

## STRATEGIC INFORMATION MANAGEMENT SYSTEM AND JOB PERFORMANCE OF DEPOSIT MONEY BANKS IN RIVERS STATE

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### ABSTRACT

*This study investigated the relationship between strategic information management system and job performance of deposit money banks in Rivers State. Two (2) objectives, two (2) research questions and two (2) hypotheses guided the study. Descriptive survey research design was adopted for this study. The population of the study was all deposit money banks licensed and operational in Rivers State where a sample size of 100 respondents was drawn. Self-structured questionnaire titled "Strategic Information Management System and Organizational performance Questionnaire" (Strategic Information Management AJPQ)" was used to obtain primary data after validation and ascertaining the reliability coefficient of 0.92. Descriptive statistics (mean, standard deviation, and percentages) were used as statistical tool for analyzing the data, while Spearman correlation was used as statistical tools to test the hypotheses with the Statistical Package for Social Sciences (SPSS). It was found that strategic information management system had significant relationship with job performance of deposit money banks in Rivers State. It concluded that strategic information management system is positively correlated with organizational performance of deposit money banks in Rivers State; on the second note the study found organizational infrastructure as a moderating factor in the relationship between strategic information management system and organizational performance of deposit money banks. Based on the findings, it was recommended that deposit money banks should ensure their system automation are dynamically innovative, creative and accommodative; and continually contribute to societal strategic transformation in compliance with professional code of conduct, ethics and excellence as to foster a success-oriented organization.*

**Key words: Strategic Information, System Automation**

### INTRODUCTION

Organizational performance is a phenomenon that has attracted the attention of scholars over time. Considering its importance, most organizations, especially profit-oriented ones, take adequate steps to ensure proper measurement of their performances. Performance measurement is pivotal for deposit money banks in Nigeria due to the stability challenges such as global economic decline, non-performing loans, and deterioration of bank assets that confronts them, which have led to a decline in growth forecasts and employee layoffs. Therefore, interrogating deposit money banks' performance will reveal the reliability, viability, and level of competence of the banking sector and its contribution to the stability of the macroeconomic environment as opined by Imeokparia, 2015; Oloye & Osuma, 2015 in Chux-Nyeche and Matthew (2021) the interrogation of deposit money banks' performance is necessary because deposit money banks occupy a strategic position and are a necessary sector for growth and development agents in any economy

Performance in any successful organization is enhanced by a determined effort to meet employers, staff, and customers' expectations in terms of profitability, productivity, and service delivery with the robust enrolment of service infrastructures. The need for a robust performance appraisal is considered a vital asset in the developmental process of any given organization and its advancement in today's technologically information-centric world for which the financial institution (deposit money banks) is not an exemption as opined in Faboyinde, (2018) cited in Sharma,

(2018). The deposit money banks have a peculiar nature that makes them stand out amidst other sectors of the economy. Deposit money banks should keep adjusting toward meeting the changing information and technological needs of the society they serve. To meet up with these requirements, the deposit money bank is dependent upon the availability of information systems to carry out their duties, and reliance on their efficacious capabilities, to efficiently utilize the information and communication technology tools, to enhance their performance.

Organizational Performance is defined as a sustainable market presence achieved through efficiency and productivity, which declares that a performing organization is efficient, competitive, and productive. It can also be the analysis of a company's presentation as compared to goals and objectives. Performance is defined as an organization's ability to exploit its environment for accessing and using limited resources according to Gavrea, Ilies and Stegorean, (2011) cited in Samwel, (2018). In measuring performance organizations tend to make use of a balanced scorecard. According to Ahmed and Shafiq, (2014), in Claude (2016) a balanced scorecard is a framework that translates strategy into a rational set of performance measurements. It, therefore, reflects the necessity of a balance between the traditional financial perspective and other non-financial elements such as customers, internal business processes, and innovations or improvements. Hence, in this study, organizational performance is measured in terms of profitability, productivity, and service delivery. Also, it translates the organization's mission and strategy into a comprehensive set of performance measures to provide the necessary framework for a strategic measurement and management system. It enables companies to track short-term financial results, while simultaneously monitoring their progress in developing the capabilities and acquiring the intangible assets that generate growth for future financial performance.

