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EFFECT OF E – COMMERCE ON SMALL AND MEDIUM SCALE ENTERPRISES PERFORMANCE IN ABEOKUTA NORTH, OGUN STATE, NIGERIA

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Abstract

The study explores effect of e – commerce on small and medium scale enterprises performance in Abeokuta North, Ogun State, Nigeria. It specifically seeks to ascertain effect of e-commerce in terms of service operations, costs operation and communication flow on SMEs performance. The sample size of 100 was obtained using Taro Yamani’s formula. The main instrument for data collection was questionnaire along with the adoption of stratified sampling technique. Data collected were analyzed using inferential statistics. Regression statistical tool found that e-commerce adoption has significant impact on service operations, cost operation reductions and communication flow. Therefore, it was concluded that e-commerce plays a vital role in the business economy especially in small and medium scale business enterprises by reducing transaction cost, improve service operations, expand business base, better understand the needs of foreign customers, and increase income levels. Based on this, it was therefore recommended that small and medium scale enterprises (SMEs) in Nigeria should effectively and efficiently adopt and implement electronic commerce very well. This is one of the highly commendable way to boost business performance that will guarantee sustainable competitive advantage.

Introduction

One of the most important opportunities for facilitating the business and competitiveness enhancement worldwide is to apply the novel information

and communication technology (ITC). The e-commerce is one of the most important products and the result of this technology which can be a suitable opportunity for

different countries in their domestic and international exchanges (Hou, Luo, Liu, Yang and Maksimov (2015).

The e-commerce concentration is to make use of IT to provide the external activities; business processes that were once strenuous and complex become easy and more efficient. It has further enhanced the visibility of businesses and improved consumers' accessibility to goods and services being offered like never before. This development has turned the world into a 'global village' where trade can take place between two parties geographically distant from each other.

Electronic commerce has facilitated the emergence of new strategies and business models in several industries in developing countries, Nigeria inclusive. Significant changes are happening in small and medium scale enterprises, especially in terms of channel development and coordination, business scope redefinition, the development of fulfillment centre model and core processes, new ways of customer value creation, and online partnerships.

Globally, the invention and development of data technologies has improved daily living and also changed the scope and dynamics of the business world. This has made things that were once thought impossible become possible. This particular feature is known as e-commerce. Likewise, Nigeria has not been left out of growing e-commerce trends as many companies in Nigeria have capitalized on the growth of information technology to improve their visibility and accessibility. In the same vein, Nigerian Small and Medium Enterprises have been able to capitalize on e-commerce to improve their business functions and make themselves visible to consumers despite having few resources. This has made e-

commerce to be seen as a modern day 'industrial revolution'.

E-commerce involves activities that look to enable arm's length transactions between firms and individuals. In the today's world, e-commerce continues to grow with new technologies and inventions which have improved its functionality and efficiency. A major advantage that e-commerce has in contrast to a traditional business is that it can be assessed at any time and it has a worldwide reach (Chen and Zhang, 2015).

Okeke, Ezeaghaego and Oboreh (2016) opined that the e-commerce has its influence over many aspects of the world market either directly or indirectly.

According to them this has removed the limitations of the accessibility of information and ensure that it can be reached anywhere by anyone accessing the Internet. Furthermore, Kareem, Owomoyela and Oyebamiji, (2014), opined that the advent of e-commerce has opened new opportunities to retailers as it has reduced the importance of location and improved their reach to consumers that are in need of their services. Major companies in the world today have capitalized on the use of e-commerce to improve their profitability and business performance. Companies like Amazon, Alibaba and Walmart have become large corporations due to the integration of e-commerce into their business models. Therefore, they have been able to expand their market share from their local market to global markets Nigeria has also been experiencing growth in the use of e-commerce by businesses as various online businesses are growing. The rapid growth of information technology in Nigeria has boosted the activities of e-commerce. It has made it possible for people around the country to shop at the comfort of their

homes through emailing, online order, texting and calling. Major companies that have thrived on the use of e-commerce include Jumia and Konga who have been the forerunners of e-commerce in Nigeria (Okeke et al, 2016).

Furthermore, Okeke et al (2016) noted that e-commerce has also afforded opportunities to Small and Medium Scale enterprises to improve their business functions and experience rapid growth. Therefore, the adoption of e - commerce in business has enhanced productivity, encouraged greater customer participation and enabled mass customization, besides reducing costs (Okeke et al, 2016).

