

The Performance implication of Technological Adoption: A study of Micro, Small and Medium Scale Enterprises (MSMEs)

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Abstract: *Most of the small businesses in Anambra state appear to still be operating in the old way; they seem not to have evolved and followed the part of companies that are making waves through technological adoption, therefore, necessitating this study to examine the potential impact of technology adoption on the performance of Micro Small and Medium Term Enterprises (MSMEs) in Anambra State, Nigeria. The study used a survey research design. The population of the study was 5874 MSMEs that are registered with the Corporate Affairs Commission Awka, Anambra State while the sample size as determined using Krejcie and Morgan's (1970) sample size determination formula was 360. The source of data for the study was through primary source and the primary source was a Likert Scale structured questionnaire. The questionnaire was validated using the combination of both face and content validity while the reliability was ascertained using the Cronbach Alpha technique and a coefficient of .849 was obtained. The analysis was done using simple regression analysis and the results showed that there is a statistically significant relationship between social media and greater customer reach and electronic customer relationship has a statistically significant relationship with quick customer response. Sequel to this, the study concluded that technological adoption has a statistically significant relationship with the performance of MSMEs in Anambra state. Hence, among others, it was recommended that MSMEs gain visibility using social media as it opens up an opportunity to a wide range of customer base, including those that are local and international to take notice of their businesses*

Keywords: Performance, Electronic Customer Relationship, Quick Customer Response, Social Media, Micro, Small and Medium Scale Enterprises (MSMEs), Anambra State, Nigeria.

INTRODUCTION

The global economy survives mostly by the activities of Micro, small, and medium-sized enterprises (MSMEs), as they play sterling roles in not just the provision of goods and services but also in employment generation. That is why the world over, the significant roles MSMEs play have been recognized. It is based on this premise that Raúl (2023) states that MSMEs have grown in importance for the economies of countries, particularly developing countries. On their part, Lamido, Bogoro and Ahmad (2022) aver that MSMEs assume a vital part in the economy of numerous nations and they are fundamental parts of the monetary advancement in Nigeria, an emerging nation in sub-Saharan Africa. They are a major source of employment, development, and commercialization of innovation and a means to grow the economy of nations (Ramdani, Raja & Kayumova, 2022).

Micro, small, and medium-sized enterprises (MSMEs) are a dynamic and relative concept since it is fluid and heavily dependent on a country's degree of development; there is no universally accepted definition of MSMEs (Aruwa & Gugong, 2017; Apulu, 2016). Differentiations in organisations at varying degrees of financial turn of events may give rise to different definitions across nations. The Department of Business, Enterprise and Regulatory Reform (BERR) (2019), for example, makes use of the definitions that are provided below: Micro firms have 0–9, Small firms have 10–49 workers, medium-sized firms have 50–249 representatives, and large firms have more than 250 representatives. According to the following models, the Small and Medium Enterprises Development Agency of Nigeria (SMEDAN) defines MSMEs as a business with fewer than 10 employees and an annual revenue of less than ₦5,000,000.00. A small business has 10–49 employees, and an annual revenue of ₦5 to 49,000,000.00; and a medium venture is a business with 50–199 employees and an annual revenue of ₦50 to 499,000,000.00 (SMEDAN, 2015).

Multinational businesses over the years seem to have understood the importance of applying and adopting technology in their programs and processes. Similarly, due to the numerous advantages technologies present to businesses, researchers, scholars and managers alike have developed a keen interest in this area, hence, the development of the concept of technology adoption in the business environment. Technology is one of the most important factors for businesses to be competitive in today's environment because it allows them to carry out their activities more efficiently and effectively (Raúl, 2023). It has provided new ways to store, process, distribute and exchange information within companies and with customers (Kollberg & Dreyer, 2006).

