

An Analysis of the Impact of Integrating Information and Communication Technology (ICT) by Entrepreneurs in Product Marketing: A Study of SMEs in Imo State

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Abstract

The study analyzed the impact of integrating Information and Communication Technology by entrepreneurs of SMEs in marketing their products in Imo State. A cross sectional survey research design was adopted for the study. The target population was 1,760 SMEs operating in Imo State. The sample size was three hundred and twenty-five (325) respondents drawn from 10 selected sectors of SMEs across Imo State. This sample size was obtained using the Taro Yemen's formula. Out of the 325 questionnaire distributed, 261 were retrieved giving a questionnaire response rate of 80.31%. Descriptive statistics was employed to analyse data. The Pearson's product moment correlation coefficient at 0.05 level of significance was used to test the hypothesis. The findings of the study revealed that ICT has a significant impact on the product marketing strategy of SMEs in Imo state. The study concluded that when ICT as an innovative and pro-active marketing strategy is applied by entrepreneurs of various SMEs it will result in an increase in customer's patronage, increase in sales and an overall increase in profit. The study therefore recommended amongst others that; effort should be made both by the state and federal governments to train SMEs on the use of ICT and that the government should partner with network providers to provide lower cost data for businesses.

Keyword: Information and Communication Technology (ICT), Product Marketing, Entrepreneur, Small and Medium Scale Enterprises (SMEs)

Introduction

Information and Communication Technology (ICT) has become a crucial aspect of modern businesses. Within the 21st century, ICT has become the driving force and its attendant effects have been enormous. The marketing strategies adopted by entrepreneurs of small and medium scale businesses have given them the opportunity of using information and communication technology. It will suffice to say that every aspect of our daily life and business are connected to ICT. No business can survive these days without the use of ICT. The communication process and the operation of these businesses have been revolutionized by the advent of ICT. Within a very short period of time, the advent of modern technology has helped entrepreneurs in building their businesses globally. Most of these entrepreneurs today are using information and communication technology for various purposes and for this reasons the learning of ICT skills has become paramount. In most developing countries like Nigeria the government is making frantic effort to train workers, students and business men on the basic uses of computers. Such training can be

viewed in primary, secondary and tertiary institutions as it has also been integrated in their various curricula.

Most African countries including Nigeria are mostly driven by SMEs. They play a significant role in the nation's GDP and as such are characterized by high competition. These SMEs face severe competition within and outside the country with the growing level of global competition which is as a result of increase in the import of foreign goods. The survival of these SMEs is dependent on the pro-active business strategies they put in place for growth. These pro-active and innovative business strategies are necessary to enable these business compete with both local and foreign competitors within the same industry. SMEs are at the centre of strong economies and prosperous societies: they create employment and raise living standards.

The position of SMEs in the society has been identified as one of the most important catalysts in a nation's development. In Nigeria, SMEs contribute 48 percent of national GDP, account for 96 percent of businesses and 84 percent of employment. According to Umar (2010), to be a successful participant in today's globalized system, Nigeria must evaluate the history and urgently register the lesson and experiences of developed and economically successful countries of the world, and adopt some or all the processes involved. The emergence of SMEs has enabled Nigeria to diversify rather than remain on oil production which has devastating effect on the economy.

