Innovations

The Influence of Information Technology on Employee Responsiveness in the Telecommunications Sector, Nigeria

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Abstract

Purpose*: The study investigated how information technology has impacted the responsiveness of the telecommunication industry, Airtel, South East, Nigeria* ***Methodology/approach****: The study used a correlational survey design, with copies ofthe questionnaire serving as the main data collection tool. The total sample size for the study was 131 employees. A probability simple random sampling technique was used to distribute the survey. Primary data were gathered using a face-to-face, researchers-administered structured questionnaire made using a Likert scale with five possible outcomes. The data was statistically tested, and Pearson Product Moment Correlation was used to analyze the relationship between one variable and another.* ***Result/Findings****: The result of research hypothesis one indicates that a unit rise in teleconferencing applications results in a 0.996 increase in employee responsiveness at a 5 % level of significance. The result of research hypothesis two revealed that a unit increase in internet applications results in a 0.865 increase in service quality at a 5 % level of significance. The researchers suggest businesses provide opportunities for their employees' ongoing education and training, so they can gain the most recent credentials and expertise in their field.* ***Limitations****: This study is restricted to five states in South East Nigeria that have Telecommunication Centers.* ***Contribution****: The study established a gap in the conceptual framework relating the variables of information technology (teleconferencing software, internet) and responsiveness (service quality). This current study aims to close the conceptual and geographic coverage gaps in the literature.* ***Practical Implications****: The outcome of this study would help policymakers push forinvestments in opportunities for lifelong learning and promote collaborations between businesses, governments, and educational institutions.* ***Novelty****: This study contributed to the body of knowledge by identifying gaps in the literature and geographic coverage.*

Keywords*: Information Technology, Teleconferencing Application, Employee Responsiveness, Resource Based Theory, Pearson Correlation, Nigeria.*

INTRODUCTION

1.1 Background Information

In recent decades, society has become more digital as a result of advances in technology. According to De Wet, Koekemoer, and Nel (2016), modern technologies have altered how people conduct their daily lives and enhanced their ability to perform their jobs. Tusubira and Mulira (2004) assert that the use of ICT in

organizational operations fosters increased productivity, economy, and competitiveness. Employees have the chance to enhance their quality of life and finish daily tasks because they have unrestricted internet access and are now connected to smart devices. The technological revolution has changed the way employees of telecommunication firms complete their tasks.

Previous studies have found a connection between information technology and employee responsiveness. Studies by Helpman and Trajtenburg (1998) show that employing information and communication technology will boost worker productivity more quickly. Gallego, Gutierrez, and Lee (2011) found that adopting technology will increase an organization's size more quickly, which will result in firm expansion. Studies by Bestman and Alfred (2022)found that virtual communication and organizational responsiveness have a strong positive relationship.

The study's geographic scope was limited to five states in South East Region, Nigeria. Both rural and urban communities in the Southeast region now enjoy unlimited internet to learn new things and create job opportunities for the business owners provided by telecommunication firms. The rise of digitalization in this regioncreates opportunity for continued education and training for workers to gain the latest industry certifications and information technology skillsvital for their jobs.

However, earlier studieson this subject did not look at how information technology, such as teleconferencing and internet applications, affects employee responsiveness and service quality using telecommunication Industry, Airtel, Southeast Nigeria. The goal of this research is to fill in the conceptual and geographic gaps in the literature.

1.2 Statement of the Problem

As a result of work automation and high efficiency, the digitization of the Nigerian telecommunications sector impacted positively on the sector in real life. With the help of digital technology, information transfer and service delivery are completed more quickly and with fewer errors. Information overload is a byproduct of the workplace's digitalization, which bombards employees with unsolicited information, accelerates the pace at which new information is created, and reduces the value of information. The negative effects of information overload are more likely to be felt by those who own more communication tools or devices. Inevitably, information overload causes insufficient quality standard and workplace anxiety, which in turn causes psychological stress related to the advent of digitalization.

1.3 Research Objectives

The general aim of this study is to examine the influence of information technology on responsiveness of employees of Telecommunication Industry, Airtel South East, Nigeria.

The specific aim of this research is to.

I. Examine the influence of teleconferencing software on employee responsiveness.
II. Ascertain the influence of internet applications on service quality.