Technology is the knowledge/information that permits tasks to be accomplished more easily, some service to be rendered, or the production of goods (Mwangi & Kariuki 2015). Adoption describes the phase when a technology is chosen to be used by a person or business (Wallace & Sheetz 2014). The role of technology in today's business cannot be undermined as it plays a significant role in enhancing operational activities and the overall firm's performance (Ogbolu & Adelaja, 2022). It has the potential to allow MSMEs to expand their customer base, innovate products, enter into agreements with international partners, etc. (Dhungana, 2003). Hence, technology adoption is a vital gauge of the degree of growth achieved by an economy and, considering the present tendency of global

proliferation, it is an instrument for reaching the goal of enhancing performance while conserving time for businesses that adopt it (Ejemeyovwi, Osabuohien & Osabohien, 2018).

The deployment of technologies in the business operations of MSEMs helps to improve their performance in different ways. The performance of small businesses such as MSMEs may be gauged using different yardsticks, including reaching more customers, building alliances with both local and internal firms and individuals and expanding their operations and diversification. Technology could help MSMEs in Anambra state by exposing them to different markets, both local and international, it could also make them more efficient and effective and attend to customers more speedily as against what appears to be obtainable where they still depend heavily on traditional ways of operations and dealing with customers. Technology deployment enables businesses to remain competitive (Krishnaswamy, Mathirajan & Bala Subrahmanya, 2014; Khurana, et al., 2021). It helps in improving their internal processes, and their product through faster communication with their customers, and better promotion and distribution of their products and services (Afenya, Aphu, Abdul-Rahaman, Asime, Amezado & Gyan-Acquah, 2019). It helps many businesses to massively and efficiently seize opportunities in foreign markets (Zhou, Li & Lam, 2009).

The relationship between technology adoption in MSMEs and performance has been the subject of much research. For example, Kamdjoug, Chengo and Gueyie (2020) note that owner-managers are using technologies to reduce costs, improve efficiency and improve the productivity of their businesses. It provides additional support to SMEs, in many industries, to gain a competitive edge over large competitors (Awiagah, Kang & Lim, 2016a). Numerous studies have identified a multitude of benefits that small businesses can derive from adopting technology. One would have anticipated that MSMEs in Anambra state would enthusiastically embrace some form of technological advancement in their operations. Regrettably, this does not seem to be the case, as the majority of these entities continue to operate using outdated methods, with costs and expertise cited as factors discouraging their adoption of technologies. In light of this, it was necessary to investigate the impact of technological adoption on the performance of MSMEs in Anambra State, Nigeria.

Objectives of the Study

The broad objective of the study is to examine the relationship existing between technological adoption and the performance of Micro, Small and Medium-scale Enterprises (MSMEs) in Anambra State. Specifically, the study intends to:

- a) explore the nature of the relationship that exists between social media and greater customer reach among MSMEs in Anambra State, Nigeria.
- b) identify the relationship that exists between electronic customer relationships and quick customer response among MSMEs in Anambra State, Nigeria.

REVIEW OF RELATED LITERATURE

Technological Adoption

The concept of technology adoption pertains to the assimilation of novel technical inventions, tools, systems, or practices into the routine activities or operations of individuals, organisations, or societies. The process of adoption encompasses the utilisation of diverse technological components such as hardware, software, digital platforms, and novel technological approaches that facilitate the execution of tasks. The terminology is frequently employed within the realm of enterprises, however, it is applicable to any scenario involving the introduction and assimilation of technology. Ghobakhloo et al., (2012) define technology adoption in MSMEs as applying computer hardware and software solutions that provide support for operation, management and decision-making in the organization.

The adoption of technology by small businesses such as MSMEs is crucial in the contemporary business environment. They are the backbone of global economies, and technology can play a crucial role in their expansion, sustainability, and overall success. The adoption of new technologies can drive organisational innovation capability through products, processes, marketing, services and administration (Raharja & Rivani, 2022). Small business technology adoption is essential for enhancing operational efficiency, expanding market reach, enhancing customer experience, streamlining processes, remaining competitive, and nurturing innovation.