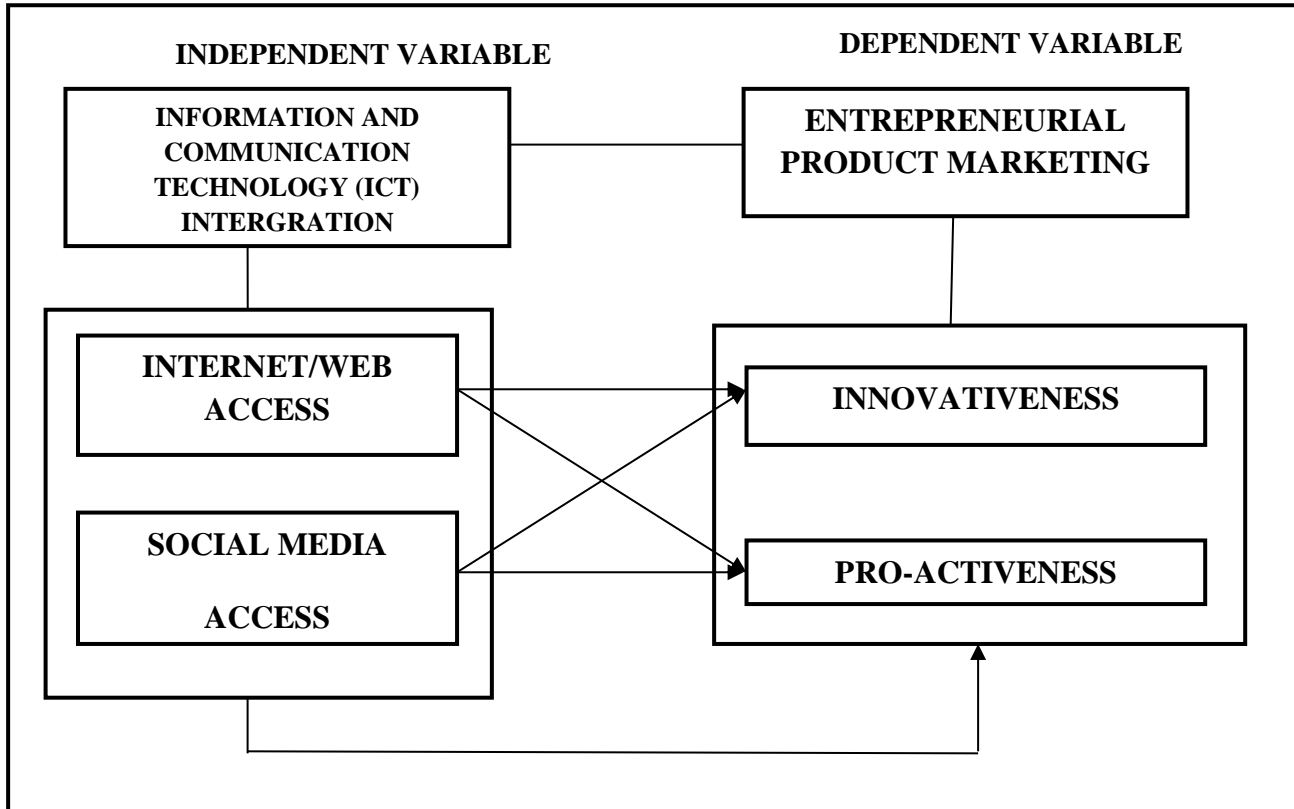
The role of information and communication technology cannot be over emphasized. It plays a very important role in helping SMEs to have edge over competitors in terms of accessibility to global markets (Zaidan, 2017). Today business world is experiencing efficiency and effective growth due to information and communication technology. Cassetta et al. (2020) stated that the rapid development of ICT which changes the existing business structures and ways of communication extremely influences competitiveness and economic growth for companies and organizations in the SMEs sector. Despite the enormous opportunities set out for businesses, the less developed countries are still facing difficulties accessing ICT. According to Asunka (2016) SMEs in developing countries still have lower ICT adoption rate with challenges compared to their counterparts in developed countries. There is a very big gap between the rate of integration of ICT in developed and developing countries. This has also led to significant developmental differences in business for both developed and developing countries. According to Okundaye (2016) developed countries have 78.3 penetration rate compared to developing countries that have 32.4 percent. This significant gap is a major challenge to the growth of small and medium scale businesses in Africa and Nigeria in particular.

Statement of the problem

Small and medium scale industries continue to be the engine of economic, political and social developments in Nigeria. They account for over 46.3 per cent of the domestic GDP, over 96.9 per cent of business enterprises, and 87.9 per cent of employment (Nigerian Tribune, 2020). Although these ventures play a vital role in supporting the largest economy and population, Nigerian SMEs fail to make a significant mark globally. Out of 1.2 million Nigerian SMEs operating in 2020, only 95,576 of them exported their products or services – a participation rate of 7.7 per cent (SMEDAN and NBS 2021 MSME Survey report). Additional insight from The Nigerian MSME report of 2022 by Kippa suggests that combined with micro businesses, SMEs account for only 6.2 per cent of gross merchandise exports. This is in contrast to India and South Africa where SMEs contribute about 40.0 and 35.0 per cent respectively. The low participation of Nigerian SMEs in the export

market, despite improvements in globalization in recent decades, highlights weak international competitiveness. There are several reasons for this down ward trend but it will suffice to say that the major problem has been the lack of integration of ICT into their businesses. Most businesses in developing world have successfully integrated ICT into their production and distribution of products. This study therefore provides an analysis of the impact of integrating ICT by SMEs in marketing their products in Imo State.

Conceptual Framework on the impact of integrating ICT by entrepreneurs in marketing their products.



The following research questions were established in this study

- i. To what extent do SMEs in Imo State adopt or utilize ICT in marketing their products?
- ii. What are the various ICTs SMEs in Imo State adopt in marketing their products?
- iii. How ICT does contribute to the marketing of products by SMEs in Imo State?
- iv. What are the challenges in the use of ICT BY SMEs in Imo State in marketing their products?

