers.

In the United States, the Small Business Administration (2012) define a small business as one that is independently owned and operated, is not dominant in its field, and meets employment or sales standard developed by the agency.

In every economy, the SMEs are recognized as the most reliable vehicle of socio-economic growth. The impact of SMEs on any economy according to Alade (2004), is so great that no country can move forward economically and industrially without a strong SMEs sub-sector.

#### **Theoretical Framework**

### Schumpeter's Economic Development Theory

Schumpeter(1983) propounded the economic development theory, he described development as a historical process of structural changes, substantially driven by innovation which he divided into five, namely: (1)

XXXV

launching of a new product, (2) application of a new methods of sales of a product(e-marketing), (3) opening of a new market through marketing innovation, (4) acquiring of new sources of supply of raw material or semi-finished goods, and (5) new industry structure such as creation or destruction of monopoly position with the application of marketing innovation.

Schumpeter asserted that any SMEs seeking growth and profit must innovate. This theory is related to the present study as it focused on marketing innovations for economic development, which the present study seeks to assess.

#### Roger's Innovation Diffusion Theory

The present study is about the extent of utilization of e-marketing application by SMEs. The Roger's Innovation Theory (1995) formed the theoretical framework for this study. The theory explains the process involved in adoption and utilization of innovation by individual and also the process involved in the diffusion of innovation by the society or any group in the society. Roger identified five stages in the process of the adoption of any innovation, namely: (1) awareness, (2) interest, (3) evaluation, (4) trial and (5) adoption. Roger also identified five characteristics of innovation that could influence the full utilization of any technological innovation (including emarketing). These are: (1) relative advantage, (2) compatibility,

(3) complexity, (4) divisibility and (5) communicability.

Kotler and Armstrong (2004) asserted as follows:

- (a) Relative advantage of an innovation is the degree to which the innovation appears superior to the existing product. The innovation is compatible if it fits the values and experiences of potential consumers. The complexity stress the degree to which the innovation is difficult to understand or use.
- (a) Divisibility is the degree to which the innovation may be tried on a limited basis and
- (b) Communicability is the degree to which the results of using the innovation can be observed or described to others.

Roger's innovation diffusion theory is well suited for this study because its involved the processes of adoption and utilization of innovation by individuals and societies. It will help the SMEs understand the need to generate more interest in utilizing e-marketing which would read to an increase in business transactions and high turnover, resulting to profit and business growth, which is what the SMEs needed to succed in business.

xxxvii

## **Theoretical Studies**

Traditional and Conventional Methods of Marketing

Marketing is going through revolution, from the days when sales people used some form of advertising, or traditional marketing methods to modern marketing methods such as online marketing, e-mail marketing, etc. (Ibara, 2005). Alavi (2007) affirmed that traditional marketing was a method widely used to inform potential customers about products and services and to establish a business base. According to Schoof (2006), traditional marketing is used by businesses to get intended customers know their products and services. Traditional marketing could be in form of pushing a cart load of wares around, distributing flyers or advertising on radio and newspapers. Schoof added that some marketers trying to sell their goods used some sort of these methods to get their products and services.

In addition to use of flyers and newspaper advertisement, Olaoye (2008) identified door to door sales and yellow page as other traditional methods of marketing. He described knocking on doors as the best way of doing business because it brings the marketer and the buyer in close contact. He further described yellow page as a thick book filled with thousands of business names and addresses in a specific area.

xxxviii

Technological advancement has forced SMEs to change their marketing methods from traditional methods to modern method for greater effectiveness (Benbunam, 2008). Supporting, Olaoye (2010) observed that companies have adopted several new methods of promoting their products and services such as e-marketing in order to compete more effectively in marketing arena. According to Grant (2008) e-marketing is a modern marketing method that is increasingly being adopted in place of the traditional methods because of its advantages such as reaching a wider client base by connecting millions of potential customers via the internet and handling different tasks like customers service, information management and public relations at low costs.

#### Small and Medium Scale Business Failure in Nigeria

Wherever a business goes bankrupt or moribund, there is always a resultant negative impact on most, if not all, of the stakeholders of the business (Al-Shaikh, 2005). Entrepreneurs lose their capital investments, employees lose their jobs, the society loses a means of the production and distribution of goods and services, the government loses revenues it would have earned from tax (Adenikinju, 2005). According to Gaskill, Van & Manning (2003), business failure reduces the

standards of living of individuals and brings about deprivation of goods and services.

Over the years, there have been several definitions of business failure and what constitutes a failed business. Some scholars like Church-Hill, Ford & Walker (2001) viewed business failure as a discontinuance of business for any reason. Dun & Bradstreet (2009) also defined business failure as those businesses that cease operations following assignment or bankruptcy; ceased with loss to creditors after such actions as execution, foreclosure or attachment, voluntarily withdraw leaving unpaid obligations.

Other views of business failure include Watson & Everett (2006), they saw business failure as businesses disposed off to prevent further losses. Irrespective of the size of any business – micro, small or medium, poor management, finance and inability to embrace technological innovation has been attributed as the major causes of business failure in Nigeria (Al-Shaikh, 2005).

In the view of Akabueze (2002) the high rate of business failure in Nigeria could be attributed to obstacles affecting business performance, which he listed to include: lack of financial resources, lack of management experience, poor location, law and regulations, inability to use e-marketing applications, poor infrastructure and low demand for

xl

products and services. Others include handicap in obtaining finance, inability to control costs and problems of dumping of cheap foreign products.

## **Marketing Problems of Small and Medium Enterprises**

One of the major marketing problems facing small business enterprises in Nigeria is lack of usage of e-marketing applications (Barclays, 2003). Most Nigerian small business owners equate 'marketing' to 'selling' and this is reflected in their various dysfunctional business behaviour against customer satisfaction and business orientation. They lack the knowledge and skills of basic marketing such as marketing research, market segmentation and market planning and control, which result to poor quality products, unawareness of competition, poor promotion, poor distribution, and poor pricing methods. They are also not marketing oriented and market-focused.

Baker (2012) identified lack of e-marketing orientation and utilization as the major factor for small business failure. Most Nigerian small manufacturer, to a high extend, depend on imported equipment and raw materials for their operations. With the over-devaluation of naira, vis-à-vis other foreign currencies, they are not finding it easier to secure these items abroad. They therefore resort to poor locally produced alternatives. The result is usually poor quality products. This may be one of the factors responsible for Nigerian consumers'

xli

unquenching appetite for imported goods, even though many of these foreign goods are equally of poor quality especially those coming from Asian and far East countries. Porter (2001) pointed out that high quality raw materials are important to producing high quality product. With the increasing demand for imported goods in Nigeria, dubious local and foreign importers are dumping fake products which go further to frustrate small scale manufacturers and seriously affect their hard earned foreign exchange.

Besides, small-scale producers lack good quality control in their operations. In this respect, they rely mainly on replacing faulty products instead of developing good quality control system (Onwuchuruba, 2001). Only few Nigerian small manufacturers are aware of the nature of competition facing them. They estimate their success only through sales revenue without considering also their share of the market. Some do not know their market segments on how to focus their operations.

Piercy (2002) has emphasized the importance of good stockholding, transport, and distribution for enhancing commercial success. Many of SMEs do not have properly defined criteria for appointing their product distributors. They rely mainly on trust created through relationships between the owners of the companies and the distributors. This relationship often ends up in running the business down. High costs of vehicles and poor roads are also affecting the

xlii

operations of SMEs in their efforts to move finished products down to consumers in both rural and urban areas. They have a complex channel of distribution with many layers which go to push the prices of their products higher. Besides, SMEs pay little attention to promotional activities as they do not adequately utilize advertising and other methods of sales promotions. Many of them do not participate in trade fairs and exhibitions. All these inhibit the growth of SMEs and their ability to compete with larger companies. Since the only way of creating awareness of their products and customers is active promotion.

In a developing country like Nigeria with low income and high level of poverty, a company that wants to succeed should offer its product at the price the consumers can bear. But often, SMEs set prices of their products arbitrarily without regard to this peculiar consumer characteristic in the environment. Since they do not have clearly defined criteria upon which to base their prices, they always seek to maximize profits at short runs without having a long-term view of their business. Faroun (2008) cautioned the United States car firms on setting high prices if they wish to succeed in markets around less developed countries due to low income and high level of poverty in the areas.

### Small and Medium Scale Enterprises and Internet Utilization

xliii

The versatility and capability of the internet technology makes it an ideal platform for Small and Medium Scale Enterprises (SMEs) to participate in global market. The use of internet opens up new markets and new opportunities for SMEs, which enables them to access global markets by eliminating the constraints previously, imposed by geographic boundaries. Michalski, (2006) explained that businesses are compelled to use the internet for several reasons, because, it provides global access to large audience at a relatively inexpensive price, it offers SMEs the ability to connect with millions of users worldwide, and it also allows firm to have a virtual front door to a large audience through a home page as well as creating useful interactions with customers, suppliers or stakeholders.

Small and Medium Scale Enterprises can use internet to improve competitive and strategic well being of their business (Levy, Powe & Worrall, 2005). Poon & Swatman (2005) pointed out that the internet offers a readily available and cost-effective way in which SMEs can take advantage of numerous e-marketing applications on the internet to improve their business growth and productivity. The internet with its open and extendible network structure provides many small businesses with an opportunity to compete on level terms with larger and more sophisticated competitors.

xliv

The internet could offer SMEs real business benefits and opportunities to improve efficiency, reduce costs and increase productivity and profits (Levy, Powell & Worrall 2005;). The DTI (2007) survey shows how SMEs can utilize the internet to improve their business through the use of e-mail and web. E-mail offers a fast, inexpensive way for SMEs to communicate both internally and externally. It allows SMEs to send and receive messages and data world-wide guickly and cheaply. Distance is no object when it comes to e-mail communication, it has several advantages over posting, faxing or courier, it is cheaper, quicker, convenient and flexible. SMEs can send e-mail to numerous people simultaneously, and location is never a barrier. The use of web gives small and medium enterprises access to business information and it allows SMEs to promote and sell their products and services to the global audience. Customers can browse through small and medium enterprises catalogue, e-mail enquiries, and place orders online. It is a real opportunity for small and medium enterprises to compete in a global market as it offers low operating cost, the ability to do business round the clock and the chance to foster better customer relationship.

# **E-Marketing Applications**

xlv

Electronic marketing is changing all business functional areas and their important tasks, ranging from advertising to paying bills. emarketing has attracted significant attention in the last few years. This high profile attention has resulted in significant progress towards strategies, requirements and development of e-marketing applications (Ukpkar, 2002, Kalakota & Robinson, 2009, Afshar & Nawaser, (2010).

Turban and Wetherbe (2002) defines e-marketing as an emerging concept which describes the process of buying, selling, or exchanging services and information via computer networks. Raymond (2001) defines e-marketing as "the functions of information exchange and commercial transaction support that operate on telecommunications networks linking business partners (typically customers and suppliers)".

E-marketing offers lower costs per business transaction, especially with respect to mailing and paper costs (Lawal, 2006). Fewer mistakes occur in paperwork because fewer people handle the data. Customer satisfaction is heightened due to better access to order and promotional data. The old rules are breaking down. Companies now share information with competitors, suppliers and buyers exchange information, economic and cultural boundaries are no more barriers in business transactions (Johnson, 2003).

Small and medium enterprises have gradually recognized the positive impact that ICTs, such as computer terminals, e-mail and the

xlvi

internet and their applications can have on their business. In advanced countries, most small firms, including micro-enterprises with fewer than ten employees, now have at least five computer terminal, usually with internet access. e-marketing applications can improve information and knowledge management within the firm, leading to more efficient business processes and better firm performance. Communication via e-mail and the internet can help to improve external communication, in either business-customer or may reduce transaction costs, increase transaction speed and reliability, and extract maximum value from each transaction in the value chain (OECD, 2002).

At inter-firm level, e-marketing applications have great potential benefit for reducing transaction costs and increasing the speed and reliability of transactions, (OECD, 2002). They can also reduce inefficiencies resulting from lack of co-ordination between firms in the value chain.

In the business to customer context, e-marketing application can be effective tools for better communication. A corporate web site that provides information on products, services or technologies can enhance the quality of a firm's services to customers and attract new ones.

E-marketing applications enable companies to link their internal and external data processing systems more efficiently and flexibly, to work more closely with suppliers and partners, and to better satisfy the

xlvii

needs and expectations of their customers. e-marketing applicatons also offers the opportunity to small and medium-sized enterprises to take on and compete with larger enterprises. Small companies, despite their size can also have a global presence through their internet website which is a cost-effective medium to expand the organization's network and provide immediate awareness in the markets serving as a means for competition in the global market place.

Kalanje (2002) asserted that e-marketing rapid pace of change combined with its development in international trade have resulted to the opening of a wide range of opportunities and challenges for small and medium enterprises as they are now able to reach potential customers in distant market which a decade ago was a dream.

# Factors that Influence Utilization of E-marketing Applications Among Small and Medium Enterprises

Various studies (Cameron & Clarke 2006, Lawrence 2008, Crawford 2004) have reported that small and medium scale enterprises are generally lagging behind to large organizations as far as usage of emarketing is concerned. Chan & Turner (2005); identified three major factors to include – owner/manager characteristics, firm characteristics and costs and return on investment.

## **Owner/Manager Characteristics**

The adoption and utilization of electronic marketing is a decision made by the business owner and the manager. Successful companies that embrace internet technologies are often those whose owners take on the role as innovation champion. Small and medium scale enterprises owner should perceive e-marketing as an important function for their business (Ramsey, Ibbotson, Bell, & Gary, 2003). However, many small and medium enterprises prefer the comfort of what they perceive as familiar over indulging into any new innovation. They are reluctant to "think outside the box" in order to seek new business solutions (Cyert & March, 2002). Some small and medium enterprises do not perceive or are not convinced by the potential strategic benefits of being the first to utilize new technologies. Some do not perceive the relevance of using e-marketing in their business, Gary (2003) argues that whether the adoption is driven by business demand or technological push, the small and medium enterprises operators need to be mentally ready to adopt and utilize the new knowledge.

## **Organization/Firm Characteristics**

A number of factors influencing utilization of e-marketing have to do with the organization itself. For instance, the age of the organization is a major factor – the older the organization, the higher the level of utilization. Freeman, Caroll & Hannan (2003) stated that older

xlix

organizations have an advantage over younger ones because reliability and accountability tend to increase with age, and failure rates tend to decrease as firms grow older. The nature of the industry, the size, the common practice, and the traditional way of doing business impose a significant impact on the utilization of new technologies. The high level of intangibility of the service/product mix can be viewed as one of the major impediments to future utilization of internet marketing. Utilization has also been found to be largely dependent on external pressure from the business competitors as well as its supply chain (Thong & Yap, 2005).

SMEs may utilize electronic business as a result of their competition using it as not to lose their competitive advantage. Fillis, Johnson & Wagner (2004) speculate that business may be dictated mainly by the end customer, supplier or distributor who does not want to embrace e-marketing technology, instead preferring conventional, traditional methods. If an organization has large amount of data and transaction, then it is likely to utilize e-marketing which can help streamline operations and offer process efficiencies within the organization (Thong & Yap, 2005).

### Costs and Return on Investment

Limited resources (e.g. financial, time, management, training, personnel) are often highlighted as major factors impacting the decision

I

to adopt and utilize e-marketing. Lawrence (2008) argued that resource limitations such as time and capital coupled with preferences for traditional mechanisms to transact business, inhibited firms from gaining benefits of utilizing e-marketing technology. Small and medium enterprises have been seen as spending little on technology, therefore they do not use the optimum solutions for much of their business. Small and medium enterprises are also concerned with return on investment. The pressure to show return on investment often leads to small firms being more concerned with medium-term survival rather than long-term viability (Akkeren & Caraye, 2000). As a result of quick return on investment owners are often hesitant to make substantial investment on long-term e-business technologies that could actually help fast track their business.

