



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

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ABSTRACT

This study was undertaken to determine the extent of utilization of e-commerce by Soft Drink Manufacturing Company in Anambra and Enugu States of Nigeria. Three research questions and three null hypotheses guided the study. The study adopted a survey research design. Three components of e-commerce were studied. The population of the study is comprised 296 employees of the Soft Drink Manufacturing Companies from the two States. No sample was taken due to the manageable size of the population. A structured 43- item questionnaire with five response categories on the degree of utilization was used as instrument for data collection. The internal consistency of the questionnaire items was determined using Cronbach Alpha reliability method which yielded .50, .82 and .78 for the three clusters respectively while the overall reliability coefficient of the instrument was .71. Copies of the questionnaires returned were 280 constituting 95 percent of the targeted population. Mean and standard deviation were used to answer the research questions. The three null hypotheses were tested using Analysis of Variance (ANOVA) statistic as they involved more than two groups in each case at 0.05 level of significance. The result of the study revealed that while router component of e-commerce was moderately utilized, the two other components of e-commerce were found to be utilized at low extent leaving a far reaching implications for marketing education and Soft Drink Manufacturing Companies in Nigeria. The result of the null hypotheses showed that there was significant differences in the mean ratings of the opinions of Marketing Managers, Sales Managers, IT Managers, Accounts Managers and Sales Representatives on the extent of utilization of Transaction Server, Internet Communication Line, and Router components of e-commerce. It was recommended among others that educational institutions offering marketing education should urgently review their curriculum contents to fall in line with current global practices. This will help Lecturers to teach properly and the graduates to acquire the right knowledge and skills.

INTRODUCTION

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

Electronic commerce, according to Nanekaran (2013), is the conducting of business communication and transactions over networks and through computers. This is in line with the views of Boamah and Kwaku (2011) which defined e-commerce as the buying and selling of goods and services and transfer of funds through digital communication. Chaffey (2009) added that e-commerce is all electronically mediated information exchanges between an organization and its external stakeholders. Osuala (2009) argued that many business leaders might think of e-commerce simply as the exchange of goods and services for payment over the Internet. The author argued that e-commerce in its broadest sense, encompasses any commercial activity that takes place directly between a business, its partners or its customers through a combination of computing and communication technologies. E-commerce has become the most popular application in marketing, earning large revenues and forging a rapid growth in related technology. Companies are now adopting social computing technologies that were designed for individual use (such as blogs, wikis, file sharing and social networks) to increase the effectiveness and efficiency of their operations (Turban, King, Lee and Chung, 2008). Today, the ever-changing manufacturing company is more global than ever.

E-commerce is an innovation in Information and Communication Technology that is changing the way marketing is being conducted globally and is a driving force of the current globalization by ensuring that marketing activities take place with minimum barrier in terms of location and time. E-commerce is conventionally divided into different domains such as Business to Business (B2B), Business to Consumer (B2C), Consumer to Business (C2B) and Consumer to Consumer (C2C) e-commerce (Okeke-Ezeanyanwu, 2017). Business to Business Electronic Commerce is the use of Information and Communication Technology to facilitate payment management, inventory management and distribution management between business organizations. Business to Consumer Electronic Commerce on the other hand, involves online selling of goods to the final consumers. Consumer to Consumer e-commerce involves the online exchange of goods and services and information among consumers. E-commerce usually takes place at B2B although individuals who are organizing events like burial ceremonies, naming ceremonies, parties etc engage in e-commerce by ordering for products online and the products

are delivered to them. E-commerce activities are carried out in organizations with the help of e-commerce technical components (Vaithianathan, 2010). E-commerce technical components include Client or PC Workstation, Transaction Server, Internet Communication Line, Database and Database Server, Web Server and Router (Osuala, 2009 and Agomuo, 2005). This study was centered on Transaction Server, Internet Communication line and Router components.

Transaction Server is a software component for e-commerce that is used in implementing business transactions. It includes e-mail, LinkedIn, Facebook etc (Osuala, 2009). The duty of transaction server is to process business transactions according to the business transaction rules established by the organization. The Transaction Server processes business transactions and is usually done using the Internet Communication Line.

