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IMPACT OF MANAGEMENT INFORMATION SYSTEM ON ORGANIZATIONAL PERFORMANCE OF MTN NIGERIA

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Abstract

This study looked at the impact of management information systems on MTN Nigeria's organizational performance. The study used a descriptive research design that included the use of a survey, and the primary data was obtained by administering a questionnaire to 346 MTN Nigeria employees. The hypotheses were tested after satisfying the various assumptions of multiple regression. The findings revealed a strong correlation (r = 0.702) between management information systems and MTN Nigeria's organizational performance, with variations in the independent variables (Customer Relationship Management and Financial Management Information System) explaining 61.3 percent of the total variation in organizational performance. However, based on the study's findings, it is concluded that Customer Relationship Management and Financial Management Information System have a significant effect on organizational performance. According to the study, MTN Nigeria's management should evaluate their performance effectiveness and efficiency in terms of customer relationship management. As a result, they should prioritize communicating with customers on a regular basis and provide customers with multiple ways to contact the organization.

Keywords: Impact, Management Information System, Organizational Performance, MTN Nigeria.

Introduction

Organizational performance is generally measured by its effectiveness, efficiency, employee and customer satisfaction, innovation, product or service quality, and ability to retain a distinctive human pool. A company's potential success is determined by its organizational performance, or its ability to effectively implement strategies to achieve institutional goals

(Singh, Burgess, Heap, Almatrooshi& Farouk 2016). Organizational performance is comprised of several variables, such as business model effectiveness, efficiency, and outcomes. The performance of any organization is heavily reliant on the decision-making process in organizations, which is at the heart of the management process and is highly dependent on available information (Okoye, Egbunike&Onyali 2013). The collection of data used for decision-making in management is referred to as information. Management information desired for an organization is all meaningful data that shows activities and is stored, processed, amended, and most importantly, reported to units and managers. Today, information has evolved into a strategic asset. In this regard, it is essential that knowledge be managed (Ucakturk& Villard 2013).

Managers are seeking and wanting information that may assist in decision-making, problem-solving, strategic planning, and management control in firms all over the world (Munirat, Sanni&Kazeem 2014). The nature of management information systems has fundamentally evolved, with more online reporting and real-time business connections. In order to make such concerns successful, firms must explore new developments in Management Information Systems. Information must be accurate, timely, and relative (Alhabri&Sonawane 2016). With the advancements in information technology, managers now have tools to help them process information and manage their businesses more effectively and efficiently (Yusuf, Sanni, &Kazeem 2014). Such IT systems, whether at the office or enterprise level, are capable of handling multiple tasks at once, a feature of modern computers that reduces information overload and increases the speed with which managers process data. As a result, corporate executives have viewed the adoption and implementation of Information Technology (IT) systems as a strategy to combat today's competition by improving productivity, profitability, and the level of information dissemination in their organizations (Obasan&Soyebo 2012) to ensure the survival and growth of their businesses.

The MIS is primarily concerned with the processing and distribution of data into useful information to all departments within an organization. An input, processing, output, and monitoring computer system handles the data. Customer satisfaction, information quality, and communication quality must all be improved in order for the management information system to grow businesses (Sonawane 2016). MIS may have a positive impact on all business functions such as financial, production, human resources, marketing, and others by developing a management system for each function individually and integrating them to provide better access (Sonawane&Alhabri 2016) in form of Enterprise Resource Planning (ERP), Supply Chain Management (SCM), Customer Relationship Management (CRM), Knowledge and Collaborative Management System (KCMS), Product Life Cycle Management System (PLCM), Enterprise Asset Management Information System (EA - MIS), Financial Management Information System (FMIS), Human Resource Management Information System (HR - MIS), Project Management Information System (PMIS), Business Intelligence Information System (BIIS), Business Intelligence Information System (BIIS), Business Intelligence Information System (BIIS) (BIS).

Customer Relationship Management (CRM) is one of the MIS classifications that has recently emerged as one of the most contentious issues in the business world. It is worth noting that customer relationship management is primarily based on the belief that establishing a long-

term relationship with the customer is the foundation for obtaining loyal customers who are far more profitable than non-loyal customers. In this regard, the successful implementation of CRM would be of great benefit to the organizations. By adopting it, such organizations can secure the benefit of increasing sales through better market segmentation, modifying products and services, achieving higher quality products, gaining access to information and employee satisfaction, and, most importantly, ensuring ongoing customer retention and loyalty (Adiele& Gabriel 2013). Customer Relationship Management (CRM) is a strategy that enables businesses to analyze customer profiles, identify their needs and potential profit areas, and implement the necessary actions to achieve customer satisfaction, competitive advantage, and thus profitability (Stone, Woodcock, Ekinci, Aravopoulou& Parnell 2019).

