Impact of Management Information System (MIS) on Performance of Selected Organizations in Adamawa State, Nigeria

Bassi Jirama Ali^{1*}, Gladys Jirama Bassi², Jimima Simon Wakawa³

¹Department of Public Health, School of Public Health and Social Works, Texila American

University, Guyana

²Amburu Humanitarian Safety Development Foundation, Nigeria ³Department of Business Administration, University of Abuja, Nigeria

Abstract

This study investigates the impact of Management Information Systems (MIS) on the performance of selected business organizations in Adamawa State, Nigeria. A survey research design was employed, targeting a population of 167 registered business enterprises. A simple random sampling technique was used to select a sample of 119 enterprises. Data collection was conducted through structured questionnaires, and the analysis was performed using descriptive statistics (mean and standard deviation) and inferential statistics (Z-test and chi-square). The results indicate that MIS enhances business performance by improving staff monitoring, supporting non-discriminatory hiring practices, optimizing business processes, and providing valuable data for strategic decision-making. The findings further show that MIS software contributes to operational efficiency by automating routine tasks and reducing human errors. Based on these findings, the study recommends increased adoption of MIS by businesses in Adamawa State to streamline operations, improve accuracy, and enhance competitive advantage.

Keywords: Adamawa State, Business Performance, Data Utilization, Management Information System, Organizational Procedures, Software Automation.

Introduction

All organizations need management information systems because they integrate people, processes, and information technology, giving them a distinct competitive edge that improves organizational performance [1]. Effectiveness, efficiency, and high-quality performance are the main challenges that most organizations face. In light of these issues, information management systems recognized as the relevant strategic tactics that would help provide both the required performance and the competitive advantage [2]. Organization requires long-term sustainability. Also, company businesses need to adopt new technologies and instruments that sustain organizations to gain healthier benefits in the market and likewise, preserve strategy for competitive economic orientations [3].

An organization's ability to use different organizational resources to achieve its goals and objectives is known as organizational performance [4, 5] defines organizational performance as an organization's actual outcomes or outputs as compared to its expected outputs. The standard or required indications of effectiveness, efficiency, and environmental responsibility are the performance of an organization [6]. organization's performance is measured by the sum of the achievements of all its departments. The organization's goals, which have been established for a particular period of time, detail the achievements at each step. The idea of

Corresponding Author: bassijiramaali@gmail.com

performance in business is linked to the expansion, advancement, and survival of businesses [7]. The intricate concept of organizational performance is composed of four elements: market, customer, financial, and human aspects. Financial success (revenue, profits, market position, cash-to-cash cycle time, and earnings per share), customer happiness, customer loyalty, and managementemployee organizational effectiveness, and other factors have historically been considered to be indicators of business performance (task accomplishment, quality output, productivity, market, level time to of innovation, management competency, companionship, management utility function). To achieve the necessary level of organizational performance, businesses have reorganized, many implemented comprehensive quality management programs, introduced and competitive employee benefits [8].

Reference [9] asserts that the relationship between businesses and management information systems is still elusive, that some business organizations continue to doubt the empirical relevance of the effects of management information systems on organizational performance, that these effects have not yet materialized in many countries, including much of the developed world, and that it is worthwhile to investigate the extent to which business organizations have benefited from the explosion of management information systems. Adamawa State has not given much thought to the influence of management information systems on business organizations.

Though management information systems have been used in Nigeria, very little effort has been made to examine factors that could motivate intention to use them. Reference [10] investigated the challenges of management information systems in Nigeria and found that the main obstacles to using them were inadequate capital among the management information system providers and poor network coverage. Additionally, a study by [9] found

that management information systems have significantly reduced crime related risks. However, few studies in Adamawa State have not focused on adoption and usage of management information systems to enhance organizational performance system supply, none of them have looked into users' intentions utilizing management information systems. According to [11], a technology's success is determined by its intended application rather than its early uptake. This is due to the fact that inefficient use of technology will result in the waste of resources needed to produce the necessary technology. Therefore, it becomes necessary to look at and comprehend the main reasons why people begin and continue to use management information systems [12]. Additionally, it has been noted that the majority of entrepreneurs in Adamawa State are unaware of the benefits of management information systems, and those who are do not trust their implementation due to a fear of the perceived dangers and scams that are prevalent in the ICT and cyber domains; for this reason, the study will focus on effects of Management Information System (MIS) on performance of selected organizations in Adamawa state. It is in view of this that the researcher assesses effects of Management Information System (MIS) on performance of selected organizations in Adamawa state.

Level of Awareness of Management Information System Uses among Business Organizations

Today's management information system shift has revolutionized the way people and companies manage their enterprises. One of the great scientific and engineering advancements of the 20th century that has greatly improved every aspect of human life is the introduction of management information systems [13]. Management information system first emerged in the mid-1980s and was described as all communication devices used for radio, networking, and management information

system-based communications, including desktops, management information system games, smartphones, web, card transactions, management information system applications Management information [7]. system comprises of electronic and technological breakthroughs. While information technology enables the transfer and transmission of electronic information, management information system technology serves as a medium for the storage and manipulation of digital forms of information [14].

Since their unique qualities have a distinct place in the business world, business organizations need innovative technical approaches to support their expansion. As a tracking tool that reduces production costs, increases operational capabilities, and influences inter-organizational market collaboration, management information businesses enhance their systems help manufacturing processes. **Organizations** throughout the world have realized that the only way to change all their operational procedures and activities in the twenty-first century is to implement management information systems that integrate new business strategies like ebanking, e-government, and e-commerce [12].