1.4 Research Questions

The following research questions were stated below.

I. What is the influence of teleconferencing software on employee responsiveness?
II. How do internet applications influence the quality of services?

1.5 Research Hypotheses

The alternate hypotheses were formulated below.

I. H_{A1}: Teleconferencing software influences significantly employee responsiveness.
II. H_{A2}: Internet applications impact significantly service quality.

REVIEW OF RELATED LITERATURE

2.1 Conceptual Review

2.1.1 The Concept of Information Technology

Olasanmi, Ayoola, and Kareem-Ojo (2012) define information technology (IT) as computer systems, telecommunication, networks, and multi-media applications that enhance knowledge for performing a given activity, implying skills and processes required for carrying out business activities in a specific way. The authors claim that IT improves organizational productivity and operational effectiveness for both employees and businesses.

Information technology (IT) is also described by Pratt (n.d.) as the tools, networking elements, software, and systems that enable digital interaction and communication between people and groups (such as businesses, nonprofits, governments, and criminal organizations). According to the authors, IT includes all elements connected to computers and digital technology.Furthermore, according to Ducombe and Keeks (2003), information technology (IT) is an electronic method of information dissemination that enhances communication between information producers and users by using information processing systems in the nation.

2.1.2 The Concept of Teleconferences

Participants in teleconferences from various locations can collaborate and exchange information online using electronic devices like laptops, smartphones, and tablets (Gillis, 2021).This approach requires more complex hardware than a straightforward phone call. People from two or more locations can communicate over the phone while participating in an interactive teleconference. During a teleconference, a video conference can be used to let participants see one another. Participants in teleconferences can communicate with one another using a variety of electronic devices thanks to platforms. Today's teleconferences are largely conducted online or via voice over IP (VoIP), as opposed to earlier iterations that only involved audio communication over the phone line.

Businesspedia (2022) defines teleconferencing as a method of bringing people together over a telecommunication medium. This is the general term used to describe the use of technology to connect individuals in two or more locations. According to White (2023), audio or video teleconferencing can unquestionably save money when it comes to removing stages from a business. Because of the potential financial repercussions, the majority of people and businesses are reluctant to pay money to connect with friends and customers in their network. Teleconferencing has a number of benefits, one of which is that it can make group meetings less expensive.

2.1.3 The Concept of the Internet

According to Wrodpress (2014), the Internet is a system of interconnected computer networks that caters to a sizable user base on a global scale. This network of networks is made up of numerous electrical, wireless, and optical networking technologies that connect millions of private, public, academic, business, and governmental networks with regional to global reach.

According to Oxford University Press (2022), the Internet is an international computer network made up of linked networks that use standardized communication protocols and offer a range of information and communication services.Oxford University Press (2022) has provided an overview of the advantages and

disadvantages of the internet. The Internet makes it simple for users to send and receive information, but it also offers a number of benefits, such as the ability to send emails at a lower cost than using a mobile phone or regular mail. However, there are drawbacks to the internet. Most computers have a risk of contracting viruses and can break down. Unauthorized parties can easily track private information sent in electronic messages, such as a person's name, address, and bank information. Another factor that contributes to internet addiction is people who spend a lot of time in front of computers.

2.1.4 The Concept of Employee Responsiveness

Responsiveness is the capacity to react quickly, appropriately, and successfully to requests for help or input (Grensing-Pophal, 2021). It clarifies the extent to which workers are able to adjust to changes in both their internal environments (coworkers, superiors, and subordinates) and external environments (customers, business partners).

Employees who are responsive are flexible and capable of making adjustments to the conditions at work. A requirement for embracing responsiveness is for businesses to be able to identify, investigate, and transform opportunities both inside and outside of the organization in order to achieve business goals (AppCentrica, 2016). Employee responsiveness is the capacity of an employee to respond quickly to change within an organization.

2.1.5 Service Quality

According to the American Marketing Association (2012), service quality is the discrepancy between service expectations and service perceptions. The standards that the service should actually meet are those set by the desired expectations of the customer. The term "customer excellence" can also refer to service quality.Service quality, according to Khadka and David (n.d.), is a measurement of how well a business understands and meets its customers' expectations. The authors contend that understanding how to improve an organization's services and products is the first step in any organization's growth. The quality of a service being provided could potentially be disrupted or compromised by a number of factors, especially in the case of continuous service delivery enterprises.