Though they lack the funding and human resource knowledge required for technology adoption, MSME owners and managers are usually aware of the potential benefits that technologies can offer to their companies. The actual ability to assign sufficient finances to enable effective and efficient adoption of technology is conditional upon these limited budgets (Ferrer Dávalos, 2021b; Olise et al., 2014). The following factors contribute to companies' failure to successfully adopt ICT: poor management understanding of ICT

adoption (Southern & Tilley, 2000; Levy, Powell & Yetton, 2001); misconceptions about the adoption process (Bull, 2003); doubts about the opportunities that ICT use will provide (Southern & Tilley, 2000); & SMEs' incapacity to create their own ICT resources (Acar, Koçak, Sey & Arditi., 2005). Furthermore, research has identified seven barriers to ICT adoption: mismatch between ICT and business, lack of ICT-savvy human resources, insufficient network infrastructure, high adoption costs, pricey software, mismatch between investment needs and costs, uncertainty surrounding ICT regulations, and mistrust of ICT security (Tan et al., 2009). Furthermore, Tan et al. (2009) clarified that SMEs shouldn't undervalue their ability to use ICT to compete in a big market. Furthermore, one of the most important factors in closing the digital divide between MSMEs and large corporations is the knowledge and skills that MSMEs' owners and employees possess, so investing in training is critical (Romero & Martinez-Roman, 2015; Wendt, Adam, Benlian, & Kraus, 2021; Buenrostro & Hernández, 2019; Ghobakhloo & Ching, 2019; Ghobakhloo et al., 2012).

Social Media

Social media encompasses digital platforms and technologies that facilitate the creation, sharing, and interaction of material and information in real-time inside virtual communities and networks. These platforms serve as mediums for facilitating online communication, networking, and the exchange of diverse forms of content, encompassing text, photographs, videos, and links. The advent of social media has significantly transformed contemporary modes of communication, facilitating widespread connectivity, information sharing, and active participation among individuals throughout the globe.

Social media has given businesses platforms to showcase their businesses to a wide spectrum of people both locally and internationally. Kumar, Ayedee and Nishu (2021) aver that social media tools provide various opportunities to small and medium enterprises for a better shopping experience, communication, and collaboration. The tools are best not only to improve visibility in the market but also to gain the trust and confidence of customers. In developed and developing countries, many customers are using social media accounts either on smartphones or laptops (Kumar, Ayedee & Nishu, 2021). The advertising and marketing communication on social media accounts better connect customers with companies on a daily basis (Kumar & Ayedee, 2018).

These social media tools provide a chance for two-way communication the organizations (Kumar, 2020). The traditional marketing channels and print media were only enhancing one-way communication between the two parties. Still, with the help of social media tools, two-way communication is possible because customers can comment and give their opinions. Small and medium enterprises can adopt the born-global approach from the time of their inception by using social media tools (Kumar, Ayedee & Nishu, 2021). The tools MSMEs can leverage for greater visibility and customer reach include Facebook, Instagram, TikTok, and Pinterest. Others are LinkedIn, YouTube, Snapchat, and X, formally known as Twitter and WhatsApp business.

Electronic Customer Relationships

Electronic Customer Relations (e-CRM), alternatively referred to as Electronic Customer Relationship Management, pertains to the utilisation of digital technology and solutions for the purpose of effectively managing and enhancing customer relationships. In the digital age, organisations apply a diverse array of tactics, practises, and technology to enhance their comprehension, interaction, and provision of services to customers. Electronic customer relationship management (E-CRM) is a crucial element of contemporary customer relationship management (CRM) systems.

The objective of e-CRM is to cater to the unique requirements of customers, hence enhancing value for both customers and enterprises (Yu, Nguyen, Han, Chen, & Li, 2015). The ability of an organisation to effectively integrate and leverage knowledge from diverse sources is contingent upon its organisational structures, procedures, and individual competencies (Khodakarami & Chan, 2014). This is supported by previous research conducted by Chen and Li (2006) as well as Da Xu (2011). Various strategies for gathering customer data, including intranets, extranets, customer knowledge discovery algorithms, web spiders, cookies, online registration, and purchasing, yield substantial volumes of data. Nevertheless, the usefulness of this data is limited in the absence of scalable approaches for its collection, analysis, processing, and comprehension (Guo, Xu, Gong, Che, & Chaudhry, 2012; Tan et al., 2014). The emergence of the E-CRM system has facilitated organisations in establishing communication with customers and effectively managing customer data by means of collection, storage, and analysis. This system aims to give organisations a holistic understanding of their client base (Romano & Fjermestad, 2003).