The Financial Management Information System (FMIS) collects and analyzes financial data that is used to run a business in the desired manner as well as to make sound financial decisions (Sonawane&Alhabri 2016). There are numerous advantages to implementing financial management information systems in a business. The financial management information system, when designed, developed, and implemented effectively, greatly aids in the preparation of auditable financial reports, the formulation of policies, and the preparation of various management reports. The MIS provides a framework for integrating functional processes and financial resources in business organizations.

In a country like Nigeria, studies on Management Information Systems are scarce. Previous research in India has identified the impact of MIS on financial management (Sonawe&Alhabri 2016). However, the relationship and impact of management information systems on organizational performance in Nigeria has not been empirically tested. Previous research on management information systems did not include management information system dimensions; Okoye, Egbunike, and Onyali (2013) investigated the relationship between Management Information System Implementation and Managerial Performance in Relation to Sustainability Related Measurement Systems in Organizational Management, taking into account managerial human resource competence areas, management information system performance areas, and social and environmental managerial complicity.

Existing literature reflects a consistent belief that firms should engage in Management Information System activities on a systematic basis (Sonawane&Alhabri 2016). Various authors (Oyenuga, Andah, Orji, and Agabi 2019) elaborate on these core ideas and derive various conceptualizations of Management Information System and its dimensions as a result. Customer Relationship Management, Financial Management Information System, and Business Information Systems, for example, are variant terminologies that all relate to the fundamental premise of the Management Information System concept. Customer relationship management is becoming increasingly important to businesses as they seek to increase profits through longer-term customer relationships (Oyenuga, Andah, Orji &Agabi 2019). Existing literature reflects a consistent belief that firms should engage in Management Information System activities on a systematic basis (Sonawane&Alhabri 2016). Various authors (Oyenuga, Andah, Orji, and Agabi 2019) elaborate on these core ideas and derive various conceptualizations of Management Information System and its dimensions as a result. Customer Relationship Management, Financial Management Information System, and Business Information Systems, for example, are variant terminologies that all relate to the

fundamental premise of the Management Information System concept. Customer relationship management is becoming increasingly important to businesses as they seek to increase profits through longer-term customer relationships (Oyenuga, Andah, Orji &Agabi 2019)

The main objective is to examine the impact of management information systems on organizational performance of MTN Nigeria. The specific objectives are to:

1. Identify the dimensions of management information systems that are in use in MTN Nigeria.
2. Investigate the impact of Customer Relationship Management (CRM) on organizational performance of MTN Nigeria.
3. Examine the effect of Financial Management Information System (FMIS) on organizational performance of MTN Nigeria.

In line with this, the following hypotheses were tested:
H_{O1}: Customer Relationship Management has no significant impact on organizational performance of MTN Nigeria.
H_{O3}: Financial Management Information System has no effect on organizational performance of MTN Nigeria.

Literature Review

Organizational Performance

Cho and Dansereau (2010) defined organisational performance as a company's performance in relation to its goals and objectives. Furthermore, Tomal and Jones (2015) describe organisational performance as an organization's actual outcomes or outputs as compared to its expected outputs. The performance of a company is the standard or required indications of effectiveness, efficiency, and environmental responsibility (Wambugu 2016). The different indicators that relate to how a given client request is handled are referred to as performance. It also refers to the act of performing: that is, doing something properly or effectively utilising one's knowledge as opposed to simply possessing it. All of a company's activities and strategy culminate in performance. It's also the extent to which an employee satisfies requirements for how she or he should operate or act in a certain setting, position, job, or condition (Wambugu 2016). Effectiveness, efficiency, employee and customer happiness, creativity, product or service quality, and the capacity to retain a distinct people pool are all indicators of organisational performance. Product quality, customer happiness, new product development, capacity to recruit people, ability to retain personnel, and the interaction between management and employees were among the organisational performance elements studied in this study.

Management Information System

Management information systems (MIS) are not new; only computerization is. Prior to computers, MIS techniques existed to provide managers with the information they needed to plan and control business operations. A management information system is an abbreviation for three words: management, information, and system. Management information system (MIS) is one of the major computer-based information systems that aims to meet the general information needs of all managers in the firm or in some organizational subunit of the firm. In Shah (2014), Santos (1991) defined MIS as a planned system of collecting, processing,

storing, and disseminating data in the form of information required to carry out management functions. It can also be a documented report of the activities that were planned and carried out. MIS can be defined as a tool that assists management in providing a competitive advantage that must support the organization's goals (Laudon & Laudon 2015). A management information system is an integrated manual computer system that provides information to support a company's management operations and decision-making functions. MIS is an organizational method for providing historical, current, and projected information about internal operations and external intelligence (Asemi, Safari &Zavareh 2011). It is also an integrated set of components or entities that work together to accomplish a specific function, objective, or goal (Okoye, Egbunike&Onyali 2013). As a result, it is a computer-based system that provides information for decision-making on planning, organizing, and controlling the operation of the firm's subsystem and, in the process, provides a synergistic organization.