2.2 Theoretical Framework

The theoretical framework for this study is the Resource Based Theory (RBT), which Barney put forth in 1991. According to RBT, a business will be in the best shape for long-term success, a competitive advantage, and superior performance compared to its rivals if it has resources that are uncommon, valuable, unique, and non-replaceable (J. Barney, 1991).

However, RBT has faced harsh criticism from researchers for the reasons given below. The traditional RBT is limited to internal resources when attempting to explain why and how some organizations are able to maintain a competitive edge in a setting that is unpredictable and undergoing rapid change (Kleinschmidt, De Brentani, & Salomo, 2007). According to Priem and Butler (2001), J. B. Barney (2001), Kozlenkova, Samaha, and Palmatier (2014), the theory is criticized for being tautological, static, self-verifying, and unable to address how organizational activities affect resource effectiveness over time.

Despite the criticism it has received, RBT has become widely accepted and is used in a variety of business management disciplines, including qualitative and quantitative, marketing and operations management, supply chain management, information systems, and entrepreneurship (J. B. Barney, 2014; Hitt, Xu, & Carnes, 2016; Kozlenkova et al., 2014; Molloy, Chadwick, Ployhart, & Golden, 2011; Seddon, 2014; Zimmermann & Foerstl, 2014).

Finally, RBT is related to this investigation into how information technology affects the responsiveness of mobile network operator staff in southeast Nigeria. The Resource Based Theory provides a framework for companies to successfully utilize their employees as resources within a company to increase responsiveness and boost productivity.

2.3 Empirical Review

Numerous studies on information technologies and employee responsiveness have been carried out by researchers from Nigeria and other countries. Several research findings both favorable and unfavorable are listed below.

Nuryanti, Hanifah, and Cahyadi (2023) determined the effect of business digitalization on entrepreneurial growth conditions for young entrepreneurs in the city of Bandung. Data from 31 young entrepreneurs who were HIPMI PT members were gathered for this quantitative study using the explanatory survey approach through observations, interviews, and questionnaires. The Statistical Package for Social Science (SPSS, 24.0) was used to process the collected data. The findings indicated that business digitalization had an impact on entrepreneurial growth.

Fakir and Miah (2021) looked into the factors influencing E-WOMs in the restaurant business evidence from Bangladesh. The study employed descriptive research techniques along with quantitative research. A structured questionnaire and an online purposive sampling technique were used to collect 161 data points from customers in Bangladesh. Data analysis and hypothesis testing were done using the partial least square structural technique and structural equation modelling (SEM). The probability sampling method was selected for this investigation. Findings demonstrated that positive reviews, negative reviews, trust, food and service quality, and source credibility had significant effects on E-WOMs in the restaurant business in Bangladesh.

Bans-Akutey and Ebem (2022) looked at how e-leadership helps organizations change with technological development. The study employed a mixed-methods triangulation strategy. A questionnaire was used to gather quantitative information from 297 customers and 146 staff of telecommunications providers in Ghana. Twelve respondents were questioned for qualitative data. For IBM SPSS Statistics 24, descriptive statistics were used to examine quantitative data. Both content analysis and qualitative data were used to test study's hypotheses. The study found that e-leadership hinders face-to-face interactions.

Ebuka, Nzewi, Gerald, and Ezinne (2020) examined how small businesses in Africa can use technology to grow and sustain their businesses in a post-Covid 19 age. This research used a qualitative method. The study found that having some level of digital proficiency could make the difference between a competitive and non-competitive corporation.

Moussa and Bans-Akutey (2022) analyzed perceptions of international students in a Ghanaian private university college on the effect of information technology on banking operations. A mixed-methods research strategy was employed. Data were gathered from 60 international students who were randomly selected from the college's total population of international students. Descriptive statistics from IBM SPSS version 24 was used to analyze quantitative data, while thematic analysis was used to analyze qualitative data. Findings showed that information technology affects banking operations positively by making operations efficient, easier and faster for both employees and customers.

Nath and Standing (2010) examined the driving forces behind information technology (IT) in Australia's supply chain. Using peer-reviewed academic articles, a conceptual model is constructed using a grounded theory methodology. The study found that there is a hierarchy of advantages that can be used to classify IT drivers.

