

ASSESSING THE IMPACT OF SYSTEM AUTOMATION ON JOB PERFORMANCE OF BUSINESS MANAGER IN DEPOSIT MONEY BANKS IN RIVERS STATE

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ABSTRACT

The aim of the study was to determine the relationship between system automation and job performance of Business managers in Deposit Money Banks in Rivers State. To realize the purpose of the study, 7 objectives, 7 research questions and 7 hypotheses were formulated to guide the study. A cross-sectional survey design was adopted for this study. The instrument for data collection used in this study was the questionnaire. The target population of the study comprised of all deposit money banks licensed to operate in Rivers state which were the respondents for the study. Descriptive statistics (mean, standard deviation, and percentages) was used as statistical tools for analysing the data with the Statistical Package for Social Sciences (SPSS). The findings of the study revealed that there is significant and positive relationship between system automation and job performance of deposit money banks in Rivers State. A number of recommendations were made among which is 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.

Keywords: *System automation, Job Performance, Assessing, Money Deposit Banks*

INTRODUCTION

There appears to be an elevated level of strategic information management system in money deposit 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 transactions or the other. Also, their incessant report on cases of bank robbery, phishing, social engineering, hacking of information as well as accounts, etc. In recent time Swedish Financial Supervisory Authority noted that Cyber security incidences have increase frequently over the years especially in Nigeria, if this trend is not checked or left unabated it will cripple the existence of deposit money banks as well as related organizations.

Another issue that necessitated this study is the lack of documented studies on the extent to which strategic information management system are related with job performance in money deposit banks in Nigeria as operationalized in this study. There had been very few local studies focusing on strategic information management and performance that holistically evaluated the dimensions of strategic information management system on performance. Most studies that are carried out only focused on single dimensions which may be automation, customization or info-security as the case may be. Katua (2014) sought to establish the role of information security management strategies at Kenya electricity generating company and established that through Information System Management (ISM) strategy organizational competencies were developed and preserved for better performance of the company. Ndung'u (2014) studied security management in top 100 midsized companies in Kenya and established that top management commitment, human-related information security issues and information security risk assessment were individually significant predictors of firm performance. Singh and Kapil (2018) sought to examine the effect of automation in banking sector on employee's efficiency in Malwa region of Punjab. The few local studies on strategic information management and firm performance have mostly focused only on automation, customization and their relationship with productivity and financial performance of organizations

without measuring their relationship with job performance at a strategic level which is an identified nexus in existing literature. Therefore, there is need to close this knowledge gap.

Hypotheses

The following null hypotheses were formulated to guide the study:

Ho₁: There is no significant relationship between system automation and decision-making success of business managers in deposit money banks in Rivers State.

Ho₂: There is no significant relationship between system automation and effective service delivery of business managers in deposit money banks in Rivers State.

Ho₃: There is no significant relationship between system customization and decision-making success of business managers in deposit money banks in Rivers State.

System Customization and Job Performance

Various information systems of traditional manufacturing enterprises are provided by different software suppliers. Therefore, the basic data format is not uniform, the data coding is inconsistent, the hardware system does not support it, each subsystem cannot be effectively connected, and the existing system cannot meet the actual business needs. In actual operation, paper file transmission, telephone or email communication often occur, and even manual work is used to reflect the situation with other departments, so the degree of informatization is low. The integration process of informationization and industrialization in most manufacturing enterprises in China is still in the initial stage, and there are not many digital factories, the intelligent manufacturing capability is still weak (Hu, & Gao, 2019; Hartman, 2016). Because of the low level of informatization, once there is a problem in any intermediate link, all departments will buck passing, and it is difficult to quickly and accurately find the nodes and main responsible persons with problems, and the communication and feedback with upstream and downstream are even less effective.

