

# Management Information System and Performance of Deposit Money Banks in Awka Anambra State, Nigeria

MEDUOYE, BUNMI OLUWARANTIMI

<sup>1&2</sup>Department of Business Administration, Chukwuemeka Odumegwu Ojukwu  
University Igbariam, Anambra State, Nigeria

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**Abstract:** *The study examined the management information system and performance of deposit money banks in Awka, Anambra State Nigeria. Objectives of the study were to: Determine the effect of decision support system on performance of deposit money banks in Awka, Anambra State Nigeria; Ascertain the extent to which process control system influence performance of deposit money banks in Awka, Anambra State Nigeria, Identify the extent to which artificial intelligence affect performance of deposit money banks in Awka, Anambra State Nigeria. The study adopted descriptive survey design. Management and technical staff of the selected banks were the target population and out of 209 of the chosen category, 199 were returned and used for analysis. Structured questionnaire was used as the as the instrument for data collection, while percentage table and ANOVA test was used for hypothesis testing. From the analysis done the study found that decision support system has significant effect on performance of deposit money banks in Awka, Anambra State Nigeria. Process control system has significant effect on performance of deposit money banks in Awka, Anambra State Nigeria It was recommended among others that Banks should put in place policies for managing the information life cycle for integrating the information flows into the banking sector; they should ensure information accuracy, relevance and up to date review; Banks should ensure that mechanisms exist to identify the costs of information assets and their contribution to the value added to the organizations*

**Keywords:** *management information system, performance, deposit money banks, decision support system, process control system*

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## Introduction

Every organization creates its own MIS, which is entirely based on the demands of the individual organizations. The human intelligence, perception, and judgment must be powerful and strong enough to combine with the system information in order to benefit from the management information system to the fullest. This is true not only of the system itself but also of the human intelligence, perception, and judgment. Managers will have access to this combination's special and priceless resources for information management in any firm. MIS is currently the organization's nervous system, reacting to opportunities and avoiding risks.

It is widely accepted that banks with the best and most efficient information systems are those that have an information strategy that is both explicit and well-considered. In deposit money banks, MIS play a significant role in ensuring the banks' competitive advantage and ultimate profitability. From a different angle, such as responsiveness, efficiency, and production, MIS are as important. Information from MIS is used to successfully and efficiently manage organizations.

Regional networks and integrated divisional systems can now be found in the workspace thanks to the management information system. It is also a rigorous way to make sure that individuals who are in charge of organizing, directing, assessing, and managing the results of an organization's operations have access to the data they require to take prompt, informed decisions. A fundamental challenge for management in almost all fields of endeavor is to thoroughly prepare so that the quantity and quality of information received is adequate to meet its requirements. (Munirat et al, 2014). A management information system (MIS) will store, organize, and retrieve data in a way that enables quicker service delivery and more focused advertising in order to improve a company's performance in ways that matter (ALGharaibeh & Malkawi, 2013). Knowledge of how the digital revolution has affected company gives one an advantage over rivals.

In order to improve information management inside a company, organizational, cultural, and strategic aspects must be taken into account. Information management is not a technology problem. Information management problems and issues are common for organizations. In many ways, the development of electronic information over the past ten or so years has only made these problems worse.

In fact, it has become nearly impossible to generate, process, store, and retrieve information with the highest level of security. With the use of a management information system (MIS), management may efficiently plan, organize, and manage its staff to get the required results. It follows that poor and low performance may emerge from the inefficient use of Management Information System (MIS). Another requirement for effective management is the Management Information System (MIS). The productivity of employees is negatively impacted by the lack of MIS. For most banks, creating and implementing efficient information system is difficult. The expense and management of these systems might occasionally act as a barrier to the accomplishment of business objectives. These factors served as the foundation for the study's necessity.