Lewis (2006) investigated the effects of relationship traits, organizational capacity, and information sharing on outsourcing efficiency in the Ohio Supply Chain. Data were gathered using a questionnaire in a descriptive survey. The relationships between organizational capabilities and relationship characteristics, as well as the connection between information sharing and perceived outsourcing performance, were examined using

multiple regressions. The results showed that information sharing had a direct effect on outsourcing performance. The results demonstrated that connection features in supply chain enterprises were directly influenced by organizational skills.

Tien (2023)undertook research on factors influencing customers' satisfaction withpublic internet service in Vietnam. 250 Vietnamese internet service users were the primary source of the data. The study used a quantitative methodology and a questionnaire as a data collection tool. In order to test and assess the hypotheses and identify the variables influencing consumer satisfaction with public fiber optic internet services, a multivariate regression method was used. Results showed that customer satisfaction with regard to the quality of public fiber optic internet service is influenced by the quality of the core service, promotion, and advertising, ease of joining the service, brand image, pricing of the service, add-on services, and customer support services.

Rachmawati (2020) assessed the impact of service quality on customer loyalty of Indonesian internet service providers during covid 19. 400 clients of internet service providers completed an online poll for the study. The findings showed that security and privacy directly affect both attitudinal and behavioral loyalty, and network quality, customer service, and information quality directly affect attitudinal loyalty. Behavioral loyalty is directly influenced by attitude-based loyalty.

Rahi and Abd. Ghani (2019)looked at how Pakistan's adoption of Internet banking affected UTAUT's electronic service quality. Utilizing 398 responses from clients of commercial banks in Pakistan, the study model was empirically tested. Structural equation modeling was used to test the theoretical concept. Findings suggest that user intention to embrace Internet banking is directly influenced by performance expectations, effort expectations, website design, customer service, assurance, and reliability.

Salem and Kiss (2023) analyzed the level of service provided by Jordan's internet service provider. Using snowball sampling techniques, 405 Amman internet service provider users were surveyed for primary data. The findings indicate that there is a perception gap between what customers expect from the internet service provided by internet service providers in Jordan and what they actually experience.

Oyewole and Adegoke (2018) determined the effects of the internet on undergraduate students' reading habits and academic achievement in Nigeria. The investigation made use of descriptive statistics. The data was compiled using information from 200 pupils. Only 142 of the respondents who were given a structured questionnaire did so, and the remaining 58 surveys' useless data was destroyed. The findings demonstrated that students' reading habits and academic performance greatly increased after accessing the internet, while their academic performance significantly declined after developing an internet addiction.

Okundia (2016)examined how the use of social media affects students' academic performance using the University of Benin, Edo State, Nigeria. Descriptive survey research methods were used for this investigation. A total of 112 students were used as the primary data source. Approximately 108 respondents filled out and returned their survey questionnaire, while the remaining 4 did not. The Pearson Correlation Method and Analysis of Variance (ANOVA) were used to statistically examine and analyze the hypotheses regarding the relationship between the variables. The findings revealed an insignificant relationship between social media usage and academic performance.

Abbas, Aman, Nurunnabi, and Bano (2019) assessed the impact of social media on Learning Behavior for Sustainable Education in Pakistan. A descriptive research strategy was used for this investigation. A total of 1,013 participants provided the data. Participants between the ages of 16 and 35 were given structured questions to fill out. Only 831 of the participant surveys were filled out and returned; the other 182 were either not filled out or were never returned. Using SPSS version 25, we ran an analysis of variance (ANOVA) to examine the correlation between the variables and test our hypothesis. Findings showed that students' use of social media had a positive influence on students' learning behavior in Pakistan.

Mohamed, Dahie, and Warsame (2018)investigated the factors affecting students' academic performance using a case study of the University of Mogadishu, Somalia. The study opted for a descriptive research strategy. Eighty participants were surveyed for this study. Results were generated by conducting tests of the hypothesis via correlation and regression analysis. The results indicated that there is a significant positive association between the factors (learning techniques, home-related aspects, study habits, and physical resources) and the academic performance of students at the University of Somalia.