Customization of information systems is a risky but inevitable task, it helps to keep consistency among information systems, organizational goals and business processes (Parthasarathy & Sharma, 2012). Information system customization is based on the analysis of organizational production process, business process, organizational structure, combined with organizational and upstream and downstream conditions, to customize a system that meets the actual needs. Contingency theory (CT) holds that in practice, managers should adapt to the changes of the environment and internal conditions of the organization, and there is no fixed and universally applicable management method. The key to successful management lies in full understanding of the internal and external situation of the organization and effective contingency strategies. SMIS customization can effectively integrate the information systems within the organization with the relevant information systems of upstream and downstream enterprises outside the organization. All kinds of SOM enterprises can integrate information systems and industrial control systems on the cloud manufacturing platform, and efficiently access, manage and apply and develop intelligent manufacturing interconnection resources (Pallant, et al., 2020; Qi, et al., 2020; Baruffaldi, et al., 2019).

Scholars have proved that customization, as a key success factor, has a wide impact on the implementation of information systems. The research results of Aversano, et al., 2012 show that large-scale integration of information technology projects usually involves customization of software packages (Aversano, et al., 2012; Aversano & Tortorella, 2013; Aversano, 2019). Considering the inefficient system interaction situation that production data and product model are usually separated in the product development process, (Peng & Yu 2011) put forward a visual manufacturing information system to integrate product model and production data. This product data management system can integrate product data in the product development process and quickly review and configure the manufacturing system according to the needs of individual customized products, which ensures the data job performance and process job performance of the

manufacturing enterprise information system. Integrating personnel, finance, warehousing, master production planning, material requirement planning, limited capacity scheduling, workshop control, procurement, requirement planning, order management, etc. with enterprise resource planning, a set of information system conforming to stakeholders is customized, which inherently includes data consistency.

Because customized information system software package is not only the macroscopic configuration of hardware, software and network, but the most important basic work is to plan and analyze data and unify data format, so that the data in different databases in the supply chain are consistent. Only in this way can we ensure the timely collection and sharing of data. For example, the data collected on programmable logic controller (PLC) must be displayed intact on the workshop control system; the order information and status stored in different databases of the whole supply chain are consistent, which can effectively ensure smooth communication between organizations, and make coordination and resource scheduling among departments be clear at a glance.

The implementation process of a good customized information system will also bring changes to the business processes of enterprises (Parthasarathy & Sharma, 2016), which can effectively ensure the smooth flow of business processes (Hartman, 2016), smooth production process and efficient operation of warehousing and logistics, thereby reducing production costs and improving production efficiency (Min & Fei, 2008). (Ilyin, et al., 2017) think that in resource-intensive projects like information systems, agile project management allows us to change requirements at any stage of information technology projects, and helps users understand and coordinate planned changes. A good information system can realize personalized customized products and mass customized production, and the customized information system architecture realizes enterprise-wide integration, provides links between value chain partners, integrates business activities, simplifies business processes, and plays an important role in the delivery process of customized products (Zhang, 2015). (Parthasarathy & Sharma, 2016; Parthasarathy & Daneva, 2016), evaluated the efficiency of ERP system from the customization point of view, studied the relationship between customization degree and efficiency of ERP package, and collected data from information technology suppliers of ERP packages deployed by 12 educational institutions. The empirical research results show that customization has a negative impact on the efficiency of ERP packages. Sinnandava et al., (2018) thinks that proper supply chain integration can reduce the waste of resources in the supply chain, reduce the information asymmetry between organizations, and alleviate the influence of external environment on the supply chain. On the one hand, SMIS customization helps enterprises to obtain relevant information in all aspects in time, including requirements, functions, technologies and strategies, so as to identify related activities and reduce waste of resources (Agerman, & Sohlenius 2013; Pallant et al., 2020). On the other hand, the customized information system is to make overall planning and design integration of the information system according to the actual operating conditions of the enterprise and the whole supply chain (Sudhaman & Thangavel, 2015) which means that the customized information system may affect its performance.

Theoretical Framework

This work is anchored on Classical Theory by Chandler (1962), Sloan (1963) and Ansoff (1965) and on Resource-Based View Theory postulated by Barney (1961)

Classical theory by Chandler (1962), Sloan (1963) and Ansoff (1965).