Internet communication line is an e-commerce component that enables organizations to communicate with their customers and other business partners. It is a system for linking computers around the world (Perrault and McCarthy, 2005). Internet is an enabling technology that helps an organization to exchange information with its business partners and customers. The Internet transmit data to another organization via the router. A router is a device that forwards data packets (units of information) from one network address in each transmission and make a decision on how to send it based on the most expedient route determined by traffic load, line cost, speed and bad lines (Trepper, 2000). Many organizations utilize these e-commerce components since the race for survival in business in this digital age is defined by the effective and efficient utilization of e-commerce components (Oborah, 2011).

Utilization connotes the use of an item, idea or object to solve a problem or to achieve an objective. To utilize, is to find a use for something (Okongwu, 2014). The utilization of e-commerce components has brought a new trend in the concept of marketing. Global marketing realities indicate that the extent of utilization of e-commerce determines successful marketing in today's internet-driven marketing environment. The failure of organizations to embrace e-commerce could result to lack of business expansions, poor revenue generation, inability to create more jobs for the unemployed and above all closure of businesses like Nigeria Mineral Water Onitsha (Oborah, 2011 and Iddris, 2012). E-commerce is utilized by soft drink manufacturing companies.

Soft Drink Manufacturing Companies are those companies that manufacture soft drinks or beverages without alcoholic content. Soft drink manufacturing companies in Nigeria include: Seven-up Bottling Company Nigeria Plc, Nigeria Breweries Plc, Nigeria Bottling Company Limited, and Intafact Beverages Nigeria Limited. The products of the companies include Maltina, Amstel Malta, Guinness malt, Malta gold, Grand malt, Coke, Sprite, Mirinda, Fanta, Schweppes Bitter lemon, Savanna Apple drink, Pepsi, Soda Water, Maltex, Beta Malt, Mountain Dew and Five Alive. Many of these soft drink manufacturing companies are located in Enugu and Anambra States. These companies may utilize e-commerce in marketing of their products through different categories of employees. For the purpose of this study, these employees include Marketing Managers, Sales Managers, Information Technology (IT) Managers, Accounts Managers and Sales Representatives.

A preliminary study was carried out by the researcher to determine whether e-commerce is in use in the Soft Drink Manufacturing Companies in the two states. The study revealed that

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

Statement of the Problem

E-commerce is one of the innovations which have brought fundamental changes in the traditional market and marketing. E-commerce affects every aspect of how business is conducted. E-commerce is redefining the business landscape as it offers a new paradigm to businesses, thus having the potential of enriching a business venture and creating business values. E-commerce enhances global reach, reduces cost of operation, increases sales and improves supply chain, and customer service relationship. These potentials have become strong motivations for the utilization of e-commerce by organizations all over the world.

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

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

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

Again, it has been observed that some customers still place order and make payments for soft drinks through sales representatives instead of using bank channels and electronic platforms, and this most often make the companies to experience loss of revenue as the Sales Representatives at times divert the fund and end up giving excuses to the customers that the

products are not available at the time of request. These funds are delayed before they are paid into the organization's accounts or at times are totally mismanaged or not accounted for thus leading to the loss of revenue. The products are sometimes delayed before they are supplied, thus, making their marketing operations to be ineffective and inefficient and losing global profitability. These products most times are lost while on transit resulting to colossal loss. Based on the above stated facts, this study therefore, was aimed at determining the extent of utilization of e-commerce by soft drink manufacturing companies in Anambra and Enugu States.

Purpose of the Study

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

1. transaction server is utilized by soft drink manufacturing companies in Anambra and Enugu States;
2. internet communication line is utilized by soft drink Manufacturing companies in Anambra and Enugu States;
3. router is utilized by soft drink manufacturing companies in Anambra and Enugu States.

Research Questions

The study answered the following research questions:

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

Hypotheses

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

- H₀₁:** There is no significant difference among the mean ratings of Marketing Managers, Sales Managers, IT Managers, Accounts Managers and Sales Representatives on the extent of utilization of transaction server by Soft Drink Manufacturing Companies in Anambra and Enugu States.
- H₀₂:** There is no significant difference among the mean ratings of Marketing Managers, Sales Managers, IT Managers, Accounts Managers and Sales Representatives on the extent of utilization of internet communication line by Soft Drink Manufacturing Companies in Anambra and Enugu States.
- H₀₃:** There is no significant difference among the mean ratings of Marketing Managers, Sales Managers, IT Managers, Accounts Managers and Sales Representatives on the extent of utilization of Router by Soft Drink Manufacturing Companies in Anambra and Enugu States.