A Management Information System (MIS) is a collection of computer hardware and software that collects, organizes, summarizes, and reports data for use by managers, customers, and other users. The broad definition of management information systems, which includes the use of information systems to provide value to external customers, is consistent with the essence of management, which is decision making (Sonawane, 2016). MIS is a management system that aims to continuously increase the value of customers by designing and improving organizational processes and systems. Thus, the design and operation of MIS as a key system that can provide value to customers should be integrated into the organization's Total Quality Management (TQM) (Alzoubi, Alnazer&Alzoubi 2016).

In most organizations, the management information system involves at least three systems which are likely to be the following:
(i) Personal system: It traces flow of employees in the firm that is, those entering and leaving the firm, their pay, and even seniority location; (ii) Commercial system: This traces the flow of material, sub-material e.t.c. into and out of the firms, (iii) Financial system: This traces flow of money or fund into, through or out of the firm.

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The primary goals of a MIS are to assist executives in making decisions that advance the organization's strategy and to implement the organizational structure and dynamics of the enterprise for the purpose of better managing the organization for a competitive advantage (Yusuf, Sanni&Kazeem 2014). The following are the objectives of MIS.

i. Data Capturing: MIS collects data or operational information from various internal and external sources of the organization to aid in decision making. Data collection can be done manually or through computer terminals (Obasan&Soyebo 2012).
ii. Data Processing: One of the primary goals of MIS is to make it easier to collect and process data for use within the company. MIS can not only automatically collect data from internal sources such as sales transactions and inventory orders, but they can also work with external sources such as industry databases and market research (Al habri&Sonawane 2015). The captured data is processed to create the necessary information for strategic, tactical, and operational planning, organizing, coordinating, directing, and controlling functions. Processing of data is done by such activities as calculating, sorting, classifying, and summarizing.
iii. Information Storage: MIS stores processed or unprocessed data for future use. If information is not required immediately, it is saved as an organization record for later use.
iv. Information Retrieval: MIS retrieves information from its stores as and when it is required by various users.
v. Information Dissemination: Information, which is a finished product of MIS, is disseminated to the organization's users. It is done on a regular basis or online via a computer terminal.

System Approach: The information system adheres to a System approach. The system approach implies a holistic approach to the study of the system and its performance in light of the goal for which it was created (Kumar 2020).

Management Oriented: When designing the MIS, the top-down approach must be used. According to the top-down approach, system development begins with determining management needs and overall business objectives. The overall business plan should be used to develop the MIS development plan. The management-oriented feature of MIS also implies that management actively directs system development efforts (Sonawane 2016).

Need-Based: MIS design and development should be based on the information needs of managers at various levels, such as strategic planning, management control, and operational control. In other words, MIS should address the specific needs of managers at various levels of an organization's hierarchy (Kumar 2020).

Exception-Based: MIS should be built on the exception-based reporting principle, which means that an abnormal situation, i.e. the maximum; minimum; or expected values vary beyond tolerance limits, should be avoided. In such cases, there should be adequate exception reporting to the decision-maker (Kumar 2020).

Future-oriented: In addition to exception-based reporting, MIS should consider the future. In other words, MIS should not merely provide past or historical information; rather, it should provide information based on projections that can be used to initiate actions.

Integrated: Management information systems (MIS) are rationally integrated. Integration is a required feature of a management information system. Integration is important because it

allows for the generation of more meaningful data. While integration improves information processing efficiency by reducing intermediate processing and the occurrence of multiple departments independently generating the same data, an even more important benefit is that it provides more timely, complete, and relevant information (Kumar 2020). To create an effective production scheduling system, for example, it is necessary to balance factors such as setup costs, workforce, overtime rates, production capacity, inventory level, capital requirements, and customer services.

Long-Term Planning: MIS is created over a long period of time. A system like this does not emerge overnight. There is a significant amount of planning involved. The MIS designer must consider the company's long-term goals and needs (Sonawane 2016).

Sub-System Concept: Because the process of developing MIS is quite complex and one is prone to losing insight on a regular basis, the system is composed of sub-systems or quasi-separate component systems that are part of the overall unified system. Each of these systems shares the management information system's and the organization's goals. Some systems serve only one activity or level within the organization, whereas others serve multiple levels or multiple activities. As part of long-term system planning, the overall structure of the various systems should be carefully established (Kumar 2020).