Research Hypothesis

The following research hypothesis were established

- H₀₁:** There is no significant relationship between ICT and marketing of product by SMEs in Imo State
- H₀₂:** There is no significant relationship between challenges and use of ICT by SMEs in Imo State

Conceptual Review

The concept and tools of ICT

The term ICT was defined by Target (2016) as an umbrella terminology encompassing communication devices such as the television, radio, computers, network technologies, mobile telephone technologies, hardware and software, as well as other applications associated to them. It is also defined from the point of view of information technology (IT) and communication technology (CT). IT includes different kinds of technology used for manipulation of data or information (e.g. machine and software equipment, equipment for data transfer and maintenance) (IT Standards, 2012). Entrepreneurs operating small and medium scale businesses make use of this new technology in transactions and information exchange. The advent of information technology has changed all the aspects of the world in the third millennium to a great extent and the entrepreneurship in particular. The world is fast entering the information age, which in result, is changing the way business and people communicate, transact and behave.

Information and Communication Technology contains a broad understanding of all activities related to processing, manipulation, management, transfer of information between media (Prahani & Supeno, 2012). The term ICT emerged after a mix of computer technology (both hardware and software) with communications technology in the mid-20th century.

ICT tools are divided into. Information and communication technology (ICT) has become an important part of most organizations and businesses. Information technology tools (IT) and communication tools. IT includes different kinds of technology used for manipulation of data or information (e.g. machine and software equipment, equipment for data transfer and maintenance) (IT Standards 2012). On the other hand, Communication Technology tools (CT) includes different kinds of video and audio transfer solutions (e.g. internet network, email, phones) (Education-Portal 2012). Researchers increasingly believe that investment in ICT and the existence of appropriate ICT support tools make it possible to create some kind of a knowledge repository and foundation for knowledge and learning management at different levels of human interaction (personal, community, society) (Bontis, 2002; Banker, 2003; Damien, 2005). Many business owners are now integrating different programs meant to create awareness of ICT tools which is used to increase the efficiency of their businesses and workers. Today those who do not have knowledge of ICT are considered to be living in the past or still leaving a primitive life. Almost all youngsters have basic knowledge about computer which makes it easier to teach them about ICT tools.

Concept of SMEs

Small and Medium-Scale Enterprises are generally privately owned organizations set-up for the purposes of producing goods or services for profit. The criteria for classifying business enterprises under SMEs differ from country to country (Aremu & Adeyemi, 2011). SMEDAN (2005) defines SMEs based on the following criteria: small- scale enterprises are businesses with ten to forty-nine people with an annual turnover of five to forty-nine million Naira while a medium-scale enterprise that have fifty to one hundred and ninety-nine employees with a year turnover of fifty to four hundred and ninety-nine million Naira. Nwaogwugwu and Ugiagbe (2008) stated that no matter the kind of definition given for small-scale business, the criteria are usually:

- a.** Size of paid employees
- b.** Size of capital invested including money, excluding the value of land

- c. Sales turnover usually annually
- d. Employment of machine power extended to power driven engines and use
- e. Combination of any of the above

In Nigeria, the Central Bank of Nigeria (CBN) in Aginah, Oguguo and Nwokocha (2013) defined SMEs based on asset base and number of staff employed.

Concept of Entrepreneurial Marketing

The term entrepreneurial marketing is often associated with marketing activities in small firms that have limited resources and therefore must rely on creative and unsophisticated tactics. It is also used to describe unplanned, nonlinear and visionary marketing actions taken by entrepreneurs (Morris, 2011). The term “Entrepreneurial Marketing” (EM) has come to describe the marketing activities of small and new ventures. As such, EM has developed within a vibrant and promising fresh field of research. While the analysis of marketing in new and small ventures is an important issue, given the large share of economic activities that can be attributed to these kinds of firms, we argue that EM is more than that: it can also describe marketing activities with an entrepreneurial mindset, irrespective of firm size or age. EM research might want to explore the idea that EM can be implemented regardless of firm size or age in order to broaden the scope of the field.

The notion that a firm’s primary objective is to return a profit albeit at the same time fulfilling the needs and wants of consumers in the market place is widely taught in business courses. Superior performance (i.e. profitability) can arise when a firm has a competitive advantage over other firms thus an examination of where a firm’s advantage lies has become a crucial process for firms wanting to differentiate in the marketplace. The culture of entrepreneurial firms is largely influenced by the attributes and values of the central entrepreneur and driven by their positive attitude toward risk and innovation that allows for more flexibility as they explore and exploit attractive opportunities. This innovative orientation is manifested through an intuitive market feel (i.e. sensing) where the entrepreneur comes up with a new idea first and then think about the market to which he will sell the product (Stokes, 2000). These firms drive markets by directly or indirectly influencing and “shaping” the marketplace (Jaworski et al., 2000), by removing disagreeable players; building and/or removing constraints; and creating new preferences. These activities require not only excellent knowledge and understanding of the marketplace, but also the entrepreneurial drive and determination to shape behaviours to achieve the best outcome for the focal organization (Matsuno *et al*, 2002).