The growth in the competitive global business environment has put considerable pressure on most organizations to make their operational, tactical, and strategic processes more efficient and effective (Yadeta, 2016 in Chux-Nyeche & Matthew 2021). Furthermore, challenges such as reducing costs, increasing efficiency, and improving performance have led organizations today to implement new organizing mechanisms such as strategic information management systems to improve performance (Melville et al., 2004 in Jane 2019). The spectacular growth of strategic information management systems has enormous potential for improving organizational performance. However, the huge investment made in strategic information management systems puts increasing pressure on management to justify the outlay by quantifying the performance effects of strategic information management system applications. Also, the issue of security of information and technical know-how constitutes a major stumbling block to the effective usage of a strategic information management system.

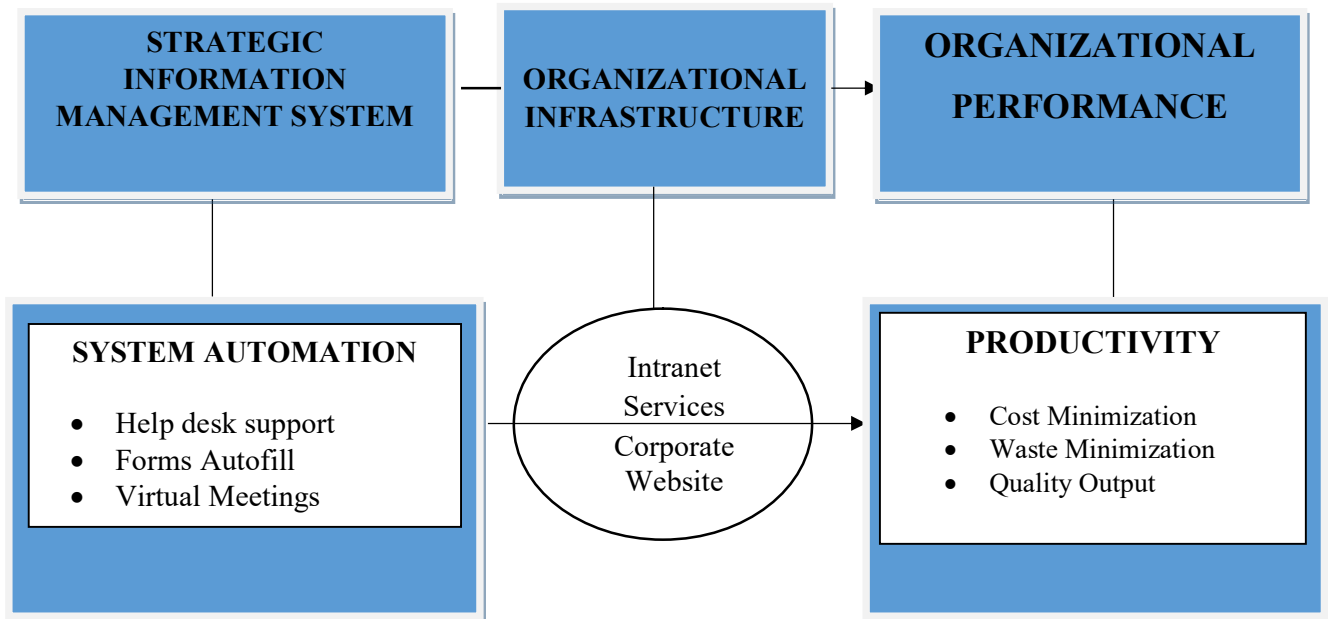
According to Diez and McIntosh, (2009) as cited in Pallant, Sands, and Karper (2020), due to the dynamic business environment, globalization, competition, changing consumer needs, and the influence of technology, modern competitive organizations adopt strategic information systems such as internet banking, mobile banking, and automated teller systems to improve efficiency and effectiveness. The revolution in strategic information management systems has brought drastic changes in financial institutions in the global market. These systems have opened new horizons for business enterprises and have enabled them to carry out their commercial activities by use of advanced technologies.

