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DECISIONS SUPPORT SYSTEMS AND ORGANIZATIONAL EFFICIENCY OF THE DEPOSIT MONEY BANKS IN PORT HARCOURT, RIVERS STATE

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ABSTRACT

This study investigated the relationship between decisions support systems and organizational efficiency of the deposit money banks in Port Harcourt, Rivers State, Nigeria. The study adopted the descriptive survey research design. Both primary and secondary methods of data collection were employed to obtain relevant data for analysis. The instrument of data collection employed was questionnaire. The study population comprised of the twenty one (21) deposit money banks operating in Port Harcourt as released by central bank of Nigeria (2020). Five (5) copies of questionnaire were administered to top management staff from each of the twenty one (21) deposit money banks, making it total of one hundred and five (105) respondents. The data was analyzed using the Pearson's Product Movement Correlation statistic through the aid of statistical packages for social science version 23.0. The result of the findings revealed that that there is a significant positive relationship between decision support systems and organizational efficiency of deposit money banks in Port Harcourt. The study concluded decisions support systems has significant positive relationship with organizational efficiency which implies that decisions support systems is indispensable and necessary in ensuring efficiency in the banks. The study also recommended that banks should maximize the use of decision support systems as a powerful tool in their decision making process so as to achieve accurate and timely decision especially in complex situation so as to achieve organizational efficiency.

***Keywords**: Decisions Support Systems, Organizational Efficiency, Cost Reduction, Real Time*

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INTRODUCTION

Many organizations are upgrading from management instinctive decisions to decisions support systems to make decisions for business growth, not only because of the bad result they get often from the instinctive decisions but from the fact that they need to mine the daily increase in data, look at the trends and patterns, and look for an accurate data so as to make better decisions. Also because of its wide support for business convenience and ease of use. Decisions Supports Systems (DSS) can be considered as a tool that helps develop and generate decisions based on the data mined. Decision Support Systems (DSS) are a specific class of computerized information system that supports business and organizational decision-making activities (Dan Power (ND). A properly designed DSS is an interactive computer based system intended to help decision makers compile useful information from raw data, documents, personal knowledge, and business models to identify and solve problems and make decisions (Broun, 2012). It provides information for making semi structured and unstructured decisions by the middle management (Khan & Khan, 2011). It's a decisive system for banks to gain a sustainable competitive advantage by moving beyond productivity to have a timely output in deciding on the critical issues of the organization that will lead to growth, expansion, profitability and customer's satisfactions. The decisions support systems (DSS) are known by its purpose, which is to support the decision maker in decision making process.

The role of a decision maker is considered to be crucial in decision support systems, with a particular focus on management information system. One of the advantages of decisions support systems results in reduction of time to find necessary information which increases employee efficiency. Banks are considered to be the pivotal of the financial system; as they play a major role in the economic development. Thus the efficiency of a bank is indispensable and demand more attention. However, due to the immensity in the information reservoirs across the banking sector facilitated by increased customer base, banks have seriously embraced the decisions support systems with high levels of programming being experienced across all the departments of their operations. Of overwhelming importance, has been the quest for market sustainability and the drive to manage the stiff competition across all financial sectors. Many organizations have over the years experienced customer loss to their competitors as a result of many factors, such as speed of service delivery, and quality of service provided. This has called for the use of technology to aid in spearheading improved performance within the banking sector.

Organizational efficiency is the ability for organization to avoid wasting materials, energy, efforts, money, and time in doing something or in producing a desired result. In a more general sense, it is the ability to do things well, successfully, and without waste. Efficiency signifies a peak level of performance that uses the least amount of inputs to achieve the highest amount of output. Organizational efficiency is the organizations degree of success in using the least possible input in order to produce the highest possible output. Efficiency is a vital factor to the effectiveness of the organization's acquisition of resources and the use of those resources to implement its plan. Increased organizational efficiency make implementation both cheaper and smoother, but it is less useful if the decision being implemented was a bad decision. Organizational efficiency as a factor is important in gauging a business' organizational effectiveness, but it is by no means the only factor of importance. Different methods, such as parametric and non-parametric methods have been used in analyzing banks efficiency and productivity. Portela and Thanassoulis (2005) viewed that productivity and efficiency in the banking industry can be measured from the point view of profit, transaction, and operations. Bank efficiency can also be measured in terms of cost and profit as established by Thaguna and Poudel (2013). Organizational efficiency is operationalized by aspects of practicability; these