Vincent, Gracious, Deus, Nelson, and Alex (2023)evaluate**d** the effects of electronic banking on customer service deliveryusing a case study of Cairo Bank Uganda's Nakasero Branch in Kampala. The 151 respondents who worked for the organization made up the study's target population. In the collection, both qualitative and quantitative methodologies were employed. This included information gathered directly from respondents, such as e-banking users and bank employees. Data were sourced in the form of observation, questionnaires, or interviews using participants. Findings that electronic banking has significantly improved financial services, which has a favorable impact on consumer satisfaction.

Zhu, Wymer, and Chen (2002)explored the impact of information technology (IT) on service quality in the consumer banking sector. It suggests a service quality paradigm that connects traditional service characteristics measured by SERVQUAL in the context of customer satisfaction and consumer-perceived service quality to IT-based service options as viewed by customers. The model, which also takes into account a number of factors influencing how customers view IT-based services, was put to the test using a structural equation modeling technique with sample data gathered from clients of retail banks. The findings show that IT-based services have a direct impact on the SERVQUAL dimensions as well as a secondary impact on customer satisfaction and perceived service quality. The findings also demonstrate that customers' preferences for conventional services, experiences with using IT-based services, and perceived It policies.

Ndung (2017)investigated the impact of social networking sites on the academic performance of Teenagers in secondary school in Nairobi County, Kenya. The sample size was 1,500 male college students. Regression analysis was used to gather information for the purpose of testing and analyzing the hypothesis. The results demonstrated that using social media positively affected students' academic performance.

Thatte, Muhammed, and Agrawal (2008)looked at how information-sharing practices and supplier network responsiveness affected a company's ability to launch products on time in the USA. The online survey received 294 responses from experts in the manufacturing and supply chain industries. Using structural equation modeling (SEM), the hypotheses were looked into and tested.

Obra, Cámara, and Meléndez (2002) looked into the connection between Internet usage and competitive advantage in Spanish companies. The study used a survey as the instrument for data collection, adhering to a descriptive survey methodology. The correlation method was used to examine the relationship between the variables. The study discovered a strong correlation between internet technology and a company's competitive advantage (market share).

Hammami and Zghal (2016) examined the relationship between the Internet and small and medium enterprise competitiveness in Tunisia. 206 Tunisian manufacturing small and medium enterprises (SMEs) made up the study's sample. SEM, or structural equation modeling, was used to analyze the findings. The results demonstrated that the Internet has a favorable impact on businesses' ability to compete.

2.3.1 Gap in Knowledge

This section providesa comparative analysis between different studies done on this subject in order to create value for this study.

Previous studies by; Nuryanti, Hanifah, and Cahyadi (2023) determined the effect of business digitalization on entrepreneurial growth conditions for young entrepreneurs in the city of Bandung; Fakir and Miah (2021) looked into the factors influencing E-WOMs in the restaurant business evidence from Bangladesh; Bans-Akutey and Ebem (2022) looked at how e-leadership helps organizations change with technological development; Bans-Akutey and Ebem (2022) looked at how e-leadership helps organizations change with technological development; Ebuka, Nzewi, Gerald, and Ezinne (2020) examined how small businesses in Africa can use technology to grow and sustain their businesses in a post-Covid 19 age;Bestman and Alfred (2022) focus on the relationship between virtual communication and organizational responsiveness using indigenous oil and gas companies in Rivers State, Nigeria; Lewis (2006) investigated the effects of relationship traits, organizational capacity, and information sharing on outsourcing efficiency in the Ohio Supply Chain; Tien (2023) undertook research on factors influencing customers' satisfaction with public internet service in Vietnam; Rachmawati (2020) assessed the impact of service quality on customer loyalty during covid 19 using Indonesian internet service providers;Rahi and Abd. Ghani (2019)looked at how Pakistan's adoption of Internet banking affected UTAUT's electronic service quality;Salem and Kiss (2023) analyzed the level of service provided by Jordan's internet service provider; Okundia (2016) examined how the use of social media affects students' academic performance using the University of Benin, Edo State, Nigeria; Obra et al. (2002) looked into the connection between Internet usage and competitive advantage in Spanish companies; Ndung (2017) investigated the impact of social networking sites on the academic performance of Teenagers in secondary school in Nairobi County, Kenya; Thatte et al. (2008)looked at the influence of information-sharing practices on supplier network responsiveness of manufacturing and supply chain firms in the USA; Hammami and Zghal (2016) examined the relationship between the Internet and small and medium enterprise competitiveness in Tunisia, the present study sought to examine the influence of information technology, teleconferencing and internet applications on employee responsiveness and service quality using the case study of telecommunication industry, airtel, South East Nigeria. In light of the aforementioned, the main difference between the present study and previous studies is that both studies were done in another location outside, of Southeast, Nigeria and using different industries. The study established a gap in the conceptual framework, and geographic coverage relating the variables.