To actualize the lofty organizational objectives, deposit money banks and their systems must function in line with set standards. This implies a systematic quality service delivery and productivity that surmounts customer satisfaction and profitability. Being service and profit-oriented, deposit money banks require the strategic use of information systems for improved organizational performance. In the light of the performance challenges that deposit money banks in Nigeria face, it has become pertinent that these banks find ways through which instability could be prevented or to ensure its minimal effects on their performance. This brings to the fore the consideration of the influence of strategic information management systems on the organizational performance of deposit money banks in Nigeria. This approach is viable because a strategic information management system can help deposit money banks to improve organization

performance by defining their degree of expertise and engendering collaboration across organizational boundaries through sensing, collecting, organizing, processing, and maintaining information (Nouri et al., 2013) in Chux-Nyeche, Nwaonumah and Onwukwe, (2023). Consequently, an information strategic management system is an important variable that can improve deposit money banks' organizational performance, thereby ensuring the stability of the Nigerian banking sector

**Problem Statement**

Adoption of strategic information management systems by modern financial institutions has contributed to improved customer service, increased profits, minimal costs of operation, and new product development. However, despite the introduction of internet banking, mobile banking and automated teller machines, deposit money banks have continued to experience deteriorating performance (Alipour & Mahdi, 2010). Hitherto, there appears to be an elevated level of strategic information management systems in deposit money banks in Nigeria. Despite these activities adopted for information management at the strategic level in deposit money banks, customers still queue at the customer service desk and cash counters for one form of transaction or the other. Also, there are incessant reports on cases of bank robbery, phishing, social engineering, hacking of information as well as accounts, etc. In recent times Swedish Financial Supervisory Authority noted that cyber security incidences have increased frequently over the years especially in Nigeria (Abawajy, 2020), in Chux-Nyeche (2022) if this trend is not checked or left unabated it will cripple the existence of deposit money banks as well as related organizations. The major concept of this study is focused on the relationship between strategic information management system and the organizational performance of deposit money banks in Rivers State. The conceptual framework showed the dimensions and measures of the dependent and independent variables of the study. This is depicted in fig 1.1 over leaf:



**Source:** Researchers conceptualization (2023), Kolb (2019), Zeb-Obipi (2016), Okwemba (2019) and Gakenia (2015) as cited in Chux-Nyeche, Asingbi, and Wokeh, (2022).

**Objectives of the Study**

The aim of the study was to determine the relationship between strategic information management system and organizational performance of deposit money banks in Rivers State. Specifically, the objectives of the study were to:

1. Examine the extent to which system automation relates to productivity of deposit money banks in Rivers State.
2. Establish how organizational infrastructure moderate the extent to which strategic information management system relates to organizational performance of deposit money banks in Rivers State.

### **Research Questions**

The following research questions formulated will aid to achieve the objectives of the study:

1. To what extent does system automation relate to productivity of deposit money banks in Rivers State?
2. To what extent does organizational infrastructure moderate the extent to which strategic information management system relates to organizational performance of deposit money banks in Rivers State?

### **Hypotheses**

The following null hypotheses are formulated to guide the study:

**Ho<sub>1</sub>:** There is no significant relationship between system automation and productivity of deposit money banks in Rivers State.

**Ho<sub>2</sub>:** Organizational infrastructure does not moderate the relationship between strategic information management system and organizational performance of deposit money banks in Rivers State.