Classical theory by Chandler [1962) and Ansoff (1965) is the oldest and still most influential theory of strategy. The theory relies on the rational planning methods and profitability is the supreme goal. Chandler (1962) and Ansoff (1965) as the three men who developed the classical theory. They established the key features of the classical in strategy namely; the attachment to rational analysis; the separation of strategy concept from strategy execution and the commitment to profit

maximization. This theory relies on the rational planning methods and profitability is the ultimate goal. The classical school believes that strategy should be formal and explicit based on the organization structure for profit maximization. Here, success or failure is determined internally by the existence or non-existence and quality of the strategic issue management activities in an organization Ansoff (1965).

Resource-Based View Theory postulated by Barney (1991).

This theory combines concepts from organizational economics and strategic management Barney (1991). In this theory, the competitive advantage and superior performance of an organization is explained by the distinctiveness of its capabilities Johnson (2008). The Resource-Based View (RBV) as a basis for the competitive advantage of a firm lies primarily in the application of a bundle of valuable tangible or intangible resources at the firm's disposal, Penrose (1959). To transform a short-run competitive advantage into a sustained competitive advantage requires that these resources are heterogeneous in nature and not perfectly mobile.

The resource-based theory which stems from the principle that the source of firm's competitive advantage lies in their internal resources, as opposed to their positioning in the external environment. That is rather than simply evaluating environmental opportunities and threats in conducting business, competitive advantage depends on the unique resources and capabilities that a firm possesses (Barney, 1995). The resource-based view of the firm predicts that certain types of resources owned and controlled by firms have the potential and promise to generate competitive advantage and eventually superior firm performance (Ainuddin et al., 2007). Resource Based View model was established by Barney (1991) and is one of the concepts applied by modern competitive firms in the dynamic business environment when formulating, implementing and monitoring strategies. As indicated by Pearce and Robinson (2013), Resource Based View is a strategy for evaluating and finding an organization's vital rewards on the premise of examining its key blends of benefits, abilities, capacities and intangibles as a firm. Maintainability of hierarchical aggressiveness depends on interesting assets of the association that range from representative abilities, innovation, client advancement and new item improvement. The theory suggests that a firm has competitive advantage over another firm and when its rival can't copy its methodologies. While assets are the wellspring of a company's know-hows, capabilities are the principle wellspring of its upper hand. An association has a focused edge over its opponents, when it has a relative favorable position over another firm and when this preferred standpoint is not being executed by any contender. This theory underpins this study based on the notion that strategic information management system adopted by organization is a strategic resource that would contribute to improved performance of organization. Inability to imitate the new technologies by industry players and integration of systems with modern technologies will enhance efficiency and effectiveness of the organization. Training employees and investing in modern strategic information management system are unique capabilities that will give organizations a competitive edge in the changing business environment. Therefore, in this study, the resource-based theory or view (RBV) of the firm's competitive advantage in particular will be the underlying theoretical foundation applied and fundamental basis of the variables and their ensuring relationships that are being studied.

METHODOLOGY

This study adopted the cross-sectional survey design. 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, on 20 are operational in Rivers State as at the time of this study. The study used the entire population of 100 functional heads selected from the 20 deposit money banks in Port Harcourt. The research was a census study as all the

twenty (20) Deposit Money Banks operating in Port Harcourt, Rivers State formed the sample for the study because the twenty (20) as population is a manageable size. Data was collected through the use of questionnaire. Data collected from the research instrument were coded and analyzed using SPSS version 26 as statistical package. The univariate analyses were done using frequencies, mean and standard deviation. The bivariate analysis was done by means of Spearman Rank correlation while the partial correlation was used to carry out multivariate analysis.

Results

Test of Hypotheses

Ho₁: There is no significant relationship between system automation and decision-making success of business managers in deposit money banks in Rivers State.

Table 1: Relationship between System Automation and Decision Making

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

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

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

Table 1 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 positive moderate and significant relationship between system automation and decision making of business managers in deposit money banks in Rivers State.