Dedrick and Kraemer (2001) contended that the major factors inhibiting utilization of e-marketing by small and medium scale enterprises include, limited diffusion of computer operation, lack unreliable online payment processes and inefficient banking services. Cloete (2001) reported several factors which affect the utilization of emarketing to include: lack of information options, lack of time to investigate options, lack of access to computers, lack of access to hardware and software, limited knowledge of e-marketing models and methodologies. Muller (2002) also revealed that low use of electronic

li

marketing by customers and suppliers, concern about security, legal and liability aspects, high costs of development, networking technologies for electronic business, limited knowledge of electronic marketing and unconvincing benefits to the owners negatively affect electronic marketing utilization by SMEs. Brown (2002) noted that small and medium enterprises lack strategic vision and e-marketing utilization is perceived as a distraction from traditional marketing business. Kaynak, Tatrylu & Kula (2005) reported on the difficulty of finding and retraining qualified personnel with required skills and knowledge and the risk of dissipation of company specific knowledge.

Bolongkikit, Obit, Asing and Tanakinhi (2006) found among other issues that small and medium enterprises markets needed a high degree of human interaction, while Scupola (2003) contended that emarketing is perceived a constant interruption and distraction, with too many junk mails. Looi (2003) espoused that lack of external pressure from suppliers and customers inhibit e-marketing utilization. Lacovou (2005) found that the owner's lack of awareness of the technology and perceived benefits is a major factor to take up electronic marketing. The lack of knowledge on how to use the technology and the low computer literacy are other contributing factors for not utilizing electronic marketing (Knol & Stroeken, 2001). Mistrust of the information

lii

technology industry and lack of time are two other factors that affect the decision to utilize electronic business (Akkeren & Caraye, 2000).

### Utilization of e-Commerce in Business Operation

The development of information and communication technology (ICT) has contributed immensely to the growth of e-commerce. There are, at present, a lot of applications in e-commerce for marketing various goods and services. BusinessTown.com (2001) identified the applications in e-commerce as follows – Electronic Data Interface (EDI), e-mail, electronic bulletin boards, fax transmission, and Electronic Fund Transfer (EFT) etc. Belch & Belch (2001) asserted that the World Wide Web (WWW) is the most popular component of the internet and the ecommerce application. They stressed that the WWW is a very vital marketing tool.

According to Electronic Innovation Centre (2001), electronic data interface (EDI) was an original resource of e-commerce in the 1970s. It is a method of trading, frequently imposed by larger trading partners, in which traditional trading documents such as orders, invoices, delivery schedules, are exchanged by electronic means, using a common format from one computer to another rather than in paper form. This is

liii

however rarely used presently as the emergence of e-comemerce have outstripped its relevance (Bambooweb.com, 2003).

Another very important e-commerce application, which is creating waves worldwide, is the electronic mail (Mbonu, 2000). Electronic mail is an electronic way of sending and receiving letters. In relation to ecommerce, e-mail can be used to send newsletters, special offers to customers and for renewing a subscription. Retailers, suppliers and sales teams can e-mail feedback on new marketing promotions, techniques or point of sales methods so that appropriate changes can be made to maximize the effectiveness of a campaign (EIC, 2001).

According to Beekman (2000) the electronic bulletin boards as an application of e-commerce has become a vital marketing communication tool in the global market. It serves as an online version of the bulletin board at local supermarkets, coffee shops and other locations. It is a place for posting online messages and reading messages left by others. Other applications such as teleconferencing, video conferencing, instant chat, newsgroup and computer telephone (VOIP) are equally important marketing communication tools (Beekman, 2000). The use of these tools is replacing the traditional memo, letters, phone call and face-to-face meeting. In teleconferencing, participants use the keyboard to communicate with each other over the computer networks, while in the computer

liv

telephony, participants use the computer systems with telephone software and hardware that allows them serve as speakerphone, answering machine and complete voice mail system. Voices are transmitted over the net instead of words as in teleconferencing. The video conferencing allows the participants communicate face-to-face over the net. These facilities are serving as vital tools for the promotion of business all over the world (Diba, 2000).

The electronic fund transfer (EFT) is also considered very important as e-commerce application. Bambooweb.com (2003) stressed that money is an important issue in the world of commerce. In e-commerce, orders are placed and items shipped, and payment made through electronic means, hence the use of electronic fund transfer. Ayo & Babjide (2006) asserted that EFT is a critical tool for the success of e-commerce and they further stated that the banking industry has to brace up to the challenge in Nigeria.

According to Belch & Belch (2001), the World Wide Web (WWW) is the most popular e-commerce application. Pasework & Pasework (2000) wrote that the web is a system of computer that share information by means of hypertext links on electronic pages. Thurban & Wetherbe (2002) 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

lv

and wide, with a simple mouse click. The web is used for many marketing purposes – for promotion, selling, buying and other marketing strategies. Kotler & Armstrong (2004) asserted that a well designed website is an important marketing tool for the marketing mix and management. Wetherbe, (2002) identified the sub applications 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 products, along with important information about various promotion, discounts, payment methods and methods of delivery. Eshopping 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 internet-based broadcasting of audio and video communications. The enterprise portal is an ecommerce application that is gaining prominence in the global market. It is used as internet gateway for businesses (small and large), Wetherbe, (2002). E-commerce applications for small businesses vary according to the respective needs, resource and the skills available (EIC, 2001).

A very important tool that has added much value to the use of the web is the development of the search engine. Kyle (2003) wrote that to find information in the web, one often has to search looking for it and

lvi

this requires the service 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 (<u>www.google.com</u>) is the most effective, (Kyle, 2003). Search engines are becoming very important for market research tool on the web, in addition to e-shopping and other marketing application (Thurban, Lee ,King & Chang 2000).

The level of e-commerce activities undertaken determines the extent of utilization of the e-commerce resources by SMEs. Electronic Commerce Resource Centre, (2002) identified four levels of ecommerce utilization by SMEs. They include the use of basic ecommerce resources including, e-mail and World Wide Web; the second level is the development of a simple website for presenting company information and promoting product and services. This involves using e-commerce for promotional strategy. The third level involves business process online. This involves doing business online, such as having a website with an ordering system, payment system or delivery system. The fourth level involves using e-commerce for both internal and external transactions (intranet). It include operating system such as accounting, inventory and to create business value chain activities with business partners over the internet (e.g. Supply Chain Management).

lvii

Based on the identified e-commerce application utilization, it is expected that an organization should at least own an e-mail address and website for a minimum level of the utilization of e-marketing. There are presently indications that Nigeria SMEs have adopted some form of e-commerce applications for marketing their products and services (Payne, 2003, Pease & Rowe, 2003). Anan (2001) stated that the emergence of electronic commerce will radically transform the economic growth and development of SMEs in Nigeria but regreted its low level of utilization in the country.

## **Utilization of e-Invoicing in Business Operation**

E-invoicing is electronic transfer of information regarding invoices (settlements and payments) between business partners (seller to purchaser). According to Ascerria (2012), it is a fundamental element of an effective financial delivery chain which allows for entering the enterprise internal processes into the payment systems.

E-invoice is a secure and economical version of the paper invoice. E-invoicing is a significant step towards increasing the use of electronic marketing. E-invoicing allows for invoice information to be transferred from the issuer's account in the accounting system directly to the recipient of financial administration on the internet.

The importance of e-marketing in small scale businesses cannot be over emphasized. Davidson (2012) states that e-invoicing is faster

lviii

and more efficient with regard to reducing operational cost and improving management of assets and capital. He went further to say that e-invoicing does that without papers rather a provider sends an invoice to the orderer who can in turn view it online. Moreover, the internet allows for realizing the payments using the services of connected financial institutions. If there is an issue between the payer and the provider, it may be settled exclusively and immediately via the Other important advantages of e-invoicing according to Aghis internet. (2012) includes, that it is possible to integrate all financial activities, including payment liabilities and capital management, also paper transaction costs are considerably reduced since the invoicing program enables one to perform all necessary task by means of mouse-clicks. A number of SMEs are using e-invoices in their businesses with result of significantly lower cost and increases in productivity and high returns in sales but a lot of SMEs are still not have made effective utilization of this application (O Brien, 2003).

## **E-Invoicing Process**

Electronic invoicing systems strive to deliver business efficiencies through end-to-end automations that permits straight-through

lix

processing and reduce costly errors than manual processes while improving productivity (CEN, 2012). E-invoicing systems ensure the integrity and authenticity of data while complying with legal constraints and permitting auditors to conduct their inquiries unfettered by technical impediments.

According to Anders (2012) the following processing steps are used in preparing an online invoice:

- (a) Prepare data the supplier provides data from online forms or directly from back end system such as order handling or shipping.
- (b) Convert Raw Data the application specific invoice data created in step 1, which includes master data and any other information required for VAT processing, is converted to a portable and standard-based format such as XML.
- (c) Create Invoice data converted in step 2 is used to create the invoice in a mutually agreed upon and legally compliant format.
- (d) Archive Invoice as required by national law, the supplier must store the invoice in an archiving system for the required retention period.
- (e) Send Invoice the invoice is either sent directly to the buyer via an electronic means such as e-mail or deposited for collection by the buyer from a location such as a website via web services, an FTP

lх

site, or other means. This step often includes technical controls to verify receipt of the invoice.

- (f) Receive Invoice the buyer takes control of the invoice, performs a technical verification of characteristic such as secure transmission, digital signatures and performs syntax checks. Technically correct invoices are forwarded for formal verification, in which invoice content such as identification, date, VAT numbers, and product or service codes are checked.
- (g) Extract data invoice data such as part numbers, quantities, prices,VAT amounts, and total amount is extracted from the document.
- (h) Verify and process data technically and formally correct invoices are forwarded for reconciliation against related documentation such as contracts, supplier catalogues, and delivery and payment term.

# Utilization of e-Advertising in Business Operation

Online advertising is a form of promotion that uses the internet and World Wide Web to deliver marketing messages to large audience.

Burban & Norman (2001). The growth of this particular medium attracts the attention of advertisers as a more productive source to alert consumers (Wakolbanger 2009).

Online advertisements offer various forms of animation. In its most common use, the term online advertising comprises all sorts of banner, e-mail, in-game, and keyword advertising, including in platforms such as Facebook, Twitter, and MySpace (Pattison, 2011). Web-related advertising has a variety of ways to publicize and reach a niche audience to focus its attention to a specific group. Research has proven that online advertising has given results and is growing small and medium enterprises business revenue (Wakolbinger, 2009).

One major benefits of online advertising to small and medium enterprises is the immediate publishing of information and content that is not limited by geography or time (Thillmany, 2012), another benefit of online advertising as identified by Patttison (2011) is that it allows for the customization of advertisements, including content and posted websites. For example, Adwords, Yahoo Search Marketing and Google AdSense which enables advertisement to be shown on relevant web pages or alongside search results.

The three most common ways in which online advertising is purchased are Cost Per Mille (CPM), Cost Per Click (CPC) and Cost Per Action (CPA).

lxii

CPM (Cost Per Mille) refers to when advertisers pay for exposure of their message to a specific audience. Per Mille means per thousand impressions or loads of an advertisement. However, some impressions may not be counted, such as a reload or internal user action.

- (a) CPV (Cost Per Visitor) refers to when advertisers pay for the delivery of a targeted visitor to the advertisers website.
- (b) CPV (Cost Per View) refers to when advertisers pay for each unique user view of an advertisement or website (usually used with pop-ups, pop-unders and interstitial ads).
- (c) CPC (Cost Per Click) refers to when advertisers pay each time a user clicks on their listing and is redirected to their website. They do not actually pay for the listing, but only when the listing is clicked on. The system allows advertising specialists to refine searches and gain information about their market. Under the Pay per Click pricing system, advertisers pay for the right to be listed under a series of target rich words that direct relevant traffic to their website, and pay only when someone clicks on their listing which links directly to their website. CPC differs from CPV in that each click is paid for regardless of whether the user makes it to the target site.
- (d) CPA (Cost Per Action or Cost Per Acquisition). According to Hugh (2011) advertising is performance based and is common in the

lxiii

affiliate marketing sector of the business. In the payment scheme, the publisher takes all the risk of running the act, and the advertiser pays only for the number of users who complete a transaction, such as a purchase or sign-up. The following are common variants of CPA as identified by Pattison (2011):

- (a) CPL (Cost Per Lead) advertising is identical to CPA advertising and is based on the user completing a form, registering for a newsletter or some other action that the merchant feels will lead to a sale.
- (b) CPS (Cost Per Sale), PPS (Pay Per Sale), or CPO (Cost Per Order) is were advertising is based on each time a sale is made.

As seen above, the large majority of online advertising has a cost that is brought about by usage or interaction of an ad, there are a few other methods of advertising online that only require a one time payment. According to Zulunga (2011), the Million Dollar Homepage is a very successful online advertising medium as visitors were made to pay \$1 per pixel of advertising space and their advert would remain on the homepage for as long as the website exists with no extra costs. He regretted that in most developing countries, a lot of SMEs have not reaped the dividends of e-advertising as a result of low level of utilization occasioned by poor e-business orientation. He went further to list various Million Dollar Homepage online advertising medium to include:

lxiv

- (c) Floating ad: An advertising which moves across the user's screen or floats above the content.
- (d) Expanding ad: An advertisement which changes size and which may alter the contents of the webpage.
- (e) Polite ad: A method by which a large ad will be downloaded in smaller pieces to minimize the disruption of the content being viewed.
- (f) Wallpaper ad: An advertisement which changes the background of the pages being viewed.
- (g) Truck Banner: A banner advertisement that looks like a dialog box with bottons. It simulates an error message or an alert.
- (h) Pop-Up: A new window which opens in front of the current one, displaying on advertisement, or entire webpage.
- (i) Pop-Under: Similar to a Pop-Up except that window is loaded so that the user does not see it until they close one or more active windows.
- (j) Video ad: Similar to a banner advertisement, expect that instead of a static or animated image, actual moving video clips are displayed. This is the kind of advertising most prominent in television and many advertisers will use the same clips for both television and online advertising.
- (k) Map ad: Text or graphic linked from, and appearing in or over a location on an electronic map such as on google maps.
- (I) Mobile ad: An SMS text or multi-media message sent to call phone.

- (m) Superstitial: An animated advertisement on a webpage from Enliven Marketing Technologies. It uses video, 3D content or flash to provide a TV like advertisement.
- (n) Interstitial ad: A full-page ad that appears before a user reaches their original destination.

### Utilization of e-Purchasing in Business Operation

According to Lyson (2006) e-purchasing is the combined use of information and communication technology through electronic means to enhance external and internal purchasing and supply management processes.

Janson (2003) viewed e-purchasing as a process of gathering and accepting goods and authorizing payment using the internet technology. This process of e-purchasing is more prevalent in the developed world than the developing economy because of fear of insecurity among business owners in the developing countries (Rosen, 2001).

In the emerging digital era, most businesses are utilizing epurchasing for more efficient, predictable, transparent and secure management of their supply chains (Afshar & Nawaser 2010). E-Purchasing systems provide up-to-date information on the statuo of buyer's needs, it also allows the establishment of an agreement with a seller to automatically ship materials when a buyer's stock reaches a

lxvi

low point, Berrill (2004). This also applies to the solicitation phase where buyers can track incoming offers prior to supplier selection. Electronic purchasing provides predictability as sellers know what to expect and can review an order's progress often in real time. Napier (2003) also stated that a product will show as having been delivered, accepted and processed for payment without the seller having to call and request information from accounting staff. Transparency and accuracy is facilitated, with data exchanged and stored electronically instead of through paper-based documents.