### **Justification for the Study**

This study is significant based on the following justifications:

This study will specifically benefit deposit money banks, Business organizations, office and information managers, researchers and the body of knowledge. It will benefit these groups of persons in the following ways – For the deposit money banks, this study has a significant and value-added contribution in that it can be entirely automated, customized and secured using emerging digital technologies. In other words, strategic information management system is likely to change the vast majority of business organizations at least to some degree which will necessitate significant job redefinition and a transformation of business processes. More so, The findings of the study are beneficial to Business Organizations as the economic benefits will extend far beyond labour savings when its roles and processes get redefined. Particularly in the highest-paid occupations, machines can augment human capabilities to a high degree, and amplify the value of expertise by increasing an individual's work capacity and freeing the employee to focus on work of higher value that will result in lower level of occupational stress.

It is hoped that this study will benefit Office and Information Managers as well as Scholars and Researchers as the finding served as catalysis for existing information management system in order to maximize work efficiency, decision making success, service delivery that transforms to productivity as well as customers' satisfaction and has also highlighted the development of strategic information management in a third world country, Nigeria, which can be considered as an act of opening door for other researchers to explore and modify the system accordingly to people's lifestyle, their needs and work ethics. The findings from the study will also serve as a reference material for further studies on the relationship between the variables. This is as its methods and techniques will provide a basis for further assessment of the variables using other methods and techniques. Furthermore, the findings from the study will provide evidence which either validates or refutes the assertions of previous studies with regards to the distributions of the variables and their relationship within the context of the study. This will therefore aid and justify decision making and the development of policies based on actual evidence from the context rather than generalized models from dissimilar contexts.

### **Area of Coverage**

The content-wise, the study concentrated on Strategic information management system (independent variables) with its dimension as system automation while, organizational performance as (dependent variable) with its measures as productivity. and organizational infrastructure as moderating variable. Geographical coverage is all deposit money banks in Rivers States, and is limited to the main branch of all the 21 deposit money banks in Rivers State. The Unit of Measurement/analysis are the branch managers, operations managers, human resource managers, customer relations managers and internet technology managers in the main branch of the banks as respondents in this study.

### **Conceptual Review**

Strategic information systems as opined by Pant and Hsu, (1995) in Sharma, (2018) can be regarded to as information systems developed in response to corporate business initiative. They are mainly intended to give competitive advantage to the organization thus improving or increasing performance. Through strategic information management system, an organization may be able to deliver 4 products or services at a lower cost, products that are differentiated or even focus on a particular market segment. Strategic information management system according to Diez et al, (2009) in Caudle, (2016) may also be defined as information technology which interrelates with business strategies to support corporate missions. In the contemporary information era, one of the key factors in search for higher levels of competitiveness and better performance is information technology which forms part of information systems.

Muraleedharan (2014) as cited in Rogers and Trombetta, (2021) argues that strategic information management system is the firms' total investment, expenditure, and know-how in computing. He further argues that it involves hardware, software, processes and people dedicated to providing services. strategic information management system affects the management system and the organizational structure by changing the methods and capability of its users to search, capture, store and transfer information. strategic information systems have become an important aspect in the future development of financial services industry and especially the banking industry (Alipour & Mahdi, 2010).

### **System Automation**

Automation is a form of banking automation that connects the customer service desk in a bank office with the bank's customer records in the back office. Banking automation refers to the system of operating the banking process by highly automatic means so that human intervention is reduced to a minimum. Branch automation is also referred to as platform automation. Automation removes the human error factor that banks run into when tasking employees with repetitive manual projects that could easily be automated. Anytime you can remove the human element and rely instead on a machine to handle repetitive tasks, accuracy rates rise and human resources can be refocused on more complex issues. Computer automation also helps banks deal effectively with the constant growth in governmental regulations. Through automation, banks can report verification of compliance and then focus on exceptions (where the problems existed). All actions and functions are fully accountable and easily accessed via the platform's systems management reporting tools.