Central Database: A central database is a mortar that holds the functional systems together. Each system requires access to the master file of data covering inventory, personnel, vendors, customers, etc. It seems logical to gather data once, validate it properly and place it on a central storage medium, which can be accessed by any other subsystem.

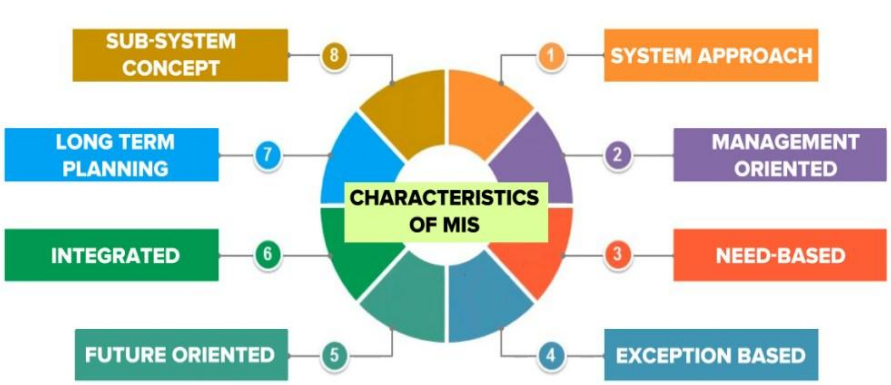

Figure 1: Characteristics of MIS (Source: Kumar 2020)

Customer Relationship Management (CRM)

A CRM system stores critical customer information such as previous sales, contact information, and sales opportunities. CRM is frequently used by marketing, customer service, sales, and business development teams. CRM is one of the MIS classifications that has recently become one of the most contentious issues in the business world. It is worth noting that customer relationship management is primarily based on the belief that establishing a long-term relationship with customers is the foundation for acquiring loyal customers who are far more profitable than non-loyal customers (Ping & Mohamed 2015) In this regard, the successful implementation of CRM would be of great benefit to the organizations. By adopting

it, such organizations can secure the benefit of increasing sales through better market segmentation, modifying products and services, achieving higher quality products, gaining access to information and employee satisfaction, and, most importantly, warranting ongoing customer retention and loyalty. Customer Relationship Management (CRM) is a strategy that enables businesses to analyze customer profiles, identify their needs and potential profit areas, and implement the necessary actions to achieve customer satisfaction, competitive advantage, and thus profitability (Stone, Woodcock, Ekinci, Aravopoulou& Parnell 2019).

Financial Management Information System

The FMIS is an information system subsystem that can be integrated with other information systems. FMIS is the computerization of public expenditure management processes such as budget formulation, budget execution, and accounting using a fully integrated system for financial management of line ministries and other spending agencies (Omokonga 2014). This MIS is designed for finance and accounting departments such as accounts payable (AP) and accounts receivable (AR) (AR). It provides financial information to managers to aid in the financial function's decision-making process. It also provides information on how to invest in funds. The FMIS provides managers with accurate reports and decision-making procedures, as well as simplifies administration work for employee benefits and improves schedules and forecasting capacity (Sonawane&Alhabri 2016).

The ability to integrate all financial resources to speed up the financial process via FMIS enables managers to handle all financial management activities effectively. FMIS is made up of several elements, each with its own function. These components can be represented as modules or sub-subsystems. General ledger, budgeting accounting, accounts payable, and accounts receivable are the four. Credit applications, billing, payment, journal, ledger entries, and other types of transactional data are all examples of transactional data. Financial intelligence data is gathered from banks, the stock market, the government, and other sources, as well as payments made to suppliers and other financial institutions. Receipts from customers and employees can be a valuable source of information for the financial management system (Kumar 2020).

Management information system and Organizational Performance

MIS is very important in the organization; it has an impact on the functions, performance, and productivity of the organization. The impact of MIS on functions is in its management; with a good MIS, marketing, finance, production, and personnel management become more efficient. Tracking and monitoring functional targets becomes simple. The functional managers are kept up to date on the activity's and targets' progress, accomplishments, and shortfalls. The manager is kept alert by providing specific information indicating and possibly indicating trends in various aspects of business. This helps in forecasting and long-term perspective planning. The manager’s attention is bought to a situation which is expected in nature, inducing him to take an action or a decision in the matter (Smyth 2019).

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kept up to date on the activity's and targets' progress, accomplishments, and shortfalls. The manager is kept alert by providing specific information indicating and possibly indicating trends in various aspects of business. It improves the administration of the business by bringing a discipline in its operations as everybody is required to follow and use systems and procedures (AL-Gharaibeh&Malkawi 2013). This procedure instils a high level of professionalism in business operations. The MIS goals and objectives are by-products of business goals and objectives. It indirectly helps to pull the entire organization in the same direction toward the corporate goals and objectives by providing relevant information to the organization (Okoye, Egbunike&Onyali 2013).