In fact, SMEs have experienced rapid growth due to the fact that they adopted business models that involved e-commerce. However, despite the evidence from these SMEs the adoption of e-commerce among SMEs remains low. This is concerning because according to Kareem, Owomoyela, and Oyebamiji, (2014), SMEs are vital to the development of the economy and as such, opportunities such as e-commerce that can aid their growth and development should be seized upon.

E-commerce is expected to improve SMEs operation, Performance in a form of transactional convenience, saving of time and quick transaction. The extent to which SMEs adopt e-commerce and reason for adopting worthy of research because ICT adoption by Nigeria SMEs is low because of limiting factors such as poor telecommunication infrastructure, limited ICT literacy, inability to integrate ICT into business processes, high costs of ICT equipment, incomplete government regulations for e - commerce, and a poor understanding of the dynamics of the knowledge economy Kareem, Owomoyela,

and Oyebamiji, (2014) further more little research have been conducted on E-commerce and SMEs performance in Nigeria. Thus, the focus of this research shall be effect of e – commerce on small and medium scale enterprises performance in Abeokuta North, Ogun State, Nigeria.

Empirical Framework

Taofeeq, Bello, Umar, & Ali (2020) reported that the importance of Electronic commerce (E.C) to any business cannot be undermined due to the role it plays in improving businesses be it small, medium or large enterprises of any economy. Electronic commerce has facilitated the emergence of new strategies and business models in several industries in developing countries, Nigeria inclusive. However, among many studies that have been conducted to investigate the factors that influence the adoption of e-commerce in both small and large businesses organizations, there is little or no empirical research that has examined the influence of e-commerce on business performance, especially in Kaduna Nigeria supermarkets after the technology has been implemented to the best of the researcher's knowledge.

Thus, this study aimed at examining impact of electronic commerce on business performance. Three hypotheses were formulated in a null form. Data were collected from owner/managers of SMEs in Kaduna State, Nigeria. A total of 208 returned questionnaires were analyzed.

Structural equation modeling was used to analyze the data processed on Smartpls2. Findings reveal that business to consumer, consumer to consumer and government to consumer has a positive significant relationship with SMEs performance. The study recommends that small and medium scale enterprises (SMEs)

in Nigeria should encourage more of electronic commerce (business to consumer, consumer to consumer and government to consumer). SMEs should effectively and efficiently adopt and implement electronic commerce very well.

This is one of the highly commendable ways to boost business performance that will guarantee sustainable competitive advantage. The study therefore concludes that that business to consumer, consumer to consumer and government to consumer have significant effect on SMEs performance in Kaduna state.

Anekwe, & Nwokediba (2019) explored e-commerce and performance of small and medium scale enterprises in Awka, Anambra State, Nigeria. It specifically seeks to ascertain the effect of e-commerce investment costs on SMEs growth, and also examine the effect of e-commerce security on customer retention. Descriptive survey research design was adopted for the study. The population was the 548 registered SMEs in Awka, Anambra State. The sample size of 85 was obtained using Taro Yamani's formula.

The main instrument for data collection was questionnaire. Data collected were analyzed using descriptive statistics. Regression statistical tool was further used to test the hypotheses of the study. The study found that e-commerce investment costs are not significantly related to SMEs growth in Anambra State. There is a significant relationship between e-commerce security and customer retention in Anambra State. Therefore, the study recommends that managers of SMEs should continuously research and invest in emerging e-commerce technologies and its components because they have been proven

to significantly promote SMEs growth and performance. Furthermore, SMEs should also ensure that all online transactions are done with trusted persons whose identities are not anonymous and should use secured websites as well as document receipts of every online commercial activity.

Amir, & Behroz (2018) reported that in recent decades with development of internet, the e-commerce has been recognized as an instrument for organizing the business model. In applying the e-commerce, the large firms generally face lower financial and infrastructural barriers while the small to medium enterprises face with resource limitations, particularly the financial resources in applying this tool. Hence, the main objective of this research is to investigate the effect of e-commerce on Small to Medium Enterprises (SME) performance. This research is a descriptive-correlative research. The population of this research involves all managers of SMEs in Tehran which was determined to be 373 subjects based on Kerjcie Morgan table as the sample size. The researcher administrated questionnaire was provided based on studies (Soto-Acosta et al. 2015, 2015).