Afshar, and Nawaser (2010) listed the benefits of e-purchasing to the SMEs to include:

- (a) Time savings in re-inputting orders.
- (b) Reduction in errors examples, from re-inputting returns, deliveries.
- (c) Reduced transaction costs and cycle time.
- (d) Holding less stock as a result of more efficient communication with customers, that is, real time sale data.
- (e) Information for use in forecasting.
- (f) Improved supplier performance by sharing supplier measurement information.
- (g) Faster payment.

Afshar and Nawaser (2010) further identified improved management information that can be performed with e-purchasing to include:

- (a) E-requisitioning creating and approving purchasing requisitions and placing purchase order using a software system based on internet technology.
- (b) E-sourcing identifying new suppliers for a specific category of purchasing requirements using internet technology. This may require e-cataloguing, that is selling up electronic products and suppliers list.
- (c) E-tendering advertising e-tender notices/e-requests for expression of interest e-ROI), receiving bids and offers, and informing on contracts awards through the internet.
- (d) E-reverse auctioning receiving, evaluating offers and bids, and purchasing goods through the internet.

They also listed the resulting benefits of e-purchasing to the buyers as the following:

- (a) Reduced transaction costs and cycle time.
- (b) Possibility of developing Vendor Managed Inventory.
- (c) Improvements in Just in Time deliveries.
- (d) More accurate deliveries due to reduced input order errors by suppliers.

- (e) Shared performance measurement data which encourages improved supplier performance.
- (f) Potential for less expediting by the buyer as the supplier acknowledges orders by exception which automatically updates the buyer's system.
- (g) And finally, reduced stock due to shared sales and forecast information.

## Setting Up an Online Store

According to Maria (2002) online stores involves online sales of goods, services and provision of information directly to consumers, it also involves online exchange of products, services or information between businesses. In order to process an online sales and purchasing transaction three things are needed according to (Deital, Deital & Neito 2000). First is the shopping Cart, second is a secure server and lastly, a payment processing.

# **Shopping Carts**

Shopping Cart software keeps track of what the user selects to buy from the website before proceeding to the checkout. An online shopping Cart consists of three parts:

(a) Product Catalogue

lxix

(b) Shopping List

## (a) Checkout system

The product catalogue is made up of all the information needed to present any product to the customer and to complete a sale/purchasing transaction online. Information to be included in the product database generally includes the price, identification number, image or other multimedia information, product options or choices.

A Shopping List (that is a list of selected products) allows users to track the items they want to purchase. A shopping cart image is generally used to show what items the shopper has selected for purchase.

The check out system allows customers to select products by clicking an add items to cart button and then enables them to pay for these products.

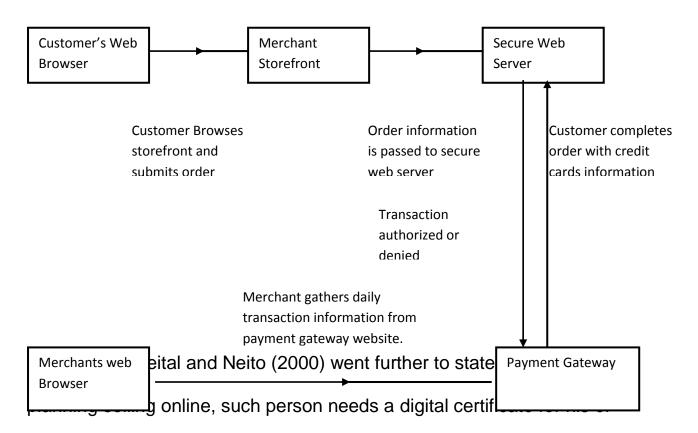
### Secure Server

The Secure Server helps to provide protection against the loss or modification of personal information. Secure Socket Layer (SSL) is the most commonly used technology for secure online transactions. Secure Socket Layer encrypts (or codes) secures all data between the shops server and the customer computer. This makes it very difficult for third parties to decode any information exchanged such as credit card numbers.

lxx

The diagram below shows how a secure server can protect

information passed between the consumer and merchant.



her SSL technology to work. A digital certificate according to him is an

electronic identity that helps to show the credibility of a website. Rosen

(2001) list the following as what to look out for when buying online:

- (a) A URL address that begins with https:// as opposed to http://
- (a) A browser that notifies one that you are on a secure site. Many browsers use a symbol, example lock icon or a message.

# **Payment Processing Options**

According to Turban, Lee, King & Chang (2000), there are three

payment processing option – they includes:

(a) Third party payment processing software

- (b) Internet Merchant Account
- (c) Manual Payment Processing

## **Third Payment Processing**

These services offer an alternative to obtaining an Internet Merchant Account. The advantage of this alternative according to Turban et al (2000) is that it is possible to start selling online more quickly and easily.

An Internet Merchant Accounts according to Turban et al (2000) is an account issued by a financial institution that enables a business to accept credit card payments online. Businesses must obtain a separate internet merchant account for each type of credit card they wish to accept (example, VISA, MasterCard, American Express).

## Manual Credit Card Processing

One can set up an e-marketing website where users can order online, but process credit cards manually rather than rely on online payment processing options. With this option according to Afshar & Nawaser (2010) credit card information can be obtained through a secure server and the transaction can be processed manually. This option is feasible when one have a limited number of online orders.

# What to consider when choosing a Payment Option

Rosen (2001) listed what to consider when choosing a payment option to include:

- (a) Cost associated with the payment options (consider transaction fees, set up fees, monthly fees).
- (b) Take the time to understand the features offered by each option and the pricing model.
- (c) Consider that there are different fees and features associated with merchant accounts.
- (d) Consider charge back fees.
- (e) Consider the fees associated with fraudulent transactions: Privacy of transaction data.
- (f) If you are considering leasing software through a service provider, check the service provider's policy for disclosure and sharing of information: Fraud Protection

(g) Review fraud protection tools, merchant accounts typically have a number of customizable fraud filters that identify and track suspicious transactions. The transaction can be placed on hold while the bank notifies the business of the suspicious activity: General credibility of the service provider.

(g) Internet merchant accounts have greater credibility.

# Security and Privacy Issues in e-Purchasing

It is important to be aware of security and privacy issues associated with e-purchasing. Some common security threats according to Rosen (2001) includes fraudulent use of credit cards, computer viruses, spam (unsolicited e-mail messages), and theft (computers or information) publishing is another type of security threat that involves an email message that looks like it comes from an official source but links in the message go to a fake website where one may disclose personal information, (Janson, 2003). Common threats to privacy include theft of personal information and inadequate protection of private information.

The following are tips for minimizing security and privacy risks associated with e-purchasing as identified by Rosen (2001):

- (a) Review the security features/services offered by your web hosting service, Internet Service Provider, web design and software company.
- (b) Pay attention to security alerts and install security patches as needed.
- (c) Regularly backup systems and information.
- (d) Design of an e-marketing website should minimize security threats.
   For example, once the consumer presses the buy button the back button should then be disabled.

- (e) Obtain a digital certificate for your website. The digital certificate shows that any personal data submitted to one's site will be encrypted (coded).
- (f) Avoid storing customer information. Make sure it is secure from access by employees or computer hackers.
- (g) Develop a privacy policy. The policy should outline how information will be collected and used and the security procedures that will be used to protect information from being lost, stolen or tampered with. One may want to post this policy on his/her website. One may also apply for privacy seal. The privacy seal icon is displayed on the website and increases consumer confidence.
- (h) Ensure you have SSL technology that encrypts all confidential information during transactions.
- (i) Ensure you have appropriate security features for storing information.
  Example a PCI (peripheral component interconnect hardware) card is often added for protection. Another approach is Secure Electronic Transaction (SET) which was developed by Visa and MasterCard. With this approach, sensitive information is not seen by the business and is not stored in the company's website. Firewalls should be used to protect the network and computers from viruses and computer hackers.

lxxv

- (j) Review other fraud prevention tools and assess if they are right for you. For example, Address Verification Service. Address Verification Service compares the information in the customers address with records stored by card-issuing banks. Major credit card companies also have verification systems. Three-digit code printed on the back of major credit cards can help one to assess if customers have legitimate cards.
- (k) Always verify customer is address.
- Be suspicious of large orders or requests for multiple copies of the same product, especially if the customer asks for rush delivery.
- (m) And finally, if you are selling valuable products that are easily resold consider whether you need advanced fraud protection services provided through gateway providers (example fraud filters to screen for suspicious activity).

#### Utilization of Marketing Software in Business Operation

Software are applications that makes easy to manage marketing programs, maintain collateral and track customers references (Lawal, 2010). He further listed the benefits to SMEs to include:

 (a) Keep co-workers, vendors and contractors on the same page. The software helps in keeping marketing team on the same page, whether they are across the hall or around the globe.

- (b) Tracking spreadsheet on the web that can be shared with coworkers, integrated with tools like document management, e-mail notification, calenders etc.
- (c) A few clicks and it is done, no need to borden the overworked IT department for help and no week-long turnaround times. It makes t easy to get work done fast.

Some of this marketing software as identified by (Rosen, 2001), includes: Advanced e-mail locator, Anoconia Rocket Sales, Atomic Mail Sender, Bmail Sender, Brorde @ St HTML, Campaign Enterprise, Dynamic Mail Communicator, e-campaign, EBmailer, E-mail Unlimited, Extractor Pro, G-Lock Easy Mail Professional, Gammadyne Mailer, Groupmail Business edition, Group mail free, KingMailer, Mail 5 Mailer, Mail Bomber, Mail Commander, Mail Magic, Mail Them Pro, Mail List Express, Mail List King, Mass e-mailer, MaxBulk Mailer, Net MailBot etc.

#### **Related Empirical Studies**

Nweke (2013), carried out a study to appraise the level of availability and utilization of ICT facilities in teaching OTM in southeastern polytechnics of Nigeria. The major purpose of the study was to ascertain the level of ICT application and utilization in teaching OTM courses in south-eastern polytechnics in Nigeria. The study was guided by two null hypotheses. The area of the study was south-eastern states of Nigeria. The population of the study which was also the sample consisted of office technology and management lecturers in the six institutions offering office technology and management programme. Instrument used for data collection was a questionnaire. Data collected was analyzed using mean and standard deviation for the research questions and t-test for the hypothesis. From the analysis of the data, it was revealed that ICT implementations of OTM programme in polytechnics of south eastern state in Nigeria are available and utilized at low extent.

The study recommended that there should be regular training and re-training programme in ICT for OTM teachers in order to ensure effective utilization of the facilities. This study relates to the present study because both dealt with the level of utilization of ICT facilities. Although the study focused on teaching of Office Technology and Management, the present study deals on SMEs in south eastern Nigeria.

Kudehinbu (2012) carried out a study titled "Level of Access and Utilization of ICT resources in Federal and State Universities in Lagos State". The purpose of the study was to determine the level of access and the level of utilization of information and communication technology resources in Lagos State. The study tested three null hypotheses, the area of study was university of Lagos and Lagos State university. The population which was also the sample was made up of 1,613 academic staff of the two universities. Questionnaires was used to collect data for the study and data collected was analyzed using frequency counts and mean scores for the research questions and z-test was applied to test the null hypotheses.

The result showed that both staff of the universities in Lagos State are highly knowledgeable about general ICT facilities and have also high level of access to ICT resources. Both staff of the universities demonstrated high level of ICT literacy. Finally, the study concluded that there was a significant different from the two universities academic staff in the level of ICT utilization. The study relates to the present study because both dealt with access and utilization of ICT. The study focused on federal and state universities while the present study deals on utilization of e-marketing by SMEs.

Onyebu (2009) carried out a study to determine commercial bank customers' awareness and utilization of technological innovations in the banking industry in Anambra State. Precisely, the study sought to:

(a) Find out the level of internet banking services by Anambra State commercial bank customers

lxxix

- (b) Find out how well commercial bank customers in Anambra State utilize internet banking services.
- (c) Find out the level of tele-banking services by Anambra State commercial Bank customers
- (d) Find out how well commercial bank customers in Anambra State utilize tele-banking services
- (e) Establish how well commercial bank customers in Anambra State are aware of point of sale terminal services
- (f) Establish how well commercial bank customers in Anambra State utilize point of sale terminal services.

The study tested six null hypotheses, the area of the study was Anambra State. The population of the study was made up of 710,808 commercial bank customers of the 24 banks operating of the 24 banks operating in the three senatorial zones of Anambra State. The researcher randomly selected 1820 of the population as the sample for the study. Questionnaire was used to collect data for the study and the data collected were analyzed using the arithmetic mean, z-test and oneway analysis of variance (ANOVA).

From the analysis of data it was revealed that commercial bank customers extent of awareness of internet banking services is low in Anambra State. Furthermore, the data analysis indicated a low utilization of internet service and low awareness of tele-banking among commercial bank customers in Anambra State. The study recommended that the banking industry should create awareness on their customers about the different types of technological innovation adopted by the banks, whenever the customers pay visit to their banks. The above study relate with the present study because both dealt on utilization of technological innovations.

Hanniga (2006) conducted a study titled, "Adoption of e-Banking and e-Readiness in Customers among Commercial Banks in Nigeria". The following were the purpose of the study:

- (a) To find out the electronic readiness of the banking consumers for adoption of online banking in Nigeria.
- (b) To determine online banking implementation and adoption by the banking sector in Nigeria.

Data were collected by means of structured questionnaires and analyzed using mean statistics. The analysis of sample data consisting of online banking users and non-users indicated that Nigerians are reluctant to adapt e-commerce and hence online banking. Cash culture is still prevalent in Nigeria compared to the plastic money replacement that has been adopted in most of the developed countries. The most important reasons are lack of trust, non-availability of infrastructure, security and service charges. Approximately 23 consumers use a form

lxxxi

of preliminary products of e-banking and are willing to have more products, service and transactions through this medium. It is the fastest and easiest way of banking but it is not popular among the customers.

The study indicated a strong potential for e-banking in Nigeria. Results highlighted that e-banking will be the means to providing competitive advantage to the banks in today's hyper-competitive world. It will be a cost cutting measure to improve on efficiency to build up customer loyalty and satisfaction, and hence profitability of the bank in the long run. The above study differed from the present study is re because it researched on e-banking, while the present is researching on utilization of e-marketing by SMEs.

In another contribution, Ononye (2006) carried out a study on utilization of aspects of communication technology by manufacturing organizations in Enugu State. The major purpose of the study was to ascertain the level of utilization of aspect of communication technology by manufacturing organizations in Enugu State. The study was guided by three null hypotheses.

The study was carried out in manufacturing organization in Enugu State. The population of the study which was also the sample consisted of all staff of micro, small and medium scale manufacturing organization in Enugu State. Instrument used for data collection was a structured

lxxxii

questionnaire, data collected was analyzed using mean, analysis of variance (ANOVA) and t-test respectively. Findings showed that manufacturing organization considered telecommunication aspect of communication technology as not utilized. They also considered ecommerce and e-banking aspect of communication technology as not utilized. Based on the findings, the study made the following conclusions:

- (a) Staff of manufacturing organization, do not utilize telecommunication aspect of communication technology.
- (b) Staff of manufacturing organization, do not utilize e-commerce aspect of communication technology.
- (c) E-banking aspect of communication technology, are not utilized by staff of manufacturing organizations.
- (d) The study recommended that awareness should be created to these manufacturing organization on the effect of utilizing communication technology.