A well-designed system that focuses on the manager improves managerial efficiency. An abundance of information motivates a wise manager to employ a variety of management tools. It enables him to engage in activities such as experimentation and modeling. He is able to use tools and techniques that would be impossible to use manually thanks to the use of computers. This task is made easier by the ready-made packages. The impact is on managerial performance because it improves decision-making ability (Hashim, Yousaf, Jehangir, Khan &Hadi 2012). The MIS work on the basic system, such as transaction processing and database, results in the drudgery of clerical work being transferred to the computerized system, relieving the human mind for better work. Recording, searching, processing, and communicating take up seventy percent (70%) of the time. This MIS has an immediate impact on the overhead. It fosters an information-based working culture within the organization (Yusuf, Sanni&Kazeem 2014).

Resource Based Theory

Resource Based Theory arose from Edith Penrose's (1959) theory of firm growth, was introduced by Birger Wernerfelt (1984), and was popularized by Jay Barney (1991). According to the resource-based view, firms have resources, a subset of which allows them to gain a competitive advantage and a further subset of which leads to superior long-term performance (Barney 1991; Wade &Hulland 2014). The foundation of a company's survival and profitability is its resources. Human or material resources could be used. When assessing a company's resources, a distinction must be made between resources and capabilities. Resources are inputs into the manufacturing process and are regarded as the fundamental unit of analysis (Gupta, Tan, Ee&Phang 2018). The resources of a firm include items such as information systems, capital equipment, patents, brand names, the skill associated with individual employees, finance and so on. Independently, fewer resources are productive (Ravichandran, Lertwongsatien&Lertwongsatien 2014).

Any productive activity necessitates the coordination and cooperation of resource teams, whereas a capability is defined as the ability or capacity of a resource team to perform a specific activity or task. As a result, resources are the sources of a given firm's capability (Grant, 2001). According to Gupta, Tan, Ee, and Phang (2018), information systems are an internal firm resource because the acquisition, integration, and usage of its interconnected components are owned and controlled by firms, whether through access (e.g. lease, subscription), progressive ownership (e.g. hire purchase), or total ownership. Empirical studies of firm performance using the RBV have discovered differences not only between firms in the same industry but also between firms in different industries (Hansen &Wernerfelt

1989). but also within the narrower confines of groups within industries (Cool & Schendel 1988). This suggests that the effects of individual, firm-specific resources on performance can be significant (Mahoney & Pandian 1992).

In this context, resource-based theory is used to include the cognitive ability of individual business managers in order to ensure effective decision-making and, ultimately, leading organizational performance. This implies that MTN Nigeria has individual-specific resources that facilitate and ensure the recognition of new opportunities, effective resource gathering, as well as the mentality of handling all activities in an efficient manner, seeking and requiring information that can help in decision making, problem solving, strategic planning, and management control. In order for those issues to be effective, information must be accurate, timely, and relative (Laudon & Laudon 2015). MIS is an integrated set of resources that work together to accomplish a specific function, objective, or goal. It is a computer based system that provides information for decisions making on planning, organizing and controlling the operation of the sub-system of the firm and provides a synergistic organization in the process (Shah 2014).

Methodology

The survey design was used for the study's research. The survey included microfinance institutions and SMEs from across Nigeria, which were used as case studies. The researcher used descriptive statistics to effectively conduct a valid analysis in the presentation and analysis of data collected in the field. The study's population consists of 1,705 MTN Nigeria employees (MTN Annual Report, 2021). The sample size for the study is 324 according to the Taro Yamani formula (324). To account for non-response, the total sample size was 356. The questionnaires were distributed through MTN service centers in Lagos.

The questions were graded on a 5-point Likert scale, with answers ranging from Strongly Agree (SA) to Agree (A), Undecided (U), Disagree (D), and Strongly Disagree (SD) (SD). To tabulate the data, frequency tables and percentages were also used. The study employs multiple linear regression analysis to analyze the collected data as well as test for the null hypotheses. Primary data was collected using researcher-structured questionnaires. The questionnaire was kept short and structured, with mostly multiple-choice selections on a Likert scale, to ensure uniformity in response and to encourage participation. In this study, questionnaires were preferred because the study's respondents are literate and capable of adequately answering questions. The researcher obtained an introductory letter from the University to collect data then personally deliver the questionnaires to the respondents and has them filled in and then collect later: the drop and pick later method.

The study's data was analyzed using a weighted arithmetic mean. In order to answer the research questions, the mean and standard deviation were used. The mean response was judged on the basis that any mean score of 2.50 or higher indicates acceptance, while any mean score below 2.50 indicates rejection. Using SPSS, regression was performed at the 0.05 level of significance, which means that if the estimated t-value is equal to or greater than the table (critical) t-value, we reject the null hypothesis and accept the alternate hypothesis.