are, above all, the *expenditure* of the procedure, the required competence for its application, and its availability. Efficiency summarizes the idea to produce with the best manner, which means that efficiency is focused on the use of minimum inputs to produce the best output, in other words, the optimized use of resources to generate the best products with the minimum costs.

Previous researches on decisions support systems and organizational efficiency do not provide adequate knowledge for managers in the Nigerian context on how decisions support systems impact an organizational efficiency. This is because most of such studies conducted using other performance measures. For instance, KhalesiZadeh & Kochuie, (2006) used efficient management tools; Alhassan and Ohene-Asare (2016) used bank efficiency on Ghanaian banks. There are little or no empirically evidenced studies on the relationship between decisions support systems impact and organizational efficiency in Port Harcourt to the best of the researcher's knowledge.

The researcher believes that this study will contribute significantly in filling the identified gap and deliver organizational efficiency in deposit money banks in Port Harcourt. Hence, the thrust of this paper is to investigate the theoretical and empirical relationships between decisions support systems and organizational efficiency of the deposit money banks in Port Harcourt, Rivers State.

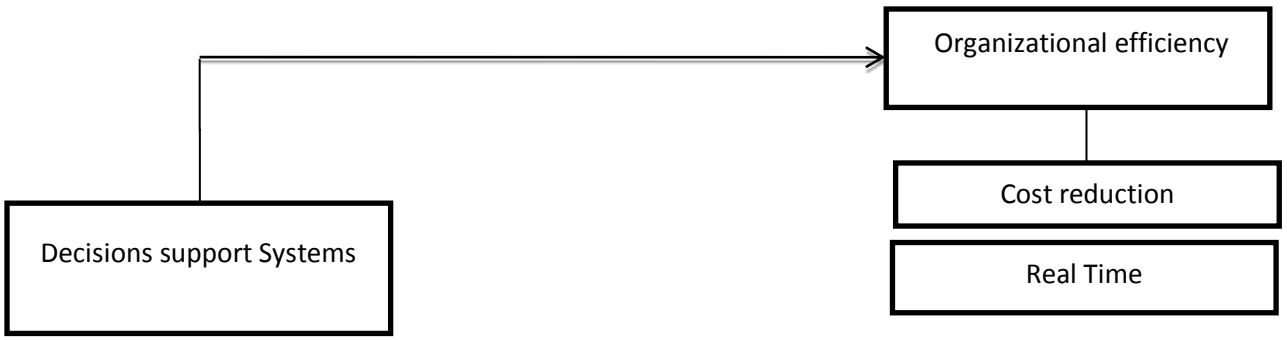

Figure 1: *Conceptual framework of decisions support systems and organizational efficiency*
Source: Author conceptualization from the review of related literature (2020)

LITERATURE REVIEW

Decisions Support Systems

Decision Support Systems (DSS) are specific class of computerized information system that supports business and organizational decision-making activities. A properly designed DSS is an interactive computer based system intended to help decision makers compile useful information from raw data, documents, personal knowledge, and business models to identify and solve problems and make decisions (Broun, 2012). It provides information for making semi structured and unstructured decisions by the middle management (Khan & Khan, 2011). It's a decisive system for banks to gain a sustainable competitive advantage by moving beyond productivity to have a timely output in deciding on the critical issues of the organization that will lead to growth, expansion, profitability and customer's satisfactions.