Chen (2014) avers that organisations are able to optimise the utilisation of collected data by converting it into valuable information and knowledge that benefits both the firms themselves and their consumers. Through the analysis of data, firms can get insights into not only purchasing habits and trends but also attitudes and preferences. The implementation of a strategy that prioritises the most significant clients through the provision of unique offers can lead to a more effective allocation of organisational resources and an increased value for both the customer and the firm (Maklan & Knox, 2009).

Performance

Performance is a multidimensional concept whose definition is contingent on the evaluative indicators employed. There is a common distinction between financial and non-financial measures, and various instruments have been utilised to assess performance. According to Kaplan and Norton (2000), the most effective performance measurement tool for an organisation is the balanced scorecard, which incorporates both financial and non-financial parameters. Kaplan and Norton (2000) assert that the parameters of measurement within the balanced scorecard have evolved. Financials, customer service, internal business processes, and learning and development are the four parameters by which organisational performance can be measured. Financial measures concentrate on the organization's net worth to its shareholders.

Performance refers to the evaluation of effectiveness and efficiency in accomplishing tasks, responsibilities, and objectives, whether at the individual, organisational, or system level, with measurements and evaluations based on pertinent criteria and benchmarks to drive continuous improvement and success. The performance of the organization reflects its ability to achieve its objectives in the long run (Schermerhorn, Osborn & Hunt as cited in Ughovero, Ogundare & Akparobi, 2021). Firm performance, therefore, is the accomplishment of giving goals by an organization, with value-added that is quantifiable. Firm performance is a collective effort by all the resources within the firm (Ogundare, Iyamabhor & Ojeh, 2023). Moreover, performance is the end result that organisations strive to achieve through the formulation of strategy and the optimal utilisation of resources in order to achieve superior organisational performance (Ughovero, Ogundare & Akparobi, 2021).

The performance of organizations such as MSMEs could be contingent on a lot of things, however, given the kind of role technology plays in recent times, it makes technology an indisputable source of performance for firms in today's world. Based on the foregoing assertion, Ogundare, Iyamabhor and Ojeh (2023) point to the fact that organisation performance depends on the successful incorporation of appropriate technology into the organisation. Thus, the adoption of information technology has affected, directly and indirectly, organizational performance (Ogundare, Iyamabhor & Ojeh, 2023).

Greater Customer Reach

Businesses of different sizes cannot operate and survive for a long time without the activities of customers. Hence, the business with the highest number of active customers stands the test of time, hence, the place of higher number of customer reach within the business survival dynamics. The ability of a company or organisation to interact with and engage a large audience of both current and potential consumers is referred to as customer reach. It includes all of the ways and means by which a business engages, communicates, and builds rapport with its intended audience. A company's capacity to create sales, increase brand awareness, and cultivate customer loyalty are all directly impacted by its customer reach, making it a crucial notion in marketing and business strategy.

A lot of effort is put toward reaching a greater number of customers, and in the recent global world, these efforts are increasingly technologically driven. George, Yanqing, Anne-Marie and Jared (2017) argue that business performance appears to improve as MSME organizations adopt technology to facilitate greater market communication and increased exposure to online shoppers. Gupta and Narain, (2012) posit that deployment of technology in SMEs is helpful in better inventory control, reducing cost and time and improving customer services and reach.

Lee, Park, Yoon and Park (2010) observed that new business models for ICT provide SMEs with access to new markets and new sources of competitive advantage. That is, with the help of technology and its platforms such as social media, businesses are exposed to a greater number of customers, and these customer bases are more online. Dhungana (2003) explains that the adoption of technology is capable of allowing SMEs to expand their customer base, innovate products, and enter into agreements with international partners.

ICT helps in the effective flow of data in organizations thereby assisting organizations to obtain information at any given time which in turn, helps these organizations to reach their desired target faster and cheaper (Apulu & Latham, 2010). Also, Swift (2009) argues that SMEs benefit from the use of technology as it connects them more easily and cheaply to external contacts. Through the use of technology infrastructures, SMEs can engage in e-commerce. Electronic commerce will aid them in increasing their efficiency in their day-to-day business operations and sustain their business growth through the opening of new market channels, and to increase the flow of information (Ongori & Migiro, 2010).