### **1.3 Objectives of the Study**

The main objective of this research is to examine the management information system and performance of deposit money banks in Awka, Anambra State Nigeria: The specific objectives objectives of the study are to:

- i. Determine the effect of decision support system on performance of deposit money banks in Awka, Anambra State Nigeria
- ii. Ascertain the extent to which process control system influence performance of deposit money banks in Awka, Anambra State Nigeria
- iii. Identify the extent to which artificial intelligence affect performance of deposit money banks in Awka, Anambra State Nigeria

## **REVIEW OF RELATED LITERATURE**

### **2.1 Conceptual Framework**

#### **2.1.1 Management Information System**

According to Ajayi and Omirin (2007), a management information system (MIS) is primarily concerned with the procedure for gathering, processing, storing, and transferring pertinent information to support management operations in any companies. According to Heidarkhani, Khomami, Jahanbazi, and Alipoor (2013), management information systems are a type of organizational information computer systems that extract internal data from operating processing systems and synthesize it into meaningful and practical forms as management reports to be used in carrying out management duties.

. Management information systems are among the most important computer-based information systems, according to Asemi, Safari, and Zavareh (2017). Its goal is to satisfy the broad information needs of all managers inside the company or in a particular organizational division of the company. A management information system, according to Babu and Sekhar (2012), is a grouping of personnel, equipment, protocols, and software used to carry out various business operations at various organizational levels. Management information systems, according to Nowduri and Al-Dossary (2012), are computer-based information systems that provide management-oriented reporting based on transaction processing and business activities of the firm..

According to Hasan, Shamsuddin, and Aziati (2013), a management information system is a category of information systems that uses internal data from the system and summarizes it to create management reports that can be used to support managerial decision-making and management operations. Management information systems, according to Al-Mamary, Shamsuddin, and Aziati (2014), primarily focus on converting data from internal sources into information that is then communicated to managers at all levels, in all functions, to help them make prompt and efficient decisions for planning, directing, and controlling the activities for which they are accountable Wehrich and Koontz defined a management information system as a functional system for obtaining, comparing, evaluating, and disseminating internal and external information to the organization in a timely, effective, and efficient manner [Wehrich and Koontz, 2011]. A management information system is a tool that helps management gain a competitive edge and further the organization's objectives. Jane and Kenneth Laudon, 2013.

### **2.2 Theoretical Framework**

#### **2.2.1 Grounded Theory**

The basis of this work is grounded theory, a method of data analysis that starts with coding the data. The codes are a popular set of labels that make it simple to segregate, assemble, and organize qualitative data (Hussey & Hussey, 1997). Axial, open, and selective coding are a few of the codes. According to Hussey (1997), the grounded theory necessitates the identification and development of codes from the interpretation of data.. Choosing the main category, systematically connecting it to additional categories, and evaluating their connections is the process of selective coding. Systems theory is also frequently utilized in the Management Information System (MIS). The input and output flow issues can be handled in a variety of complicated ways using the systems theory. When transporting information from a source to a destination, it makes use of

communication theory to develop a system architecture that can handle data inputs, process, and outputs with the least amount of noise or distortion.

**Table 2.1: Empirical Studies**

SN	Author and Year	Objective	Methodology	Major Findings	Recommendation
1	Munirat, Sanni and Kazeem (2014)	To investigate various challenges and prospect of MIS in Nigeria.	questionnaire and interview	The study reported that the use of Information Systems (ISs) was encouraged by the technological breakthroughs.	Attention should also be paid to communication through the media agencies as a way of promoting company's control of the market
2	AL-Gharaibeh and Malkawi (2013)	To identify the impact of management information systems (MIS) on the performance of governmental organizations	77 employees	There is a significant impact of networks, individuals and procedures, and management information system as a whole on the performance of governmental organizations.	Integrated approach to the organizational and technical change should be adopted.
3	Muhammad & Asfandyar (2012)	To examine the impact of MIS training on the performance of the AG office Peshawar (kpk) employees	Diagrams	The result indicated that SAP program enhances the operation more quickly than operated manually before, only entry is required and verification by authorized users are acquired to process all records.	attention should be focused on security aspects information technology development to avoid the invasion of corporate confidentiality and secrets that could be damaging to the organization
4	Naranjo (2017)	To analyse the role of top management team in the relationship between management information systems and strategic performance.	Descriptive study	The study found the effect of management information system on strategic performance (focused on flexibility) is moderated by top management team diversity.	Information technology should be upgraded to a department status in the civil service with visible and demonstrable top management commitment
5	Alaa (2015)	To investigate the concept of management information system	mean and the standard deviation	The study found that employees in Jordanian telecommunication companies have positive attitudes towards	Business organization in Nigeria should develop, acquire