This study and the present study are related as both studied utilization of communication technology but as the study focused on manufacturing organizations, the present study is on the extent of utilization of e-marketing by SMEs. Mmuo (2005) conducted a study on assessment of the level of awareness and utilization of electronic commerce by indigenous manufacturing industries in Anambra State. The following was the purpose of the study:

- (a) The extent to which indigenous manufacturing industries are aware of e-commerce.
- (b) The extent to which indigenous manufacturing industries in Anambra State utilize e-commerce technique in the marketing of their products.
- (c) Factors affecting optional utilization of e-commerce technology by indigenous manufacturing industries in Anambra State.

The study tested six null hypotheses, and the area of the study was Anambra State. The population of the study comprised of all the managers of indigenous manufacturing industries in Anambra State and the sample consisted of 61 managers working in the indigenous manufacturing industries in Anambra State. The instrument for data collection was questionnaire and data collected was analyzed using mean statistics for the research questions and t-test statistics for the hypotheses. Findings revealed that though the industries are aware of e-commerce, they have not been well positioned to make use of it, either due to poor infrastructural facilities or low level of acquisition of its operation by the managers. Based on the findings, the study concluded

lxxxiv

that indigenous manufacturing industries are aware of e-commerce technology and urban and rural indigenous manufacturing industries have differences in their employees' awareness of e-commerce technology.

The study recommended that the level of awareness of ecommerce technology should be improved through mounting of workshops and seminars for the indigenous industrialists and also rural electrification and other co-operant factors must be put in place in the rural area to enable rural industries avail themselves of the benefits of e-commerce. The present study relates to this studying in the area of utilization of e-commerce which is sub-set the present study. While the study merely identified the level of awareness and utilization of ecommerce by indigenous manufacturing industries in Anambra State, the present study deals with the extent e-marketing applications are utilized by SMEs in south east Nigeria

Finally, Obi (2007) carried out a study on assessment of information communication technology usage by secretaries in tertiary institutions in Anambra State. The main purpose of this study was to assess the usage of information and communication technology (ICT) by secretaries in tertiary institution in Anambra State. The study tested four null hypotheses; the area of the study was tertiary institution in

lxxxv

Anambra State. The population which was also the sample consisted of all secretaries from all the departments and units in the six conventional tertiary institutions in Anambra State. The instrument for data collection was a questionnaire and data collected was analyzed using mean and standard deviation for the research questions and t-test and analysis of variance (ANOVA) for the null hypothesis.

Findings revealed that secretaries of tertiary institutions use to a low extent ICT in enhancing interpersonal relationship. The study also conclude that secretaries in tertiary institutions in Anambra State use ICT in carrying out resources management functions and recommended that there is need for monitoring of ICT policies to ensure implementation. This study and the present study are related in the area of information communication technology usage, while the present study is focusing on e-marketing application utilization by SMEs in south eastern Nigeria, this study focused on ICT usage by secretaries in tertiary institutions in Anambra State.

# Summary of the Review of Related Literature

In summary, technological innovations adoption by small and medium enterprises (SMEs) has brought significant growth to the usage of electronic marketing in Nigeria. Technology has been a motivating factor for many SMEs growth and survival hence SMEs with low emarketing utilization seem to be going moribund.

This chapter reviewed pertinent related literature in the area of emarketing utilization for the success and survival of the SMEs. Small and medium enterprises are business establishments that satisfy certain criteria as investment, labour, size and turnover.

Generally, authors agree that e-marketing provides the benefits of competitive advantages and a level playing market ground for the SMEs and the large organizations. They are also in agreement that effective utilization of e-marketing applications will lead to reduction in cost of marketing and open up the opportunity to extend their market presence, nationally and internationally.

Literature reviewed suggests that there are basic applications relevant to e-marketing utilization for successful SMEs operations. In the same light, standard parameters were established in relation to SMEs failures, marketing problems of SMEs, internet utilization and SMEs. Emarketing applications and factors that influence utilization of emarketing applications were also reviewed.

The review of empirical studies related to the present study revealed that electronic innovation has actually been adopted by SMEs, but not all the SMEs in Nigeria have introduced the technological innovation to a great extent. More so, most of the SMEs that have

lxxxvii

adopted it are not utilizing these innovation as a result of lack of internet skills and fear of insecurity.

Finally, although some studies have been carried out in e-business adaptation and utilization, the researcher found out that none has been carried out in assessing the extent SMEs owners/managers utilize emarketing in South Eastern states of Nigeria, hence a need to fill the gap.

# CHAPTER THREE

#### **METHOD**

The chapter discussed procedures used in carrying out the study. It covers research design, area of the study, population of the study, sample and sampling techniques, instrument for data collection, validation of the instrument, reliability of the instrument, method of data collection and method of data analysis.

#### **Research Design**

The design of the study was a descriptive survey design, because it involved gathering opinions from managers of SMEs in South Eastern States of Nigeria on their extent of utilization of e-marketing applications. Osuala (2004) stated that descriptive survey research design is considered most appropriate for studies that seek opinions of respondents regarding beliefs, attitudes, motivation and behavior through the use of questionnaire. Moser and Kalton (1999) explained that when a study centres on individuals and their opinion, the best research design should be the survey method. Similarly, Onyebu(2009), Okoro(2009) and Kudehindu( 2012) utilized descriptive survey design in their various studies to find out the opinions of respondents in relation to the variables they studied.

### Area of the Study

The study was carried out in the South Eastern geo-political zone of Nigeria which include, namely; Abia, Anambra, Ebonyi, Enugu and Imo. South Eastern geo-political zone is located east of the River Niger and bounded on the east by Cross Rivers State, on the North, by Benue and Kogi states, in the west by Edo and Delta states, and on the South by Bayelsa and Rivers states. The choice of the area was informed by the highly enterprising nature of the people. Although some of them are civil servants, majority of the population are engaged in one form of business or the other and there are many SMEs in the area.

#### Population of the Study

The population for the study consisted of 1,846 owners/managers of SMEs in South Eastern Nigeria that have their businesses registered with the National Association of Small and Medium Enterprises (NASME, 2013).

### Sample and Sampling Technique

This exercise involved the SMEs owners/managers in the five South-Eastern States of Nigeria that were registered with National Association of Small and Medium Scale Enterprises (NASME). The population of the study was too large for the researcher to cover hence a sample of 1473 respondents were selected using stratified random sampling technique based on the States. This was done in order to

хс

ensure greater representativeness of the sample relative to the population. (see Appendix C).

### Instrument for Data Collection

The instrument used for data collection was a structured questionnaire organized in five sections A – F. Section A dealt with general information about the respondents and contains four items with options and blank spaces that require the respondent to check in the boxes while section B, contains 20 items relating to the extent of utilization of e-commerce application. Sections C, D and E contain 12 items each covering extent of utilization of e-invoicing application, eadvertising application and e-purchasing respectively. Section F contains 20 items relating to the extent of utilization of marketing software's. Sections B to F of the instrument was constructed on a 5point rating scale with response options of Very High Extent (VHE), High Extent (HE), Undecided (UD), Low Extent (LE), and Very Low Extent (VHE) to which values 5, 4, 3, 2, 1 respectively were assigned for all the items in the five sections. Each respondent was required to tick ( $\sqrt{}$ ) against the option that he or she views most appropriate.

#### Validation of the Instrument

хсі

The face and content validation of the instrument was done by four experts selected from different departments and fields. One of the expert was in Business Education, another one in Adult Education, and the others in Guidance and Counseling and Measurement and Evaluation from the Faculty of Education, Nnamdi Azikiwe University, Awka. These experts were given the research topic, purpose of the study, research questions and hypotheses along with the instrument and requested to ascertain the suitability and relevance of the items as well as clarity of the language of the items and instructions.

The observations and suggestions of the experts were put into consideration in the final draft of the instrument before presenting it to the researcher's supervisor for final approval (See the validated copies in Appendix D).

#### **Reliability of the Instrument**

To determine the internal consistency of the instrument, a reliability estimate test was conducted by administering copies of the instrument to 20 managers of SMEs in Port-Harcourt, Rivers State. Their responses were collected and data analyzed using Cronbach Alpha. Coefficients of 0.99, 0.99, 0.98, 0.99, and 0.96 were obtained for sections B, C, D, E and F of the instrument respectively (See Appendix N ). Cronbach Alpha reliability coefficient is a generalized formula which deals with tests of

хсіі

multiple scores items (Ogbazi & Okpala, 1994). It was used to determine the internal consistency because the instrument was arranged in clusters.

# Method of Data Collection

The data for the study were collected through direct contact approach. The researcher trained five research assistants (who were already graduates of Vocational Education). Copies of the instrument were administered directly to the respondents, where a respondent wishes to respond on the spot, a research assistant waited and collected the completed instrument. For those who were unwilling to respond on the spot, research assistants called back on the agreed date and retrieved their responses. The exercise lasted for two weeks.

#### Method of Data Analysis

The arithmetic mean and standard deviation were used to analyze data in respect of the research questions. z-test was used to test the hypotheses. Nominal values were assigned to different options for the items and the mean of each item was determined based on the boundary limits as follows:

Reponse Options	Rating Points	Boundary Limits
Very High Extent (VHE)	5	4.50 - 5.00
High Extent (HE)	4	3.50 - 4.49
Undecided (UD)	3	2.50 - 3.49

xciii

Decision Rule		
Very Low Extent (VLE)	1	0.50 – 1.49
Low Extent (LE)	2	1.50 – 2.49

Based on the boundary limits of the five-point rating scale, items with mean ratings between 4.50 and above were regarded as being utilized to a very high extent, while those with 3.50 - 4.49 were regarded as high extent. Items whose mean ratings fall between 2.50 - 3.49 show that the respondents were undecided on their extent of utilization. Items with mean values between 1.50 - 2.49 and 0.50 - 1.49 were regarded as utilized at a low and very low extent respectively.

A null hypothesis was accepted at 0.05 level of significance when the calculated value of z was equal to or less than the critical value of z; otherwise, the null hypotheses was rejected.

# CHAPTER FOUR

# PRESENTATION AND ANALYSIS OF DATA

This chapter presents the analysis of the data collected in respect of the study. Tables were used in presentation of the five research questions and five hypotheses formulated for the study.

Analysis of Research Questions

**Research Question 1** 

To what extent do SMEs managers utilize e-commerce in their operations?

The analysis in respect of the Research Question 1 is shown on Table 1.

# Table 1: Respondents' mean ratings on the extent SMEs utilize e-commerce in their operations

S/N	Items	Mean	Remarks
1	e-Mail (Electronic Mail)	2.43	Low Extent
2	WWW (World Wide Web)	2.30	Low Extent
3	e-Catalogue (Electronic Catalogue)	2.21	Low Extent
4	Hyperlinks (Web Links)	2.48	Low Extent
5	Search engines	2.45	Low Extent
6	e-shopping cast	2.38	Low Extent
7	e-payment (Electronic Payment)	2.35	Low Extent
8	Teleconferencing	2.34	Low Extent
9	Video conferencing	2.24	Low Extent
10	VOIP (Voice on the Internet Protocol)	2.33	Low Extent
11	Bulletin board	2.38	Low Extent
12	Web chatting	1.58	Low Extent
13	Web casting	2.37	Low Extent
14	EDI (Electronic Data Interface)	2.38	Low Extent
15	Enterprise portal	1.39	Low Extent

# Table 1 contd

	Grand Mean	2.30	Low Extent
20	Intranet	2.22	Low Extent
19	e-procurement	2.30	Low Extent
18	Internet banner advert	1.89	Low Extent
17	EFT (Electronic Fund Transfer)	2.28	Low Extent
16.	Electronic auction	2.37	Low Extent

Table 1 reveals that in research question1, the score of the respondents ranged from 2.48 to 1.39 with a grand mean of 2.30. This implies that with reference to decision rule stated in the method of data analysis, the extent SMEs utilize e-commerce in South-Eastern states of Nigeria is low.

# **Research Question 2**

To what extent do SMEs managers utilize e-invoicing in their operations?

Analysis of data in respect of this research question is presented in Table 2.

# Table 2: Respondents' mean ratings on the extent SMEs utilize e-<br/>invoicing in their Operations

S/N	Items	Mean	Remarks

	Grand Mean	1.95	Low Extent
12	Certificate authorization electronically	1.79	Low Extent
11	Process CSC files electronically	1.81	Low Extent
10	Process XML files electronically	1.52	Low Extent
9	Process EDI files electronically	1.65	Low Extent
8	Verify data electronically	1.82	Low Extent
7	Prepare credit note electronically	1.65	Low Extent
6	Receive invoice electronically	1.81	Low Extent
5	Send invoice electronically	1.82	Low Extent
4	Prepare debit note electronically	3.82	High Extent
3	Create Invoice Electronically	1.92	Low Extent
2	Convert Invoice Data	1.85	Low Extent
1	Prepare invoice data electronically	1.88	Low Extent

The data presented in Table 2 reveals that the mean score of the respondents ranged from 1.65 to 3.82 with the grand mean score of 1.95. This implies that SMEs managers in five South-Eastern states utilize e-invoicing to a low extent in their operations.

# **Research Question 3**

To what extent do SMEs managers utilize e-advertising in their operations?

Analysis of data in respect of this research question is presented in Table 3.

# Table 3: Respondents' mean ratings on the extent SMEs utilize eadvertising in their operations

S/N	Items	Mean	Remarks
1	Floating advertisement electronically	1.91	Low Extent
2	Expanding advertisement electronically	2.26	Low Extent
3	Polite advertisement electronically	2.18	Low Extent
4	Wallpaper advertisement	2.07	Low Extent
5	Trick banner	1.84	Low Extent
6	Pop-up	2.02	Low Extent
7	Pop-under	2.14	Low Extent
8	Video advertisement	2.06	Low Extent
9	Map advertisement electronically	1.52	Low Extent
10	Mobil advertisement	1.56	Low Extent
11	Superstitial electronic advertisement	1.88	Low Extent
12	Interstitial electronic advertisement	1.98	Low Extent
	Grand Mean	1.95	Low Extent

Data presented in Table 3 reveals that the mean scores of the respondents ranged from 1.52 to 2.26. With the grand mean score of

1.95, it implies that SMEs managers in South-Eastern states utilize eadvertising at a low extent in their operations

# **Research Question 4**

To what extent do SMEs managers utilize e-purchasing in their

operations?

Analysis of data in respect of this research question is presented in Table 4.

# Table 4: Respondents' mean ratings on the extent SMEs utilize epurchasing in their operations

S/N	Items	Mean	Remarks
1	e-requisitioning	2.01	Low Extent
2	e-sourcing	2.26	Low Extent
3	e-tendering	2.18	Low Extent
4	e-indent management	2.07	Low Extent
5	e-auctioning	2.05	Low Extent
6	e-purchasing order	2.02	Low Extent
7	e-approval management	2.14	Low Extent
8	e-payment	2.06	Low Extent
9	e-budgeting	1.92	Low Extent
10	e-receiving	1.56	Low Extent
11	e-inventory	2.08	Low Extent
12	e-shipment notice	1.98	Low Extent
	Grand Mean	2.03	Low Extent

Data presented in Table 4 reveals that the mean score of respondents ranged from 1.92 to 2.26, with the grand mean score of 2.03. With the grand mean of 2.03 it implies that SMEs managers utilize e-purchasing to a low extent in their operations.

# **Research Question 5**

To what extent do SMEs managers utilize e-marketing software in their operations?

Analysis of data in respect of this research question is presented in Table 5.