MATERIALS AND METHOD

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

The population for this study was 296 staff of Soft Drink Manufacturing Companies in Anambra and Enugu States. This population consists of 17 Marketing Managers, 21 Sales Managers, 7 IT Managers, 6 Accounts Managers and 245 Sales Representatives. The population is further composed of 182 respondents in Anambra State and 114 respondents in Enugu State. No sample was taken owing to the manageable size of the population. Hence, the entire population of 296 was studied.

A structured questionnaire titled “E-commerce Questionnaire for Soft Drink Manufacturing Companies (EQSDMC)” was used for the study. The Questionnaire items were developed in line with each of the research questions. The structured questionnaire was developed from the literature reviewed by the researcher. The questionnaire is divided into two parts. Part one contained 5 items that sought information on personal data of the respondents. Part two contained sections A, B, and C with 43 items. Section A contained 11 items (1-11) designed to determine the extent to which soft drink manufacturing companies utilize transaction server in their business operations in Anambra and Enugu States. Section B comprised of 24 items (12-35) designed to determine the extent to which soft drink manufacturing companies utilize internet communication line in their business operations in Anambra and Enugu States. Section C contains 8 (36-43) items designed to determine the extent to which soft drink manufacturing companies utilize router in their business operations in Anambra and Enugu States.

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

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

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

Data generated from the questionnaire were analyzed using mean, standard deviation and analysis of variance (ANOVA). The analyses were done with Statistical Package for the Social Sciences (SPSS) in order to ensure that precision is attained.

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

Very High Extent	=	4.50-5.00
High Extent	=	3.50-4.49
Moderate Extent	=	2.50-3.49
Low Extent	=	1.50-2.49
Very Low Extent	=	1.00-1.49

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

RESULTS

Research Question 1

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

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

Table 1:

Mean ratings and standard deviation of respondents on the extent of utilization of transaction server by Soft Drink Manufacturing Companies in Anambra and Enugu states.

(N=280)

S/NO	Item Statements	\bar{X}	SD	Remarks
1	Use of Facebook facilities for e-conversations with customers	1.16	.71	VLE
2	Using e-hubs for sales promotion purposes	4.49	.98	HE
3	Making use of e-mail, fax facilities to facilitate business transaction	2.32	.64	LE
4	Use of server to obtain information concerning customer's	1.49	.57	VLE

	records			
5	Using transaction server to validate payment made with a credit card	1.24	.54	VLE
6	Utilization of twitter to create awareness, connect customers and drive sales	1.13	.41	VLE
7	Effecting online transaction made by customers	2.30	.57	LE
8	Effecting online fund transfers and e-payments using electronic banking e.g. money transfer	2.97	.71	ME
9	Effecting automated clearing of financial instruments	1.42	.71	VLE
10	Utilizing computer for the preparation of customer utility bills.	1.59	.77	LE
11	Generating revenue from purchase and sale transactions	2.23	.82	LE
*	Overall Mean	2.03	.29	LE

Table 1 presented the mean ratings of respondents on the extent of utilization of transaction server by soft drink manufacturing companies in Anambra and Enugu states. The analysis of the Table 1 revealed that item 2 had mean rating of 4.49 implying that it was utilized to a high extent. While item 8 had mean rating of 2.97 indicating that it was utilized to a moderate extent. However, items 3, 7, 10, and 11 had mean ranging from 1.59 to 2.32 indicating low extent of utilization. On the other hand, items 1, 4, 5, 6, and 9 had their mean ranging from 1.13 to 1.49 indicating that they were utilized to a very low extent. The standard deviation of all the items ranged from 0.41 to 0.98 indicating that the respondents were not far from each other in their opinions. With an overall mean and standard deviation of 2.03 and 0.29 respectively, Table I indicated that Transaction Server was generally utilized to a low extent by Soft Drink Manufacturing Companies in Anambra and Enugu States.