Quick Customer Response

One of the greatest hallmarks of successful businesses is Business now require quick responses to customers. Customers and clients alike are usually endeared to organizations which makes responding to them swiftly a priority. Hence, MSMEs who can do this seemingly simple but difficult task of quick response will stand the test of time.

The use of technology in businesses is one of the most common and easiest ways to respond quickly to customers' complaints and changes in demand and taste. The use of technology in the workplace improves communication among employees (Aboelmaged, 2018), enhances the quality of service provided and enhances response time (Jeong, Lee & Nagesvaran, 2016), and helps managers make appropriate decisions based on information from the proper source at the proper time (Buhalis & Leung, 2018).

The main impetus that makes businesses invest in technology is to provide services to customers that are better and faster than the competition and follow the main management strategies (Ashrafi and Murtaza, 2013). Gupta and Narain (2012) note that the deployment of technology in SMEs is helpful in better inventory control, reducing cost and time and improving customer services and response time. Pavic, Simpson and Padmore (2007) state that organizations have the opportunity to achieve a competitive advantage from the advances in ICT through innovation, marketing, efficiency gains, better quality and customer responsiveness.

Empirical Review

Adeniyi and Adeeko (2024) examined the relationship between i4.0 technology adoption and market scalability of small and medium enterprises in Southwest, Nigeria. The study adopted the descriptive research design of the survey type. Multistage sampling techniques were used to select the samples of one thousand two hundred (1,200) respondents from the owners of MSMEs in Southwest, Nigeria. A structured questionnaire was used to collect data from the respondents. Data collected were analyzed using descriptive statistics, while regression analysis was used to test the hypotheses. The findings of the study revealed that the majority of the small and medium entrepreneurs do not have an awareness of i4.0 technology in Southwest, Nigeria, the challenges identified as the problem confronting the adoption of i4.0 technology in Southwest Nigeria, which are lack of expertise about i4.0 technology, financial challenges, unstable power supply.

Arachie, Dibua and Idigo (2023) examined the role of AI in small business operations. The study adopted a descriptive design. The population of the study was 27546 small businesses that were registered under the Cooperate Affairs Commission (CAC), and a sample size of 379 was arrived at by adopting Krejcie and Morgan's 1970 sample size determination formula. The source of data was solely primary through interviews, which later formed a stepping stone for the structured questionnaire used for the study. The instrument was validated and tested for reliability. Data analysis was performed using descriptive statistics consisting of frequencies and percentages. Results revealed that most SMEs in Nigeria are still operating manually.

Bruce, Shurong, Ying, Yaqi, Amoah and Egala (2023) leveraged the theory of planned behaviour to explore the impact of digital marketing adoption on the sustainable growth of SMEs in Ghana. Using a structured questionnaire and SmartPLS version 3.3 for the data analysis, 533 owners/managers of SMEs in Ghana were drawn to administer the questionnaire. The findings suggested that, while attitudes toward digital marketing did not influence the intention to use digital marketing, perceived behaviour control and subjective norms were found to affect individuals' intentions to use digital marketing. Additionally, the results proved a direct positive link between subjective norms and actual behavioural use of digital marketing. Finally, the relationship between the actual use of digital marketing and SMEs' sustainable growth was also proven positive, affirming that digital marketing significantly improved the sustainable growth of SMEs in developing countries.

Pacho (2023) in Tanzania carried out a study that sought to understand how entrepreneurial marketing strategy decisions and social media adoption impact women's business performance during the COVID-19 pandemic. The study also examined the mediating role of the Technology Acceptance Model (TAM) on the relationships. To accomplish the study's objectives, an actual visit survey using a questionnaire and confirmatory Factor Analysis (CFA) was applied to validate the data, and the Structural equation model (SEM) was employed to test the hypotheses. The study revealed that entrepreneurial marketing strategy decisions have a positive and statistically significant direct effect on company performance. Also, there was a positive and significant direct relationship between social media adoption and the company's performance. In the mediation results, the study found that perceived usefulness mediated the relationship between entrepreneurial marketing strategies and business performance. In addition to that perceived usefulness mediates the relationship between social media adoption and business performance.

