



INFORMATION COMMUNICATION TECHNOLOGY AND ORGANIZATIONAL PERFORMANCE OF SELECTED MONEY DEPOSIT BANKS IN ANAMBRA STATE

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ABSTRACT: *The study investigated information communication technology and organizational performance of selected Money Deposit Banks in Anambra State. The specific objectives of the study were to: determine the effect of decision support system and organizational performance of selected money deposit banks in Anambra State, and ascertain the effect of office automation system and organizational performance of selected money deposit banks in Anambra State. Two research questions and two research hypotheses were formulated in line with the specific objective. The study was anchored on Contingency theory of Fred Fiedler. The population used for the study was four thousand two hundred (4200) staff of selected money deposit banks in Anambra State. The sample size for this study was determined by Godden's (2004) formula. Five hundred and twenty-five (525) staff were selected as the sample for the study. The hypotheses were tested using multiple regression analyses and the result shows that decision support system has no significant positive effect on the performance of selected money deposit banks, and office automation system has no significant positive effect on the performance of selected money deposit banks in Anambra State. The study recommended that to raise the performance of these banks, bank owners should invest more in ICT and its component because they have proven to significantly influence organizational performance. Also, that bank should invest in ICT innovations to build capacity to design specialized products to serve all corners of the market. It concluded that the introduction of innovative products and services like office automation and decision process does not just attract new customers but also improves customer retention and loyalty.*

KEYWORDS: Information communication technology, organization performance, money deposit banks.



INTRODUCTION

Background of the Study

Information communication technology (ICT) has changed the way businesses are performed by impacting nearly all phases of business processes including product improvement, mechanization of processes, storage of client data, communication, and communication with clients and suppliers. In today's worldwide and lively aggressive setting, organizations are leveraging skill to innovate. ICT innovation is becoming more significant resulting in three major trends: intense global competition, disjointed and challenging markets, and various and fast changing technologies (Wheelwright & Clark, 2019). Firms that offer modern products modified to the needs of the target clients of the firms, that are quick to market new products and are more competent than their competitors are in a healthier position to create a sustainable competitive advantage. In current decades, the argument of outfits and appropriate allocation of resources in the economic sector of the society was one of the most vital issues of low wages (Adenutsi, 2012). Particularly, in the process of economic growth, best use of the physical and mental labor force plays an important task in setting a superior goal for planners to increase the rate of successful employment in the country.

The use of electronic payment (ideas, techniques and policies) and execution of electronic devices in the banking industry has become a theme of basic significance and worry to all banks operating within the Nigerian province, and indeed a precondition for local and international competitiveness. The fresh consolidation policy in the Nigerian banking sector has tired the awareness of many banks to the use of different technological strategies in promoting and achieving better client service delivery that assured nonstop amplification in profitability and higher return on investment. However, the rapid development in universal banking services has improved the pressure on Nigerian banks mainly in Anambra State for improved performance. Odirke (2018) asserts that the new age of banking allows clients to walk into any computerized bank and finish off their dealings within a twinkle of an eye. To improve banking services, the preponderance of banks particularly the new generation banks have implemented electronic banking services to improve their customer service delivery through the progress in information technology.

Technology is the major driver that helps in the improvement of the electronic system to boost customer service quality. It is information technology that brought about electronic banking which the banking used and conducted on the platform of mobile devices and wireless networks, and also the provision of banking and financial services with the help of mobile telecommunication devices. Therefore, the electronic payment system deals with defrayal network uniqueness which are automated reimbursement services that manifest in the use of magnetic ink character reader in money deposit banks in Anambra State. The remote services or point of sales characteristics addresses the units of banking activities that transfer fund from one's bank account to another. The transfer is always authorized and the record is kept on file of that authorization. Also, it deals with pre-authorized debit and credit characteristics of electronic payment which is apparent in the use of cards. Plastic cards are used to recognize clients and pass the same to the machine to initiate a paper or electronic payment.



Statement of the Problem

In the state under study (Anambra State), customers of banks today are no longer troubled about the safety of their money and boost returns on their investments only. Customers demand well-organized, fast, and expedient services. Customers want banks that will present the services that will meet their exacting needs and sustain their business goals. Businessmen want to travel without moving with cash for security reasons. They want to be able to verify their balance online, find out if a cheque is cleared, transfer funds among accounts and even want to know every transaction record in system; clients want an ensuring cashless economy. Bickersteth (2015) attributed the slow pace of the growth of e-payment to lack of insufficient infrastructure, poor internet diffusion, absence of open standard and trust, decision support system, and office automation system, among banks.