# Table 5: Respondents' mean ratings on the extent SMEs utilize emarketing software in their operations

S/N	Items	Mean	Decision
1	Advanced e-mail locator	2.35	Low Extent
2	Anconia Rocket Sales	2.31	Low Extent
3	Atomic Mail Sender	2.35	Low Extent
4	Bmail	2.33	Low Extent
5	Broadc@st HTML	2.32	Low Extent
6	Campsign enterprise	2.31	Low Extent
7	Dynamic cail Communicator	2.29	Low Extent
8	e-campaign	2.32	Low Extent
9	EB mailer	2.30	Low Extent

10	Emal unlimited	2.30	Low Extent
11	eNill	2.30	Low Extent
12	Extractor pro	2.30	Low Extent
Tabl	e 5 contd		
13	G-lock masyMail professional	2.28	Low Extent
14	Gammadyne mailer	2.26	Low Extent
15	Group mail business	2.27	Low Extent
16	Group mail free	2.28	Low Extent
17	King mailer	2.28	Low Extent
18	Litemail	2.30	Low Extent
19	Mach5mailer	2.28	Low Extent
20	Mail Bomber	2.27	Low Extent
	Grand Mean	2.30	Low Extent

Data presented in Table 5 reveals that the mean scores of the respondents ranged from 2.26 to 2.35 with the grand mean score of 2.30. With the grand mean of 2.30, it implies that SMEs managers in South Eastern states utilize e-marketing software to a low extent in their operations.

# **Testing the Null Hypotheses**

**Null Hypothesis 1** 

Small and medium scale enterprises managers will not differ significantly in their mean ratings on the extent they utilize e-commerce in their operations based on their years of experience.

# Table 6: z-test of respondents' mean ratings on the extent SMEs utilize e-commerce in their operations based on their years of experience.

Source of variation	Ν	Х	SD	df	Cal.z	Crit.z	P≥0.05
1 – 5 years	725	53.63	23.55				
				1443	6.22	1.96	S
6 years and above	720	61.28	23.23				

Table 6 shows that at 0.05 level of significance and 1443df the calculated z 6.22 is greater that the critical z 1.96. Therefore, the first null hypothesis is rejected, this implies that there is significant difference in the mean ratings of experienced and inexperienced SMEs managers on the extent they utilize e-commerce in their operations.

# **Null Hypothesis 2**

Male and female SMEs managers will not differ significantly in their mean ratings on the extent they utilize e-invoicing in their operations.

# Table 7: z-test of respondents' mean ratings on the extent SMEs utilize e-Invoicing in their operations based on their gender.

Source of variation	Ν	Х	SD	df	Cal.z	Crit.z	P≥0.05
Male	990	33.11	12.10				
				1443	3.52	1.96	S
Female	455	35.60	13.42				

Table 7 reveals that at 0.05 level of significance and 1443df the calculated z 3.52 is greater that the critical z 1.96. Therefore, the second null hypothesis is rejected, this implies that there is significant difference in the mean ratings of male and female SMEs managers on the extent they utilize e-invoicing in their operations.

# **Null Hypothesis 3**

SMEs managers with computer skills and those without computer skills will not differ significantly in their mean ratings on the extent they utilize e-advertising in their operations.

# Table 8: z-test of respondents' mean ratings on the extent SMEs utilize e-advertising in their operations based on their level of computer literacy.

Source of variation	Ν	Х	SD	d	f C	al.z	Crit.z	P≥0.05
With computer skills	1350	30.93	11.40					
				1443	5.59	1.96	6	S
Without computer skills	95	24.00	15.16					

Table 8 indicates that at 0.05 level of significance and 1443df the calculated z 5.59 is greater that the critical z 1.96. Therefore, the third null hypothesis is rejected, this implies that there is significant difference in the mean ratings of SMEs managers with computer skills and those without computer skills on the extent they utilize e-advertizing in their operations.

# **Null Hypothesis 4**

Male and female SMEs managers will not differ significantly in their mean ratings on the extent they utilize e-purchasing in their operations.

# Table 9: z-test of respondents' mean ratings on the extent SMEs utilize e-purchasing in their operations based on their gender.

Source of variation	Ν	Х	SD	df	Cal.z	Crit.z	P≥0.05
Male	990	30.82	13.33				
				1443	7.32	1.96	S
Female	455	36.24	12.52				

Table 9 shows that at 0.05 level of significance and 1443df the calculated z 7.32 is greater that the critical z 1.96. Therefore, the fourth null hypothesis is rejected this implies that there is significant difference in the mean ratings of male and female SMEs managers on the extent they utilize e-purchasing in their operations.

# **Null Hypothesis 5**

SMEs managers with low and those with high educational qualifications will not differ significantly in their mean ratings on the extent they utilize e-marketing software in their operations.

# Table 10: z-test of respondents' mean ratings on the extent SMEs utilize e-marketing software in their operations based on their educational attainment.

Source of variation	Ν	Х	SD	df	Cal.z	Crit.z	P≥0.05
OND/NCE and below	540	41.19	18.07				
			144	3	6.83	1.96	S
HND/1 <sup>ST</sup> degree & above	905	48.89	2221				

Table 10 shows that at 0.05 level of significance and 1443df the calculated z 6.83 is greater that the critical z 1.96. Therefore, the fifth null hypothesis is rejected, this implies that there is significant difference in the mean ratings of SMEs managers with low and high educational qualifications on the extent they utilize e-marketing software in their operations.

# Summary of the Findings

From the preceding analysis the following findings were made:

- SMEs in South Eastern Nigeria utilize e-commerce in their operation at a low extent.
- SMEs in South Eastern Nigeria utilize e-invoicing in their operation at a low extent.
- 3. SMEs in South Eastern Nigeria utilize e-advertising in their operations to a low extent.
- 4. SMEs in South Eastern Nigeria utilize e-purchasing in their operation to a low extent.

- 5. SMEs in South Eastern Nigeria utilize e-marketing software in their operations to a low extent.
- There is significant difference between the mean ratings of experienced and inexperienced SME managers on the extent they utilize e-commerce in their business operations in South Eastern Nigeria.
- Significant difference exists in the mean ratings of male and female SME managers on the extent they utilize e-invoicing in business operations in South Eastern Nigeria.
- 8. There is a significant difference in the mean ratings of SME managers that are computer literate and those that are not computer literate on the extent they utilize e-advertising in their business operations in South-Eastern Nigeria.
- Significant difference exists in the mean rating of male and female SME managers on the extent they utilize e-purchasing in their business operations in South-Eastern Nigeria.
- 10. There is a significant difference in the mean scores of SMEs

managers with low and high educational qualifications on the extent they utilize e-marketing software in their business operations in South-Eastern Nigeria.

# **CHAPTER FIVE**

# **DISCUSSION, CONCLUSIONS AND RECOMMENDATIONS**

In this chapter, discussion of findings, conclusions, implication of the study, recommendations, limitation of the study and suggestions for further study are highlighted.

# **Discussion of the Findings**

Findings of the study are discussed in relation to literature reviewed as follows.

# **Utilization of e-commerce**

The result of the analysis of the data relating to utilization of ecommerce indicated that SMEs in South-Eastern Nigeria utilize ecommerce in their operations at a low extent. This is evident in the grand mean of 2.46. The finding is in agreement with Adekeye (2007) who stated that effective utilization of e-commerce innovation is still low in the country. Similarly, this finding agrees with Anan (2001) who noted that SMEs in the country are yet to reap the gains of e-commerce as a result low utilization. The low level of utilization may be as a result of lack of knowledge and skills to effectively utilize e-commerce applications.

#### Utilization of e-invoicing

The result of the analysis of the data relating to the second research question indicated that SMEs extent of utilization of e-invoicing in South Eastern Nigeria is low. With grand mean of 1.96 it is quite obvious that SMEs do under utilize e-invoicing. This finding is in agreement with O'Brian (2003) who affirmed that a lot of SMEs in the country are still not making effective utilization of e-invoicing. Barclays (2003) also stated that low utilization of e-invoicing is among the major problems facing SMEs in Nigeria.

#### Utilization of e-advertizing

The result of the analysis of the data relating to the third research question indicated that SMEs extent of utilization of e-advertizing in South- Eastern Nigeria is also low. The grand mean of 1.95 implies that the number of respondent that utilize e-advertizing is low. This finding is in accord with Zulunga (2011) who noted that in most developing countries SMEs have not reaped the dividends of e-advertizing as a result of its low level of utilization.

#### Utilization of e-purchasing

The result of the analysis of the data relating to the fourth research question reveals that e-purchasing are also under utilized by SMEs in the South –Eastern states of Nigeria. The grand mean of 2.03 implies that the utilization of e-purchasing is low. Supporting this finding Rosen (2001) asserted that the rate of utilization of e-purchasing in most developing countries is still low because of fear of insecurity in SMEs business owners.

#### Utilization of e-marketing software

The result of the analysis of data relating to the fifth research question shows that SMEs level of utilization of e-marketing software in South-Eastern Nigeria is low.

This finding is in agreement with Muller (2002) who noted that SMEs utilization of e-marketing software is low as a result of limited knowledge of electronic marketing and unconvincing benefits e-business of the owners.

The five null hypothesis were all rejected as their calculate z values of 6.22, 3.52, 5.59, 7.32 and 6.83 are greater than the critical z

сх

value of 1.96. This goes to confirm that there is a significant difference in the respondents' mean ratings on the extent SMEs in the area of study utilize all the identified e-marketing applications based on experience, gender, computer literacy and educational attainments.

Table 6 result, shows that there is a significant difference between experienced and inexperienced SMEs managers utilization of ecommerce. This finding agrees with Kai-Uwe (2002) assertion that SMEs owners that have long business experience may avoid any form of innovation intervention that disrupts their old traditional business practices.

Table 7 findings also showed that there is a significant difference between male and female SMEs managers utilization of e-invoicing based on their gender. This result is in agreement with Wolin and Korgaonkar (2003) submission that male exhibit more positive attitudes towards innovation usage than females. The finding also corroborates Kim, Leato and Marrison (2007) who affirmed that gender differences are noticed in information and decision making as it concerns internet usage.

Table 8 findings, clearly shows a significant difference between SMEs mangers with computer literate and those without computer literacy utilization of e-advertizing based on their level of computer skills.

схі

The finding is in accord with Knol and Stroeken (2001) who asserted that lack of knowledge of computer (computer literacy) contribute to low emarketing utilization by business enterprises.

Finally, Table 9 shows that there is a significant difference between SMEs managers utilization of e-marketing software based on their educational attainments. The result is in agreement with Gradon and Pearson (2004) who stated that educational qualification of SMEs owners may likely influence their level of utilization of e-marketing applications.

### Conclusions

In the light of the findings of this study, the following conclusions were drawn:

- The extent of utilization of e-commerce, e-invoicing, e-advertizing, e-purchasing and e-marketing software in South-Eastern Nigeria is low.
- There is a significant difference between the mean ratings of experienced and inexperienced SMEs managers on their utilization of e-commerce as a result of their years of experience.

- Male and female SMEs managers differ significantly in their mean ratings on the extent of utilization of e-invoicing as a result of their gender.
- 4. There is a significant difference between the mean ratings of SMEs managers that are computer literate and those that are not computer literate based on their level of computer literacy.
- SMEs managers with high educational qualification and those with lower educational qualification differ significantly as a result of their level of educational attainments.

### Implications of the Study

The findings of the study have implication for educational practice in Nigeria, particularly at the tertiary level. Greater numbers of SMEs owners/managers are graduates of different tertiary institutions who decided to start their own businesses after graduation. It is therefore necessary that all the institutions of higher learning in Nigeria expose their undergraduate students to relevant skills needed for effective utilization of e-marketing applications. The outcome of the study has therefore, revealed a gap between what is taught in the various tertiary institutions and what is expected (skills) in the real the world of work as it affects information communication technology.

#### Recommendations

Based on the findings of this study, the following recommendations are made:

- SMEs owners/managers should be trainned by business schools and business consultancy firms on how to use e-marketing applications. The importance of e-marketing should be clearly spelt out for them so that they can acquire the skills to fully integrate into their business operations.
- 2. Nigeria Association of Small and Medium Enterprises (NASME) and other associations at state level should embark on e-marketing capacity building to ensure better understanding of e-marketing and the need for its effective utilization by their members. This could be achieved by collaborative efforts with relevant government agencies, educational institutions and private business consultants through the organization of seminars, workshops, conferences and training programmes for both owners of SMEs and their staff.
- 3. Federal and States governments intervention is important to achieve her desire to use SMEs as a fulcrum to create employment and reduce poverty. The government through its agencies like SMEDAN and Federal Ministry of Industry can organize intervention programmes in the area of internet operation for owners of SMEs and their staff.

cxiv

- 4. Small and medium enterprises in South-Eastern Nigeria that have not adopted any form of e-marketing should make immediate effort to begin the adoption in order to satisfy the demands of their customers and to keep pace with the current global marketing practice. This would improve their productivity and reduce the high mortality rate of the SMEs.
- 5. The federal government through Federal Ministry of Industries and Federal Inland Revenue should create a condusive business environment for SMEs to thrive. High cost of running business like powering private generating sets, multiple taxation and fear of insecurity especially in e- business transaction in Nigeria should be urgently addressed for SMEs to utilize e-marketing to a satisfactory extent.

### Limitation of the Study

The study has the following limitations:

First, not all SMEs in South Eastern States of Nigeria are covered in the study because some of them were not registered with any organized associations and therefore could not be captured in the study. Secondly, because this study was carried out in South Eastern States of Nigeria, the findings could not be generalized to other geo-political zone or the entire nation. Lastly, most of the respondents in were not receptive to the researcher and his assistants as they thought the questionnaire was for government revenue collection identification. However, in spite of these limitations the findings of the study are valid and can be generalized to all the SMEs in the area.

### **Suggestions for Further Studies**

The result of the study has given rise to the following suggestions for further studies.

- Assessment of factors influencing SMEs utilization of e-marketing applications.
- Perception of owners/managers of SMEs on the adoption of emarketing in their business operations.
- 3. Challenges of utilization of e-marketing applications by SMEs owners/ managers.
- SMEs owners/managers assessment of government policies on e-marketing.

### REFERENCES

- Adelaja, A.O. (2012) Importance of small and medium scale industries in a developing / underdeveloped economy. Lagos : Academy Publishers.
- Adenikinju, Y. A. (2005), *Entrepreneurship and small scale business enterprises development in Nigeria.* Ibadan: University Press PLC.
- Adekeye, B. E. (2007) *Evaluation of small scale industries performance,* (Unpublished B.Eng. Thesis), Department of Mechanical Engineering, Federal University of Technology, Akure.
- Afsher, J. A. & Nawaser, K. H. (2010, September). *Mobile commerce: The force of electronic commerce future.* International seminar on Innovations in strategic management for organizational excellence. Sinhged Institute of Management. Pune India.
- Aftab, K. & Rahim, E. (2009). Barriers to the growth of informal sector firms. *Journal of Development Studies*, 25, (4). 35-42.
- Aghis, L. (2012). Marketing segmentation in the Indonesian banking sector. The Relation between demographic and desired

customers benefits. *International Journal of Bank Marketing*, 18(2) 64-74.

- Akabueze, B. (2002, February). Financing small and medium enterprises the small and medium industries equity investment scheme option. Paper presented at e-week 2002 seminar at MUSON Centre Lagos.
- Akkeren, J. & Caraye, A.L. (2000, December). Factors affecting entrylevel internet technology adoption by small business in Australia: An Empirical study. Proceedings of the 10<sup>th</sup> Australian Conference on Information Systems, Wellington, New Zealand.
- Alavi, M. (2007). Using information technology to add value to management education. Academy of Management Journal, 40(6) 310-318.
- Alemayehu, M. (2005). Exploring the reality of e-marketing benefits among businesses in developing countries: Journal of *Development Informatics*, 17(2)52-58.
- Al-Shaikh, K. (2005). Global industrial restructuring: Implication for small Firm. STI Working Paper 4, OECD Paris. Retrieved from <u>http://www.oecd.or/sti/working-papers</u>.
- Anders, J. C. (2012). Assumptions of the two step approach to latent variable modeling: *Social Methods Research,* 20, 321-333.
- Angelo, T.A. & Roses, K.P (1993) Classroom assessment technique: A handbook for college teacher. San Francisco: Jossey-Bass.
- Anan, K.A (2001). E-commerce and development report. United Nations Conference, trade and development. New York.