DSS has no specific definition as different researchers have proposed different definitions. Power (2008) defined DSS as a computer application that improves individual or group's capability in decision making process. The said ability is supported by a class of computerized information system. (Raheja & `1Mahajan, 2013) defined DSS as a single powerful system which supports three types of decision making process which are the structured, semi-structured, and unstructured problem, and the system is a combination of data, sophisticated analytical tools, and a user friendly software. (Fang 2009) defined DSS as an application of various data and models to Human-machine interface (HMI) in order to assist

decision makers at each level to achieve a scientific decision. Complementary to this, Bukharov and Bogolyubov (2015) had stated that DSS as a computer-based information system designed to support in building complicated decisions through a more profound and focused analysis of the focus area. Decision Support System (DSS) is a management tool that can support managers in decision-making. (Laudon & Brien, 2004). Decision support system (DSS) Support complex decisions and increases its effectiveness (Bomba and Land, 2006).

Decisions support systems (DSS) as an interactive computer-based system helping decision makers to use data and models for undetected issues (Mohammadi, 2011). The role of a decision maker is considered to be crucial in decision support systems, with a particular focus on management information system. One of the advantages of decisions support systems results in reduction of time to find necessary information which increases employee efficiency. The concept of an interactive computer-based system that helps companies makes better business decisions has been around since computers came into use. The vision is deceptively simple. Companies work hard on gaining competitive advantage through building a deep understanding of the challenging relationship between organization and its environment (Al-Zoubi, 2012,). They take advantage of in-depth reporting tools and predictive models to analyze data and learn what happened in their business, why it happened and, eventually, what will happen. This yields a deep, fact-based understanding that complements experience and intuition which leads to exemplary decision-making and dramatic competitive advantage (Jessani, 2003).

Concept of Organizational Efficiency

Organizational efficiency is the organizations degree of success in using the least possible input in order to produce the highest possible output. Efficiency signifies a peak level of performance that uses the least amount of inputs to achieve the highest amount of output. Efficiency is a term that recently has come to the forefront of the scientific world. As the world struggles to accommodate the enormous growth in population and to manage the distribution of resources, the effort to make things more efficient has become increasingly more relevant. It often specifically comprises the capability of a specific application of effort to produce a specific outcome with a minimum amount or quantity of waste, expense, or unnecessary effort (Robin and Zelenyuk 2019).

Qayyum and Khan (2007) suggest efficiency as being the ratio output per unit input. A firm is said to be technically more efficient than another firm if it can produce more output using a given amount of inputs as compared to another firm. Organizational efficiency is the organizations degree of success in using the least possible input in order to produce the highest possible output. Banks are considered to be the backbone of the financial system; they play an important role in the economic development as they play the role of intermediary to transfer funds from surplus units to deficit units. So, the efficiency of a bank is essential and needs to be paid more attention. Efficiency refers to very different inputs and outputs in different fields and industries.

How efficient a company is can be denoted by how well it uses its resources. Efficiency involves more effort when working toward a goal. It is more of a time and process-oriented strategy that focuses on how you can achieve results using minimum input. So basically, it is figuring out how to maximize performance while putting in the least amount of effort and money. Organizational efficiency is operationalized by aspects of practicability; these are the expenditure of the procedure, the required competence for its application, and its availability. The term efficiency is different from the term effectiveness, both are used to describe the performance of an entity but according to Jouadi & Zorgui (2014), efficiency summarizes the idea to produce with the best manner, which means that efficiency is focused on the use of minimum inputs to produce the best output, in other words, the

optimized use of resources to generate the best products with the minimum costs. In management, we can consider efficiency as the study of the optimized use of internal factors of the firm. On the other hand, the effectiveness concept summarizes the yield of factors and the reach of goal, without considering the manner and the resources optimized use. Peter Drucker believes that there is no efficiency without effectiveness, because it is more important to do well what you have proposed (the effectiveness) than do well something else that was not necessarily concerned (Drucker, 2001).

Isrova (2010) stated that efficiency supports the fruitfulness of implemented macroeconomic policies, which generate the durable development, economic growth, and welfare for society; this is the same meaning that McKnley & Banaian (2000) stated as they define efficiency in terms of cost minimization and profit maximization. Diallo (2018) stated that efficiency makes banks more resilient to shocks, thereby positively and significantly affecting growth. Bank efficiency relaxes credit constraints and creases the growth rate for financially-dependent industries during the crisis. Waheed & Younus (2010) provides quantitative support to the view that the financial sector's development is crucial to economic growth and the efficiency of the financial sector is potentially important to the long-term growth performance of the countries.