Results and Discussion

Data Analysis

Table 1: **Demographics of the respondents**

Characteristics	Frequency	Percentages (%)
Gender		
Male	193	55.8
Female	153	44.2
	346	**100.0**
Age		
18-24 yrs	48	13.83
25-31yrs	115	33.3
32-38yrs	73	21.0
39-45yrs	45	13.0
46 and above	65	18.8
Total	**346**	**100.0**
Educational Qualification		
ND	63	18.1
HND/B.Sc	203	58.7
Postgraduate	80	23.2
Total	**346**	**100.0**
Management Level		
Manager	15	4.3
Head section	10	2.9
Supervisor	23	6.5
others	298	86.2
Total	**346**	**100.0**
Working Experience		
1-5yrs	60	17.4
6-10yrs	110	31.9
11-15 yrs	78	22.5
over 15yrs	98	28.3
Total	**346**	**100.0**

Researcher's computation, 2022

Table 2: Dimensions of MIS used in MTN Nigeria

		Frequency	Percent
Valid	DSS	58	8.2
	BIS	103	14.6
	CRM	346	49.1
	FMIS	168	23.8
	TPS	30	4.3
	Total	**703**	**100.0**

SPSS output, 2022

Table 2 shows the dimensions of management information systems used by MTN Nigeria. Fifty-eight respondents, or 8.2 percent, stated that the organization uses Decision Support Systems (DSS), 103 respondents, or 14.6 percent, stated that the organization uses Business Information Systems (BIS), 346 respondents, or 49.1 percent, stated that the organization uses Customer Relationship Management (CRM), 168 respondents, or 23.8 percent, stated that the organization uses Financial Management Information System (FMIS), and 3 respondents, or 49.1 percent, stated that the organization uses (TPS). The different dimensions of MIS reported by respondents in the table above were due to the various departments to which the respondents belonged. Some departments may use a type of MIS that another department is unfamiliar with.

Table 3: Correlation coefficient

		FMIS	CRM	OP
FMIS	Pearson Correlation	1	.506**	.562**
	Sig. (2-tailed)		.000	.000
	N		346	346
CRM	Pearson Correlation		1	.675**
	Sig. (2-tailed)			.000
	N			346
OP	Pearson Correlation			1
	Sig. (2-tailed)			
	N			

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

The correlation coefficients between the independent variables are shown in Table 3 above, with values ranging from less than 0.9 to greater than 0.1. This means that the variables correlate fairly well enough to be used in the study, and there is no risk of harmful multicollinearity.

Table 4: Regression Statistics

Variable	**Coefficient**	***t* Statistics**	***p* value**
Constant	0.205	.607	.547
CRM	0.595	5.638	.000
FMIS	0.232	2.033	.048
R	0.702		
R squared	0.613		
Adj R squared	0.599		
F stat	60.809		
Prob (F stat)	0.000		
Durbin Watson	2.251		

Author's computation 2022

Table 4 shows the regression for the impact of management information systems on MTN Nigeria's organizational performance. The F-statistic, which measures the adequacy and fitness of the model used in the study, was 60.809 with a p-value of 0.000, which is significant at 1%; this indicates that the model is appropriate for the study.

4.5 Discussion of findings

According to the findings, R, the multiple correlation coefficient for management information system variables, was 0.702, indicating that Customer Relationship Management and Financial Management Information System are strong predictors of organizational performance. This implies that there is a strong relationship between management information systems and MTN Nigeria's organizational performance. The multiple coefficient of determination of the variables, R^2, was 0.613, indicating that variations in the independent variables (Customer Relationship Management and Financial Management Information System) captured in the study explain approximately 61.3 percent of the total variation in organizational performance. The remaining 38.7% is explained by variables not included in the study. The adjusted R^2 of 0.599 indicates that even when other variables are added to the study, the independent variables, Customer Relationship Management, Financial, and Management Information System, will still explain 59.9 percent of the variations in organizational performance. This demonstrates that the importance of management information systems cannot be overstated.

The constant of 0.205 in table 4 indicates that if Customer Relationship Management (CRM) and Financial Management Information System (FMIS) were both rated as zero, organizational performance would be 0.205. A close examination of the beta values (coefficient values) for each variable in table 4 reveals the contribution of each independent variable to the model. CRM has a coefficient of 0.595, indicating that it has a positive effect on organizational performance. This means that effective customer relationship management will result in a 59.5 percent increase in organizational performance. The t-statistics, which stood at 5.638 with p0.01 indicating that the effect of CRM on organizational performance is significant at the 99 percent confidence level, are used to judge the significance of the effect. This implies that the study lacks sufficient statistical evidence to accept the null hypothesis, which states that Customer Relationship Management has no significant impact on MTN Nigeria's organizational performance; thus, the alternative hypothesis, which states that Customer Relationship Management has a significant impact on MTN Nigeria's organizational performance, is accepted. The finding is consistent with Waskito's (2018) report, which asserted that effective CRM influences organizational profit in Somalia. Furthermore, Kebede and Tegegne (2018) found CRM to be statistically significant in determining the performance of firms.