Pro-activeness

It has been observed that not all businesses that start well end well. Their ability to sustain their capacity and survival is greatly influenced by managerial decisions that are proactive in nature. Lumpkin *et al* (2009) describe pro-activeness as entrepreneurial behavior where an organization steps ahead of rival competitors, being abreast of customers’ demands and market trends by continuously scanning, monitoring the trends and at the same time, taking entrepreneurial actions. When a firm act faster than its rival in providing the needs of the customer, we consider that firm to be proactive in nature. Pro-activeness and competitive aggressiveness are both strategic approaches taken by organizations in an attempt to fight hyper competition. Rauch *et al* (2009) stated that pro-activeness looks at how aggressive a firm is in taking over the market while laying emphasis on wanting to be the first among competitors to implement innovation in the industry. It was stated earlier by Ottih (2016) that entrepreneurs are venture opportunity seekers. According to this scholar, an entrepreneur does not see problems in opportunity but rather sees opportunities

in every problem and will eventually look for means to solve these problems well ahead of others. Firms that are proactive will always be the first in introducing novel product or services and act in expectation of potential demand and needs of customers. Proactive firms monitor the needs and desires of their customers and act uninterruptedly to provide such needs. According to Wiklund (1999), pro-active firms always have competitive advantage over their rival because of their ability to be one step ahead of their rivals.

Innovativeness

Innovativeness is the ability of a firm to bring in new ideas, exceptionality, experimentation and creative process which bring about new goods and services or technology method (Lumpkin & Dess, 1996). Wiklund (1999) stated that innovative firms have capabilities to monitor the market changes and respond quickly, thus capitalizing on emerging opportunities. Huse and Gabrielson (2010) have similarly stated that firms operating in turbulent environments are often characterized by rapid and frequent new production creation, new approaches and high levels of research and development to overcome the huddles. These changes in the environment motivate firms to innovate using new technologies, new products, and services in order to take advantage of the market (Huse *et al*, 2010). This view was also supported by Zain and Hassan (2007); and Drucker (2002) who established that large enterprises such as international business machines (IBM), Apple, Sonny, Hewlett Packard, Microsoft, Facebook and Google have been able to sustain high level of performance by engaging in innovation. The automotive industries have also recently strategically engaged in serious innovation to further market growth. GSM industries have also engaged in serious innovations to beat the competitive atmosphere. This is also the case with the banking industries. According to (Zehra & Garvis, 2000) when a firm innovates, it helps it to new competitive methods and technique which it uses to exploit the market to its advantage.

Methodology

The study adopted a cross-sectional survey research design to evaluate the impact of integrating ICT by small and medium scale entrepreneurs in marketing their products in Imo State. The population of the study consisted of 1760 SMEs in Imo State which are duly registered by the Corporate Affairs Commission (CAC) and are engaged in the production, commercialization and distribution of small and medium scale products. The population was obtained from the 2017 survey report of small and medium enterprise development agency of Nigeria (SMEDAN, 2017) and the National Bureau of Statistics (NBS, 2017). Based on this population a sample size of 325 was obtained for the study. The sample size was derived using the Taro-Yamene statistical formula.

This sample size was distributed among ten sectors of SMEs that were randomly selected with data collected through questionnaire. The questionnaire distribution was as follows; agriculture (51 questionnaire representing 15.69%), manufacturing (20 questionnaire representing 6.15%), accommodation and food services (49 questionnaire representing 15.08%), whole sale/retail trade (68 questionnaire representing 20.92%), transportation and storage (12 questionnaire representing 3.69%), information and communication (25 questionnaire representing 7.69%), education (50 questionnaire representing 15.38%), arts, entertainment and recreation (21 questionnaire representing 6.46%), water supply and waste management (4 questionnaire representing 1.23%), health and social services sectors (25 questionnaire representing 7.69%). This selection was

however limited to those who make use of internet/website as well as social media platforms (whatapp, facebook, twitter and instergram) for business purpose.

The questionnaire was designed using the 5 point likert scale of strongly agree (5), agree (4), undecided (3), disagree (2) and strongly disagree (1). There were 20 questionnaire items designed to answer the research questions. The questionnaire was administered on all the 325 respondents. However only 261 copies were retrieved representing a response rate of 80.31%. The response rate was above average and therefore represented the sample (Mungenda & Mugenda, 2003). Descriptive statistics was used to analyze the data while the Pearson’s Product Moments Correlation (PPMC) at 5% significance level was used to test the hypothesis.