Measures of organizational efficiency

Cost Reduction

This is a process of identifying and eliminating unnecessary costs to improve the profitability of a business. The aim of cost reduction is to see whether there is any possibility in bringing about a saving in cost incurred material, labour, overheads, etc. ACCA Study Text (nd) defines cost reduction as the reduction in unit cost of goods or services without impairing suitability for the use intended. The success of any organization largely depends on how strategically cost is managed compared with that of competitors. Cost reduction means reducing cost associated with production or other cost activities without affecting the quality of product or service as well as activities. Cost reduction is a planned positive approach to reduce expenditure. Through cost reduction procedures or techniques managers reduce cost. For this they develop different cost reduction techniques. It certainly provides competitive advantage which is essential in this hyper competitive market or business world. As the manager is the higher authority of any organization, they are to develop different types of policies and strategies to run the business successfully.

According to the Terminology of Cost Accountancy of the Institute of Cost and Management Accountants London, Cost reduction is to be understood as the success of real and unchanging reduction in the unit costs of goods manufactured without impairing their suitable for the use intended. Thus, the term cost reduction denotes real or genuine saving in production, administration, selling and sharing costs resulting to the elimination of wasteful and inessential elements from the design of the product and from the techniques and practices carried out in connection therewith. The necessity for cost reduction arises when the profit margin has to be increased without an increase in the sales turnover i.e. for the same volume of sales, the cost should be reduced.

In competitive industry, there is need to incur reasonable cost and management has to ensure careful and efficient use of resources so as to achieve the set of standard. Therefore, cost reduction is important in an organization in order to help to bring about increase in market demand in term of competitive market. The significance of cost reduction derived from its function in profit maximization. Any organization that is successful using cost reduction can have an edge over its competitors without reducing its quality. Lockey (2002) stated that, having price competitive advantage, the company can increase its market share and become a market leader. Cost reduction is a technique used in making other means of competition feasible. The importance of cost

reduction scheme within an organization cannot be overstated especially when the organization is struggling to maintain profitability. Organizations that forfeit money are required to intensify profits or become more involving need to reduce expenses in order to succeed. Frequent re-examination of costs can assist an organization to curb excessiveness and thereby eliminating costs. Every organization that wants to survive and maintain its consumers must seek to improve on its product. Therefore, in order not to exceed their budget and not to run at loss, as well as not to reduce the quality of their products, organization needs to ensure maximum efficiency in the activities of the organization.

With the banking industry facing low margins and hefty compliance investments, banks need to remain vigilant and keep costs well under control. Therefore banks need to find ways in which they can become more efficient. Cost reduction in banks can only be achieved when there is efficiency in operational activities and transaction process that improved productivity. Over the years, banks have grown large and unwieldy, with several financial institutions accelerating their growth through acquisitions without complete and holistic integration of their new products, processes, and systems. The result is that many of the larger banks are complicated, matrix institutions, with broad, diverse services and products that are backed by legacy IT systems. If banks are to ensure that their costs are within optimal boundaries, it is important to identify and act on multiple areas of optimization—among which headcount reductions are but one focal point. Cost reduction measures need to be part of an overall efficiency strategy, designed to maximize effectiveness and service efficiency, reduce organizational complexity, enhance customer service, and improve customer retention. An added advantage is that it will allow banks to position themselves better for the wave of consolidation that is expected to hit the industry in coming years.