Furthermore, the study finds that FMIS has a positive impact on organizational performance, with a coefficient of 0.232. This implies that effective use of the Financial Management Information System will result in a 23.2 percent increase in organizational performance. The t-statistics, which stood at 2.033 with p0.05, were used to determine the significance of the effect. At a 95% confidence level, the p-value indicates that the impact of FMIS on organizational performance is significant. This implies that the study lacks sufficient statistical evidence to accept the null hypothesis, which states that the Financial Management

Information System has no effect on MTN Nigeria's organizational performance; thus, the alternative hypothesis, which states that the Financial Management Information System has an effect on MTN Nigeria's organizational performance, is accepted. This study's findings agree with Omokonga (2014) and Njonde&Kimanzi (2014), who found a positive relationship between the effectiveness of IFMIS and public financial management in a study.

The results of the study's robustness and validity tests revealed that the regression models on organizational performance satisfied the multiple regression assumptions. As a result, the analysis results were adequate in explaining the relationship between study variables. Furthermore, the study employs the variables empirically investigated by previous studies around the world and discovered that the variables are among the determinants of MTN Nigeria's performance. The F-statistics in table 4 were 60.809. The p-value is less than 0.05, indicating that the model's depicted relationship is significant at the 95 percent confidence level and that the model can be relied on to reach a reasonable conclusion. The results of fitting a multiple linear regression model to describe the relationship between organizational performance and Customer Relationship Management and Financial Management Information System are shown in table 4.

The findings of this study show a significant positive relationship between management information systems and MTN Nigeria's organizational performance (r = 0.702). This finding implies that when an organization's day-to-day activities are MIS-oriented, it will be faster and easier to retrieve information, and such information can be used to improve organizational performance. According to Yusuf, Sanni, and Kazeem (2014), determining a set of competitors necessitates knowledge of which customers may be using this product and for what purpose. This finding supports previous research by Rananathan and Kannabira (2014), which discovered that the primary goal of information systems is to improve and enhance the organization's potential role in terms of improving its overall financial performance. Furthermore, the findings agree with those of Lemchi (2018), who discovered a strong positive relationship between management information system and Seven Up Company Aba and Port Harcourt's market share and profitability. Similarly, Kalhoro, Rahoo, Kalhoro, and Nagar (2019) and Afolayan (2018) found that management information systems have an impact on overall business performance.

Conclusion

The management information system is very important in the organization; it has an impact on the functions, performance, and productivity of the organization. The management of MIS has an impact on the functions. With good MIS support, marketing, finance, production, and personnel management become more efficient, and tracking and monitoring of functional targets becomes simple. MIS uses formalized procedures to provide appropriate information to management at all levels in all functions based on data from both internal and external sources, allowing them to make timely and effective decisions for planning, directing, and controlling the activities for which they are responsible. Based on these findings, the study concludes that management information systems have a significant impact on MTN Nigeria's organizational performance.

References

Afolayan, J. A. (2018). *Impact of Management Information System on Business Performance: Evidence from Lubcon Oil Plc Ilorin* (Doctoral dissertation, Kwara State University (Nigeria).

Al-Gharaibeh, S. M., &Malkawi, N. M. (2013). The impact of management information systems on the performance of governmental organizations: Study at Jordanian ministry of planning. *International Journal of Business and Social Science*, *4*(17), 101-109.

Alhabri, H. A. Y. &Sonawane, M. A. (2016). Creating Awareness of Management Information System and Its Advantages in Business Performance: A Review of Literature. *IOSRJournal of Business and Management (IOSR-JBM*), 18(2), 70-73.

Alzoubi, H., Alnazer, N., &Alzoubi, A. (2016). Exploring the Impact of the use of Business Information systems BIS on the organizational performance effectiveness. *International Journal of Business and Management Invention*, *5*(4), 48-55.

Asemi, A., Safari, A., &Zavareh, A. A. (2011). The role of management information system (MIS) and Decision support system (DSS) for manager's decision making process. *International Journal of Business and Management,* 6(7), 164-173.

Cho, J., &Dansereau, F. (2010). Are transformational leaders fair? A multi-level study of transformational leadership, justice perceptions, and organizational citizenship behaviors. *The Leadership Quarterly*, *21*(3), 409-421.