Ogbolu and Adelaja (2022) explored the significance of technology adoption among unregistered small or micro businesses in the informal economy in Nigeria. To achieve this objective, initial observations were carried out by researchers over a time period on unregistered business owners operating in an informal economy. The study adopted an interview data collection method. The findings revealed that initially, these business owners had no intention of adopting technology into their business model, however, they did. Given this, the adopted technology (simple mobile phones) gave them some unprecedented opportunities over others in terms of work flexibility and expanded customer networks via referral. Unintentionally, the interview findings also revealed that with the simple technology adopted by these informal and unregistered businesses, customers were able to make business transactions from their comfort zone and enhance their individual security consciousness.

Seclen-Luna, René and Lopez (2022) analysed the effects of the use of digital technologies on firms' net sales and productivity. The technology adoption approach was applied in empirical research using data from the National Enterprise Survey in Peru. Using the OLS method on a sample of 2,970 firms from creative and manufacturing industries in Peru, the effects of digital technologies on net sales and productivity were determined. Findings indicated that there is a positive relationship. However, these relationships can be different depending on the type of digital technology, the size of the firm and the manager's gender proportion. The study found that most of these technologies were more commonly related to creative industries than manufacturing firms. These relationships have greater statistical significance to net sales in large companies within both types of industry.

Afenya, Aphu, Abdul-Rahaman, Asime, Amezado and Gyan-Acquah (2019) used a quantitative approach to identify technology adoption and its utilization effect on the market performance of small and medium enterprises in Ghana, La-Nkwantanang municipality. The sample size taken by the researchers was 100 from the small and medium enterprises in Madina La-Nkwantanang municipality. The researchers used structured questionnaires to gather primary data which was analyzed using smart PLS and SPSS and the following results were obtained: perceived ease of use, perceived usefulness of internet technology, compatibility and cost-effectiveness are some of the factors that influence the adoption and utilization of internet technology, however, there is a positive relationship between internet technology usage and market performance.

Sulaiman, Muzamil and Shahin (2018) examined the factors that affect the adoption intensity of Green IT practices and their subsequent influence on the firm's performance in the context of a developing country, Iran. The data were collected using survey questionnaires administered online to 277 managers who handled IT adoption in companies listed on the Tehran Stock Exchange. Results obtained using structural equation modelling (SEM) reveal a positive relationship between Green IT practices with institutional pressure, Consideration for Future Consequences (CFC) and openness. A positive relationship was also found between Green IT practices and organizational performance.

METHODOLOGY

This work adopted a survey research design. This type of design is adopted because of the structure of the work which seeks to collect data from sampled respondents through the instrumentality of a questionnaire, hence, making survey design the most suitable for it. The population of the study consist of 5874 MSMEs that are registered with the Corporate Affairs Commission Awka, Anambra State. These MSMEs are drawn from the three senatorial zones of the state which are Awka, Nnewi and Onitsha. These businesses must have been in existence for at least 3 years before 2023. Onitsha has a total of 2768 MSMEs, Nnewi has 1987 and Awka has 1119 that are registered. The sample size of the study is 360, determined using Krejcie and Morgan's (1970) sample size determination formula. To determine the appropriate allocation of questionnaires to each of the senatorial zones by the proportion of the number of MSMEs they have, Bowley's allocation formula was used. The source of data for the study is wholly through primary sources. The primary source used is a questionnaire. The questionnaire was a structured questionnaire. The structure took the shape of a Likert Scaled questionnaire with a 5-point scale, ranging from strongly agree, agree, undecided, disagree and strongly disagree with scales of 5, 4, 3, 2 and 1 respectively. The data used for the study was collected through personal contact, with the assistance of 2 research assistants who were trained to do this. The instrument was validated by instrument validation experts using a combination of both face and content validity. The instrument was also tested for reliability using the Cronbach Alpha technique. 36 copies of the instrument representing 10% of the sample size were distributed, and the result obtained (.849) shows that it is reliable because the coefficient is greater than the threshold of .6. The data was analysed using descriptive statistics and inferential statistics. The descriptive statistics to be employed are mean, frequencies and tables while the inferential statistics which is geared towards testing the hypotheses took the shape of Ordinary Least Square (OLS) simple regression analysis because the study is a relational study.