Banks are engaged in the intermediation of services between lenders and depositors. Banks provide a wide array of services such as low risk assets, credit and payment services, and etc. inefficiencies in banks can lead to huge financial loss within the banking sector. Therefore banks ensure efficiency has concentrated on cost reduction that can enhance profitability in the organization. The widespread availability of automated machines in many public places makes it to be easily accessed by customers. ATMs are considered to be cost effective, user friendly, efficient, reliable and convenient. Thus, increasing efficiency and reducing banking costs for customers. Online banking has increased efficiency and reduced costs for customers through the reduced need for queuing in the bank for some transaction which should have been done otherwise. Queuing results in customers foregoing some other activities that they should have done, the improvement of efficiency in the banking sector has help to reduce cost as a result of the efficient use of resource and equipment to generate more input. The prominent technological advances in the banking sector contributing to the improved efficiency and cost reductions for customers are: automated tellers machines (ATMs), credit cards, computers, the internet and cell phones. ATMs have made the greatest contributions in improving the efficiency and reducing banking costs for customers. This shows that there is need to make use of decisions support systems to further improve the efficiency in banking for the benefit of customers.

Real Time

Real time is the actual time during which a process or event occurs. It is also an act of achieving goals or providing result at the exact time that is to be done. Efficiency in operational activities and transaction process in the banks improves speed, on time delivery and various other process baselines. Organizational efficiency minimizes the waste of resources including time while accomplishing the desired result. Real time can only be achieved in an organization that is efficiently

managed. Banks are multi-product institutions; many of their services are jointly or independently produced (e.g. they offer different kinds of loans or investments). Efficiency in the banks ensures responding to customers' needs in the most important strategy for creating superior customer loyalty. Customers have so many choices available to them that they can be more demanding than before, and firms need to have the ability to track and predict changes in customer preferences, and provide timely responsiveness. The operational efficiency deals with all operations that go into banking activities. Thus, operational efficiency helps improve the speed of all the operational activities in the banks that saves time of the bank and that of the customers. Therefore real time captures productivity of bank staffs employed in the performing of value-added services.

The transactional efficiency inputs tend to enable the bank to make use of alternative distribution channel such as automated teller machines (ATMs), The Electronic Teller Machines (ETMs), cheque dispenser machines (CAT's) and other electronic banking platforms. According to Portela and Thanassolious (2005), electronic banking platforms such as ATMs, mobile banking, internet banking and provides new distribution channels for banking operations. This channel are made available and accessible to customers which help save time in the bank and also enable those that don't have the time to go to the bank or are in a haste to carry out their transaction. The output improves speed that helps saves time for banks and customers as well as increases the productivity of banks and also makes customers happy and satisfied. Online banking has increased efficiency and save time for customers through the reduced need for queuing in the bank for some transaction which should have been done otherwise. Queuing results in customers foregoing some other activities that they should have done. The improvement of efficiency in the banking sector has help to save time as a result of the efficient use of resource and equipment to generate more input. ATMs are considered to be user friendly, efficient, reliable and convenient. Thus, increasing efficiency and saving time of customers.

Empirical Review

From the perspective of experts and managers, implementation of the decision support system DSS has significant impact on cost reduction among organizations and is also impressive in the earnings and the last point is that in this regard implementation of the system (KhalesiZadeh & Kochuie, 2006). The revenue arising from the rendering of services increase and the reasons for are described below: Decision support system DSS implementation makes it possible to respond quickly to unforeseen situation, It has the ability to do analysis without the background, Costs saving, Time saving, Better use of data resources Provides new comments and learning and Development of communication and improving the effectiveness of the growth of the organization.

Alhassan and Ohene-Asare (2016) examined the relationship between competition and efficiency in the Ghanaian banking industry. Data on 26 banks from 2004 to 2011 was used to estimate technical and cost-efficiency scores by the data envelopment analysis while the Boone indicator was employed to proxy for competition. Controlling for bank size, lending, income diversification, tangibility, leverage and profitability, ordinary least squares, instrumental variables and fixed effects estimations were used to estimate the panel regression model. The authors also applied the growth convergence theory to examine the existence of efficiency convergence. The resulted points to improvements in cost efficiency and competition within the banking industry. From the empirical estimations, the findings suggested that competition exerts a positive influence on cost efficiency. The authors also found evidence of convergence in both technical and cost efficiency. The study recommended that efforts at improving competitiveness of the banking industry will translate into lower interest rate spread through improved cost efficiency. This will ultimately

improve access to bank credit and impact positively on economic growth.