Result of the Findings

Demographic Profile of the Respondents

The data on demography characteristics of the respondents was based on respondent’s gender, highest level of education and number of years business has existed.

Table 1: Demographic characteristics of the respondents

Issues	Frequency	Percent	Cumulative percent
Gender			
Male	189	58.15	58.15
Female	136	41.85	100
Total	325	100	
Highest level of education			
Secondary Education	62	19.07	19.07
OND/NCE	136	41.85	60.92
HND/B.Sc	95	29.23	90.15
Postgraduate	32	9.85	100
Total	325	100	
Years business has existed			
0-2	121	37.23	37.23
3-5	149	45.85	83.08
6-10	41	12.62	95.7
11 and Above	14	4.30	100
Total	325	100	

(Source: SPSS version 21)

Table 1 above represents demographic characteristics of the respondents. On Gender, 189 respondents representing 58.15% were males while 136 respondents representing 41.85% were females. This analysis shows that the small and medium scale businesses in Imo State are dominated by males. On the Highest level of education, 62 respondents representing 19.07% had secondary school education, 136 respondents representing 41.85% were OND/NCE holders. Respondents with HND/B.Sc were 95 representing 29.23% while respondents with postgraduate

level of education were 32 representing 9.85%. From the analysis, it is observed that most of the respondents are OND/NCE holders while post graduate were the least. With regards to the years the business has been in existence, 121 respondents representing 37.23% said their businesses have existed for up to 2years. Respondents whose business have existed for 3-5years were 149 and this represents 45.85%. Those whose business has existed for 6-10 years were 41 representing 12.62%. while those whose business have existed for 11 years and above were 14 representing 4.30%. From this analysis, majority of the businesses have existed for 3-5years

Reliability Test

Cronbach alpha was used to measure reliability of the questionnaire/scales that were used to gather information /data. It measured the internal consistency of the sample obtained after research survey. It was first named by (Lee Cronbach in 1951)

Cronbach alpha can be written as:

$$\alpha = \frac{N \cdot c}{v + (N-1) \cdot c}$$

Here:

N=Number of items

c = Average covariance of the items

v = Average variance of the items.

Table 2: Cronbach Alpha reliability test outcome

	No of items	Item Dropped	Cronbach Alpha	Indicator
Internet/web access	5	-	.701	High
Social media access	5	-	.692	High
Innovativeness	5	-	.780	High
Pro-activeness	5	-	.711	High
Ave			.721	High

The above table shows the Cronbach alpha and items of each independent variable, namely internet/web access and social media access while innovativeness and pro-activeness, are dependent variables. The Cronbach's coefficients alpha values for all factors that range from 0.637 to 0.794 indicated good inter-items consistency for each factor. Cronbach alpha was 0.701, 0.692, 0.780 and 0.711 for internet/web access, social media access, innovativeness and pro-activeness respectively. The overall average for the four dimensions is 0.721. Hinton *et al* (2004) have suggested four cut-off points for reliability, which includes excellent reliability (0.90 and above), high reliability (0.70-0.90), moderate reliability (0.50-0.70) and low reliability (0.50 and below).

**Analysis of the Independent Variable
Descriptive statistical outcome on internet/web access**

Table 3: Descriptive Statistical outcome on internet/web access

No	Items	SA (5)	A (4)	U (3)	D (2)	SD (1)	Mean	Std
1	Using internet provides me with sufficient information about the products I sell.	87	98	8	47	21	3.70	1.31
2	Internet access has enable me find buyers for my product	76	115	2	47	21	3.68	1.28
3	To enable me overcome the challenges of increasing customer patronage, I make use of several ICT packages such as Microsoft outlook	69	98	7	43	50	3.36	1.49
4	To enable me overcome the challenges of increasing customer patronage, I make use of several ICT packages such as Microsoft outlook	96	90	1	40	34	3.67	1.43
5	I am satisfied with the accuracy of system devices.	90	97	3	48	23	3.70	1.34

SUMMARY OF RESPONSES

Item	Strongly Agree and Agree		Undecided		Strongly Disagree and Disagree		Mean	StD
	Total	Percentage	Total	Percent age	Total	Percentage		
1	185	70.88	8	3.07	68	26.05	3.70	1.31
2	191	73.18	2	0.77	68	26.05	3.68	1.28
3	167	63.98	1	0.38	93	35.63	3.36	1.49
4	186	71.26	1	0.38	74	28.35	3.67	1.43
5	187	71.64	3	1.15	71	27.20	3.70	1.34
Ave							3.62	1.37

(Source: SPSS version 21)

Internet/web access was measured using five questionnaire items which were developed on a five point Likert scale. The item labels are shown above. Item one has a mean of 3.70, item two has a mean of 3.68, item three has a mean of 3.36, item four has a mean of 3.67 while item five has a mean of 3.70. The overall mean response (Average) for the five items was (3.62) showing that Internet/web access contributes largely to relationship between ICT and products marketing of SMEs in Imo State.