- Ascerria, L. (2012). Barriers to ICT in SMEs: How to bridge the digital divide. *Journal of Systems and Information Technology*, 10(2) 93-108.
- Awa, H.O., Nwibere, B.M & Inyang, B.J (2010). The uptake of electronic commerce by SMEs: a meta theoretical framework expanding the determining constructs of TAM and TOE framework. *Journal of Electronic Market.* 6(1) 1-27
- Ayo, C .K & Babjide, D.O (2006). Designing a reliable e-payment system: Nigeria as case study. *Journal of Internet Banking and Commerce.* 11(2) 23-29.
- Baily, G.E. (2008). *Globalization, Technology and Competition. Bostan* Harvard Business School Press.
- Baker, L. (2012). Facilitating Power Policy Influence in Nigeria's Energy. *E-Journal of Energy.* 8(1) 73-82. Retrieved from *http/www.brethonwordproject.or/update/60/bwupdt60-aipdf*
- Bambooweb.com (2003). *Electronic marketing*. Retrieved from <u>http://www.banbooweb.com/articles/e/i/Electronicmarkeing.html</u>.
- Barclays, L.M. (2003). Disruptive technologies: Catching the waves. Harvard Business Review, 21 (5) 32-39
- Bardes, B & Denton, J. (2000, November). Using the grading process for departmental and program assessment. Paper presented at the American Association for Higher Education Conference. Denver, USA.
- Bauer, H.I. (2002), Building customer relations over the internet. Industrial Marketing Management Journal. 3(2) 15-25.
- Bauer, S.B. & Danes, K.S. (2005). Payment technologies, financial innovation and Laissez Faire Banking. *Information and Management Journals*, 15 (1) 36-40.

- Beekman, G. (2000). Computer Conferencing: Explaining Tomorrow's Technology. New York: Addisa-Werley.
- Beheshti, H.M & Sangari, E.S (2007). The benefits of e-business adoption: an empirical study of Swedish SMEs. *Journal of Marketing Sciences*. 1(3)233-346
- Belch, G. E. & Belch, M. (2001). Advertising and Promotion: An integrated marketing communication perspective. Sydney: McGraw-Hill.
- Benbunam, R. (2008). Educational application of CMCS in solving case studies through asynchronous learning networks. *Journal of computer-mediated Communication 4(3)* 87-92.
- Berrill, A. S. (2004). Managerial expectations of internet marketing adoption after the techwreek of 2000- an Australian perspective. *Journal of Global Inform.* 17(3) 46-63.
- Berisha-Namani, M. (2009, July). The role of information technology in small and medium sized enterprises in Kosova. Paper Presented at the Sixth National Fullbright Academy Conference. Retrieved from <u>http://www.fulbrightacademy.org/file-depot/0-1000000/20000-0000/21647/folder/82430/Berisha+Paper+in+SMEs+inKosovo.pdf</u>
- Billo, R. E., Needy, K. L., & Bidanda, B. (2007). Technology to support world class manufacturing. *Computing in Industry.* 28,2. 28(2) 43-51
- Bolongkikit, J., Obit, J.H., Asing, J. G. & Tanakinjai, G.H. (2006). An exploratory research of the usage level of e-commerce among SMEs in the West Coast. Malaysia. Retrieved from http/www.arraydev.com/commerce/JIBC/2006.08/Bolongkikt.asp.
- Broadgroup, E. (2009). *Synopsis*: Nigeria TNT Venture. Retrieved from <u>http://wwwtntfinance.com/report/nwreports/newsreports7.aspx</u>

Brodie, R. (2003). Is e-marketing coming of age?: An examination of penetration of e-marketing and firm performance. *Journal of Interactive Marketing 21(1) 2-12.* 

Brown, C. (2002). Accelerating the uptake of e-marketing by small and medium enterprises. Small enterprises telecommunications center. Retrieved from: http://www.setel.comau.smeforum2002/final report.pdf.

- Burban, L. & Norman, P (2011). Evaluating Information Systems in Small and Medium-sized enterprises: Issues and evidences. *European Journal of Information Systems*. 7(2) 241-251.
- Burgess, E. & Cooper, D. (2002). Information technology in small business: Issues and Challenges. Australia: Idea Group Publishing.
- Business Town.com (2001). *The definition of e-marketing.* Retrieved from <u>http://www.Businesstown.com/e-marketing</u>.
- Cameron, R. & Clarke, E. (2006). *Communication by design: The politics of information and communication Technologies.* London: Oxford University Press.
- Campbell, J. E. (2005). Small firms: Reports of the Committee of Inquiry on Small Firm. London: HMSO.

 Central Bank of Nigeria (2006, August 6). Guideline on small and medium scale enterprise operations. The Vanguard, p. 23
 Centre for Management Development (2002) Federal Government of Nigeria Official Document. Abuja: Government Press.

Chacko, J. G. & Harris, G. (2005). *ICT and small, medium and micro enterprises in Asia pacific – size does matter. Journal of Information Technology and Development,* 12 (2), 175-177.

- Chan, M. & Turner, S. (2005). Factors influencing the adoption of internet banking. *Journal of the Association for Information Systems*, 1(5) 14.
- Chaffey, M. (2002). Determinants of EDI adoption in the transportation Industry. *European Journal of Information System.1(3)18.*
- Chenery, H. (2004). *Redistribution with Growth*. Oxford: Oxford University Press.
- Chibelushi, C. (2008). Learning the hard way? Issues in the adoption of new technology in small technology oriented firms. Journal of *Education and Training* 50(9), 725-736.
- Church-Hill, G.A, Ford, N.M & Walker, D.I (1991). Sales force management: planning implementation and control. Illionis: Richard D Irvin.
- Cloete, E. (2001). SMEs in South Africa: Acceptance and adoption of ecommerce. Cape Town: McTaylor Publishers.
- Committee European de Normartization (2012). Improving the standard of service: The road ahead of european standardization. Cambridge. Francis Publishers.
- Crawford, J. (2004). Issues and barriers affecting the development of ebusiness in small and medium enterprises: Department of Enterprise Trade and Employment. Retrieved from <u>http://www.gov/publicationSME/news.bk.pdf</u>.
- Cyert, R.M. & March, J. G. (2002). A *behavioural theory of the firm*. Oxford: Blackwell.
- Daniel, H. M. (2005). E-business and e-marketing how to program. New York: Prentice Hall.
- Davidson, A. (2012). Moving procurement systems to the internet: The adoption and use of e-procurement technology models. *European Management Journal 21(*9) 11-23.

- Dedrick, J & Kraemer, K. L. (2001). China IT report: *The Electronic Journal on Information Systems in Developing Countries* 6(2) 1-10.
- Diba, A. (2000). Voice on the net a tip of the iceberg. *Journal of Information Technology* 142(8) 21.
- Deital, H.M., Deital, P.J. & Neito, T.R (2000). E-business and ecommerce: how to program. New York. Prentice Hall.
- Department of Trade and Industry (2007) National Strategy for the development and promotion of malls business in South African. Cape Town: Government Printer.
- Direct Marketing Association (2002). Aligning your organization with data-driven marketing best practices. Retrieved from <u>http://www/dma.org.uk</u>.
- Doyle, P. (2006). Marketing and competitive performance of British industry areas for research. *Journal of Marketing Management.1(1)5-8.*
- Dun M. & Bradstreet, I. (2009). The Business Failure. *Record Economics Division*. New York: Prentice Hall.
- Electronic Commerce Resource Centre (2002). *E-commerce in Thailand: Statistics and analysis in each business sector*. Bangkok: SE Educational Publishing.
- Electronic Innovation Centre (2001). *E-marketing*. Retrieved from <u>http://www.emarketing.ac.uk/pdf/trding.pdf</u>.
- Enebe, N. G (2004, March 19). Technology in Banking Industry. The Guardian p 11

Eric, V.H. (2002). The red pill of technology innovation. California: Bluefield Press.

Fabayo, Y. A. (2009, August). Small and medium enterprises development strategy: A critical option for sustainable long-term economic Development in Nigeria. A paper presented at the first Annual International Conference on Effective Management of Small and Medium Scale Enterprises for sustainable Economic Development, Ijebu-Ode, Nigeria.

Faroun, S. (2008). Infotech is the Powerhouse of Business. Nibrend

Journal 34(3), 5

Federal Government of Nigeria (2008). *Third National Development Plan*. Abuja:

SMEDAN Planet Press Ltd.

Federal Ministry of Industries (2005). National policy on micro, small and

medium enterprises: Abuja. Planet Press Ltd.

- Fillis, I., Johnson, U. & Wagner, B. (2004). Factors Impacting on adoption and development in the smaller firm. International *Journal of Entrepreneurial Behaviour and Research* 10(3), 178-191.
- Forcht, K. & Wex, R. (2006). Doing business on the internet: Marketing and security aspect. Journal of Information Management and Computer Security 4, 3-9.
- Freeman, J., Carroll, G.R. & Hannan, M.T. (2003). The liability of newness: Age dependence in organizational death rate. *American Sociological Review*, 48, 692 – 710.

- Gary, C. (2003). A stage model of ICT adoption in small firms. Workshop in Rimini-Firms and Consumers facing E-commerce: Strategies to increase its adoption and usage. Open University Business School, UK.
- Gaskill G., Van, S. & Manning, M. (2003). Regional information access: The use of Telecentres to meet Universal Services Obligations. *Telematics and Informatics* 14(3) 273- 288.
- Gibson , T. & Van der Vaart, H. (2008) Developing Small and Medium sized Enterprises. Retrievved from http://www.brookings.edu/-/media/research /files/papers/2008/9/development%20gibson/09development-gibson.pdf
- Gilmore, A. & Gallagher, D. (2007). E-marketing and SMEs operational lessons for the future. *European Business Review* 19(3) 234-241.
- Goonatilake, P. C. (2007). A computer based simulation model for optimum production, pricing and marketing strategies under multiple batch production. Proceedings of International Conference on Modeling and Simulation. New Delhi, India.
- Gohary, H. & Trueman, M. (2008). E-marketing and small business enterprises. *Journal of Business and Public Policy 2(2) 29-38.*
- Grand, E. & Pearson, J.M (2004). e-commerce adoption: Perceptions of Managers / owners of small and medium sized firms in Chile. *Communications of the Associations for Information Systems* 1(13), 81-102.

- Grant, S. (2008). Nigeria leads the world in cyber crime. *Entrepreneurs tip News* 1(2), 2-5
- Hanniga, T.I (2006). Risk Management for Electric Banking and Electric Cash. Ibadan: Gilford and Co. Publishers.
- Hazbo, S., Arnela, C. & Chun-Yan, H. (2008). ICT adoption model of Chinese SMEs. *International Journal of Business Research*. (44) 161-16.
- Hugh, J. (2011). Success of software packages in Small Business. European *Journal of Information System* 1(3) 159-169.
- Ibarra, H. (2005). Network centrality, power and innovation involvement: determinants of technical and administrative roles. *Academy of Management Journal* 36(2) 471-484.
- Ibene, K.S. & Obi, R.C. (2001). The Internet and its use in the emerging Nigerian information society. *Namoda Tech-Scope*, 4(2) 109-117.
- Ike-Obiorah, B.U (2008) Assessment of information and communication technology compliance in tertiary institution management. (Unpublished Doctoral Dissertation), Nnamdi Azikiwe University, Awka.
- International Labour Organization (2005). The international labour organization and the struggle against forced labour from 1919 to the present. *Journal of International Labour,* 48(4) 477-500.
- Jacobson, I. (1992) Marketing Strategy: An Assessment of the state field and outlook. *Academy of Marketing Science Journal* 1(12), 120-133
- Janson, M. K. (2003). Making sense of e-commerce as social action. *Inform. Techn. People,* 18(4): 311-318.
- Jennex, M. E., Amoroso, D. & Adelakun, O. (2004). *E-commerce infrastructure success factors for small companies in developing economies. Electronic Commerce Research*, 4, 263-286.

- Jock, B. & Essuk, S. (2001). Drivers and barriers to adopting EDI: A Sector Analysis of UK Industry. *European Journal of Information System*, 5, 24-32.
- Johnson, E.G (2003). The opportunities of information and communication technologies for small and medium enterprises in regional development in Tanzania. (Unpublished Master's Thesis) University of Joensuu, Finland.
- Julian, R. & Ramseshen, E. (2004). Innovation Awareness: Consumer's enlightenment on the technologies. Lagos: New Age Publishers.
- Kai-Uwe B.J. (2002). Information and Technology in the small firm in Carter S. Jones-Evans (eds) Enterprise and the Small Business Prentice Hall, Pearson Education.
- Kalakota, R. & Robinson, M. (2009). *E-Business: Roadmap for success*. New Delhi: Wesley Press.
- Kalanje, C. (2002). Enhancing the competitiveness and growth of SMEs: Marketing challenges for SMEs. 5<sup>th</sup> NASME International Conference and Exhibition Retrieved from <u>http://www.wipo.int/sme/documents/pdf/nasme.pdf</u>.
- Kapurubandara, M. (2008 December). Model to e-transform SME's in developing countries. Paper presented at the 4<sup>th</sup> International Conference on information and Automation for sustainability. Colombo, Sri-Lanka.
- Kaynak, E., Tatrylu, E. & Kula, V. (2005). An analysis of the factors affecting the adoption of electronic commerce by SMEs: Evidence from emerging market. *International Marketing Review*, 22 (6)632-640.

- Kilby, D. & Turner, M. (2003). IT and the small retail business. International Journal of Retail and Distribution Management, 21(7), 20-27.
- Kim D.Y., Lehto, X. & Morrison, A.M. (2007. Gender differences in online travel information search: Implication for marketing communication on the internet. Tourism management, 28(2), 423-433.
- Knol, W.H. & Stroken, J.H. (2001). The diffusion and adoption of Information Technology in Small and Medium-sized enterprises through IT Scenarios. Journal of Technology Analysis and Strategic Management, 13(2) 227-246.
- Kotler, P. (2004). Marketing management. New Delhi: Prentice Hall.
- Kotler, P. & Armstrong, G. (2004). *Principles of marketing.* India: Pearson Education Publishing.
- Kudehinbu, O.O (2013) *Level of access and utilization of ICT resources in federal and state universities.* (Unpublished Doctoral Disseration). Nnamdi Azikiwe University, Awka.
- Kyle, M. (2003). *Using your computer: The Beginner's guide*. Cincinnati: South Western Educational Publishing.
- Lane, M. S., Delpachitra, S. & Howards, S. (2004). An Electronic Commerce Initiative in Regional Sri Lanka: The Vision for the Central Province Electronic Commerce Portal. *Electronic Journal of Information System in Developing Countries*, 16(1) 1-18.
- Lacovou, C. L. (2005). Electronic data inter-change and small organization: Adoption and impact of technology. *MIS Quarterly*, 19(4) 405-485.