Based on the foregoing the study hypothesized thus:

Ho_1: There is no significant relationship between decisions support systems and organizational efficiency of deposit money banks in Port Harcourt

Ho_2: There is no significant relationship between decisions support systems and cost reduction of deposit money banks in Port Harcourt

Ho_3: There is no significant relationship between decisions support systems and real time of deposit money banks in Port Harcourt

METHODOLOGY

The study adopted descriptive survey design research design. The population of this study comprised of the twenty one (21) deposit money banks operating in Port Harcourt as released by central bank of Nigeria (CBN, 2020). The sample size of the study was the same as the population given the small population size. However, the researcher administered five (5) copies of the questionnaire to top management staff from each of the twenty one (21) deposit money banks, making it total of one hundred and five (105) respondents. Categories of the management staff included Branch Managers, Operation Managers, Marketing Managers, Customers' Service Managers and Internal Auditors. Ninety (90) copies of questionnaire were retrieved and were usable for the data analysis. iPearsoni Product iMomenti Correlation technique was used in testing the various hypotheses in order to determine the conjectural relationship between the predictor variable (decisions support systems) and the criterion variable (organizational efficiency) with the help of the Statistical Packages for Social Sciences version, 23.0.

DATA ANALYSIS AND RESULTS

The primary data analysis was carried out through univariate and bivariate statistics. Pearson's Product Moment Correlation tool was used at a 95% confidence level. Specifically, the tests covered hypotheses Ho_1 to Ho_3 which were bivariate at all stated in the null manner. The study relied on the Pearson's Product Movement Correlation tool to carry out the analysis thus the probability criterion of 0.05 significance level was adopted for accepting the null hypotheses at ($P>0.05$) or rejecting the hypotheses at ($P<0.05$).

Table 1: Showing Descriptive Statistics for Decision Support System

Item	Questionnaire	SA (4)	A (3)	D (2)	SD (1)	Mean (x)	Standard Deviation
1.	The use of computerize account system helps in tracking the flow of expenses	67	18	3	2	3.67	.2659
2.	Cost reduction in the organization depends on the record of employees performance	47	25	13	5	3.27	.8350
3.	Details of customers stored in the system enhance real time.	68	15	5	2	3.66	.7067
4.	The use of computerize account system fasten customers transactions	63	22	5	0	3.64	.7638

Source: *Research Data 2020 (SPSS output version 20.0)*

Table 1 illustrated the response rate and descriptive statistics for decisions support systems. From the analysis of the responses, all the four items carry a high mean scores ($x>2.5$) which serve as base for moderate agreement levels. Where $x>2.5$ represents a substantial agreement level while $x<2.5$ represents poor or inadequate agreement levels.

Table 2: Showing Descriptive Statistics for Organizational Efficiency

Item	Questionnaire	SA (4)	A (3)	D (2)	SD (1)	Mean (x)	Standard Deviation
1.	organization efficiency is achieved when right decision made by management of the organization.	67	22	0	1	3.72	.1523
2.	Organization efficiency limits waste of resources and time.	69	18	3	0	3.73	.6992
3.	Organizational efficiency enables transactions to be done on time in the bank	70	15	2	3	3.69	.8971
4.	The use efficient of computerize system can lead to organizational efficiency	35	45	6	4	3.23	.8675

Table 2 illustrating the descriptive statistics for the measures of the dependent variable; organizational efficiency carried high mean scores (x>2.5) based on the 4-point Likert scaling adopted.

Table 3: Showing descriptive statistics for Cost Reduction (CR)

Item	Questionnaire	SA (4)	A (3)	D (2)	SD (1)	Mean (x)	Standard Deviation
1.	Reduction in cost in an organization depends on the decision made by management of the organization.	67	22	0	1	3.72	.1523
2.	Little or no expenses is achieved when accurate decisions are made.	69	18	3	0	3.73	.6992
3.	Bad decision made by management can lead to huge financial loss	70	15	2	3	3.69	.8971
4.	The use of computerize system save cost for customers	35	45	6	4	3.23	.8675

Source: *Research Data 2020 (SPSS output version 20.0)*

Table 3 illustrated the response rate and descriptive statistics for Cost Reduction. From the analysis of the responses, all the four items carried a high mean scores (x>2.5) which served as base for moderate agreement levels. Where x>2.5 represents a substantial agreement level while x<2.5 represents poor or inadequate agreement levels.

