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IMPEDING FACTORS FOR THE ADOPTION OF E-COMMERCE BY SMALL AND MEDIUM-SIZED ENTERPRISES IN ANAMBRA STATE: ORGANIZATIONAL AND ENVIRONMENTAL CONSTRAINTS

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ABSTRACT

E-commerce adoption by SMEs in Anambra State is hindered by organizational factors like inadequate resources and environmental factors like poor infrastructure and regulatory barriers. Two research questions guided the study and two Null hypotheses were tested at 0.05 level of significance. Descriptive survey research design was adopted. The study was carried out in Anambra State of Nigeria. The population of the study was 2502 owners of registered SMEs in Anambra State. A 14-item questionnaire was used for data collection. The questionnaire was validated and to determine its reliability, a pilot study was carried out. Test on the data collected using cronbach Alpha reliability method yielded coefficient values respectively for the two sections of the instrument with the overall co-efficient value of 0.82. The data were analyzed using descriptive statistics of mean and standard deviation. The mean ratings were used to answer the two research questions while standard deviation was used to determine the closeness of the respondents. Analysis of Variance (ANOVA) was used in testing null hypotheses at a 0.05 level of significance. The findings revealed that organizational and environmental constraints militate against the utilization of e-commerce by SMEs to a high extent. Based on these findings, it can be concluded that the existence of these constraints is real and has contributed significantly to the low utilization of e-commerce by SMEs. The researcher recommended among others, that owners of SMEs should improve their knowledge of the infusion of ICT for business operation by attending conferences and seminars where utilization of ICT in business is discussed.

Keywords: Business educators, Environmental Constraints, Organizational Constraints E-commerce, Entrepreneurs.

Introduction

The world has increased in technology such that it has a serious influence on the global market. The business environment in recent times is intensely very competitive for large, medium, and small-scale enterprises. The roles of employment generation, rural development, youth empowerment, contribution to national income and growth, spread and development of adaptable technology, and regional balanced growth channel make

entrepreneurship the building block of the economy.

In another vein, the Federal Ministry of Commerce and industry in Oroka (2013) defined SMEs as firms with total investment (excluding court of the land but including capital) of up to ₦750,000 and paid employment of up to fifty persons. SMEs have been defined as business organizations set up by individuals or groups of individuals known as business operators for the main purpose of providing goods and services. The owners of SMEs are people who set up business enterprises. Thus, the owners of the SMEs oversee the management of the businesses and determine the business processes and payment platforms of the SMEs. However, the rates at which SMEs utilize electronic commerce in carrying out their business activities seem to pose a great challenge to owners of SMEs in Nigeria including Anambra State. Agwu and Murray (2015) observed that the level of e-commerce utilization among Nigerian SMEs is low. This is saddening given the enormous benefits that are attainable with the infusion of e-commerce in SMEs activities.

E-commerce is thus defined as a wide array of commercial activities carried out using computers and other ICT devices. E-commerce involves carrying out business transaction through the internet. Through e-commerce, goods and services could be traded online; funds can be sent and received electronically. Turban, King, Liang, and Turban (2010) defined e-commerce as the process of buying, selling, transferring, or exchanging products, services, and/or information via computer networks, mostly Internet and intranets. In addition, Laudon and Traver (2011) defined e-commerce as the process of conducting business transactions over the Internet for the exchange of information of value in the form of products and services as well as payments between and among organizations and individuals.

The utilization of e-commerce offers a great opportunity to SMEs to gain greater global access and reduced transaction costs. It also provides substantial benefits via improved efficiencies and raised revenues; facilitates access to potential customers and suppliers, productivity improvements, customization of products and services, and information exchange and management. The utilization of electronic commerce is important for the ongoing survival of SMEs. According to Taylor and Owusu (2012), the utilization of electronic commerce by SMEs will help to strip large firms of their competitive advantages, thus providing an opportunity to SMEs by providing cost-effective ways to market and promote their business (Senarathna, Warren, Yeoh & Salzman, 2013).