The banking industry believes that by adopting automated systems, both customer service level and customer relationship will improve for the better. Pikkarainen et al. (2014) in Caudle, (2016) describes internet banking as an internet platform, that allows customers to use different types of banking services ranging from bill payment to making investment. Nyangosi et al. (2009) in Jane (2019) argue that in Kenya, most banks have adopted internet, mobile and other e-banking facilities to enrich delivery channels to their customers. However, it is significant that the introduction of these products be accompanied with programs to educate the consumer on the novel and other innovative ways of conducting banking business. For example, in as much as internet banking is a convenient and quick means of carrying out banking transaction, it hasn't

gained acceptance amongst customers due to uncertainties and fears of apprehension in this approach of banking.

### **Organizational Performance**

Although the concept of organizational performance is very common in the academic literature, its definition is difficult because of its many meanings. Performance is a systematic process for improving organizational performance by developing the performance of individuals and teams. It is a means of getting better results by understanding and managing performance within an agreed framework of planned goals, standard and competency requirements (Alaa, 2015 in Jane 2019). Performance is a measure of results achieved by individual, group, and organization. Organization performance is defined as a continuous and action oriented with focus on improving performance by using objective, standards, appraisal, and feedback (Ababneh, 2008 in Alipour & Mahdi, 2010). Organizations performance comprises the actual output or results of an organization achievement as measured against its intended goals and objectives. Ammons (2001) as cited in Li. (2018) noted that organizations adopt performance measurement because it creates accountability, provides feedback to operations, and result in more effective planning, budgeting and evaluation.

### **Method**

#### **Philosophical Underpinning**

The focus or perspective for quantitative research is usually concise and reductionist which means the whole cannot be studied but will be broken down into parts so that the parts can be examined. Furthermore, quantitative research requires control to identify and limit the problem and attend to limit the effect of extraneous or outside variables that are not the focus of the studies. One of the four quantitative research designs used for this study is correlation design. Therefore, the choice of the research philosophy is based on the hypotheses to be tested by the researchers. As such, the research philosophy that best fitted the objectives of this study is the positivism paradigm.

#### **Research Design**

The study adopted a descriptive research design to establish the relationship between strategic information management systems and organizational Performance of deposit money banks in Nigeria. Kothari (2004) regards the research design as an arrangement of conditions for the collection and analysis of data in a manner that aimed to combine relevance to the research purpose with economy in procedures. The descriptive study method was appropriate because it explores and describes the relationship between variables in their natural setting without manipulating them.

The descriptive study aims at obtaining information that can be analyzed, patterns extracted and comparisons made for clarification and provision of a basis for making decisions. Both qualitative and quantitative data were obtained for comparison purposes. Cooper and Schindler (2006) as cited in Jane (2019) acknowledge the importance of descriptive design especially when the intent is to gain a broader understanding of the context of the research and processes being enacted. Moreover, they argue that the design has considerable ability to generate answers to the questions of why, where, what, and how.

#### **Population, Sample/Sampling Technique**

The population for this study included all the deposit money banks licensed to operate in Nigeria and are operational in Rivers State. According to the Central Bank of Nigeria (CBN), the number of deposit money banks in Nigeria with operational permit totals twenty-two (22), however, only 21 are operational in Rivers State as at the time of this study. Table 3.1 is used to show all the deposit money banks in Nigeria. The main branches of the deposit money banks in Port Harcourt, Rivers State represents the symbol and existence of the various deposit money banks in Nigeria. Hitherto, the sample for this study is 21 deposit money banks making the study a census study. A