Descriptive statistical outcome on social media access

Table 4: Descriptive Statistical outcome on social media access

No	Items	SA (5)	A (4)	U (3)	D (2)	SD (1)	Mean	Std
1	Social media advertisements enable my customers to be aware of the available products I sell.	100	108	8	32	13	3.95	2.11
2	I spend more time on whatapp, facebook and intergram as a means of reaching and engaging my customers	78	110	2	50	21	3.67	1.94
3	To enable me overcome the challenges of increasing accounting, I make use of several ICT packages such as Microsoft outlook	90	91	19	37	24	3.02	2.07
4	Using the social media handles, I provide my customers with the most recent and relevant information about the latest products in the market and this has increased loyalty among my customers consumers	97	90	9	45	20	3.76	1.95
5	There has been an increasing demand from my customers since I started using social media handles for my business	70	112	7	49	23	3.60	1.39

SUMMARY OF RESPONSES

Item	Strongly Agree and Agree		Undecided		Strongly Disagree		Mean	StD
	Total	Percentage	Total	Percentage	Total	Percentage		
1	208	79.69	8	3.07	45	17.24	3.95	2.11
2	191	73.18	2	0.77	68	26.05	3.67	1.94
3	161	63.98	1	0.38	93	35.63	3.02	2.07
4	186	71.26	1	0.38	74	28.35	3.76	1.95
5	187	71.64	3	1.15	71	27.20	3.60	1.39
Ave							3.60	1.89

(Source: SPSS version 21)

Social media access was measured using five questionnaire items which were developed on a five point Likert scale. The item labels are shown above. Item one has a mean of 3.95, item two has a mean of 3.67, item three has a mean of 3.02, item four has a mean of 3.76 while item five has a mean of 3.60. The overall mean response (Average) for the five items was (3.60) showing that social media access contributes largely to relationship between ICT and products marketing of SMEs in Imo State.

Descriptive statistical outcome on pro-activeness

Table 5: Descriptive Statistical outcome on pro-activeness

No	Items	SA (5)	A (4)	U (3)	D (2)	SD (1)	Mean	Std
1	I always go ahead of my competitors in providing customers with the latest products	80	98	7	51	25	3.60	1.98
2	Most time I deliver my products to my customers personally	81	105	21	36	18	3.75	1.64
3	I strongly believe that I lead and my competitors follow	98	93	10	40	20	3.80	1.05
4	I acknowledge that to make great sales I must work extra in meeting the demands of my customers	90	99	19	30	23	3.78	1.61
5	My customers are satisfied with my method of doing business.	80	88	43	31	20	3.69	1.28

Summary of Responses

Item	Strongly Agree and Agree		Undecided		Strongly Disagree		Mean	StD
	Total	Percentage	Total	Percentage	Total	Percentage		
1	178	68.19	7	2.68	76	29.12	3.60	1.98
2	186	71.26	21	8.04	54	20.69	3.75	1.64
3	191	73.18	10	3.83	60	22.96	3.80	1.05
4	189	72.41	19	7.28	53	20.31	3.78	1.61
5	168	64.36	43	15.30	51	19.54	3.69	1.28
Ave							3.72	1.51

(Source: SPSS version 21)

Pro-activeness was measured using five questionnaire items which were developed on a five point Likert scale. The item labels are shown above. Item one has a mean of 3.60, item two has a mean of 3.75, item three has a mean of 3.80, item four has a mean of 3.78 while item five has a mean of 3.69. The overall mean response (Average) for the five items was (3.72) showing that pro-activeness contributes largely to relationship between ICT and products marketing of SMEs in Imo State.

Descriptive statistical outcome on innovativeness

Table 6: Descriptive Statistical outcome on innovativeness

No	Items	SA (5)	A (4)	U (3)	D (2)	SD (1)	Mean	Std
1	Introducing ICT in my business is an innovative way of increasing sales and profit.	88	90	15	39	29	3.65	1.63
2	I often carry out extensive online search for the most trending products as a way of keeping my customers with the latest products in town.	80	95	18	40	28	3.61	1.48
3	In most instance my customers are always the first to buy the latest products within Imo State and its environ	47	50	74	40	50	3.02	1.07
4	I also allow my customers to bring in new ideas about the products they in the market	60	42	59	51	49	3.05	1.69
5	Innovativeness is the key to my success	66	92	23	47	33	3.43	1.62