Even though e-commerce has great advantages to SMEs' operations and the economy at large, SMEs in Nigeria including Anambra State seem to be lagging in the use of e-commerce for business operations. SMEs in Anambra State are predominantly operated by business owners who have either inherited their business from their parents or other mentors of the family. Some of these business owners lack proper business management skills and seem not to be aware of the current trend of carrying out business activities. In as much

as these business owners are aware of the benefit of using e-commerce in their business transactions, they still tend to oppose its use in their business because of certain constraints. Constraints can be defined as something that limits or restricts someone or something, or control that limits or restricts someone's actions or behaviour. According to Merriam, it is something that controls what you do by keeping you within a particular limit. Examples of those constraints are; lack of technical knowledge of ICT, cost of implementation of e-commerce, and the location of their business.

Some of the SMEs are in rural areas or urban areas where there are problems of epileptic power supply (Agwu and Murray, 2015). This situation seems to affect the ability of the business to integrate e-commerce in their business operation. It has been suggested in the literature (Ajmal, 2017; Wachira, 2014) that some constraints like personality constraints, implementation constraints, organizational constraints, security constraints, environmental constraints, and technological constraints could influence SMEs utilization of e-commerce. SMEs requires e-commerce in their business operation of organizational finance and commitment.

Organizational constraints, also known as firm internal factors, are generally represented by size, management support, and enterprise resources (Yang, Chou & Liu, 2012). These factors deal with issues related to the level of SME resources, firm size management support, and commitment toward the utilization of e-commerce. As much as the size, resources, and management commitment of SMEs can influence their ability to utilize e-commerce, it is noted that security is another important constraint that can influence e-commerce utilization in SMEs (Patrick & Refiloe, 2018). The organizational constraints are connected to the external environment which is another constraint that plays an important role in the utilization of e-commerce in SMEs.

Environmental constraints are those constraints that are external to small and medium-scale enterprises. According to Vaithianathan (2010), these environmental constraints consist of competitive pressure, suppliers, government regulations, and policies. Vaithianathan (2010) added that environmental constraints have a great influence on the utilization of e-commerce in SMEs. Similar to the environmental constraints are technological constraints which can influence the utilization of e-commerce in SMEs. Technological constraints are constraints that involve the technological infrastructure required for the integration of e-commerce in SMEs. According to Ajmal (2017), technical infrastructure involves intranet, extranet, email, and all technology-related infrastructure, that are necessary for the implementation of e-commerce. The extent to which the business location of SMEs influences their utilization of e-commerce is not clear. It is against this background that the researcher sought to determine impeding factors for the adoption of e-commerce among small and medium-sized enterprises in Anambra State focusing on organizational and environmental constraints.

Statement of the Problem

E-commerce serves as a powerful business management tool for SMEs, enhancing communication and information flow with customers, facilitating the introduction of new products to the market, and enabling the discovery of potential partners. Despite the numerous potential advantages of e-commerce utilization, many entrepreneurs in Anambra State refrain from adopting e-commerce as a key business strategy, resulting in missed opportunities for improved communication, product innovation, and partner identification. Small and medium-sized business owners in Anambra State often refuse to utilize technology-enhanced tools for payment due to security and privacy concerns, opting instead for traditional methods of cash payment. This situation is worrisome considering the high number of internet users in Anambra State in particular.

Kingsley Adeyemo, David T. Isiavwe, Dorcas Adetula, Olusanmi Olamide & Owolabi Folashade (2020) reported that The Central Bank of Nigeria (CBN) initiated a cashless banking system in 2012 with the primary goal of reducing the volume of cash in circulation and promoting automated transactions. As part of measures to encourage the adoption of e-commerce, the Centre Bank of Nigeria (2017) mandated all deposit money banks to commence the enforcement of a cashless policy in all their dealings. Despite this policy, the researcher's observation reveals that SME owners and their customers often fall prey to armed robbers daily because they prefer cash payment rather than carrying out their cash business transactions online. The researcher wonders why this undesirable situation continues to persist because, through e-commerce, business transactions can be done securely from the comfort of homes or business premises, hence, a need for this study.