census approach was adopted where information was sought from twenty-one (21) deposit money banks in Port Harcourt. Respondents of the study were 105 functional heads in all the head branches of the twenty-one (21) deposit money banks operating in Port Harcourt, Rivers State. This was because the twenty-one (21) deposit money banks as a population is a manageable size. The 5 functional heads such as Managerial staff which include Branch Managers, Operations managers, Human Resource Managers, Customer Relations Managers, and Internet Technology Managers were selected from each of the deposit money banks. They were selected as respondents because the researchers wanted to select those who directly deal with strategic management issues and those who are also involved in the formulation and implementation of policies. Hence the one hundred (100) respondents were chosen as follows: One (1) Branch Manager, one (1) Operations manager, one (1) Human resources manager, one (1) Customer relations manager, and one (1) Internet technology the population for this study included all the deposit money banks licensed to operate in Nigeria and are operational in Rivers State. According to the Central Bank of Nigeria (CBN), the number of deposit money banks in Nigeria with operational permits totals twenty-two (22), however, only 21 are operational in Rivers State at the time of this study. Table 3.1 is used to show all the deposit money banks in Nigeria. The main branches of the deposit money banks in Port Harcourt, Rivers State represents the symbol and existence of the various deposit money banks in Nigeria.

**Table 1: Population table and selected respondents from categorized functional heads**

S/N	DEPOSIT MONEY BANKS	NUMBERS OF STAFF
1	Access Bank Plc.	5
2	Citibank Nigeria Ltd.	5
3	Ecobank Nigeria Plc.	5
4	Fidelity Bank Plc.	5
5	First Bank Nigeria Ltd.	5
6	First City Monument Bank Plc.	5
7	Globus Bank Ltd.	5
8	Guaranty Trust Bank Plc.	5
9	Heritage Banking Company Ltd.	5
10	Key Stone Bank	5
11	Polaris Bank	5
12	Stanbic IBTC Bank Ltd.	5
13	Standard Chartered Bank Nigeria Ltd.	5
14	Sterling Bank Plc.	5
15	Sun Trust Bank Nigeria Ltd.	5
16	Titan Bank	5
17	Union Bank of Nigeria Plc.	5
18	United Bank For Africa Plc.	5
19	Unity Bank Plc.	5
20	Wema Bank Plc.	5
21	Zenith Bank Plc.	5
<b>TOTAL</b>		<b>105</b>

*\*Source: Survey Data, 2021.*

According to Kothari (2006), a census is a procedure of systematically acquiring and recording information about the members of a given population. Information from every member of the population was sought to establish the problem under investigation. A census was preferred because the deposit money Banks operating in Rivers State were limited in number and the collection of data from the twenty-one (21) deposit money Banks will enhance the accuracy of the findings to establish the problem under investigation.

### **Research Instrument**

The research question guides the type of data gathered for the study and as such, the researcher made use of primary data. Primary data are original data collected for a specific research study. Data was collected through the use of a questionnaire. The questionnaire which is one of the most widely used methods of data collection will be used, with a closed-end and structured in a response-friendly manner to aid the understanding of the respondents. The questionnaire was designed to reflect the research objectives and research questions for the study. This method was adopted because it is the only possible way to reach a large number of respondents and it ensures the unity and consistency of the information collected for this study.

The instrument was titled 'strategic information management system and Organizational performance Questionnaire' (strategic information management AJPQ). The questionnaire was made up of a list of questions relating to the variables in the study. The questionnaire was divided into two sections, one section contained demographic information of the respondents and the subsequent sections contained information on strategic information management systems and Organizational performance. A 5-point interval rating scale was used to describe the opinions of the respondents as such, 5-point numerical values were assigned to the rating that describes a particular item that is measured. The 5-point interval rating scale is shown below

**Table 2. Interval Rating Scale for Research Instrument**

<b>Response</b>	<b>Options</b>	<b>Ratings</b>	<b>Boundary Limits</b>
Very High Extent	(VHE)	5	4.50-5.00
High Extent	(HE)	4	3.50- 4.49
Moderate Extent	(ME)	3	2.50-3.49
Low Extent	(LE)	2	1.50-2.49
Very Low Extent	(VLE)	1	0.00 – 1.49

Source: Researcher's Conceptualization (2021)

### **Validity of the Instrument**

Validity of instrument is one of the criteria used to assess measurement. To Bryman & Bell, (2003) in Alipour and Mahdi (2010), it refers to the issues of whether an indicator that is devised to gauge a concept really measures that concept. Therefore, the researcher presented a copy of the research instrument to the researcher's supervisor and two test and measurement experts for content and face validation. All their criticisms, corrections and modifications were incorporated in the finally draft before administering the instrument to the respondents.