RESEARCH METHODS

3.1 Research Design

The study sought to accomplish its goals using a correlation survey design. The research strategy enables the researcher to observe what takes place in the field without changing the data.

3.2 The Population of the Study

The total population of the study comprised 241 employees of the Telecommunication Industry, Airtel South East, Nigeria. The five states (Imo, Abia, Enugu, Anambra, and Ebonyi) made up the study's total population. Officers in the top cadre are the subject of this researcher's attention. The target populations would provide the researchers with specific information that they are interested in because they have a greater understanding of how mobile network operators operate.

Table 3.2.1: The Population of the Study of the Telecommunication Industry

S/N	Location/State	Positions	Departments	Population
1.	Imo	Managers/ Supervisors	Retail	52
2.	Abia	Managers/ Supervisors	Commercial/Sales and Distributions	49
3.	Anambra	Managers/ Supervisors	Network	57
4.	Ebonyi	Managers/ Supervisors	Legal and Regulatory	40
5.	Enugu	Managers/ Supervisors	Enterprise Business	43
	Total			241

Source: (Personnel Records of Telecommunication Industry, Artel).

3.3 Sampling Size and Sampling Technique

The sampling technique developed by Slovin was used to calculate the sample size. It is demonstrated by the following formula, where N represents the entire population, e represents the tolerance for error, and n represents the sample size. In order to determine the required sample size for the survey, the following formula is applied below.

n = N/1 + N(e)2

where n = 241/1 + 241 (0.05)2

n = 241/1 + 241 (0.05)2 = 241/1.6025

Sample Size (n) = 150.38 = 150.39

The sample size was calculated as 150. Bowler's proportional allocation method formula was used in determining the proportion of the questionnaire to be distributed in the selected firm. The Bowlers proportional allocation formula is stated below as follows:

$$nh = \frac{nNh}{N}$$

Where nh = Bowley's allocation formula

Nh = Number of items in each stratum in the population.

n = Sample size

N = Population size

Applying the formula, we have:

Imo State $nh = \frac{150\ (52)}{241} = 32.36 = 33$

Abia State $= \frac{150\ (49)}{241} = 30.50 = 31$

Anambra State $= \frac{150\ (57)}{241} = 35.48 = 35$

Ebonyi State $= \frac{150\ (40)}{241} = 24.90 = 25$

Enugu State $= \frac{150\ (43)}{241} = 26.76 = 27$

3.4 Instrument of Data Collection

The researcher used a structured questionnaire sourced from unprocessed data that has never been gathered or is already in existence to accomplish the study's objectives. Using a case study of telecommunication firms in Southeast Nigeria, a link between information technology and employee responsiveness was established. The survey for Nigerian mobile network operators, which is depicted in Table 1, included questions about information technology, teleconferencing, and employee responsiveness. A total of 10 items, including both positive and negative comments, were included in the research instrument. The survey was distributed by the researcher to 150 participants.

3.6 Validity of the Instrument

The questionnaire underwent face and content evaluation in order to determine the effectiveness of the instrument. In order to better align the questionnaire's length with the study's goals, the items of the instrument underwent another in-depth examination of both their face and their content by experts in this field.

3.7 Reliability of the Instrument

In order to assess the accuracy of test results, Cronbach's Alpha method was used in this study. The measuring device's task is accomplished at 0.986, where the alpha value exceeds the acceptable level.

Table 3.7.1 Reliability Statistics

Cronbach's Alpha	N of Items
.986	8

Source: (SPSS Version 25).