The data analysis was based on structural equation modeling. In this research, the partial least square was also used. the results indicated that using the e-commerce is significantly effective on SME performance and e-commerce application is significantly effective on performance elements such a financial performance, internal process, customers, growth and learning. The relationship between e-commerce and performance and its elements was also moderated by innovation.

Okeke, Oboreh, & Ezeaghaego (2016) examined the effects of e-commerce

on the growth of small scale enterprises in Anambra State. The study became necessary following the fact that E-commerce is changing all business functional areas and their important tasks all over the world. The study reviewed relevant theoretical and empirical literatures and is anchored on two theories.

Technology, Organizational and Environmental Model (TOE model) and Resources-Based View Theory. The data used were generated from the selected small scale enterprises in Nnewi, Onitsha and Awka. The data generated were analyzed using percentage analysis while the hypotheses formulated were tested using Z-test statistics. The study found that business-to-customer (B2C) exerts significant effect on the performance of small scale enterprises.

It also revealed that E-commerce adoption has significant effect on growth of small scale enterprises. It was recommended that small scale enterprises yet to adopt e-commerce technology should do so to remain competitive in their industries.

Akanbi (2015) assessed the role of e-commerce in Nigerian Small and medium scale enterprises, a case study of Lagos State. Purposive sampling was adopted while data were collected through questionnaire from 1000 respondents that were selected randomly through a stratified random sampling technique. Both descriptive and inferential statistics were used in analyzed data. From the findings, it showed that e-payment Product such as Mobile banking, Atm, Internet and others are the tools mostly used for e-commerce by SMEs. Also, it is evident that e-commerce application has great positive impacts on SMEs performance. This paper also found that if e-commerce is fully adopted, it will bring an

increased in SMEs performance. It was recommended that seminars and conferences, mentor-mentee programs, awareness campaign and motivation and strategic partnership or alliance should be implemented to aid more adoption of e-commerce to boost the performance effectiveness of SMEs in Nigeria.

Kareem, Owomoyela, and Oyebamiji, (2014) examined the impact of e-commerce on business performance with particular reference to the selected supermarkets in Ibadan metropolis. The study sample was made up of 8 Supermarkets. Structured questionnaire designed by the researchers were used to collect data from each operator and 5 staff respectively, totaling 48 respondents. Data analysis was conducted with simple regression analysis.

The result showed that e-commerce adoption has significant impact on service operations, cost operation reductions and profit levels. It was concluded that adoption of e-commerce by Nigerian supermarkets will reduce transaction cost, improve service operations, expand business base, better understand the needs of foreign customers, and increase profit levels.

The paper recommended that the operators and staff of supermarkets should embark on more effective Information Technology (IT) training in order to further enhance their performance. And also management of supermarkets should procure quality IT gadgets that will enhance efficiency and customers' retention.

Anthony, Onwumere, and Obiamaka (2014) examined effects of electronic commerce in the light of business to business transaction. Our assessments result in the development of four propositions regarding the impact of electronic commerce on business performance. Our propositions

link the adoption of electronic commerce through information flow and speed of decision making to business performance. From these propositions, we have suggested a model of the impact of electronic commerce adoption on business performance, the benefit of the buyers, the suppliers and the customers. The model implies a mediated link between electronic commerce and business performance. It is our view that the adoption of this model will enhance business activity and its overall performance.

Methodology

Since the main goal of this research is to investigate effect of e-commerce on SMEs' performance, the research would be applied in term of goal. The study was carried out in Abeokuta North, Ogun State, Nigeria. The study area was chosen because of its precedence, geographical location and most of the small and medium scale enterprises have their headquarters situated in the study area which also stood as commercial center servicing diverse interest of the people. Both questionnaire and interviewed techniques were used for data collection from 100 respondents chosen through stratified sampling techniques.