Research Questions 2

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

The data used for answering this research question are presented in Table 2:

Table 2:

Mean ratings and standard deviation on the extent of utilization of Internet Communication Line by Soft Drink Manufacturing Companies in Anambra and Enugu States.
(N=280)

S/NO	Item statements	\bar{X}	SD	Remarks
1	Taking orders for products and services on the internet	1.55	.61	LE
2	Utilization of Internet Relay Chat (IRC) for discussion on internet	1.13	.43	VLE
3	Utilization of search Engines to obtain information that facilitate business operations e.g Google, yahoo	2.97	.61	ME
4	Utilization of user nets (News-Groups) for receiving and sharing news with customers.	1.09	.38	VLE

5	Utilization of FTP (File Transfer Protocol) to transfer files between B2B and C2B via the internet.	1.76	.93	LE
6	Utilization of Hosting (making information available to others on the internet)	1.09	.36	VLE
7	Utilization of mailing list (e-mail messages) forwarded to everyone on a special internet list.	1.21	.53	VLE
8	Utilization of e-catalogue to promote new products	2.47	.80	LE
9	Utilization of e-shopping cart to enhance sale of product without difficulty.	1.77	.75	LE
10	Utilization of teleconference to share ideas on business operations	1.23	.83	VLE
11	Utilization of bulletin boards for advertisement and promotions of brands product.	4.45	1.15	HE
12	Use of Electronic Data Interface (EDI) to exchange business document in a standard electronic format between company and business partners.	2.46	.93	LE
13	Use of Enterprise Portal for recording details about product components.	1.77	1.00	LE
14	Use of Electronic Auction for quick sale of products	1.29	.67	VLE
15	Use of ETF (Electronic Fund Transfer) for payment to business partners and payments by customers	3.16	.98	ME
16	Use of World Wide Web (www) to obtain and give out information.	3.06	.74	ME
17	Use of VOIP (Voice of Internet Protocol) to deliver voice communication	1.35	.82	VLE
18	Utilization of gateway to communicate between different types of network.	2.53	.85	ME
19	Use of LAN Server to link computers together within the company.	3.99	.97	HE
20	Use of e-procurement to obtain raw materials from suppliers.	3.45	.85	ME
21	Utilization of different word processing packages to enhance communication between company and customers.	1.66	1.03	LE
22	Utilization of stored information to plan call timers	2.22	1.01	LE
23	Utilization of intranet to communication within the company.	4.33	1.17	HE
24	Utilization of HTML (Hypertext Markup Language) to present a web	2.22	1.15	LE
*	Overall Mean	2.26	25	LE

In Table 2, there are 24 item statements out of which three items have mean scores of 3.99, 4.43 and 4.45 implying that they were utilized to a high extent, while five items with mean scores of 2.97, 3.16, 3.06, 2.53 and 3.45 respectively were thus adjudged to be utilized to a moderate extent. Nine of the items (items 1, 5, 8, 9, 12, 13, 21, 22 and 24) have their mean scores range from 1.55 to 2.47 implying that they were utilized to a low extent. The remaining seven items on the Table have their mean scores as 1.13, 1.09, 1.09, 1.21, 1.23, 1.29 and 1.35, respectively, which showed that they were utilized to a very low extent. The overall mean of

2.26 implied that all the items in the cluster were generally utilized to a low extent. The standard deviation of all the items ranged from .36 to 1.17 indicating that the respondents were not too far apart in their opinions.

Research Question 3

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

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

Table 3

Mean ratings and standard deviation on the extent of utilization of Router by Soft Drink Manufacturing Companies in Anambra and Enugu States. (N = 280)

S/No	Item Statement	\bar{X}	SD	Remarks
1	Use of Router to establish network connections for business operations	3.21	.99	ME
2	Forwarding of data packet across computer network	3.13	.88	ME
3	Use of Border Gateway Protocol (BGP) to establish link to computers in different offices	2.78	.77	ME
4	Use of Access Servers or gateways to establish network to link the server	2.74	.82	ME
5	Connection of multiple networks to facilitate business operation	2.64	1.12	ME
6	Use of Tail drop to manage congestion when packets arrive at a rate higher than the router can process	3.37	1.63	ME
7	Use of internet banner advert for advertisement of product and publicity of business operations	2.67	1.79	ME
8	Use of video conference by the company and customers to communicate ideas for wider audience	1.50	.96	LE
*	Overall Mean	2.74	.52	ME

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

TEST OF HYPOTHESES

Null Hypothesis 1

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

The data for testing this null hypothesis 1 are presented in Table 4

Table 4

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

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

The Analysis of Variance (ANOVA) presented in Table 4 show the F-value to be 29.177 with a significance P-value of .000 which is less than 0.05. Hence, the null hypothesis was therefore rejected at 0.05 level of significance. With this result, there is a significant difference between, the mean ratings of Marketing Managers, Sales Managers, IT Managers, Account Managers and Sales Representatives on the extent of utilization of transaction server by Soft Drink Manufacturing Companies in Anambra and Enugu States.