Ho₂: There is no significant relationship between system automation and effective service delivery of business managers in deposit money banks in Rivers State.

Table 2: Relationship between System Automation and Service Delivery

			System Automation	Service Delivery	Decision
Spearman's rho	System Automation	Correlation Coefficient	1.000	.629**	
		Sig. (2-tailed)	.	.000	
		N	95	95	
	Service Delivery	Correlation Coefficient	.629**	1.000	Significant
		Sig. (2-tailed)	.000	.	Relationship
		N	95	95	

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

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

Table 2 shows a correlation coefficient (r) value of 0.629 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 positive weak and significant relationship between system automation and service delivery of business managers in deposit money banks in Rivers State.

Ho₃: There is no significant relationship between system customization and decision-making success of business managers in deposit money banks in Rivers State.

Table 3: Relationship between System Customization and Decision Making

			System Customization	Decision Making	Decision
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Spearman's rho	System Customization	Correlation Coefficient	1.000	.400**	Significant Relationship
		Sig. (2-tailed)	.	.000	
		N	95	95	
	Decision Making	Correlation Coefficient	.400**	1.000	
		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 3 shows a correlation coefficient (r) value of 0.400 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 positive weak and significant relationship between system customization and decision making of business managers in deposit money banks in Rivers State.

Discussion of Findings

System automation and Job performance of business managers

The study investigated the relationship between system automation and job performance of business managers in Deposit Money Banks in Rivers State. The investigation of the relationship between System automation and Job performance of business managers followed two specific hypotheses that were tested. These hypotheses (H_{01} and H_{02}) were all rejected based on the emerging p-values less than 0.01. The results revealed moderate to strong positive relationship between System automation and measures of Job performance of business managers. The result obtained in the study was as follows:

H_{01} : System automation has a moderate positive relationship with decision making of Deposit Money Banks in Rivers State ($\rho = 0.504$; $p = 0.000$).

H_{02} : System automation has a moderate positive relationship with service delivery in Deposit money banks Rivers State ($\rho = 0.539$; $p = 0.000$).

Hence, the study found a positive relationship between system automation and decision making, and service delivery in Deposit Money Banks in Rivers State. Summarily, the result revealed that system automation is positively correlated with job performance of business managers of Deposit Money Banks. This finding is consistent with many scholars including Parida, et al. (2017) who also found that system automation impact on innovation capacity. Also, Kong (2016) had earlier found system automation and knowledge management tools to create innovative capacity and growth, which may lead to high success of organisations. Still in line with the findings of the present study, Kong (2016) has stressed on the pivotal and vital role played by information resource management in improving organisational success. This suggests that investment in information resource and sources has direct impact on organisational success. A study by Zakaria (2004) to evaluate the relationship between investment in system automation and service delivery pay offs in industries indicates that there is robust evidence of a correlation between the service delivery acceleration and the intensive use of information technology (IT) in the late 1990s. In a similar study to evaluate the high increase in investment system automation in the 1990s by Doms (2004), it emerged that the increase may be attributed to the fall in the prices of information technology goods, but not necessarily the fact that IT can boost service delivery, which contradicts the finding of Zakaria (2004) and that of this present study. Another study in corroboration with this present study was Radhakrishnan (2018) which opined that the ability of organizations to compete depends, to a large extent, on the role of investment in system automation and strategic capacity. Also, a study by Ovia (2000) observes that the system customisation landscape is wide and diverse and organisations depend on many information sources to make key decisions.

CONCLUSION

The study examined the relationship between system automation and Job performance of business managers in Deposit Money Banks in Rivers state. It found that system automation is positively correlated with Job performance of business managers in Deposit Money Banks in Rivers state. From the result of the data analysis, it can be concluded that that system automation play a major role in achieving continued success of Deposit Money Banks under study.

RECOMMENDATIONS

Based on the findings from this study, the following recommendations were made: 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. Deposit money banks should have frameworks for system customisation and information security. Deposit money banks should develop a sys policy. This should enhance effective management of knowledge in the banks with the aim of improving their decision making, service delivery and innovativeness.

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