In analyzing the data, inferential statistics was used in addition to conventional descriptive statistics such as tables, frequency distribution and percentages. The regression model specified in this study to analyze effect of e-commerce on small and medium scale enterprises performance can be expressed as follows:

$$Y = \alpha_0 + \beta_1 SO + \beta_2 CO + \beta_3 CF + \beta_4 + \mu$$

Where:

Y = Income

SO = Service Operation

CO = Cost Operation

CF = Commercial Flow

β_0 = intercept

β_1 = regression coefficient

ϵ = stochastic error term

Results and Discussion

The importance of e-commerce in achieving better performance in a global competitive environment cannot be overemphasized. Clearly, electronic commerce over the internet has offered important advantages including a more efficient way to conduct business transactions for buyers and vendors alike (Buderi, 2005). Table 1 shows regression of effect of e-commerce on small and medium scale enterprises performance. The result of regression model shows that Table 1 has coefficient of variables that were statistically significant at 1%, and 5% probability levels. The variables are: service operation, cost operation and commercial flow. Table 1 shows that service operations of e-commerce adoption by SMEs has significant impact on the income of the enterprises with (4.72) at 1% level.

This implies that e-commerce in terms of service operations has positive impact on income. This revealed that an increase in the level of service operations the greater the income to be generated. This result agrees with Alrawi, (2007) who asserted that that e-commerce have changed the way of delivering the product and consumers can have more choices than they could easily locate otherwise and transaction can be made 24 hours a day, from almost any location.

Result also revealed that e-commerce adoption in terms of cost operation by SMEs has significant impact on income with (-2.12) at 5% level. This indicates that the adoption of e-commerce in terms of cost operation by SMEs negatively correlated to income of the enterprise. This shows that the adoption of e-commerce in terms of cost operation by SMEs will reduce cost of operations. This implies that reduction in cost of operations will leads to an increase in the income to be realized by .the said enterprises. This result also conform to Allen and Fjermestad (2001) findings, that e-commerce has given new possibilities for distribution of the product and international expansion with relatively lower costs and allows lower inventories by facilitating pull-type supply chain management.

Result indicated that e-commerce adoption in terms of communication flow by SMEs has positive significant impact on the income level with (7.04) at 1% level. This means that the adoption of e-commerce adoption in terms of communication flow will improve income level tremendously. Also, e-commerce provides better access and communication with customers, which can be used for a better understanding of customer needs and finally offering a product which fully satisfy those and enables individuals to work at home and to do less traveling, resulting in less road traffic and lower air pollution (Allen and Fjermestad, 2001). At the same time, companies can expand their product line, offering additional interactive or physical services around the core product (Chaffey et al. 2000).

Table 1: Regression Analysis for Effect of e – commerce on small and medium scale enterprises performance. Dependable variable: Income

Explanatory variable	Coefficient	Std. Err.	Z	p>/z/	(95% conf.)	Interval
Service Operations	1.052632	0.2228768	4.72***	0.000	-.6101653	1.495098
Cost Operation	-1.236842	.0.2021309	-2.12**	0.000	-.8355615	1.658123
Communication Flow	1.1	0.1563256	7.04***	0.000	0.7896119	1.410388
Constant	-2	.242334	-8.25	0.000	-2.481094	-
						1.518906
Number of Obs.						
	100					
F (4, 95)	113.33					
Prob. > F	0.0000					
Pseudo R2	0.8267					

Source: Field Survey, 2021

** Significant at 5%

*** Significant at 1%

Conclusion

Based on the findings obtained this research paper examined the impact of e-commerce on SMEs performance with particular reference to Abeokuta North, Ogun State, Nigeria. The result showed that

e-commerce adoption has significant impact on service operations, cost operation reductions and communication flow. Therefore, it was concluded that e-commerce plays a vital role in the business economy especially in small and medium

scale business enterprises by reducing transaction cost, improve service operations, expand business base, better understand the needs of foreign customers, and increase income levels.

E-commerce has been identified as important tool that will assist Nigerian SMEs to acquire information about particular customer needs and foreign competitors from foreign distributors all over the world.

Recommendations

The following recommendations have been given for better and more effect of e-commerce on SMEs:

1. Managers of SMEs should continuously research and invest in emerging e-commerce technologies and its components because they have been proven to significantly promote SMEs growth and performance.
2. Managers of SMEs should also ensure that all online transactions are done with trusted persons whose identities are not anonymous and should use secured websites as well as document receipts of every online commercial activity.
3. There should be customers' privacy in order to safeguard the banking credentials and information of their customers.
4. Small and medium scale enterprises (SMEs) in Nigeria should effectively and efficiently adopt and implement electronic commerce very well. This is one of the highly commendable ways to boost business performance that will guarantee sustainable competitive advantage.

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