There is a need to put in place effectual security procedures to safeguard customers money, and also introduce information technology and systems like decision support and automation machines to help the customers operate at anywhere they are.

Objectives of the Study

The main objective of the study is to investigate the effect of information communication technology on organizational performance of selected money deposit banks in Anambra State, Nigeria. The specific objectives are to:

1. Assess the effect of the decision support system on the effectiveness and organizational performance of selected money deposit banks in Anambra State.
2. Ascertain the effect of office automation system and organizational performance of selected money deposit banks in Anambra State.

Research Hypotheses

Two null hypotheses were formulated to guide the study:

1. The decision support system has no significant positive effect on the organizational performance of selected money deposit banks in Anambra State.
2. Office automation system has no significant positive effect on the organizational performance of selected money deposit banks in Anambra State.



REVIEW OF RELATED LITERATURE

Conceptual Review

Information and Communication Technology

ICT is a sunshade term used to define an anthology of telecommunication devices, computer hardware, and software. ICT has changed the way businesses are carried out by impacting almost all features of business procedure including product development, mechanization of procedure, storage of client data, communication, and interaction with clients and suppliers. In today's universal and vibrant competitive setting, organizations are leveraging technology for innovation. ICT innovation has become relevant (Wheelwright & Clark, 2014).

ICT refers to a wide variety of mechanized technologies that permits communication and electronic processing, and transmission of information. These technologies include products and services such as desktop computers, laptops, hand-held devices, wired or wireless intranet, business presentation software, data storage and security, and network security. ICT adds to economic behavior through an increase in collective performance which will enhance development in economic growth (Laudon & Laudon, 2012). Adewoye and Akanbi (2012) stated that ICT is a multifaceted and mixed set of goods, applications, and services used to manufacture, dispense, procedure, and transform information.

ICT is dependable to human resources and infrastructure which comprise the basic tools and means of evaluating, preparing, managing progress, and achieving sustainable economic activities and growth. Technological improvement has changed the preponderance of wealth-creating work from corporeal effort based to knowledge, and allows organization to know the value of ICT to their firms by offering business opportunities over opponents in the market.

ICT refers to technologies that are used for collection, storing, restriction, and transition on information in various forms. One of the main issues of national development and international competitiveness is learning. ICT is being used internationally to transform ideas into attainable goals and develop same into real success. ICT is willingly useful in all areas mainly in agriculture, engineering, medicine, law, architecture, aviation, commerce, insurance, banking and finance as well as maritime activities (Ovie, 2019).

Decision Support System (Dss)

A decision support system (DSS) is a kind of information system that is developed to help society in storing, managing, analyzing, and eventually supporting managers in the decision-making process (Power, 2013). DSS is an old term, and researchers have been unfolding its major mechanism from diverse viewpoints, such as problem solving, system function, and development process. Efficient versions of the information system are based on a model-oriented system known as a decision support system to support the organizational decision-making process. Since then, the evolution of DSS has started where different research articles were published in different information systems-related journals.



Organizational Performance

Organizational performance has been the most important issue for every organization, be it a profit or non-profit organization (Ismael, Yusof & Davoud, 2010). However, defining performance has not been an easy task. The idea of performance holds close a distant wider measurement of explanations of qualitative, nonfinancial measures which offer information on the degree of accomplishment of purposes and results. Organizational performance consists of three exact areas of firm outcomes: (1) financial performance (profits, return on assets, return on investment); (2) market performance (sales, market share); and (3) shareholder return. These are more suitable for investigating the key aim that controls and directs decision-making and action-taking levels.

Theoretical Framework

This work is anchored on the contingency theory of Fred Fieldler of Austra in 1960. Contingency theory is an organizational theory that claims that there is no best way to organize an organization; instead, the optimal course of action is contingent upon internal and external situations. Contingency theory believes that the nature of management is situational. Management principles are not universal but no one size fits all approaches. Organizational complexity can be better understood by focusing on the multivariate nature of organization. Managers should acquaint themselves with the components of contingency theory to help themselves better like: be prepared, analyze the happenings in the organization, response planning, and implementing preparedness.