3.8 Method of Data Analysis

The research topic "The Impact of Information Technology on Employee Responsiveness of Telecommunication Firms, South East Nigeria" supplied the data needed to test the research hypotheses. However, the Pearson Correlation method was applied to research objectives one and two in order to achieve the research objective. Finally, if the p-value is less than 0.05, the null hypothesis (H0) will be rejected; if the p-value is larger than 0.05, the alternate hypothesis (HA) will be accepted.

DATA PRESENTATION AND DISCUSSION OF RESULTS

4.1 Data Presentation

Using the statistical package for social science (SPSS) Version 25 software, the researcher tabulated, processed, and carried out an analysis of the data she had gleaned from the questionnaire. Only 131 of the 150 questionnaires distributed to the participants were successfully completed and returned; the remaining 19 copies were not used in the study.

Table 4.1.2: Schedule of Questionnaire Administered and Returned for Mobile Network Operators

S/N	Mobile Network Operators South East Nigeria	Population	Copies Distributed	Copies filled and returned	Percentage Returned
1	Imo State	52	33	29	22.14
2	Abia State	49	31	27	20.61
3	Anambra State	57	35	31	23.66
4	Ebonyi State	40	25	21	16.03
5	Enugu State	43	26	23	17.56
	Total	241	150	131	100

Source: (Field Survey, 2023).

4.2 Analysis of Research Question One

How does teleconferencing affect employee responsiveness?

Table 4.2.1: Investigative Questions on Teleconferencing and Employee Responsiveness

S/N	**Item**	**SA**	**AG**	**UN**	**DA**	**SD**	**Total**
A	Teleconferencing (Independent Variable)						
1.	We communicate with employees using phone calls and keep them updated wherever they are.	58	45	19	2	7	131
2.	Innovative technology promotes collaborative thinking.	55	68	4	2	2	131
3.	Staff members can typically learn to utilize telecommuting.	54	71	1	4	1	131
4.	In some cases, workers are so worn out after using this cutting-edge technology on a daily basis.	46	74	3	6	2	131
5	Both individuals and organizations can reduce travel expenses through the use of video calls.	48	72	8	2	1	131
B.	Employee Responsiveness (dependent variable)						
6.	The use of online gadgets has altered the way staff operate.	56	62	7	5	1	131
7.	Managers can communicate assignments and responsibilities among staff members in advance by using technology tools.	52	76	3	2	0	131
8.	The majority of the time, using technological advances can increase staff productivity.	48	72	5	4	2	131
9	Employees often make use of their technical tools to save operational expenses.	51	73	0	5	2	131
10	However, some employees find it difficult to focus on their work because they regularly engage in talking on social networking sites.	53	70	4	2	2	131

Source (Field Survey, 2023).

4.3 Test of Research Hypothesis One

H_{A2}: Teleconferencing software influences significantly employee responsiveness.

Table 4.3.1 Result of Pearson Correlations

		TCF	ERS
TCF	Pearson Correlation	1	.996**
	Sig. (2-tailed)		.000
	N	131	1
ERS	Pearson Correlation	.996**	1
	Sig. (2-tailed)	.000	
	N	131	131

Source: (IBM SPSS Version 25)

**. Correlation is significant at the 0.01 level (2-tailed).

TCF represents teleconferencing

ERS represents employee responsiveness.

4.4. Analysis of Research Question Two

How dointernet applications affect employee responsiveness?

Table 4.4.1: Investigative Questions on Internet and Service Quality

S/N	Item	SA	AG	UN	DA	SD	Total
A	**Internet**						
1.	We complete our tasks more quickly with the aid of the Internet.	43	53	26	1	8	131
2.	The assistance we sought from our Information Technologysupport improved the quality of the work we do.	56	53	18	3	1	131
3.	We interact effectively with our customersthrough cutting-edge technology.	52	68	9	1	1	131
4.	Most times, our staff work remotely to reduce costsdue to advances in technological advancements.	69	51	3	6	2	131
5	My company has reduced operational costs as a result of cutting-edge technology.	64	46	13	7	1	131
B.	**Service Quality**						
6.	We have increased customer service as a result of innovations in technology.	56	70	15	6	3	131
7.	My company is efficient in addressing customer needs.	66	52	11	2	0	131
8.	Information on the employees is kept in our database.	53	47	25	4	2	131
9	Our system of communication has been enhanced, moving away from print and toward email.	49	66	12	2	2	131
10	Using our computer device, we have won our customers' trust.	65	52	4	8	2	131

Source (Field Survey, 2023).