Purpose of the Study

The study determined the impeding factors on the utilization of e-commerce by SMEs in Anambra State. Specifically, the study determined:

1. Organizational constraints militating against the utilization of e-commerce by SMEs in Anambra State.
2. Environmental constraints militating against the utilization of e-commerce by SMEs in Anambra State.

Research Questions

The following research questions guided the study:

1. What are the organizational constraints militating against the utilization of e-commerce by SMEs in Anambra State?
2. What are the environmental constraints militating against the utilization of e-commerce by SMEs in Anambra State?

Hypotheses

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

1. There is no significant difference between the mean ratings of SMEs in rural and urban areas on the organizational constraints to the utilization of e-commerce in Anambra State.

2. There is no significant difference between the mean ratings of SMEs in rural and urban areas on the environmental constraints to the utilization of e-commerce in Anambra State.

Research Method

A descriptive survey research design was adopted. The study was carried out in Anambra State. The population of the study comprised 2,502 owners of SMEs in Anambra State who are registered with the State Ministry of Commerce, Industry, and Technology. The sample of this study comprised 750 managers of SMEs. The sample will be drawn from 2,502 registered SMEs in Anambra State using stratified random sampling. Thirty percent of small and medium-scale managers were selected from each stratum. According to Burmeister and Aitken (2012), a 30 percent sample size from a large population distribution of above 100 respondents was considered appropriate representative of the entire population. The instrument has two main sections- A and B. Section A contains two items on respondents' background information covering the size of the business and location. Section B contains a total of 22 items arranged in two clusters of B1 and B2 according to the two research questions guiding the study. The instrument was validated by three experts in the Faculty of Education, Nnamdi Azikiwe University, Awka. The reliability of the instrument was ascertained through a pilot test. The instrument was administered to 10 Small and Medium Scale Entrepreneurs in Asaba Delta State who were not included in the population of the study. The application of the Cronbach Alpha reliability method on the obtained data yielded a score of .81 for internal consistency which was deemed high for the study. The application of the Cronbach Alpha reliability method for the four clusters yielded coefficient values of .74 and .87 for clusters 1 and 2. The data collected from the respondents was analyzed using descriptive statistics such as mean and standard deviation. The mean value was used to answer the research questions while the standard deviation was used to ascertain the homogeneity or otherwise of the respondents' ratings. The item-by-item analysis was based on the real limits of numbers on a 5-point rating scale of Strongly Agree (4.50-5.00), Agree (3.50-4.49), Moderately Agree (2.50-3.49), Disagree (1.50-2.49) and Strongly Disagree (0.50- 1.49). For the hypotheses, a t-test was used to test the twelve null hypotheses at a 0.05 level of significance. Where the calculated t value is less than the critical value of t, it means that the variable does not significantly affect respondents' mean ratings and the hypothesis was not rejected. Conversely, where the calculated t value is equal to or greater than the critical t value, it means that the variable has a significant effect on the respondents' mean ratings and the hypothesis was rejected.

Research Question 1: What are the organizational constraints to the utilization of e-commerce by SMEs in Anambra State?

Table 1: Respondents Mean Ratings of the Organizational Constraints militating against the Utilization of E-commerce by Owners of SMEs

S/NO	organizational Constraints:	Small			Medium			Rural			Urban		
		X	SD	D	X	SD	D	X	SD	D	X	SD	D
1	Size of the business	3.72	0.81	A	3.55	0.81	A	3.75	0.80	A	3.70	0.85	A
2.	Financial resource level of the enterprise	3.98	0.85	A	3.86	0.83	A	3.60	0.73	A	3.86	0.76	A
3.	Technological resource capacity of the enterprise	3.83	0.83	A	3.67	0.72	A	3.89	0.78	A	3.68	0.70	A
4.	Quality of the information systems of the enterprise	3.80	0.72	A	3.72	0.73	A	3.50	0.80	A	3.72	0.87	A
5.	The management support systems of the enterprise	3.78	0.73	A	3.75	0.84	A	3.57	0.85	A	3.75	0.80	A
6.	Management commitment to e-commerce utilization for business transaction	3.88	0.85	A	3.71	0.73	A	3.75	0.74	A	3.80	0.85	A
7.	Quality of project management team	3.97	0.81	A	3.86	0.75	A	3.58	0.86	A	3.79	0.75	A
	Mean of Means	**3.85**	**0.80**	**A**	**3.73**	**0.77**	**A**	**3.66**	**0.79**	**A**	**3.76**	**0.80**	**A**