DATA PRESENTATION AND ANALYSIS

Research Question One

What nature of relationship exists between social media and greater customer reach among MSMEs in Anambra State, Nigeria?

Table 1: Distribution of Responses for Social Media and Greater Customer Reach

S/N	QUESTIONNAIRE ITEMS	SA	A	UN	D	SD	Mean	Decision
Social Media								
25	I use WhatsApp to advertise my business.	57	80	-	110	92	2.71	Reject
26	I have a Facebook page for my business.	-	78	-	130	131	2.07	Reject
27	My business exists on X, formerly known as Twitter.	-	40	-	160	139	1.83	Reject
28	Customers reach me through my social media pages.	21	45	10	99	164	2.00	Reject
Greater Customer Reach								
29	More people get to know about my business from my social media pages.	13	59	48	92	127	2.23	Reject
30	I meet new customers on social media.	27	60	-	107	145	2.17	Reject
31	My business gets customers and clients from around the globe through social media.	-	60	14	130	135	2.00	Reject
32	My business customers will grow with an online presence.	129	150	34	26	-	4.13	Accept

Source: Field Survey, 2024

Table 1 shows the distribution of responses for social media and greater customer reach. The analysis here is based on the mean, with an acceptance threshold of 3 and a rejection benchmark of less than 3. Starting with measures for social media, the respondents rejected that they use WhatsApp to advertise their business as the mean obtained (2.71) is less than the benchmark of 3. They also rejected that they have a Facebook page for their business as shown by a mean of 2.07. A mean of 1.83 and 2 shows that the respondents rejected that their business exists on X, formerly known as Twitter and that customers reach them through their social media pages respectively.

On questions used to measure greater customer reach, the respondents rejected that more people get to know about their business from their social media pages as indicated by a mean of 2.23 which is lesser than the benchmark of 3. They also rejected that they meet new customers on social media with a mean of 2.17. A mean of 2.00 reveals that the respondents also disagreed that their business gets customers and clients from around the globe through social media. In contrast, however, they accepted that their business customers will grow with an online presence as shown by a mean of 4.13.

Hypotheses One

H₀₁: There is no significant relationship between social media and greater customer reach among MSMEs in Anambra State, Nigeria.

Table 2: Regression Result for Hypothesis Four

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	F	t	Sig
1	.982 ^a	.964	.964	.813	8959.190	94.653	.000

Source: Field Survey, 2024

Table 2 shows the regression analysis result carried out to test hypothesis four which states that there is no significant relationship between social media and greater customer reach among MSMEs in Anambra State, Nigeria. From the result, it is seen that the R is .982 showing a positive relationship, while the R² is .964 signifying that a 96% change in the dependent variable (greater customer reach) is accounted for by changes in the independent variable (greater customer reach). The relationship observed is statistically

significant because the P-value as indicated by the sig on the Table is .000 which is less than the .05 level of significance used. Therefore, the null hypothesis is rejected and the alternate hypothesis is accepted. Hence, it is stated that there is a statistically significant relationship between social media and greater customer reach among MSMEs in Anambra State, Nigeria

Research Question Two

What is the relationship that exists between electronic customer relationships and quick customer response among MSMEs in Anambra State, Nigeria?