- Lawal, A. (2006). *Entrepreneurship Development in Small Scale Business* Lagos: Gabson Resources Nigeria Ltd.
- Lawal, A. S. (2010). *Electronic commerce in Nigeria banking industry a case study of Guaranty Trust Bank Nigeria Plc.*(Unpublished Masters Thesis) University of Ilorin, Ilorin.
- Lawrence, J. E. (2008). *The challenges and utilization of e-commerce.* The use of Internet by Small to Medium-sized Enterprises in the United Kingdom. Information, Society and Justice Journal, 1(2).
- Levenburg, N., Magal, S.R. & Kosalge, P. (2006). An exploratory investigation of organizational features and e-business motivation among Small and Medium Enterprises in the US. Journal of *Electronic Markets*, 16(1) 70-84.
- Levey, M., Powell, P. & Worrall, I. (2005). Strategic internet and ebusiness in SMEs: *Enablers and Inhibitors, Information Resources Management Journal,* 18(4) 1-20.
- Looi, H. C. (2003). A model of factors influencing electronic commerce adoption among small and medium enterprises in Brunei Darussalam. *International Journal of Information Technology*, 10(1). 72-87.
- Lukas, H. C. (2000). Information Systems Concepts for Management. Kanses: Mcgraw-Hill.
- Lyson, K. (2006). Purchasing and chartered Institute of purchasing and supply London: Pitman Publishing.
- Maduka, E. (2005) Internet Marketing: Challenges and Prospects in Nigeria Marketing environments (Unpublished MSc Thesis) University of Nigeria. Nsukka, Enugu Campus.

- Maldeni, H. M. & Jayasenne, S. (2008). Information and communication technology usage and bank branch performance. *The International Journal of Advances in ICT for Emerging Regions*, 2(2), 29-37.
- Maria, P. (2002) Online Experience its now a much better fit. USA *Today*. 35(2) 250-265.
- Massey, T.K. (2006). Computers in small business: A case of underutilization. American Journal of Small Business. 11(2), 51-60.
- Mbonu, B. (2000). *Teach yourself Internet and the World Wide Web Step by Step.* Ikeja: Becky Publishers Ltd.
- McCole, P. & Ramsey, E. (2004). Internet-enabled technology in knowledge-intensive business. *Information System Management* 1(15), 78-81.
- Merrick, B. (2003 May). Internet marketing done right. Credit Union Magazine 69(10), 12.
- Michalski, R. M. (2006). SME adoption of electronic marketing technologies: Implication for emerging national information infrastructure systems. Proceedings of the Hawaii International Conference Systems, 495 – 504.
- Muller, N.J. (2002). How the internet is breaking down barriers to EDI Information System Management 1(15), 78-81.
- Mmuo, A.N. (2005). Assessment of the level of awareness and utilization of electronic commerce by indigenous manufacturing industries.
  (Unpublished masters thesis). Nnamdi Azikiwe University, Awka.
- Mutula, M.S. & Brakel, P.V. (2006). E-readiness of SMEs in the ICT sector in Botswana. Journal of *Electronic Library*, 24, 402-407.

- Munasinga, G. & Jayawardena, D. (2009). *The* use of hosted enterprises application by SMEs: A dual market and user perspective. *Journal of Electronic Market.* 16(1) 85-88.
- Myer, S.T. & Kenter, L.U. (2008). *Technology application in the industry*. New York: John Wiley & Sons Publishers.
- Napier, H.A. (2003). Information technology and organizational performance: An Integrative Model of IT Business Value. MIS Quarterly. 28(22) 283-322.
- NASME, (2013). National Association of Small and Medium Scale Enterprises. Retrieved from Desktop / nasme –membership html
- NPC (2007). The National population commission report. Abuja: Federal Government Press.
- Nwachukwu, C.C (2010). Management Theory and Practice. Onitsha: African –FEP Ltd.
- Nweke, O.M (2013). Appraisal of the level of availability and utilization of ICT facilities in teaching OTM in South-Eastern Polytechnics. (Unpublished Masters Thesis). Nnamdi Azikiwe University Awka.
- O' Brien, J.A. (2003). Introduction to information systems. Essentials for the e-business Enterprises (11<sup>th</sup> ed) Irwin: McGraw-Hill.
- Obi, B.I (2007). Assessment of information communication technology usage by secretaries in tertiary institutions. (Unpublished Masters Thesis) Nnamdi Azikiwe University, Awka.
- OECD(2002). A New Economy: The Changing Role of Innovation and Information Technology Growth. Paris: OECD.
- Ogbazi, J. & Okpala, C (1994). Practical Research Methods in Education. Lagos: Sam Educational Publishers.
- Onyebu, M.C (2009). Assessment of commercial bank customers' awareness and utilization of technological innovations in the

*banking industry.* (Unpublished Doctoral Dissertation) Nnamdi Azikiwe University, Awka.

- Ononye, N.E. (2006). *Utilization of aspects of communication technology by manufacturing organizations.* (Unpublished Masters Thesis). Nnamdi Azikiwe University, Awka.
- Okongwu, D. A. (2001). Fostering the innovation potentials of SMEs in the globalization era: The role of patents. WIPO Milan Forum on Intellectual property and Small and Medium-sized Enterprises. February 9-10, Milan Italy.
- Okafor, E. (2004). Shopforless Nigeria. Retrieved from http://www.timbuktuchronicles.blogspd.com/2004--08-01timebuctchroniclesontime.html.
- Olaoye, I.K. (2008 April). ICT and the global labour market, International Conference on Marketing. Conference conducted at University of Jos.
- Olaoye, I.K. (2010). Information and communication technology and entrepreneurship development: evidence from Nigeria. In Kolawole S. (Ed). Perspective of Entrepreneurship and Economic Development in Nigeria. Ilorin: Olad Publishers.
- Ongori, H. (2010).Information communication technology adoption in SMEs. Journal of Chinese Entrepreneurship. 2(1) 93-104
- Onwuchuruba, G. U. (2001,October). *The role of marketing in small scale business in Nigeria.* Paper delivered at the second School of Management Studies Conference. The Federal Polytechnic Ilaro.
- Osuala, E. C. (2001). *Fundamentals of Nigeria Marketing.* Onitsha: Cape Publishers International Ltd.
- Osuala, E. C. (2004). *Principles and Methods of Business and Computer Education.* Enugu: Cheston Agency Ltd.

- Opia, O. (2008). An exploratory study of the moderating effects of trust on e-commerce adoption behavior of Nigeria small enterprise. *Journal of Electronic Marketing*. 1(1)43-51
- Palmer, A. & McCole, P. (2000). The role of electronic commerce in creating a virtual tourism destination marketing organization. *International Journal of Contemporary Hospitality Management*, 12(3), 198-204.
- Pasework, W.R (Snr) & Pasewark W.R (Jnr) (2000). Office procedures and technology. Cincinnate: South Western Educational Publishing.
- Pattison, R. (2011). Forecasting in the Wholesale Industry. Journal of Business Forecasting Methods and Systems, 18, 129-142.
- Payne, J. E. (2003). E-commerce readings for SMEs in developing countries. A guide for developing professionals. Retrieved from <u>http://www/blake.moncllair.edu/eibcout/conference/Data/Theme</u> 7/Thailand 2. pdf.
- Pease, W & Rowe, M. (2003). E-commerce and Small and Medium Enterprises in Regional Communities. Retrieved from http://www/blake.montclair,edu.eibcout/conference /data/theme 7 / Thailand 2.pdf.
- Piercy, D. (2002). Internet marketing adoption by small and medium sized enterprises in the Illiawara. Retrieved from http://COLLecteR,org/archives/2000December/01.pdf.
- Poon, S. & Swatman, P.M. (2005, October). The Internet for small businesses: An enabling infrastructure for competitiveness. Paper presented at the fifth Internet Society Conference in Poon, New Delhi.
- Porter, M. (2001). Strategy and the internet. *Harvard Business Review*, 75(3), 63-78.

- Ramsey, E., Ibbotson, P., Bell, P. & Gary, B. (2003). E-opportunities of service sector SMEs: An Irish Cross-boarder Study. *Journal of Small Business and Enterprise Development*. 10(3), 250-264.
- Rashid, M.A. & Al-Quirim, N.A (2001). E-commerce technology adoption framework by New Zealand small and medium sized employees. *Journal of Applied Management Studies* 3(2). 63-70.
- Raymond, L. (2001). Organizational characteristics and MIS success in the context of small business. *MIS Quarterly*, 9(1), 37-52.
- Republic of South Africa (2004). National Small Business Act. No. 102 of 2004. Cape Town: Government Gazette 27.
- Rogers, E.M. (1995) Diffusion of Innovations. New York: The Free Press
- Rosen, A. (2001). The e-commerce question and answer book: A survival guide for business managers. *American Management Association*, 5(1), 18-21.

Salechi, R.J. (2012). Telecommunication and economic development.

World Bank, Baltimore: The John Hopkins University Press.

Sampson, E. (2005). Technological development global banking innovation. *Zenith Economic Journal*, 8(2),56-61.

Sauser, C. (2005). More women succeed as business owners.

Retrieved from sitcom.inc.Sit.Com/women/succeed.htm.

Schnuemann, M. (2009). SMEs where the main drivers of economic growth between 2004 and 2006. Retrieved from <u>http://epp.eurostat.ec.europe.eu/cached/ITY-OFFPUB/KS-SF-09-071/EN/KS-SF-09-071-EN.PDF</u>

- Schoof, U. (2006). Stimulating youth entrepreneurship: Business and incentives to enterprise start-ups by young people. Geneva: International Labour Organization.
- Schumpeter, J. (1983). The theory of economic development: An Inquiry into Profit, Capital, Credit, Interest and the Business Cycle. New Brunswick: Transaction Books.
- Scupola, A. (2003 October). Adoption of internet-based electronic commerce in South Intalia SMEs. 1<sup>st</sup> Nordic Workshop on Electronic Commerce, Halmstad, Sweden.
- Small Business Administration (2012). Small and medium sized enterprises in America: Issues and policies. Retrieved from <u>http://www.sba.org</u>.

Small Scale Industries Association of Nigeria (2008). Small scale industries of Nigeria: An Overview of ICT Trends and Policy in Nigeria. Retrieved

from <u>http://www.ssin.or.ng</u>.

- Small and Medium Enterprises Development Agency of Nigeria (2007). National policy on micro, small and medium enterprises. Abuja: SMEDAN. Planet Press Ltd.
- Sparrowe, R. T., Liden, R. C. & Kraimer (2001). Social networks and entrepreneurship development. Academy of Management Journal 44(2) 316-325.
- Stewart, H. (2002) Technological: marking sure we get it right. *Educate quarterly* 25 (3) 22 27

- Teo, T. S. & Pain, Y. (2005). A contingency perspective on internet adoption and competitive advantage. *European Journal of Information System* 12(4) 78-92.
- Thillmany, M. (2012). An exploratory study of factors influencing sales performance of small and medium-sized enterprises. Proceedings of the Administrative Sciences Association of Canada. Winnipeg, Manitoba.
- Thong, J. & Yap, C.S. (2005). CEO characteristics, organizational characteristics and information technology adoption in small business. Academy of Management Journal, 23(4) 429-442.
- Tieto, E.C. (2009). The Future of e-invoicing. Retrieved from digitdoc: http://www.digitdochu/downloads/e-invoicing.pdf.
- Turban, E. E. & Wetherbe, J. (2012). Information Technology for Management. New York: John Wiley and Sons.
- Turban, E., Lee, J., King, D., & Chang, H. (2000). Electronic Commerce: A Managerial Perspective. New-Jessy, Prentice Hall.
- Upkar, V. (2002). *E-commerce: framework, applications and networking support. Hinghm:* Kluwer Academic Publishers.
- Uzoka , F.M., Shemi, A.P. & Seleka G.G. (2007). Behavioural influence of e-commerce adoption in a developing country context. *Journal of Information Systems.* 31(4). 1-15.
- Vuuren, J.J. & Groenewald, D. (2007). A critical analysis of the influence of start-up factors in small businesses and entrepreneurial ventures in South Africa. *Journal of Marketing Research* 4(1),269-280.

- Wakolbanger, D. (2009). An overview of forecasting methodology. Start Pac Research Library .Retrieved from <u>http://www.statpac.org</u> research-library/forecasting html.
- Wamale, B.E, (2006) Management training and performance: Factors that hinder the transfer of skills. (Unpublished MBA dissertation). Makerere University Kampala.
- Watson, V. & Everett. G. (2006). The initiation, adoption and implementation of telecommunications technologies in United States of America organizations. *Journal of Management Information System* 10(1) 141-163.
- Wetherbe, J. (2002). B to B e-marketing: an e-marketing framework for B to B commerce marketing. Journal of *Intelligence and Planning*, 28(3), 310-329.
- Wolfenson, J.D. (2001).Comparing the performance of male and female controlled businesses relating output to inputs. Information Management Journal 26(3) 91-100.
- Wolin D.I & Korgaonkar P. (2003). Internet research: Internet Research: Electronic Networking. Web Advertising: Gender differences applications and policy, 13(5), 375-38
- Zhao, F (2005). Entrepreneurship and innovation in e-business: an integrative perspective. *Journal of Internet Marketing*.6(1), 53-60
- Zillman, M. (2005). (*Rating the digital economy*): Perspectives from Singapore, electronic marketing. Proceedings from the 11<sup>th</sup> International Electronic Commerce Conference. Bled, Slovenia. 33(3) 26-32
- Zulunga, F. C. (2011). The use of internet in business: Experience of early adopters in Singapore. *Internet Research Journal*. 7(3), 217-228.

### **APPENDIX A**

cxxxviii

## LETTER OF TRANSMITAL

Dept. of Vocational Education, Nnamdi Azikiwe University, Awka.

4<sup>th</sup> July, 2014

Dear Respondent

# REQUEST TO COMPLETE QUESTIONNAIRE ON THE EXTENT OF UTILIZATION OF e-MARKETING APPLICATIONS BY SMALL AND MEDIUM SCALE ENTERPRISES (SMEs)

I am a postgraduate student of the aforementioned Institution and I am presently carrying out a study to ascertain the extent of utilization of emarketing applications by SMEs. The attached questionnaire is designed to collect relevant data for the study.

As owner/manager in small and medium scale enterprises, I consider your input very vital and hereby request that you please spare some minutes out of your busy schedule to assist me in completing the questionnaire. I assure you that your input will be treated with utmost confidence and used solely for the stated purpose.

Thank you so much for your anticipated cooperation.

Yours faithfully

Signed

### **Okeke Kelechi Charles**

# **APPENDIX B**

# **QUESTIONNAIRE ON EXTENT OF UTILIZATION OF e-MARKETING APPLICATIONS BY SMEs IN SOUTH EASTERN NIGERIA**

### **SECTION A: PERSONAL DATA OF RESPONDENT**

**Instruction:** Please indicate by tick ( $\sqrt{}$ ) the option that is most applicable to you.

- Gender: Male 1.

Female

Highest educational qualification (held by the owner/manager) 2.

(a) OND/NCE & Above (b)HND/First Degree & Above

Knowledge of Computer 3. (a) Computer literate (b)Not Computer literate

Г		

Years of Experience 4. 1 – 5 Years 6 Years and above

Г		 ٦

# SECTION B: Extent of Utilization of e-commerce Applications

Listed below are e-commerce applications that can be used by SMEs to facilitate their business transactions. Please indicate with a tick ( $\sqrt{}$ ) the extent to which you utilize each of these in your business transactions.