Data in Table 1 reveal that the respondents agree that all 7 listed organizational constraints militate against owners of small and medium-scale enterprises' utilization of e-commerce with mean ratings ranging between 3.50 to 3.98 according to the size and location of the business. This means that organizational constraints militate against small and medium-scale enterprises' utilization of e-commerce. The mean means scores of 3.85 for small-scale enterprises and 3.73 for medium-scale enterprises indicate that organizational constraints militate against small and medium-scale enterprises' utilization of e-commerce. This is also consistent with the mean of means scores of 3.66 for SMEs in rural areas and 3.76 for SMEs in urban areas which show agreement that organizational constraints militating against small and medium scale enterprises to the utilization of e-commerce. Standard deviation scores for all the items are within the same range which shows that the respondents are not wide apart in their mean ratings.

Research Question 2: What are the environmental constraints to the utilization of e-commerce by owners of SMEs in Anambra State?

Table 2: Respondents Mean Ratings of the Environment Constraints militating against the Utilization of E-commerce by Owners of SMEs

S/NO	Environmental Constraints:	Small			Medium			Rural			Urban		
		$\bar{X}$	SD	D	$\bar{X}$	SD	D	$\bar{X}$	SD	D	$\bar{X}$	SD	D
8.	Level of government support	4.01	0.90	A	4.08	0.91	A	3.90	0.82	A	4.17	0.82	A
9.	Electricity Supply	4.25	0.84	A	4.38	0.80	A	4.28	0.89	A	4.22	0.78	A
10.	Lack of developed Legal and regulatory system	3.95	0.87	A	3.67	0.78	A	3.82	0.85	A	3.69	0.82	A
11.	National ICT Infrastructure	4.10	0.92	A	3.89	0.73	A	3.79	0.76	A	3.88	0.79	A
12.	Pressure from customers	3.70	0.82	A	3.82	0.84	A	3.87	0.73	A	3.75	0.78	A
13.	Pressure from competitors	4.06	0.88	A	3.79	0.87	A	3.86	0.88	A	3.89	0.99	A
14.	Pressure from suppliers	3.56	0.94	A	3.90	0.83	A	3.77	0.75	A	3.87	0.89	A
	Mean of Means	**3.94**	**0.88**	**A**	**3.93**	**0.82**	**A**	**3.90**	**0.81**	**A**	**3.92**	**0.84**	**A**

Information in Table 2 reveals that the respondents agree that all 7 listed environmental constraints affect small and medium-scale enterprises' utilization of e-commerce with mean ratings ranging between 3.56 to 4.28 according to the size and location of the business. This implies that environmental constraints militate against small and medium-scale enterprises in the utilization of e-commerce. The mean of means scores of 3.94 for small-scale enterprises and 3.93 for medium-scale enterprises indicate that environmental constraints militate against small and medium-scale enterprises on the utilization of e-commerce. This is also in agreement with the mean means scores of 3.90 for SMEs in rural areas and 3.92 for SMEs in urban areas which show agreement that environmental constraints militate against small and medium-scale enterprises on the utilization of e-commerce. Standard deviation scores for all the items are within the same range which shows that the respondents are not wide apart in their mean ratings.

Testing the Null Hypotheses

Hypothesis 1: There is no significant difference between the mean ratings of SMEs in rural and urban area on the organizational constraints militating against the utilization of e-commerce in Anambra State.