Table 3: Distribution of Responses for Electronic Customer Relationship and Quick Customer Response

S/N	QUESTIONNAIRE ITEMS	SA	A	UN	D	SD	Mean	Decision
Electronic Customer Relationship								
33	Customers chat with me online to complain.	32	50	-	100	157	2.12	Reject
34	I respond to customers via social media.	-	79	-	121	139	2.06	Reject
35	My business has a dedicated online platform to respond to customers' complaints.	-	23	-	145	171	1.63	Reject
36	Having to attend to customers online is important.	100	121	-	45	73	3.38	Accept
Quick Response								
37	Online response is faster for me.	19	67	112	67	74	2.68	Reject
38	Customers will be responded to quickly if my business has online channels for it.	200	130	-	9	-	3.95	Accept
39	The complaints laid by my customers can be treated immediately online unlike the physical way of doing it.	123	121	19	76	-	3.86	Accept
40	Online treatment of customers' concerns does not differ from the physical way of doing it.	-	23	40	171	205	1.94	Reject

Source: Field Survey, 2024

Table 3 reveals the distribution of responses for electronic customer relationships and quick customer response, with the mean being the analysis technique, with a benchmark of acceptance of 3. Starting with questions measuring electronic customer relationships, when asked if customers chat with them online to complain, a mean of 2.12 which is less than 3 shows that they disagreed. They also disagreed with the question of whether they respond to customers via social media as shown by a mean of 2.06 while also rejecting that their business has a dedicated online platform to respond to customers' complaints as shown by a mean of 1.63. however, a mean of 3.38 which is greater than 3 indicates that they agreed that having to attend to customers online is important.

For questionnaire items used in measuring quick response, the respondents disagreed that online response is faster for them as shown by a mean of 2.68. A mean of 3.95 however, revealed that the respondents agreed that customers will be responded to quickly if their business has online channels for it with a mean of 3.95. In the same line of response, they also agreed that the complaints laid by their customers can be treated immediately online unlike the physical way of doing it with a mean of 3.86. On the contrary, however, the respondents disagreed that online treatment of customers' concerns does not differ from the physical way of doing it as shown by a mean of 1.94.

Hypotheses Two

Electronic customer relationship has no significant relationship with quick customer response among MSMEs in Anambra State, Nigeria.

Table 4: Regression Result for Hypothesis Two

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	F	t	Sig
1	.929 ^a	.864	.863	1.576	2136.640	46.224	.000

Source: Field Survey, 2024

Table 4 shows the regression analysis result carried out to test hypothesis five which states that electronic customer relationship has no significant relationship with quick customer response in MSMEs in Anambra State, Nigeria. From the result, it is seen that the R

is .929 showing a positive relationship, while the R^2 is .864 signifying that an 86% change in the dependent variable (quick customer response) is accounted for by changes in the independent variable (quick customer response). The relationship observed is statistically significant because the P-value as indicated by the sig on the Table is .000 which is less than the .05 level of significance used. Therefore, the null hypothesis is rejected and the alternate hypothesis is accepted. Hence, it is stated that electronic customer relationship has a statistically significant relationship with quick customer response in MSMEs in Anambra State, Nigeria.

Conclusions

Businesses in the 21st century appear not to be paying leap service to the adoption of technologies in their operations. This is more so with big businesses, and little is seen from small businesses in terms of technological adoption. It is against this backdrop that this study sought to examine how technological adoption could help in improving the performance of MSMEs in Anambra state. To achieve this goal, five specific objectives were formulated, accompanied by five research questions and hypotheses, after which data to be used in measuring the various variables in the work were collected and tested using ordinary least square regression analysis and hypotheses tested at a 5% level of significance. In the end, the study concludes that technological adoption has a statistically significant relationship with the performance of MSMEs in Anambra state because all the specific independent variables (social media and electronic customer relationship) had statistically significant relationships with all the specific dependent (greater customer reach and quick customer response).

Recommendations

Following the findings of the study, it is recommended:

- a) social media is the new norm for all kinds of businesses, including small and big businesses, therefore, ignoring leveraging on it could be suicidal for MSMEs in Anambra State. It is, therefore, suggested that they gain visibility using social media as it opens up an opportunity for a wide range of customer bases, including those that are local and international to take notice of their businesses.
- b) attending to customers only physically is gradually becoming mundane, especially for big businesses, and it is, therefore, suggested for smaller forms of businesses like MSMEs in Anambra State to also actively seek ways to respond to customers swiftly using electronic means, like social media and websites as this will lead to quicker customer response and better satisfaction for the customers which will eventually lead to better performances by the MSMEs.

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