Summary of Responses

Item	Strongly Agree and Agree		Undecided		Strongly Disagree	Disagree and	Mean	StD
	Total	Percentage	Total	Percentage				
1	178	68.20	15	5.75	68	26.05	3.65	1.63
2	175	67.05	18	6.89	68	26.05	3.61	1.48
3	97	37.16	74	28.35	90	34.48	3.02	1.07
4	102	39.08	59	22.61	100	38.31	3.05	1.69
5	158	60.54	23	8.81	80	14.79	3.43	1.62
Ave							3.35	1.49

(Source: SPSS version 21)

Innovativeness was measured using five questionnaire items which were developed on a five point Likert scale. The item labels are shown above. Item one has a mean of 3.65, item two has a mean of 3.61, item three has a mean of 3.02, item four has a mean of 3.05 while item five has a mean of 3.43. The overall mean response (Average) for the five items was (3.35) showing that innovativeness contributes largely to relationship between ICT and products marketing of SMEs in Imo State.

Table 7: Descriptive statistics out come

Descriptive Statistics						
	N	Minimum	Maximum	Mean	Std	
I/WA.1	261	3.00	5.0	3.70	1.31	
I/WA.2	261	2.00	5.0	3.68	1.28	
I/WA.3	261	2.00	5.0	3.36	1.49	
IWA.4	261	2.00	5.0	3.67	1.43	
IWA.5	261	2.00	5.0	3.70	1.34	
SMA.1	261	1.00	5.0	3.95	2.11	
SMA.2	261	2.00	5.0	3.67	1.94	
SAMA.3	261	2.00	5.0	3.02	2.07	
SMA.4	261	2.00	5.0	3.76	1.95	
SAM.5	261	1.00	5.0	3.60	1.39	
Pro-A.1	261	1.00	5.0	3.60	1.98	
Pro-A.2	261	1.00	5.0	3.75	1.64	
Pro-A.3	261	1.00	5.0	3.80	1.05	
Pro-A.4	261	3.00	5.0	3.78	1.61	
Pro-A.5	261	2.00	5.0	3.69	1.28	
IN.1	261	2.00	5.0	3.65	1.63	
IN.2	261	2.00	5.0	3.61	1.48	
IN.3	261	2.00	5.0	3.02	1.07	
IN.4	261	2.00	5.0	3.05	1.69	
IN.5	261	2.00	5.0	3.43	1.62	
Valid N (listwise)	261	4.00	5.0			

CORRELATIONS /VARIABLES=CO. SV /PRINT=TWOTAIL NOSIG /MISSING=PAIRWISE

Source: SPSS version 21

Research Hypotheses

Research Hypothesis one

The following research hypothesis test were carried out;

H₁: There is no significant relationship between ICT and marketing of product by SMEs in Imo State

Table 8: ICT and marketing of products by SMEs Imo State

		ICT (Internet/web access)	Marketing (innovativeness/pro- activeness)
ICT (Internet/web access)	Pearson Correlation	1	.612**
	Sig. (2-tailed)		.001
	N	261	261
Marketing (innovativeness/pro- activeness)	Pearson Correlation	.612**	1
	Sig. (2-tailed)	.001	
	N	261	261

As shown in the Table 8 above, Pearson Product-Moment correlation was used to examine the relationship between ICT and marketing of product by SMEs in Imo State. The Pearson Product-Moment correlation test was statistically significant: $r(261) = .612$, $p < 0.05$. From the result, the null hypothesis stated is rejected and the alternative hypothesis accepted. This means that there is a significant relationship between ICT and marketing of product by SMEs in Imo State

Hypothesis two

H₂: There is no significant relationship between challenges and use of ICT by SMEs in Imo state

Table 9: Challenges and ICT usage by SMEs in Imo state

		Challenges	ICT Usage (social media access)
Challenges	Pearson Correlation	1	.732**
	Sig. (2-tailed)		.001
	N	261	261
ICT Usage (social media access)	Pearson Correlation	.732**	1
	Sig. (2-tailed)	.001	
	N	261	261

As shown in the Table 9 above Pearson Product-Moment correlation was used to examine the relationship between challenges and ICT usage by SMEs in Imo state. The Pearson Product-Moment correlation test was statistically significant: $r(261) = .732$, $p < 0.05$. From the result, the null hypothesis stated is rejected and the alternative hypothesis accepted. This means there is a significant relationship between challenges and usage of ICT by SMEs in Imo state.