4.4.1 Test of Research Hypotheses Two

H_{A2}: Internet applications impact significantly service quality.

Table 4.4.2 Result of Pearson Correlations

		IT	SQ
IT	Pearson Correlation	1	.865**
	Sig. (2-tailed)		.000
	N	131	131
SQ	Pearson Correlation	.865**	1
	Sig. (2-tailed)	.000	
	N	131	131

Source: (SPSS Version 25)

**. Correlation is significant at the 0.01 level (2-tailed).

IT.representsinternet

SQ.represents service quality.

4.4.3 Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
IT	131	1.00	146.00	53.5000	53.76305
SQ	131	.00	146.00	49.2000	53.73203
Valid N (listwise)	131				

Source: (SPSS Version 25).

4.5 Decision Rule

If the p-value is less than 0.05, reject the null hypothesis (H0), but accept the alternate hypothesis (HA) at 5 % level of significance. The Pearson Product Correlation Method test result for the hypothesis is shown in Table 4.4.2. The null hypothesis, which argues that internet application has no effect on service quality, is consequently rejected because the p-value (.000) is smaller than the critical value (0.05). The alternate hypothesis states that internet application influences service quality was accepted.

4.6 Discussion of Findings

The main goal of this study is to determine how information technology affects the responsiveness of employees of telecommunication industry in South East Nigeria. Research hypothesis one was evaluated and tested using the Pearson Correlation Method. The result of the test was statistically significant.

The results of research hypothesis one indicates that a unit rise in teleconferencing applications results in a 0.996 increase in employee responsiveness. The findings support Thatte et al. (2008)which showed that more effective information-sharing strategies can increase supplier networks' responsiveness and shorten a company's time to market. The results are in line with the findings of the study conducted by Obra et al. (2002), which affirms the favorable effects of internet technology on a company's competitive advantage (market share).

The outcome of research hypothesis two was statistically subjected to the Pearson Correlation Method. The result of research hypotheses two revealed that one unit increase in internet applications results in 0.865

increase in service quality.The results of the test were statistically significant. This finding is in line with a study by Vincent et al. (2023), which shows that electronic banking has significantly improved financial services, which in turn has a positive impact on customer satisfaction.

SUMMARY OF FINDINGS, CONCLUSION, AND RECOMMENDATION

5.1 Summary of Findings

The summary of the findings is stated as follows:

- The results of hypothesis one also suggested that teleconferencing software had a positive impact on organizational responsiveness.According to the results of the Pearson product correlation coefficient test, r = 0.996, N = 146, and P = 0.000.
- The results of hypothesis two also revealed that internet applications had a positive impact on service quality. According to the results of the Pearson product correlation coefficient test, r = 0.865, N = 146, and P = 0.000.

5.2 Conclusion

To test the research hypothesis, the Pearson correlation was used to establish that teleconferencing software improves staff responsiveness oftelecommunication firms in South East, Nigeria. Research objective two also shows that Internet applications directly improvethe quality of services in the organization. To sum up, the researchers found that information technology directly improves staff responsiveness and quality of services. Both study findings and the literature are connected.

5.3 Recommendations

In light of the aforementioned conclusions, the following suggestions were made.

I. In order for employees to perform tasks associated with their jobs, the development of technological skills is encouraged.

II. Employers should provide opportunities for ongoing education and training so that staff members can acquire the most recent industry certifications and skills.

III. Policymakers should push for investments in opportunities for lifelong learning and encourage partnerships between businesses, governments, and educational institutions in order to increase the effectiveness and efficiency of digital information gathering and dissemination.

IV. Management should place a high priority on job enrichment if they want to inspire workers and boost output.

5.4 Future Research

This study is restricted to five states in South East Nigeria that have telecommunication firms. It is highly recommended that future research should look into the connection between computer technology and workplace productivity in the public sector be conducted.

5.5 Limitations of the Study

This study's focus is only on telecommunication firmsin South East Nigeria. The use of numerous case studies can lead to the generalization of findings. Therefore, based on just one case study, the results of this study cannot be generalized.

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