Null Hypothesis 2

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

The data for testing this null hypothesis 2 are presented in Table 5.

Table 5

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

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

Key: Level of significance – 0.05, S - significant

The analysis of variance (ANOVA) presented in Table 5 show an F-value to be 3.574 with a p-value of .007 which is less than 0.05. Hence, the null hypothesis was therefore rejected at 0.05 level of significance. With this result, there is significant difference between the mean ratings of Marketing Managers, Sales Managers, IT Managers, Accounts Managers and Sales Representatives on the extent of utilization of Internet Communication Line by Soft Drink Manufacturing Companies in Anambra and Enugu States.

Null Hypothesis 3

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

The data for testing this null hypothesis 3 are presented in Table 6

Table 6

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

Sources of Variance	Sum of Squares	of Df	Mean squares	F	P-value	Remarks
Between groups	4.120	4	1.030			
				4.633	.001	S

Within groups	61.135	275	.222
Total	65.255	279	

The analysis of variance (ANOVA) presented in Table 6 show the F-value to be 4.633 with P-value of .001 which is less than 0.05. Hence, the null hypothesis was therefore rejected at 0.05 level of significance. With this result, there is a significant difference between the mean ratings of Marketing Managers, Sales Managers, IT Managers, Accounts Managers and Sales Representatives on the extent of utilization of router by Soft Drink Manufacturing Companies in Anambra and Enugu States.

DISCUSSION OF FINDINGS

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

From the analysis of result presented in Table 1, it was found that some items on transaction server were utilized to a very low extent. The items include: utilization of facebook facilities for e-conversation with customers, use of server to obtain information concerning customer's records, utilization of transaction server to validate payment made with a credit card, utilization of twitter to generate awareness, connect with customers and drive sales and effecting automated clearing of financial instruments. However, some other items such as utilizing e-mail, fax facilities to facilitate business transaction, effecting online transaction made by customers, utilizing computer for the preparation of customer utility bills, and generating revenue from purchase and sales transactions were utilized to a low extent. Incidentally, only one item was utilized to a high extent. This was utilizing e-hubs for sales promotion. This confirmed the view of Lee (2003) who stated that e-commerce is useful in promotional strategy. Similarly, the result of the hypothesis 1 (H_{01}) showed that there was a significant difference between the mean ratings of Marketing Managers, Sales Managers, IT Managers, Accounts Managers and Sales Representatives on the extent of utilization of transaction server by Soft Drink Manufacturing Companies in Anambra and Enugu States. The hypothesis 1 (H_{01}) was therefore rejected. This result is in line with a study carried out by Oyeleran and Adeya (2006). It was found that e-commerce is rarely used by business organizations in Nigeria. The poor utilization of transaction server by Soft Drink Manufacturing Companies could be attributed to lack of infrastructure and non possession of skills by the employees. This is in line with the view of Chime (2004) who noted that some of the new technologies are not yet being utilized in Nigeria due to lack of infrastructure and professionals to support them.

In e-commerce marketing operations, transaction server is a necessary component. It is used in implementing business transactions. This agrees with Iwundu in Nwabufu (2012) who asserted that this age is a computer age whereby technology is taking over manual, mundane and

strenuous methods of transactions. For organizations to effectively utilize e-commerce, all their business transactions must be implemented electronically. This was why in a study by Hinsin and Dadzie (2009) to ascertain the nature of contemporary marketing practices, it was found out that firms in Ghana emphasize transactional and database marketing in their marketing practices. The Ghana experience is in keeping with current global marketing realities. That only one item was highly utilized gives the hope that other identified items could be highly utilized in future. Therefore the need to stimulate marketing interest in the Nigerian marketing context along that line has become a necessity. Transaction server is often utilized to facilitate business strategy that focuses on single, "Point of Sale" (POS) transactions. Utilization of this e-commerce component is often targeted at maximizing the efficiency and volume of individual sales rather than developing a relationship with the buyer.