Empirical Review

Fidel G. (2021) studied 5 banks in Owerri, Imo State to investigate the effect of office automation on e-payment of these banks in the state using customers of these banks. The method used was descriptive survey design; the whole population was used and the result showed that with the use of office automation, customers find it easy to deal with their accounts without much stress. Thus, it was concluded that various banks around should teach employees the same system to help customers operate their accounts with ease.

Leson (2020) investigates the role of decision support on organizational productivity of the money deposit banks under study in Enugu, using descriptive design, and using planned behavior framework, hypotheses were drawn and tested where results demonstrated interesting insights into the role of decision support on these money deposit banks. Findings show that the employees' involvement in decision support goes a long way for them and has a direct positive impact on their performance. In addition, our analysis demonstrated that not only their performance would increase as a result of decision support, but also employees' innovation and awareness.



METHODOLOGY

Research Design

The research design is the overall method that integrates different elements and components of a study. This study adopted a descriptive survey design. This enabled the researcher to generate data for the study and the test of hypotheses.

Population of the Study

The population for this study consists of the top, middle, and lower-level managers in four new generation banks in Anambra State such as Access Bank, First Bank, Heritage Bank, Polaris Bank and Wema Bank. Different branches of these banks are selected based on year of existence and number of staffs within three (3) senatorial districts in Anambra State. So, the population of the study is as follows:

Table 1

S/N	NAME OF BANK	POPULATION
1	Heritage bank	1200
2	First bank	1000
3	Polaris bank	1000
4	Wema bank	1000
and	Total	4200

Sample Size Determination

The sample size for the study was mathematically determined by Godden's (2004) formula. This mathematical method is given as:

Infinite population formula:

$$n = \frac{Z^2 Pq}{C_2}$$

where:

n = Sample size

Z = Z-Value^A (e.g., 1.96 for a 95% confidence)

P = Percentage of population picking a choice, expressed as a decimal (usually 0.5 is chosen)

C = Confidence interval, expressed as a decimal (e.g., 0.04).

$$\text{So, } n = \frac{3.8416 (0.5) (0.51)}{(0.04)^2} = 600$$



Sample size finite population:

$$\text{New sample size, } n = \frac{n}{1 + (n-1)}$$

pop

Pop = Population (4200).

Thus, substituting in the above equation, we have:

$$n = \frac{600}{1 + (600-1)} = \frac{600}{1 + 599}$$

$$= \frac{600}{600}$$

$$N = \frac{600}{1 + 0.142619047619} = \frac{600}{1.142619047619}$$

$$= 525.11$$

$$\approx 525$$

Thus, the sample size is five hundred and twenty-five (525) respondents.

PRESENTATION AND ANALYSIS OF DATA

Data were collected, collated, presented, and analyzed to proffer answers to research questions. The responses were received from the employees of selected money deposit banks in Anambra State.

Test of Hypotheses

The hypotheses' testing involves a set of rules that leads to a decision in the acceptance or rejection of a given phenomenon. The tools used are linear regression and Pearson Product Moment Correlation analysis with a probability level of .05.

Hypothesis One: Decision support system has a positive effect on organizational performance of selected money deposit banks in Anambra State.

**Table 2: Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.062a	.104	-.007	5.00447

a. **Predictors:** (Constant), Decision support system

b. **Dependent Variable:** Organizational performance

The table above shows that the R is at .062, R square is at .104, and the Adjusted R square is at -.007, while std. error of the estimate at 5.00447. This simply means that the level at which the decision support system affected effectiveness is 10%, meaning that, to an extent, decision support system affects organizational performance.

Table 3: ANOVA Table

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	2.252	1	2.252	4.549	.000b
	Residual	839.495	524	9.027		
	Total	841.747	525			

a. **Dependent Variable:** Organizational performance

b. **Predictors:** (Constant), Decision support system

The ANOVA table above shows that the F statistics are at 4.549 and the significant level at .000 which is lesser than the probability of .05. This implies that the decision support system has a positive significant influence on the performance of selected money deposit banks in Anambra State. Therefore, the alternate hypothesis which states that there is a positive relationship between the decision support system and the organizational performance of selected money deposit banks is accepted and the null hypothesis which states that that there is no positive relationship between the decision support system and the performance of selected money deposit banks is rejected.