Table 4: Showing descriptive statistics for Real Time (RT)

Item	Questionnaire	SA (4)	A (3)	D (2)	SD (1)	Mean (x)	Standard Deviation
1.	Decisions support systems reduce decision cycle time	66	20	2	2	3.66	.1667
2.	Accurate and timely decision saves time for both customers and the organization	67	13	6	4	3.58	.9084
3.	Customers are happy when transactions are done on time in the bank	72	18	0	0	3.8	.5084
4.	Data stored on the computerized systems make transactions faster	65	15	7	3	3.57	.9148

Source: *Research Data 2020 (SPSS output version 20.0)*

Table 4 illustrated the response rate and descriptive statistics for Real Time. From the analysis of the responses, all the four items carried a high mean scores (x>2.5) which served as base for moderate agreement levels. Where x>2.5 represents a substantial agreement level while x<2.5 represents poor or inadequate agreement levels.

Test of Hypotheses

Ho_1: There is no significant relationship between decisions support systems and organizational efficiency of the deposit money bank in Port Harcourt Rivers State, Nigeria.

Table 5: Extent of Relationship between Decisions Support Systems and Organizational Efficiency

		Decisions support Systems	Organizational efficiency
Decisions Support System	Pearson Correlation	1	.898**
	Sig. (2-tailed)		.000
	N	90	90
Organizational efficiency	Pearson Correlation	.898**	1
	Sig. (2-tailed)	.000	
	N	90	90

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

From the SPSS output on Table 5, the correlation of hypothesis one showed a significant correlation at r = .898** where P-value = .000 (P<0.001). This implied a strong and significant relationship between both variables at 95% level of confidence. We therefore rejected the null hypothesis (Ho:$_1$), and upheld the alternate and restated, thus, there is a significance relationship between decisions support systems and organizational efficiency data management system of the deposit money banks in Port Harcourt, Rivers State.

This implied that decisions support systems can be used to achieve organizational efficiency of the deposit money banks in Port Harcourt. Based on this, we rejected the null hypothesis that there is no significant relationship between decisions support systems and organizational efficiency of the deposit money banks in Port Harcourt and accepted the alternate hypothesis that there is a strong, significant relationship between decisions support systems and organizational efficiency of the deposit money banks in Port Harcourt

Ho_2: There is no significant relationship between decisions support systems and cost reduction of the deposit money bank in Port Harcourt Rivers State, Nigeria

Table 6: Extent of Relationship between Decisions Support Systems and cost reduction

		Decisions support Systems	Cost Reduction
Decisions Support System	Pearson Correlation	1	.898**
	Sig. (2-tailed)		.000
	N	90	90
Cost Reduction	Pearson Correlation	.898**	1
	Sig. (2-tailed)	.000	
	N	90	90

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

From the SPSS output on Table 6, the correlation of hypothesis one showed a significant correlation at r = .898** where P-value = .000 (P<0.001). This implied a strong and significant relationship between both variables at 95% level of confidence. We therefore rejected the null hypothesis (Ho:$_1$), and upheld the alternate and restated, thus, there is a significance relationship between decisions support systems and cost reduction of the deposit money banks in Port Harcourt, Rivers State.

This implied that decisions support systems can be used to achieve cost reduction of the deposit money banks in Port Harcourt. Based on this, we reject the null hypothesis that there is no significant relationship between decisions support systems and cost reduction of the deposit money banks in Port Harcourt and accept the alternate hypothesis that there is a strong, significant relationship between decisions support systems and cost reduction of the deposit money banks in Port Harcourt

Ho$_3$: There is no significant relationship between decisions support systems and real time of the deposit money bank in Port Harcourt Rivers State, Nigeria.