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

From the analysis of result presented in Table 2 which sought to determine the extent to which Soft Drink Manufacturing Companies utilize Internet Communication Line in Anambra and Enugu States, it was shown that only three items (items 11, 19 and 23) out of the 24 items in the cluster were utilized to a high extent. These were utilization of bulletin board for advertisement and promotions of brands products, use of LAN Server to link computers together within the company and utilization of internet to communicate within the company. It is not surprising that these three Internet Communication Line components were scored high as Nigerians are gradually trying to bridge the gap in communication especially in organizations. This agrees with Trepper (2000) who asserted that the core of electronic commerce is the ability to communicate over both internal network and the internet. Five items were utilized to a moderate extent while the remaining 16 items in this cluster were utilized to a low and very low extent. No item in this cluster was rated very highly utilized. Furthermore, result of null hypothesis 2 (Ho₂) presented in table 5 showed that the significant difference between the mean ratings of Marketing Managers, Sales Managers, IT Managers, Accounts Managers and Sales Representatives on the extent of utilization of Internet communication line by Soft Drink Manufacturing Companies in Anambra and Enugu States. Hypothesis 2 (Ho₂) was therefore rejected. Internet was found to be utilized to a low and very low extent in the findings is worrisome considering the importance of internet in business. Confirming low utilization of Internet, Nwabufo (2012), in his study on the extent of customers' awareness and utilization of technological innovation in the banking industry, concluded that one cogent reason for the low utilization of internet technology by bank customer is low internet awareness and connectivity in Nigeria. The close association with awareness and connectivity offers the need for internet infrastructure which facilitates network. Individuals and private organizations cannot fully develop internet infrastructure. A lot is required from the government to boost the development of internet infrastructure to enable individuals tap from such infrastructure as some companies would need V/Sat, Internet Service Protocols, etc to enable them get properly connected. Internet infrastructure remains a pivot under whichever effort any ICT development must hinge (Garvin, 2007). Despite the reality, the inadequacy of infrastructure keeps reverberating.

To buttress the place of technology in today's world, Nwabufo (2012) observed that technological advancement in the world is engulfing every aspect of the world's system. This finding is in line with the view of Oyelaran and Adeya (2006) who pointed out that Nigeria, with her vast human resources, have the potentials to be a major player and beneficiary of the internet economy but regretted that the internet economy has not been fully utilized by Nigerians. It is therefore unthinkable that this e-commerce component is utilized to a low and very low extent in an area of marketing that one can rightly say is paramount to the survival of the Nigerian people and the economy.

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

The analysis of result presented in table 3 showed that the Soft Drink Manufacturing Companies in Anambra and Enugu States utilize seven out of the eight items in the cluster to a moderate extent. These items had mean ratings ranging from 2.64 to 3.37. The items are as follows: use of Router to establish network connections for business operations, forwarding of data packet across computer network, use of Border Gateway Protocol (BGP) to establish link to computers in different offices, use of Access Servers or gateways to establish network to link the server, connection of multiple networks to facilitate business operations, use of Tail drop to manage congestion when packets arrive at a rate higher than the router can process and use of internet banner advert for advertisement of product and publicity of business operations. The remaining one item had a mean score of 1.50 and was rated as being utilize to a low extent. This implies that no item under this cluster of the study was utilized to a high extent. Furthermore, the result of null hypothesis 3 (H_{03}) presented on table 6 showed that there was significant difference between the mean ratings of Marketing Managers, Sales Managers, IT Managers, Accounts Managers and Sales Representatives on the extent of utilization of router by Soft Drink Manufacturing Companies in Anambra and Enugu States. Hypothesis 3 (H_{03}) was therefore rejected. This calls for serious concern. This findings is in line with the view of Okoro (2015) who found that core ICT facilities were available and were being utilized to a low extent. Router is required to be utilized to a high extent in order to connect different levels of marketers for the purpose of achieving an organization's marketing objective. It is also necessary for establishment and connection of multiple networks to facilitate business operations. A Router is a special communication processor used to route packets of data through different networks ensuring that the message sent gets to the correct address. It enables the practice of expanding the number of one's business or social contacts (Laudon and Laudon, 2006). Soft Drink Manufacturing Companies ineffective utilization of Router will be seriously affecting their marketing operations since it is based on the company distributing services or products through a big network of individual distributors and contractors (Quirk, 2011). Effective utilization of the router will offer Soft Drink Manufacturing Companies in Anambra and Enugu States the chance for their sales force to be compensated not only for sales they personally generate, but also for the sales of others they recruit, creating a down line of distributors and a hierarchy of multiple levels of compensation.

CONCLUSION

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

RECOMMENDATIONS

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

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

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