Keys to the response options from Section B to F are:

VHE	-	Very High Extent
HE	-	High Extent
UD	-	Undecided
LE	-	Low Extent
VLE	-	Very Low Extent

S/N	e-Commerce Applications	VHE	HE	UD	LE	VLE
1.	e-mail (Electronic Mail)					
2.	WWW (World Wide Web)					
3.	E-Catalogue (Electronic Catalogue)					
4.	Hyperlinks (Web Links)					
5.	Search Engines					
6.	e-Shopping Cast					
7.	e-Payment (Electronic Payment)					
8.	Teleconferencing					
9.	Video Conferencing					
10.	VOIP (Voice on the Internet					
	Protocol)					
11.	Bulletin Board					
12.	Web Chatting					
13.	Web Casting					
14.	EDI (Electronic Data Interface)					
15.	Enterprise Portal					
16.	Electronic Auction					
17.	EFT (Electronic Fund Transfer)					
18.	Internet Banner Advert					

19.	e-Procurement			
20.	Intranet			

## SECTION C: EXTENT OF UTILIZATION OF e-INVOICING

Listed below are e-invoicing applications that can be used by SMEs owners/managers to facilitate their business transactions. Please indicate with a tick ( $\sqrt{}$ ) the extent you utilize each of these in your business transactions.

S/N	e-Invoicing Applications	VHE	HE	UD	LE	VLE
21.	Prepare invoice data					
	electronically.					
22.	Convert Invoice Data					
	electronically					
23.	Create Invoice electronically					
24.	Prepare debit note					
	electronically					
25.	Send Invoice electronically					
26.	Receive Invoice electronically					
27.	Prepare Credit note					
	electronically					
28.	Verify Data electronically					
29.	Process EDI files electronically					
30.	Process XML files					
	electronically					
31.	Process CSC files					
	electronically					
32.	Certificate Authorization					

electronically						
----------------	--	--	--	--	--	--

### **SECTION D: Extent of Utilization of e-Advertising**

Listed below are e-advertising applications that can be used by SMEs owners/managers to facilitate their business transactions. Please indicate with a tick ( $\sqrt{}$ ) the extent you utilize each of these in your business transactions.

S/N	e-Advertising Applications	VHE	HE	UD	LE	VLE
33.	Floating advertisement					
	electronically					
34.	Expanding advertisement					
	electronically					
35.	Polite advertisement electronically					
36.	Wallpaper advertisement					
37.	Trick banner					
38.	Pop-Up					
39.	Pop-Under					
40.	Video advertisement					
41.	Map advertisement electronically					
42.	Mobil advertisement					
43.	Superstitial electronic					
	advertisement					
44.	Interstitial electronic advertisement					

# **SECTION E:** Extent of Utilization of e-Purchasing

Listed below are e-purchasing applications that can be used by SMEs owners/managers to facilitate their business transactions. Please indicate with a tick (  $\sqrt{}$  ) the extent you utilize each of these in your business transactions.

S/N	e-Purchasing Applications	VHE	HE	UD	LE	VLE
45.	e-requisitioning					
46.	e-sourcing					
47.	e-Tendering					
48.	e-Indent management					
49.	e-Auctioning					
50.	e-Purchasing Order					
51.	e-Approval Management					
52.	e-Payment					
53.	e-Budgeting					
54.	e-Receiving					
55.	e-Inventory					
56.	e-Shipment notice					

#### SECTION F: EXTENT OF UTILIZATION OF MARKETING SOFTWARES

Listed below are marketing softwares that can be used by SMEs owners/managers to facilitate their business transactions. Please indicate with a tick ( $\sqrt{}$ ) the extent you utilize each of these in your business transactions.

S/N	Softwares Applications	VHE	HE	UD	LE	VLE
57.	Advanced E-mail Locator					
58.	Anconia Rocket Sales					
59.	Atomic Mail Sender					
60.	Bmail					
61.	Broadc@St HTML					
62.	Campaign Enterprise					
63.	Dynamic Mail					
	Communicator					
64.	e-campaign					
65.	EB Mailer					
66.	Emal Unlimited					
67.	eNill					
68.	Extractor Pro					
69.	G-Lock EasyMail					
	Professional					
70.	Gammadyne Mailer					
71.	Group Mail Business					
72.	Group Mail Free					
73.	King Mailer					
74.	Litemail					
75.	Mach5Mailer					
76.	Mail Bomber					

#### Appendix C

#### Population Distribution of Registered NASME in South Eastern

#### Nigeria

State	Specific	Population
Abia	NASME	632
Anambra	NASME	441
Ebonyi	NASME	114
Enugu	NASME	444
Imo	NASME	215
Total		1846

Source: NASME (2013)

#### Sample Distribution of Registered NASME in South Eastern Nigeria

States:	Abia	Anambra	Ebonyi	Enugu	Imo	Total
population	632	441	114	444	215	1846
sample	504	352	91	354	172	1473

## Appendix D

## Copies of Validated Instrument

#### Apppendix E

#### Mean Ratings on the Extent SMEs Managers Utilize e-Commerce in their Operations in South Eastern Nigeria.

	Ν	Minimu m	Maximu m	Mean	Std. Deviation
SB1	1445	1.00	5.00	2.4343	1.10362
SB2	1445	1.00	5.00	2.3066	1.12032
SB3	1445	1.00	5.00	2.2132	1.08325
SB4	1445	1.00	5.00	2.4824	1.14708
SB5	1445	1.00	5.00	2.4547	1.21438
SB6	1445	1.00	5.00	2.3824	1.21737
SB7	1445	1.00	5.00	2.3512	1.21823
SB8	1445	1.00	5.00	2.3434	1.23902
SB9	1445	1.00	5.00	2.2408	1.20978
SB10	1445	1.00	5.00	2.3324	1.20502
SB11	1445	1.00	5.00	2.3819	1.22412
SB12	1445	1.00	5.00	1.5824	1.22588
SB13	1445	1.00	5.00	2.3714	1.21668
SB14	1445	1.00	5.00	2.3824	1.23712
SB15	1445	1.00	5.00	2.3743	1.29250
SB16	1445	1.00	5.00	1.3920	1.28687

SB17	1445	1.00	5.00	2.2824	1.28652
SB18	1445	1.00	5.00	1.8993	1.30317
SB19	1445	1.00	5.00	2.3037	1.34968
SB20	1445	1.00	5.00	2.2216	1.28237
Valid N (listwise)	1445				

#### APPENDIX F

Mean Rating on the Extent SMEs Managers Utilize e-Invoicing in their Operations in South Eastern Nigeria.

	N	Minimu m	Maximu m	Mean	Std. Deviation
SC21	1445	1.00	5.00	1.8824	1.13114
SC22	1445	1.00	5.00	1.8512	1.07638
SC23	1445	1.00	5.00	1.9240	1.07436
SC24	1445	1.00	5.00	2.8235	1.08503
SC25	1445	1.00	5.00	1.8201	1.07966
SC26	1445	1.00	5.00	1.8131	1.07527

SC27	1445	1.00	5.00	1.8037	1.08906
SC28	1445	1.00	5.00	1.8235	1.06245
SC29	1445	1.00	5.00	1.6501	1.06675
SC30	1445	1.00	5.00	1.5240	1.02825
SC31	1445	1.00	5.00	1.8131	1.03590
SC32	1445	1.00	5.00	1.7939	1.05939
Valid N (listwise)	1445				

#### **APPENDIX G**

Mean Rating on the Extent SMEs Managers Utilize e-Advertising in their Operations in South-Eastern Nigeria.

	Ν	Minimu m	Maximu m	Mean	Std. Deviation
SD33	1445	1.00	5.00	1.9155	1.01756
SD34	1445	1.00	5.00	2.2640	.98300
SD35	1445	1.00	5.00	2.1813	.99225
SD36	1445	1.00	5.00	2.0725	.96858
SD37	1445	1.00	5.00	1.8433	.99115
SD38	1445	1.00	5.00	2.0225	1.01257
SD39	1445	1.00	5.00	2.1433	.97707
SD40	1445	1.00	5.00	2.0606	1.04469
SD41	1445	1.00	5.00	1.5225	1.07235
SD42	1445	1.00	5.00	1.5623	1.07259
SD43	1445	1.00	5.00	1.8844	1.05948
SD44	1445	1.00	5.00	1.9810	1.05943
Valid N (listwise)	1445				

#### **APPENDIX H**

Mean Rating on the Extent SMEs Managers Utilizes e-Purchasing in their Operations in South Eastern Nigeria.

	Ν	Minimu m	Maximu m	Mean	Std. Deviation
SE45	1445	1.00	5.00	2.0138	1.14725
SE46	1445	1.00	5.00	2.2630	1.14528
SE47	1445	1.00	5.00	2.1846	1.13184
SE48	1445	1.00	5.00	2.0733	1.14781
SE49	1445	1.00	5.00	2.0509	1.13503
SE50	1445	1.00	5.00	2.0232	1.16483
SE51	1445	1.00	5.00	2.1436	1.13872
SE52	1445	1.00	5.00	2.0609	1.15019
SE53	1445	1.00	5.00	1.9246	1.15521
SE54	1445	1.00	5.00	1.5632	1.16780
SE55	1445	1.00	5.00	2.0843	1.18382
SE56	1445	1.00	5.00	1.9825	1.20104
Valid N (listwise)	1445				

### **APPENDIX I**

Mean Ratings on the Extent SMEs Managers Utilize e-Marketing Software in their Operations.

	Ν	Minimu m	Maximu m	Mean	Std. Deviation
SF57	1445	1.00	5.00	2.3495	1.08455
SF58	1445	1.00	5.00	2.3149	1.05648

SF59	1445	1.00	5.00	2.3495	1.03889
SF60	1445	1.00	5.00	2.3322	1.05281
SF61	1445	1.00	5.00	2.3183	1.06035
SF62	1445	1.00	5.00	2.3149	1.06302
SF63	1445	1.00	5.00	2.2907	1.08117
SF64	1445	1.00	5.00	2.3183	1.10513
SF65	1445	1.00	4.00	2.3045	1.06766
SF66	1445	1.00	4.00	2.3010	1.07026
SF67	1445	1.00	4.00	2.3045	1.07413
SF68	1445	1.00	4.00	2.2976	1.06637
SF69	1445	1.00	5.00	2.2768	1.10064
SF70	1445	1.00	4.00	2.2630	1.07221
SF71	1445	1.00	4.00	2.2664	1.07619
SF72	1445	1.00	4.00	2.2837	1.06039
SF73	1445	1.00	4.00	2.2837	1.06039
SF74	1445	1.00	5.00	2.2976	1.08568
SF75	1445	1.00	5.00	2.2768	1.10064
SF76	1445	1.00	5.00	2.2664	1.11724
Valid N (listwise)	1445				

#### **APPENDIX J**

# The z-test on the Mean Ratings of SMEs Managers Extent of Utilization of e-Commerce in their Operation Based on their Gender.

	GENDER	Ν	Mean	Std. Deviation
TOTALS B	MALE	990	54.6566	22.76830
D	FEMALE	455	63.5165	24.54851
TOTALS	MALE	990	33.1061	12.10436
С	FEMALE	455	35.6044	13.41795
TOTALS	MALE	990	29.7828	11.96635
D	FEMALE	455	31.9780	11.31739
TOTALS E	MALE	990	30.8182	13.32897
	FEMALE	455	36.2418	12.51637
TOTALS F	MALE	990	44.5707	20.71967
Г	FEMALE	455	49.1429	21.55291

#### **Group Statistics**

z-test for Equality of Means

		Z	Df	Mean Difference
TOTALS B	Equal variances assumed	-6.701	1443	-8.85992
TOTALS C	Equal variances assumed	-3.520	1443	-2.49833
TOTALS D	Equal variances assumed	-3.294	1443	-2.19519
TOTALS E	Equal variances assumed	-7.322	1443	-5.42358
TOTALS F	Equal variances Sassumed	-3.847	1443	-4.57215

#### APPENDIX K

The z-test on the Mean Ratings of Male and Female SMEs Managers Extent of Utilization of e-Invoicing in their Operations Based on their Educational Qualifications.

#### **Group Statistics**

	EDUCATIONALQUA LIFICATION	Ν	Mean	Std. Deviation
TOTALS B	OND/NCE AND BELOW	540	52.6852	23.97651
	HND/1ST DEGREE AND ABOVE	905	60.2873	23.07537

TOTALS C	OND/NCE AND BELOW	540	31.7315	13.17120
	HND/1ST DEGREE AND ABOVE	905	35.1823	12.04044
TOTALS D	OND/NCE AND BELOW	540	27.8426	12.73766
	HND/1ST DEGREE AND ABOVE	905	32.0442	10.92251
TOTALS E	OND/NCE AND BELOW	540	29.8426	13.18075
	HND/1ST DEGREE AND ABOVE	905	34.1271	13.14278
TOTALS F	OND/NCE AND BELOW	540	41.1852	18.07075
	HND/1ST DEGREE AND ABOVE	905	48.8895	22.20951

z-test for Equality of Means		
Z	Df	Mean Difference

TOTALS B	Equal variances assumed	-5.970	1443	-7.60211
TOTALS C	Equal variances assumed	-5.087	1443	-3.45084
TOTALS D	Equal variances assumed	-6.642	1443	-4.20161
TOTALS E	Equal variances assumed	-5.989	1443	-4.28448
TOTALS F	Equal variances assumed	-6.825	1443	-7.70432

#### APPENDIX L

The z-test on the Mean Ratings of SMEs Managers with Computer Skills and Managers without Computer Skills on the Extent they Utilize e-Advertising in their Operations in South Eastern Nigeria Based on their Level of Computer Literacy.

	KNOWLEDGE OF COMPUTER	Ν	Mean	Std. Deviation
TOTALS B	COMPUTER LITERATE	1350	58.3593	23.21334
	NOT COMPUTER LITERATE	95	44.4737	26.64257
TOTALS C	COMPUTER LITERATE	1350	34.4407	12.30580
	NOT COMPUTER LITERATE	95	26.1053	13.89128
TOTALS D	COMPUTER LITERATE	1350	30.9296	11.40300
	NOT COMPUTER LITERATE	95	24.0000	15.15873
TOTALS E	COMPUTER LITERATE	1350	32.9704	13.16004

#### **Group Statistics**

	NOT COMPUTER LITERATE	95	26.2105	13.95883
TOTALS F	COMPUTER LITERATE	1350	46.3593	20.76378
	NOT COMPUTER LITERATE	95	41.0526	24.81736

		z-test for Equality of Means		
		Z	Df	Mean Difference
TOTALS B	Equal variances assumed	5.578	1443	13.88558
TOTALS C	Equal variances assumed	6.325	1443	8.33548
TOTALS D	Equal variances assumed	5.587	1443	6.92963
TOTALS E	Equal variances assumed	4.820	1443	6.75984
TOTALS F	Equal variances assumed	2.375	1443	5.30663

#### **APPENDIX M**

The z-test on the Mean Ratings of Male and Female SMEs Managers on the Extent they Utilize e-Purchasing in their Operations in South Eastern Nigeria Based on their Years of Experience.

	YEAROFEXPERI ENCE	Ν	Mean	Std. Deviation
TOTALS B	1 - 5YEARS	725	53.6345	23.54988
	6YEARS AND ABOVE	720	61.2847	23.23271
TOTALS C	1 - 5YEARS	725	32.9448	13.12697
	6YEARS AND ABOVE	720	34.8472	11.94116
TOTALS D	1 - 5YEARS	725	30.9310	12.48129
	6YEARS AND ABOVE	720	30.0139	11.07440

#### **Group Statistics**

TOTALS E	1 - 5YEARS		31.5310	
	6YEARS AND ABOVE	720	33.5278	13.02557
TOTALS F	1 - 5YEARS	725	45.0345	19.84867
	6YEARS AND ABOVE	720	46.9931	22.23202

	-	z-test for Equality of Means		
		Z	Df	Mean Difference
TOTALS B	Equal variances assumed	-6.216	1443	-7.65024
TOTALS C	Equal variances assumed	-2.881	1443	-1.90239
TOTALS D	Equal variances assumed	1.477	1443	.91715
TOTALS E	Equal variances assumed	-2.857	1443	-1.99674
TOTALS F	Equal variances assumed	-1.767	1443	-1.95857