Gupta, G., Tan, K. T. L., Ee, Y. S., &Phang, C. S. C. (2018). Resource-based view of information systems: Sustainable and transient competitive advantage perspectives. *Australasian Journal of Information Systems*, *22*, 1-9.

Hashim, M., Yousaf, A., Jehangir, M., Khan, S., &Hadi, N. (2012). The impact of management information system on the overall performance and efficiency of the workforce of the accountant general (peshawar): A research base study. *International Journal of Academic Research in Accounting, Finance and Management Sciences*, *2*(2), 167-182.

Kalhoro, S., Rahoo, L. A., Kalhoro, M., & Nagar, M. A. K. (2019). The Meaning and Role of Management Information System in the Telecom Companies in Sindh Province. *Computer Engineering and Intelligent Systems*, 10(3), 9-13

Kebede, A. M., &Tegegne, Z. L. (2018). The effect of customer relationship management on bank performance: In context of commercial banks in Amhara Region, Ethiopia. *Cogent Business & Management*, *5*(1), 1499183.

Kumar, A. (2020). What is MIS? Characteristics, Objectives, Role, Component. Available online from https://www.geektonight.com/what-is-mis/

Laudon, K. C., & Laudon, J. P. (2015). *Management information systems* (p. 143). Upper Saddle River: Pearson.

Lemchi, Y. H. D. (2018). Management information system and organizational performance of Seven-Up Bottling Company in Aba and Port Harcourt. *International Journal of Economics and Business Management*, *4*(4), 53-61.

Njonde, J. N. &Kimanzi, K. (2014). Effect of integrated financial management information system on performance of public sector: A case of Nairobi County Government. *International Journal of Social Sciences and Entrepreneurship*, 1(12), 913-936

Obasan, K. A., &Soyebo, Y. (2012). Management information system as a catalyst to organizational performance in the 21st century: a study of selected banks in Nigeria. *American Journal of Business Management*, *1*(1), 12-17.

Okoye, P. V. C., Egbunike, F. C., &Onyali, C. I. (2013). The Nexus of Management Information System (MIS) Implementation and Managerial Performance: An Exploratory Study. *Journal of Information Engineering and Applications*, 3(13), 76-86.

Omokonga, S. (2014). *The effect of Integrated Financial Management Information System on the Performance of Public sector organizations* (Doctoral dissertation, United States International University-Africa).

Ping W. & Mohamed, E. H. (2015). A review paper on the Impact and the Importance of Management Information Systems. *Innovative Journal of Business and Management*, 4(2), 27-30.

Ravichandran, T., Lertwongsatien, C., &Lertwongsatien, C. (2014). Effect of information systems resources and capabilities on firm performance: A resource-based perspective. *Journal of management information systems*, *21*(4), 237-276.

Shah, M. (2014). Impact of management information systems (MIS) on school administration: What the literature says. *Procedia-Social and Behavioral Sciences,* 116, 2799-2804.

Singh, S. K., Burgess, T. F., Heap, J., Almatrooshi, B., & Farouk, S. (2016). Determinants of organizational performance: a proposed framework. *International Journal of Productivity and Performance Management,* 65(6), 844-859

Smyth, D. (2019). The Concept of Management Information Systems. Available online from https://bizfluent.com/how-8256522-develop-management-information-system.html

Sonawane, M. A. &Alhabri, H. A. Y. (2016). The Effectiveness and Efficiency of Management Information System (MIS) in Financial Management in Business Enterprises. *Indian Journal of Science and Technology*, 9(46), 1-7.

Sonawane, M. A. (2016). Impact of Management Information System (MIS) on Managers Decision in Industrial Companies in India. *International Journal of Management (IJM)*, *7*(4), 179–188.

Stone, M., Woodcock, N., Ekinci, Y., Aravopoulou, E., & Parnell, B. (2019). SCHEMA: Information on marketing and customer engagement performance–reality versus dreams. The Bottom Line, 32(1), 98-116.

Tomal, D. R., & Jones, K. J. (2015). A comparison of core competencies of women and men leaders in the manufacturing industry. *The Coastal Business Journal*, *14*(1), 13.

Wade, M., &Hulland, J. (2014). The resource-based view and information systems research: Review, extension, and suggestions for future research. *MIS quarterly*, *28*(1), 107-142.

Wambugu, J. (2016). *Customer Relationship Management and Market Performance of Nation Media Group.* An unpublished thesis submitted to School of Business, University of Nairobi.

Yusuf, M., Sanni, I., &Kazeem, A. (2014). The impact of management information system (MIS) on the performance of business organization in Nigeria. *International Journal of Humanities Social Sciences and Education (IJHSSE)*, *1*(2), 76-86.