		and organizational performance		management information system (MIS).	appropriate and suitable computer software and program to meet it ever growing growth and expansion
6	Yusuf, Isyaka and Aina (2014)	To examine the impact of Management Information System (MIS) on the performance of business organization in Nigeria.	Z-test.	The result of this research work revealed that there has been a lot of barriers other than financing militating against the growth and development of MIS in Nigeria for the past years.	skilful and experienced IT workers should be employed to manage the IT department of the company.
7	AL-Gharaibeh and Malkawi (2013)	This study aimed to determine the role played by the MIS in governmental organizations and how they affect the performance of the employee.	Frequencies, Percentages, Means, standard deviations , Coefficient of correlation	The study found that there is no impact of hardware and software equipment on the performance of governmental organizations, there is a significant impact of networks, individuals and procedures, and management information system as a whole on the performance of governmental organizations.	Effective communication is also essential for forecasting mutual understanding and minimizing conflicts between management and employees
8	Dandago and Rufai (2012)	This study aims at assessing the effect of information management on the performance of banks in the Nigeria banking industry.	trend analysis and time series analysis	The study concludes that for a bank to continue to remain financially viable and managerially performing, it must give high priority to information management, especially in terms of financial analysis.	There should also be flexibility in the nature/pattern and structure of management system in organizations so as to permit informed and easy information flow and accessibility to all information end-users,
9	Robert and Lori (2016)	To clarify the impact of information technology on individual and firm marketing performance	Descriptive study	The results indicate that measures of organizational traits, individual traits, information quality, system /service quality, industry traits and tasks performed using the system impact perceived performance of	Organizations should also pay more attention to communication through the media agencies.

				the marketing organization mediated individual performance impact, attitudes toward using the system, and system use.	
10	Kasasbeh (2016)	This study aimed to determine the role of information technology in improving the efficiency of the performance of the Free Zones Corporation Jordan	mean and the standard deviation	The study found the following results: Received an improvement in all elements of information technology, with the difference in the rates of improvement	Business organization should pay more attention to the development of a good and formidable management information system
11	Al Meetany (2015)	This study aimed to identify the impact of management information system to improve the efficiency and effectiveness.	Descriptive study	The study found that management information systems have a level technicians and highly skilled and qualifications and experience to enable them to perform their work to the fullest.	supervisor should organize and prioritize their jobs and concentrate on important tasks to increase their productivity and save time
12	Al Fawzan (2016)	This study aimed to know the sources of information flow in the Customs Department	Frequencies and Percentages	The majority of respondents agreed that there are administrative and financial constraints, operational and psychological facing the use of modern management information systems of interest.	Supervisors need to make out a list of tasks to be attended to with specific times attached to them, taking a leave from time management grid. While prioritization of tasks remains supreme
13	Bilkisu and Kabiru (2015)	impact of investment in Information Technology (IT) on the financial performance of banks in Nigeria	Panel data	The result from the panel regression revealed that there is a significant relationship between the independent variables and the dependent variables,	There is need for every organization to endeavour and make effective communication an essential integral part of its management strategies
14	Agbaje, Busari, & Adeboye, (2016)	examined the extent to which accounting information management has	OLS	The result revealed that accounting information had impacted significantly on the growth of Profitability in Nigerian banking industry	All cadres of staff should be involved in decisions and issues that affect their



		enhanced the profitability of Nigerian banks			performance, for it will lead to organisational development and positive
15	Kabiru & Abdullahi (2016)	effect of information management on the performance of banks in the Nigeria banking industry	OLS	The study concludes that for a bank to continue to remain financially viable and managerially performing	An open communication environment is one in which all members of the organization feel free to share feedback, ideas and even criticism at every level,
16	Akanbi and Adewoye (2018)	evaluated the adoption of the Accounting Information Systems (AIS) among commercial banks in Nigeria	OLS	The study found that commercial banks in Nigeria adopted and use AIS in providing their services to their customers and the level of usage is relatively high	follow up of information encouraged for organizational performance
17	Balogun (2016)	examined customers' and employees' responses to technology innovation, and their effects on the performance of the Nigerian banks	Chi-square	Findings revealed that technological innovation influenced banks employee's performance, customer's satisfaction and improvement in banks profitability	Staff in the institution should be taken through in-service training on the use of computers
18	Akram (2015)	examined financial institutions of Bahrain on Management Information Systems leadership	Chi-square	The results of the research showed that MIS was primarily used to enhance strategic planning in both financial institutions	Updating information systems continuously and top management support to the role of MIS in improving governmental organizations performance
19	Minwer (2016)	identify the Management Information Systems & Their Impact on Improving the	Chi-square	there are impact on the management information systems of Improving the Quality of Service,	Engaging employee of governmental organizations in the analysis, design, construction and