Table 4: Coefficients Table

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	10.314	1.256		8.209	.000
	Decision support system	-.065	.129	-.052	-.499	.619

a. **Dependent Variable:** Organization performance

b. **Predictor Variable:** (Constant), Decision support system



The coefficient table above shows that the t value is at 8.209 and sig value is at .000, which signifies the significance of the independent variable over the dependent variable. This simply means there is a positive relationship between the decision support system and the performance of selected money deposit banks in Anambra State.

Table 5: Correlation Table

		Decision support system	Performance
Decision support system	Pearson Correlation	1	.508**
	Sig. (2-tailed)		.002
	N	525	525
Performance	Pearson Correlation	.508**	1
	Sig. (2-tailed)	.002	
	N	525	525

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

The study conducted revealed that the Pearson correlation test shows a strong relationship of .608 with a significant value of .002 indicating that the two variables are significantly related. Therefore, there is a positive relationship between the decision support system and the performance of the selected money deposit banks.

Hypothesis Two: Office automation system has no significant effect on organizational performance of selected money deposit banks in Anambra State

Table 6: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.062a	.114	-.007	5.00447

- a. **Predictors:** (Constant), Office automation system
- b. **Dependent Variable:** Organizational performance

The table above shows that the R is at .062, R square is at .104, Adjusted R square is at -.007 while std. error of the estimate at 5.00447. This simply means that the level at which the office automation system affected organizational performance is 11%, meaning that, to an extent, office automation system affects the organizational performance of selected banks in Anambra State.

**Table 7: ANOVA Table**

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	2.252	1	2.252	4.549	.000b
	Residual	839.495	524	9.027		
	Total	841.747	525			

a. **Dependent Variable:** Organizational performance

b. **Predictors:** (Constant), Office automation system

The ANOVA table above shows that the F statistics are at 4.549 and the significant level at .000 which is less than the probability of .05. This implies that the office automation system has a positive significant influence on the performance of selected money deposit banks in Anambra State. Therefore, the alternate hypothesis which states that the office automation system has a significant positive influence on the performance of selected money deposit banks in Anambra State is accepted and the null hypothesis which states that the office automation system has no significant positive influence on the performance of selected money deposit banks in Anambra State is rejected.

Table 8: Coefficients Table

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	10.314	1.256		8.209	.000
	ICT Systems	-.065	.129	-.052	-.499	.619

a. **Dependent Variable:** ICT Systems

b. **Predictor Variable:** (Constant), Organizational performance

The coefficient table above shows that the t value is at 8.209 and sig value is at .000, which signifies the significance of the independent variable over the dependent variable. This simply means that the office automation system has a significant positive influence on the performance of selected money deposit banks in Anambra State.

DISCUSSION OF FINDINGS

1. The decision support system has no significant effect on the performance of selected money deposit banks in Anambra State where the R is at .062, R square is at .104, Adjusted R square is at -.007 while std. error of the estimate at 5.00447. This simply means that the level at which the decision support system affected performance is 10%, meaning that to an extent, the decision support system affects the performance of selected money deposit banks in Anambra State.
2. Office automation system has no significant effect on organizational performance of selected money deposit banks in Anambra State such that the R is at .062, R square is at



.104, and Adjusted R square is at -007 while the std. error of the estimate is at 5.00447. This simply means that the level at which the office automation system affected performance is 11%, meaning that, to an extent, office automation system affects performance.

SUMMARY

1. The decision support system has no significant positive effect on organizational performance of selected money deposit banks in Anambra State.
2. Office automation system has no significant positive effect on organizational performance of selected money deposit banks in Anambra State.

CONCLUSIONS

The study aimed at examining information communication technology and organizational performance of selected money deposit banks in Anambra State. The inferential statistical data analysis provided evidence of existing relationships amongst the variables. The conclusions derived from the study are that: These variables used, when applied by the owners of the banks studied, will improve the organizational performance of the banks used; even the performance of the employees will be enhanced because if the organization is working effectively, the advantage will help the employees to put in more. The organization doing well will enjoy international recognition, improved market share, increased profit even job satisfaction for the employees.

RECOMMENDATIONS

Based on the findings and conclusions of the study, the following recommendations were made:

1. To raise performance and global competitiveness, bank owners should invest more in ICT as it aids in quick decision making and its components have proven to significantly influence organizational performance.
2. Finally, it is suggested that the management should increase office automation system on the output of existing software for continual improvement, and identify reliable software of the department of information technology.



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