### **Reliability of the Instrument**

According to Bryman and Cramer (2001) in Jane (2019), reliability refers to the ability of a measuring device to achieve consistent result each time it is used. This is also an indicator of the level of stability and consistency with which the instruments measure the concepts and helps to assess the 'goodness' of a measure. Therefore, the Cronbach Alpha statistic was used to determine the reliability of the instrument. The researcher conducted a pilot study in 10 micro finance banks to ascertain the reliability of the study. On subjection to test on internal consistency, a reliability coefficient of 0.92 was achieved which depicts a very high reliability with 8% error tolerance. Nevertheless, Table 3.3 shows the reliability coefficient for each of the study variables as obtained from the pilot study:

**Table 3: Reliability Co-Efficient of Study Variables**

S/N	Dimensions of the Variables	Number of Items	Number of cases	Cronbach Alpha
1	System Automation	5	10	.870
2	System Customization	5	10	.883
3	Access control	5	10	.767
4	Productivity	5	10	.748
5	Profitability	5	10	.745
7	Service delivery	5	10	.838
7	Organizational Infrastructure	5	10	.762
	All Construct	35	10	.921

Source: Research Data (2021)

### Administration of Instrument

A total of 105 copies of questionnaires were administered to respondents in the various deposit money banks under study at their head offices in Port Harcourt metropolises with the help of two research assistants. The research assistants were briefed on what they are expected to do before proceeding to administer the questionnaire to the various deposit money banks used for this study. Two weeks was designated for this exercise.

### Data Analysis

Data obtained from field were presented using Simple Percentages, frequencies and charts. Three level of analysis was done in this study. First univariate analysis was done using frequencies, mean, standard deviation. The univariate analysis was used to show the extent to which each of the study variables (dimension and measures) manifest in the population. Secondly bivariate analysis was done by means of spearman rank correlation to ascertain the relationship between the variables as operationalized in the study. Lastly multivariate analysis was done using partial correlation to determine how organization infrastructure moderate the relationship between strategic information management and organizational performance.

Data collected from the research instrument were coded and analyzed using SPSS version 26 as statistical package.

### Relationship between System Automation and Productivity

			System Automation	Productivity	Decision
Spearman's rho	<b>System Automation</b>	Correlation Coefficient	1.000	.504**	
		Sig. (2-tailed)	.	.000	
		N	95	95	
	<b>Productivity</b>	Correlation Coefficient	.504**	1.000	Significant Relationship
		Sig. (2-tailed)	.000	.	
		N	95	95	

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

Source: SPSS Data Output based on Field Survey (2022)

Table 4.10 shows a correlation coefficient (r) value of 0.504 using a 2 tailed test  $p = 0.000$  at 0.01 level of significance. Since the p-value of 0.00 is less than ( $\leq$ ) 0.01 alpha levels, the null hypothesis is hereby rejected and the alternate accepted. This implies that there is a significant relationship between system automation and productivity of deposit money banks in Rivers State.

### CONCLUSION/RECOMMENDATIONS

The study examined the relationship between Strategic information management systems and Organizational performance of deposit money banks in Rivers State. It found that strategic

information management system is positively correlated with organizational performance of deposit money banks in Rivers State. On the second note, the study found Organizational infrastructure as a moderating factor in the relationship between strategic information management system and organizational performance of deposit money banks.

Based on the findings from this study, the following recommendations were made:

1. Deposit money banks should ensure their automation systems are dynamically innovative, creative, and accommodative; and continually contribute to societal strategic transformation in compliance with professional code of conduct, ethics, and excellence to foster a success-oriented organization.
2. Deposit money banks should develop an information system policy. This should enhance the effective management of knowledge in the banks to improve their productivity, service delivery, and innovativeness.

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