		Quality of Service at The Commercial Bank Customers in Saudi Arabia			development of information system
20	Kabiru, Mohd, and Norlena. (2015)	The Relationship between Information Technology Capability and Organizational Performance in Nigerian Banks	SPSS	The findings showed that IT capability is significantly related to organization performance of banks based on resource based view (RBV) of organization performance.	Train employee on how to use information system to improve their performance.
21	Ironkwe, & Otti, (2016)	investigate the relationship between accounting information and the financial performance of banks in Nigeria	SPSS	the findings showed that relevance of accounting information was statistically significant in determining the profitability and quality of service delivery of banks in Nigeria	MIS personnel should use the identified data collection procedures in providing the relevant data for MIS activities in the Bank
22	Nazem & Malkawi, (2013).	impact of management information systems on the performance of governmental organizations-study	Survey	there is a significant impact of networks, individuals and procedures, and management information system as a whole on the performance of governmental organizations	Ministry should update MIS continuously, engaging employees in building systems, and train then on the system.
23	Marire (2018)	Importance of Management Information System in service Delivery and Paper Work in Nigeria	SPSS	The result was revealed that management information system has assisted in service delivery to a high extent	proper orientation should be given to managers to ensure proper and adequate use of MIS facilities in generating and disseminating information for better decisions in the universities
24	Munirat Mohammed & Kazeem, (2018)	Impact of Management Information System (Mis) on the Performance of Business Organization in Nigeria	SPSS	Management information system has assisted in reducing paper work to a large extent	Business organization should introduce flexibility in the nature or pattern and structure of MIS,
25	Nebo, Nwankwo,	Role of effective communication on organizational	Survey	Effective communication is the remedy to effective and efficient management	there is need for every organization to endeavour and



	& Okonkwo, (2015).	performance: a study of Nnamdi Azikiwe University		performance of employees in an organization	make effective communication an essential integral part of its management strategies and map out a strategic ways of storing information's;

## RESEARCH METHODOLOGY

### 3.1 Research Design

This study used a descriptive survey design. The study uses a descriptive survey because it adopted the use of questionnaires aimed at finding the effect of management information system on the performance of selected firms in Nnewi. The population of interest therefore consists of all staff in deposit money banks in Anambra state. Thus the population of this study is 209 staff from four selected banks in Awka (First Bank, Fidelity, Zenith and FCMB). This population figure was derived from human resources personnel of selected deposit money banks. Since the population is not up to 1000, the researcher sampled all. A structured questionnaire instrument consisting of close ended multiple choice-questions were employed for the survey. Given that most of the items in the questionnaire were targeted to measuring the respondents' perceptions and attitudes, hence, Likert-type scale is considered more appropriate and reliable Adeoye and Lawanson (2012).. Questionnaire will be used to generate the data needed for the study. The questions will be organized on issue-based structured pattern following the sub-elements of the stated research questions, so as to ensure completeness. The data collected were quantitative. Data were presented using tables - percentages and frequencies to facilitate understanding. A well known statistical package SPSS (Statistical Package for Social Sciences) version 29.0 was used in order to analyze the data.

### PRESENTAION AND ANALYSIS OF DATA

Two hundred and ninety-nine (209) questionnaires were administered, but only one hundred and ninety-nine (199) were retrieved, so the analysis and interpretation of data were only based on the returned questionnaires. The validity and reliability of this study is highly assured, despite the number of questionnaires not returned.

## 4.1 Demographic Table

### 4.1.1 Gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	MALE	166	69.5	83.4	83.4
	FEMALE	33	13.8	16.6	100.0
	Total	199	83.3	100.0	
Total					

**Source: SPSS Version 21, 2023**

The above table reveals that the one hundred and sixty-six (166) of the respondents which represents 83.4% were male respondents, while thirty-three (33) respondents which represent 16.6% were female respondents. By implication, male respondents were more than female respondents by 66.4% in our selected population sample for this study. The implication of this is to enable us to know the number of female and male that successfully returned their questionnaire.