Table 7: Extent of Relationship between Decisions Support Systems and Real Time

		Data Management System	Real Time
Data Management System	Pearson Correlation	1	.971**
	Sig. (2-tailed)		.000
	N	90	90
Real Time	Pearson Correlation	.971**	1
	Sig. (2-tailed)	.000	
	N	90	90

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

From the SPSS output on Table 7, the correlation of hypothesis one showed a significant correlation at r = .898** where P-value = .000 (P<0.001). This implied a strong and significant relationship between both variables at 95% level of confidence. We therefore rejected the null hypothesis (Ho:$_1$), and upheld the alternate and restated, thus, there is a significance relationship between decisions support systems and real time of the deposit money banks in Port Harcourt, Rivers State.

This implies that decisions support systems can be used to achieve real time of the deposit money banks in Port Harcourt. Based on this, we reject the null hypothesis that there is no significant relationship between decisions support systems and real time of the deposit money banks in Port Harcourt and accept the alternate hypothesis that there is a strong, significant relationship between decisions support systems and real time of the deposit money banks in Port Harcourt

DISCUSSION OF FINDINGS

This study used survey research design and inferential statistical methods in investigating the demographic characteristics of the respondents as well as the studied variables, while Pearson Product Moment Correlation Coefficient was used in testing the relationship between the predictor variable (decision support system) and the criterion variable (organizational efficiency) in money deposit bank in Port Harcourt, Rivers State. The empirical findings revealed a positive and significant relationship between decision support system and organizational efficiency using the Pearson Product Moment Correlation Coefficient at 95% confidence interval, using Statistical Package for Social Science (SPSS) version 20. This empirical findings support

the study conducted by Broun, (2012) who concluded that, decision support systems (DSS) are a specific class of computerized information system that supports business and organizational decision-making activities. A properly designed DSS is an interactive computer based system intended to help decision makers compile useful information from raw data, documents, personal knowledge, and business models to identify and solve problems and make decisions. In another study, Khan and Khan (2011) concluded that, decision support system provides information for making semi structured and unstructured decisions by the middle management. It's a decisive system for banks to gain a sustainable competitive advantage by moving beyond productivity to have a timely output in deciding on the critical issues of the organization that will lead to cost reduction that give the organization growth, expansion, profitability and customer's satisfactions.

The second hypothesis show that, there is a strong positive relationship between decisions support systems and measure of organizational efficiency cost reduction of which the significant is based on r=0.898; p= 0.000 <0.05 at 95% confidence interval leading to the rejection of the null hypothesis (H_{02}), stated in the chapter one, and upheld the alternate and restated thus; there is a significant relationship between data management system and cost reduction. This findings support the empirical finding of Daniel (2017) who surveyed management of liquidity and its impact on efficiency of banks. The period covered a total of 25 years (1986–2011). The target population was based on 24 banks. Test data for the research was obtained from secondary data and analyzed using the SPSS package. The results of this study indicated that liquidity management positively influences the operations of deposit money banks. The study further explained the data using correlation analysis and found that equity returns and cash liquidity reserve ratio are positively related, while equity returns and deposit loan ratio are negatively related. He recommends that banks should adopt optimum liquidity strategies for the smooth running of the business.

The third hypothesis show that, there is a strong positive relationship between decisions support systems and measure of organizational efficiency real time, of which the significant is based onr=0.971; p= 0.000 <0.05 at 95% confidence interval leading to the rejection of the null hypothesis (H_{02}), stated in the chapter one, and upheld the alternate and restated thus; there is a significant relationship between data management system and real time. This findings support the empirical finding of X. Liu et al (2016), in their study of internet of things, they concluded that, timeliness of processing requires the ability to collect, transfer, process, and present the stream data in real-time. As the value of data may vanish over time rather rapidly, the streaming architecture needs to perform all the calculation and communication on the fly with the data that has newly arrived.

CONCLUSION AND RECOMMENDATION

In line with the findings of this study and to the extent of its consistency with results of similar previous studies, we conclude that decisions support system has a significant positive relationship with organizational efficiency of deposit money banks in Port Harcourt.

Based on the findings of the study, we recommend that deposit money banks in Port Harcourt should employ the use of decisions support systems as a powerful tool in their decision make process for organizational efficiency to be sustained

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