Discussion of Result

ICT usage (Internet/web access) and innovative marketing of products by SMEs Imo State

The findings revealed that there was a significant relationship between ICT (internet/web access) and marketing (innovativeness) of products by SMEs in Imo State. This was validated by the fact that internet and web access enables many small and medium scale businesses to get access to relevant information that has to do with the development of their businesses. Most of the entrepreneurs are able to access information regarding new products in the market and how they can engage in modern managerial and business operational issues. The ICT tools have helped entrepreneurs to procure goods online as well as enable them to sell these goods to customers from different places through electronic means. According to the African Development Bank report (2018), there were fewer than 10 million ICT users of internet, mobile phones and personal computers in the continent 10 years ago. The number grew to over 1.5 billion in 2021. About 62% of this internet, mobile phones and computer users used these ICT tools for business purpose. The findings of this study are in line with the findings of Setiowati (2015) who investigated the influence of ICT adoption on SMEs. Their findings showed that ICT adoption and owners/managers knowledge and innovativeness influence the growth of SMEs in Indonesia. The result from the findings showed that information technology has high impact on the growth of SMEs in Imo State. All the above mentioned sources showed that ICT helps in providing the opportunity at every place and time for advertisement; increasing the overall potential of products

procurement and also gives information on the best management practice for entrepreneurs and an overall increase in the income for the industries and businesses.

ICT usage (Social media access) and pro-active marketing of products by SMEs Imo State

The world today has become so modern that almost everything is done online. Traditional pro-active marketing relied on the entrepreneur moving from one place to another informing customers and potential customers of the existence of products, but with the use of information and communication technologies (further – ICT), this can be done with the click of a button. This has facilitated the entrepreneurs means of getting access to their customers. Using ICT in business encourages collaboration and integration of businesses thus facilitating the entry of new products in the market. The findings of this study is in line with the findings of Setiowati et al. (2015) who believed using ICT as a pro-active marketing tool improves customer's retention, reduce infrastructural cost and increases sales. Social medial platforms have gain so much attention in the global business realm. Many successes in some businesses are attributed to the use of social media platforms for advertising and product search. The study of Murtaga (2008) and Adermi also believe that using ICT as a proactive marketing strategy in an organization leads to cost reduction, thereby increasing return, increasing sales and increase profit. The study of Reenen et al (2010) also established that ICT as a pro-active marketing strategy has a direct relationship to productivity. It also gives the organization a comparative advantage such as customer's satisfaction, gain market coverage and brand loyalty creation. Kiveu and Ofafa (2013) also believed one of the main problems faced by SMES is low market access and competitiveness. However, Kiveu and Ofafa still believed using ICT as a pro-active marketing strategy can solve this problem.

Challenges of ICT usage by SMEs in Imo State

With the advent of ICT, SMEs globally have been integrating different technological tools and capabilities to enable their small businesses to be competitive and stand the test of time. However, SMEs in the developing world generally and Nigeria specifically have been slow to follow the trend. Several issues have been found by various researchers in their areas of study as affecting the rate and level of adoption of ICT by SMEs. The study identified the key challenges to ICT adoption as lack of internal capabilities, high cost of ICTs, poor infrastructure, financial constraints, and lack of information about suitable ICT solutions and lack of time to implement. The findings of this study is in line with the findings of Kotelnikov (2007) who studied the level of ICT usage of SMEs in Ibadan. In their finding it was revealed that these SMEs are still in their infant stages in the adoption of ICT due to several challenges ranging from lack of infrastructure to high cost of accessing ICT. The finding is also in line with the findings of Eze et al. (2019) who studied the challenges facing SMEs in emerging ICT adoption from diverse actors' perspective. The result of their findings also identified challenges such as poor knowledge of ICT, and Time are challenges linked to SME managers. Limited ICT support, lack of specialized skills, limited funding, and general support linked to the government

Conclusion

The findings of the study have established that ICT plays a vital role for SMEs as a marketing strategy. Most of the small and medium scale businesses have experienced market accessibility, access to raw materials and products and increases in their profits margins. They are also able to advertise their products using the social media handles like facebook, whatapps and instagrams.

Most of these SMEs are now globally established and are facing and challenging their competitors. This notwithstanding, there still exist several challenges which these SMEs faced including lack of capital, poor electricity and poor infrastructure. However, many of these entrepreneurs are still making use of the available access and it is their desire that this infrastructure is improved for a better business environment. It is therefore concluded that ICT is an important variable in the growth of SMEs in Imo State and the entire Nigeria.

Recommendation

Based on the findings of the study, the following recommendations are put forth by the study

- i. There is need for the state and federal government to support Small and medium scale Enterprises in the area of knowledge management to achieve the ICT goals. This support could be in terms of education and training, developing new tools and methods for acquiring and managing knowledge of ICT.
- ii. The state and federal government should also provide ICT infrastructures like reliable internet connections and electricity with these business facilities. This will enable these small businesses to easily gain access to their customers and the global market for their products.
- iii. The government and the network providers should partner together to provide low cost ICT data for businesses. This will also enable these businesses to acquire ICT tool and use them for the growth of their businesses.

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