### 4.1.2 Age

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	LESS THAN 25 YEARS OLD	104	43.5	52.3	52.3
	25-30	90	37.7	45.2	97.5
	35-ABOVE	5	2.1	2.5	100.0
	Total	199	83.3	100.0	

**Source: SPSS Version 21, 2023**

The table above shows that respondents whose age bracket falls below 25yrs were one hundred and four (104) which represent 52.3 percent. This is followed by those with age bracket of 25-30years with ninety (90) which represents 45.2%. Also those within age bracket of 35-above were five (5) which represents 2.5%. The implication of this age distribution is to enable us to check if the questionnaire was directed to the right age group.

### 4.1.3 Marital status

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Single	72	30.1	36.2	36.2
	Married	99	41.4	49.7	85.9
	Separated/divorced	28	11.7	14.1	100.0
	Total	199	83.3	100.0	

**Source: SPSS Version 21, 2023**

In the table above, out of the one hundred and ninety-nine (199) respondents, seventy-two (72) of the respondents were single. While twenty-eight (28) respondents which represent 20.7 percent are married. Two respondents (2) which represent 1.5 answered others. It is therefore glaring that the majority of the respondents were single as at the time of this study. Thus marital status table help us to know the number of single, married, and divorce respondents that answered the distributed questionnaire.

**4.1.4 Level**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Clerical Staff	35	14.6	17.6
	Junior Staff	66	27.6	33.2
	Senior Staff	98	41.0	49.2
	Total	199	83.3	100.0

**Source: SPSS Version 21, 2023**

The table above indicates that thirty (30) respondents which representing 34.5% maintain to acquire WAEC, while 18.4% of the respondents which represents sixteen (16) ordinary national diplomas. However fourteen which represent 16.1 percent either have Bachelor of Science degree/HND. The respondents that have MS.c are numbered 19 which represent 21.8%, while those that answered others are but 98 which represent 9.2%. This is the one of demographic item helps us to identify the education qualification of the respondent.

**4.1.5 Years of Experience**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1-5	160	66.9	80.0
	5-10	33	13.8	96.5
	11-ABOVE	6	2.9	100.0
	Total	199	83.7	100.0

**Source: SPSS Version 21, 2023**

The table above shows that respondents whose years of experience fall between 1-5 yrs were one hundred and sixty (160) which represent 80 percent. This is followed by those whose years of experience fall between 5-10 years with thirty-three (33) which represents 16.5%. Also those whose years of experience fall between 11-above were seven (7) which represents 3.5%.

**4.3 Hypothesis Testing**

The need to examine the relationship between the collected data and the stated hypothesis has called for this section. This result will be compared with the statistical criteria to see if the preconceived notion in this research work holds or not.

### Hypothesis One

H<sub>01</sub>: Decision support system has no significant effect on performance of deposit money banks in Awka, Anambra State Nigeria

#### Anova

Model	Sum of Squares	Df	Mean Square	F	Sig.
1 Regression	10.134	2	3.071	19.456	.000 <sup>b</sup>
Residual	57.396	197	2.836		
Total	97.503	199			

Source: SPSS, Version, 20 2023

However, from the Anova table above, it was observed that the probability value of hypothesis one is less than 0.05% level of significance (0.000), as a result null hypothesis will be rejected and alternative accepted, meanwhile Decision support system has significant effect on performance of deposit money banks in Awka, Anambra State Nigeria

### Hypothesis Two

H<sub>02</sub>: Process control system has no significant effect on performance of deposit money banks in Awka, Anambra State Nigeria

#### Anova

Model	Sum of Squares	Df	Mean Square	F	Sig.
1 Regression	6.020	2	5.614	13.172	.000 <sup>b</sup>
Residual	34.470	197	2.520		
Total	57.570	199			

Source: SPSS, Version, 20 2023

However, from the Anova table above, it was observed that the probability value of hypothesis two is less than 0.05% level of significance (0.000), as a result null hypothesis will be rejected and alternative accepted, Process control system has significant effect on performance of deposit money banks in Awka, Anambra State Nigeria

### Hypothesis Three

H<sub>03</sub>: Artificial intelligence has no significant effect on performance of deposit money banks in Awka, Anambra State Nigeria