Table 3: t-Test analysis of the Mean Ratings of Rural and Urban Owners of SMEs on the organizational constraints militating against the Utilization of E-commerce in Anambra State

Variable	N	Mean	SD	df	*ά*	t-cal.	t-crit.	Decision
Rural SMEs	114	3.66	0.79					
				674	0.05	0.35	1.96	Not Significant
Medium SMEs	562	3.75	0.80					

Data in Table 3 show that the calculated t-value of 0.35 at 674 degree of freedom and at 0.05 level of significance is less than the critical value of 1.96. This shows that the location of the business did not significantly influence their opinions on organizational constraints militating against the utilization of e-commerce in Anambra State. Therefore, the hypothesis is accepted.

Hypothesis 2: There is no significant difference between the mean ratings of owners of SMEs in rural and urban areas on the environmental constraints militating against the utilization of e-commerce in Anambra State.

Table 4: t-Test analysis of the Mean Ratings of Rural and Urban Owners of SMEs to the Environmental Constraints militating against the Utilization of E-commerce in Anambra State

Variable	N	Mean	SD	df	*ά*	t-cal.	t-crit.	Decision
Rural SMEs	114	3.90	0.78					
				674	0.05	0.32	1.96	Not Significant
Medium SMEs	562	3.92	0.84					

Data in Table 4 show that the calculated t-value of 0.32 at 674 degree of freedom and at 0.05 level of significance is less than the critical value of 1.96. This shows that the location of business did not significantly influence their opinions on environmental constraints militating against the utilization of e-commerce in Anambra State. Therefore, the hypothesis is accepted.

Discussion

Findings revealed that there was no significant difference between the mean ratings of small and medium-scale enterprises in rural and urban areas on the organizational constraints that militate against the utilization of e-commerce in Anambra State. This is because organizational constraints like the size of the business, financial resource level of the enterprise, technological resource capacity of the enterprise, quality of the information systems of the enterprise, the management support systems of the enterprise, management commitment to e-commerce, utilization for business transaction and quality of project management team among others were also major constraints to the utilization of e-commerce in SMEs in Anambra State. This is in line with Makame, Kang and Park (2014) who found no significant difference in the opinion of

SMEs in rural and urban areas on the challenges to the utilization of e-commerce in SMEs. It therefore becomes pertinent that measures are advanced for mitigating the effect of these constraints on the use of e-commerce in SMEs in Anambra State.

Findings revealed that there was no significant difference between the mean ratings of owners of small and medium-scale enterprises in rural and urban areas on the environmental constraints that militate against the utilization of e-commerce in Anambra State. This means that constraints like the level of government support, electricity supply, lack of developed legal and regulatory system, national ICT infrastructure, pressure from customers, pressure from competitors, and pressure from suppliers affect the utilization of e-commerce among SMEs in Anambra State. This is in line with Kazungu, Panga, and Mchopa (2015) who found no significant difference in the opinion of SMEs in rural and urban areas on the challenges to the utilization of e-commerce in SMEs. It therefore becomes pertinent that measures are advanced for mitigating the effect of these environmental constraints on the use of e-commerce in SMEs in Anambra State.

Conclusion

Based on the findings of this study, it was concluded that organizational and environmental constraints militate against the utilization of e-commerce by small and medium-scale enterprises in Anambra State. In addition to that, it can be concluded that the existence of these constraints is real and has contributed significantly to the low utilization of e-commerce by SMEs in Anambra State. Equally, the above-listed constraints militate against Small and Medium Scale business owners in rural and urban areas. With the Federal Government of Nigeria's Cashless policy in full effect, it is therefore imperative that efforts are made to improve on the state of e-commerce in Anambra State in particular and Nigeria in general.

Recommendations

Based on the findings of this study, the researcher proffers the following recommendations:

1. Owners of SMEs should improve on their knowledge of infusion of Information and Communication Technology for business operations by attending conferences and seminar where utilization of ICT in business is discussed.
2. SMEs can also improve on the level of their utilization of e-commerce in their business operations by contracting the services of ICT experts who would help them in implementing e-commerce in their business operations.
3. State government should also ensure the provision of steady electricity supply in rural and urban areas in the state in particular and the nation in general.
4. Efforts should be made by the State government to ensure the accessibility and availability of internet networks and ICT infrastructures in both rural and urban areas.

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