**Anova**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	21.719	2	4.344	13.895	.000 <sup>b</sup>
	Residual	65.781	197	2.741		
	Total	87.500	199			

Source: SPSS, Version, 20 2023

However, from the Anova table above, it was observed that the probability value of hypothesis three is less than 0.05% level of significance (0.000), as a result null hypothesis will be rejected and alternative accepted, meanwhile Artificial intelligence has significant effect on performance of deposit money banks in Awka, Anambra State Nigeria

**CONCLUSION AND RECOMMENDATIONS**

**Conclusion**

The results of this study imply that aspects of management information systems such artificial intelligence, process control systems, and decision support systems were linked to DMB performance in Nigeria. Particularly, it was discovered that the performance of DMBs was considerably and favorably related to the technology information system. The study came to the conclusion that DMB management would perform better if they took advantage of technology information systems. The performance of DMBs is also considerably and favorably impacted by management information systems.

In order to maintain their performance and competitive advantage, managers of DMBs should implement and use management information systems. In other words, the more they use their management information systems, the higher the likelihood that they will acquire the technical know-how necessary to boost their performance. Therefore, it is advised that managers of DMBs should employ their management information systems channels effectively and efficiently in order to improve their performance and maintain their competitive edge.

**Recommendations**

- Banks should put in place policies for managing the information life cycle for integrating the information flows into the banking sector; they should ensure information accuracy, relevance and up to date review.
- Banks should ensure that mechanisms exist to identify the costs of information assets and their contribution to the value added to the organizations.
- Updating information systems continuously and top management support to the role of MIS in improving governmental organizations performance.
- Train employee on how to use information system to improve their performance.

**References**

Agbaje, W. H., Busari, G. A., & Adeboye, N.O. (2016). Effects of accounting information management on profitability of Nigerian banking industry, *International Journal of Humanities Social Sciences and Education* 1 (9) 100-105

- Ajayi, I. A., and Omirin, F. F. (2017). The Use of Management Information Systems (MIS) In Decision Making In The South-West Nigerian Universities, *Educational Research and Review*, (2)5, 109-116.
- Akanbi T. A and Adewoye J. O (2018). Effects of Accounting Information System Adoption on the Financial Performance of Commercial Bank in Nigeria, *Journal of Accounting & Marketing*, 4 (6) 12-19
- Akram, J. K. (2011). The significance of management information Systems for enhancing strategic and tactical Planning, *Journal of Information Systems and Technology Management*, Vol. 8, No. 2, 2011, p. 459-470
- Al Fawzan, R.M. (2016). Modern information system and their impact on the performance of employees, a survey on the General Customs Authority, Saudi Arabia, Master theses, NaifArabe University for Security Sciences, Graduate School, Department of Administrative Sciences, Saudi Arabia
- Al Meetani, Y.A.R.Y. (2015). The impact of management information systems to improve the efficiency and effectiveness of the Jordanian commercial banks: a case study of arab bank, master, al al-bait university, faculty of economics and administrative sciences, jordan.
- Alaa, K. (2015). The effect of management information system on organizational performance: applied study on Jordanian telecommunication companies, *Information and Knowledge Management*, (5) 6, 45-50.
- Al-Gharaibeh, S. M., & Malkawi, N. M. (2013). The impact of management information systems on the performance of governmental organizations- study at Jordanian ministry of planning. *International Journal of Business and Social Science*, 4(17), 101-109.
- Al-Mamary, Y.H., Shamsuddin, A., and Aziati, N. (2014). The Role of Different Types of Information Systems in Business Organizations: A Review, *International Journal of Research*, (1)7, 333-339.
- Asemi, A., Safari, A. and Zavareh, A.A. (2018). The Role of Management Information System (MIS) and Decision Support System (DSS) for Manager's Decision Making Process. *International Journal of Business and Management*, (6)7, 164-173.
- Babu, K.V.S.N.J., and Sekhar, B.M.R (2016). MIS. Vs. DSSS in Decision Making, *Global Journal of Management and Business Research*, (12) (16) 1-16
- Balogun E. O. (2016) Effects of Information Technology on Organisational Performance in Nigerian Banking Industries, *Research Journal of Finance and Accounting*, 7 (3) 52-65
- Bilkisu K. U. F. and Kabiru I. D., (2015 impact of investment in Information Technology (IT) on the financial performance of banks in Nigeria, 5 (8) 45-53



- Dandago, K.I. and Rufai, A.S. (2012) the effect of information management on the financial performance of banks in Nigeria (2006-2010), *International Journal of Arts and Commerce*, (1) 5, 263-278.
- Hasan, Y., Shamsuddin, A., and Aziati, N. (2016), The Impact of Management Information Systems adoption in Managerial Decision Making : A Review, *The International Scientific Journal of Management Information Systems*, (8)4, 010-017.
- Heidarkhani, A., khomami, A.A, Jahanbazi, Q., and Alipoor, H. (2015). The Role of Management Information Systems (MIS) in Decision-Making and Problems of its Implementation, *Universal Journal of Management and Social Sciences*, (3)3, 78-89.
- Hussey, J. and Hussey, R. (2016). *Business Research: a practical guide for undergraduate and postgraduate student*. London: Macmillan.
- Ifinedo J.L. and Uwadie W., (2015). "Developing environmental scanning/forecasting systems to augment community college planning". *VCCA Journal*. Chapel Hill Copytron. (4)1: 12-20
- Ironkwe, U. I. & Otti, J. O. (2016) Accounting Information and Financial Performance of Banks in Nigeria, *Journal of Accounting and Financial Management*, 2 (3) 60-67
- Kabiru I. D. & Abdullahi S. R. (2013) The effect of information management on the financial performance of banks in Nigeria, *Journal of Research in International Business and Management*, 3(1) pp. 27-37
- Kabiru J. R., Mohd R. R. and Norlena H. (2015) The Relationship between Information Technology Capability and Organizational Performance in Nigerian Banks, *International Journal of Business Research and Development*, 4 (2), 1-10
- Kasasbeh, A.K. (2016), the role of information technology in improving corporate performance, A Case Study Jordanian Free Zones Corporation, Arab University for Graduate Studies, Faculty of Management Studies and Senior Finance, Department of Management, Jordan.
- Marire M. I. (2018). Importance of Management Information System in service Delivery and Paper Work in Nigeria. *Journal of Business and Management* 20 (9) 30-43
- Minwer M. A (2016) Management Information Systems & Their Impact on Improving the Quality of Service at the Commercial Bank Customers, *International Journal of Business and Social Science* 7 (6) 56-64
- Muhammad , S. and Asfandyar J.C. (2013). "Market orientation and the learning organization". *Journal of marketing*. ABI/inform Global. (56)3: 63-74
- Munirat Y, Mohammed S & Kazeem, A.O (2018). The Impact of Management Information System (Mis) on the Performance of Business Organization in Nigeria. *International Journal of Humanities Social Sciences and Education* 1, (2), 76-86

- Munirat, T. Sanmi, J. and Kazeem, A. (2014). *What kind of resource is information*. (10)2. Boulder, C.O: west view Press.
- Munirat, Y., Sanni, I., &Kazeem, A. O. (2014). The impact of management information system (MIS) on the performance of business organization in Nigeria. *International Journal of Humanities Social Sciences and Education (IJHSSE)*, 1(2), 76-86.
- Narango, L. (2017). *Information policy issues and challenges for organizations*. Aslib Information. Second Edition. Gower/Aldershot.
- Nebo, C. S. Nwankwo, P.N. & Okonkwo, R. I. (2015). The role of effective communication on organizational performance: a study of Nnamdi Azikiwe University
- Nowduri, S., and Al-Dossary, S. (2012). Management Information Systems and Its Support to Sustainable Small and Medium Enterprises, *International Journal of Business and Management*; (7)19, 125-131.
- Robert, D. and Lori, J.E. (2016). The role of information in strategic management process”. *Journal of Information Science*. British Library Research and Innovation Centre Publisher. (21)4: 257-272.
- Welhrich Y. and Koontz, Y. (2001). “Information Manager, an exploratory study”. *South African Journal of Library and Information Science*. (60)3. 137-147
- Yusuf M., Isyaka, M.S. and Aina, O.K. (2014). The Impact of Management Information System (MIS) on the Performance of Business Organization in Nigeria. *International Journal of Humanities Social Sciences and Education (IJHSSE)*, (1)2, 76-86