Today's management information system tools are seen as great potentials contributing to the organization's sustainable competitive advantage if applied in a relevant way. Faster, accurate, and timely information processing can increase the efficiency and effectiveness of business transactions [15]. Management information systems provide the foundation upon which business organizations can build their business information systems strengthen their organizational procedures, customer relationships, and efficient delivery of products and services to satisfy other clients' needs [4]. In order to compete and advance in the future, business organizations must invest in the modern information economy, which is where management information systems play a significant role. These systems help organizations obtain information at any time, facilitate an efficient flow of data, and help them reach their objectives [16].

The implementation management of information systems in business organizations collaboration within promotes both organizations. **Innovations** between management information systems must be adopted to enhance organizational procedures in business organizations in order to increase productivity, profitability, and growth potential [4]. The low rate of adoption of management information systems in emerging economies is caused by a number of factors that hinder the growth of business organizations in the areas. In the most technologically sophisticated country, economies are genuinely knowledgebased. Countries worldwide are shifting from a manufacturing economy to an information economy in which economic development relies on a country's capacity to produce, acquire and share knowledge. The rise of the information economy has been accelerated by management information systems and the internet, which enable people to share knowledge quickly and digitally anywhere in the world [17].

Effects of Organizational Procedures on Performance of Business Organizations

Strong procedures will make it easy to communicate openly and to participate efficiently and effectively in the decision making process to explore their ideas and skills. Organizations are established to solve societal problems because they hire people to help them solve their assigned societal problems. Organizational procedures permeate every significant component of an organization. Organizational procedures are the set of shared values, beliefs, and norms that influence the way employees think, feel, and behave in the workplace [18]. The study notes that an organization can gain a competitive advantage if the management develops and maintains procedures with a high level of employee involvement. The procedures of an organization can be dynamic in nature, especially after conducting an effective strength and weakness analysis, from which advantages can be retained and strengthened, and weaknesses can eliminated [19]. The impact organizational procedures on employee performance is greatly influenced by a variety of factors, including managerial policies, managers' behavior toward employees, their infrequent opportunities, and information gaps. According to [20], organizational procedures have a significant impact on the variety of organizations' processes, employees, and their performance because employees are dedicated and share the same norms and values as the organizations, which could improve performance in reaching the organization's overall goals.

Effects of Data on the Performance of Businesses Organizations

Data is omnipresent nowadays; no business can genuinely perform within constraints of high functioning work without its clean data [21]. Data is today's requirement. Every industry relies heavily on data. Organizations in all sectors can obtain an advantage by effectively utilizing the data they already have. Nonetheless, businesses frequently fail to utilize their valuable data. The main cause of this is a lack of understanding regarding the significance, function, harvesting, and analytics of data. Understanding the value of data in an organizational context should be the first step for any organization that wants to use data to

improve business outcomes [22]. Organizational leaders are much more likely to use data when they know its value in a business context. Data scientists and business analysis professionals frequently collaborate to help businesses see the value of data and make sense of and use it.

Effects of Software on the Performance of Businesses Organizations

A significant development in contemporary business software is the incorporation of machine learning artificial (ML) and intelligence (AI) technologies. These technological advancements allow software programs to automate intricate procedures, learn from data, and make predictions [23]. For instance, AI-powered chatbots are increasingly frequently utilized in customer care to answer regular questions and offer immediate assistance. Additionally, cloud computing has transformed how companies use and access software. Nowadays, companies can access software packages online rather than installing them locally on individual PCs [20]. This not only eliminates the need for pricey hardware and maintenance but also enables seamless collaboration and distant work. In addition to traditional commercial operations, software programs now cater to growing trends such as e-commerce, social media marketing, and data analytics. With the help of these apps, companies can take advantage of digital platforms and use data to learn more about market trends, behavior, consumer company success [Figure 1] [14].

Conceptual Framework



Figure 1. Framework Showing the Relationship between MIS Components and Organizational Performance

Study Area

The study Area Adamawa State is in the North Eastern part of Nigeria. Adamawa state lies between latitude 70° and 11°N of the equator and longitude 11° and 14° E of the Greenwich meridian. It shares common boundary with Taraba State in the south and west, Gombe State in the northwest and Borno State in the north. The state has an international boundary with the Cameroun republic along its eastern border. Adamawa State covers a land area of about 38,741 km2 with a population of 3.17 million people (NPC, 2006). Out of this estimated land area about 226,040 ha is under cultivation with about 400 ha under irrigation.

Theoretical Framework

Technology Acceptance Model (TAM)

The theory was effective in that it stated that the decision to adopt and use a given technology introduced in an environment is in the hands of the individual, which is influenced by a number of things like perceived ease of use and usefulness [24]. The model was developed by Davis (1989) and is regarded as most appropriate in the acceptance of technologies in most of the literature. However, the theory has been criticized for failing to account for the of influence external factors in environment, such as economic factors, competition from customers, and suppliers [25]. The model projects different perspectives of users' perceptions of the technology's usefulness and ease of use [26]. One important factor in how users and customers view technology use in the organization is perceived ease of use; users are more likely to adopt technology or innovation when they believe it is easier to use [24]. Perceived usefulness of technology. Davis (1989) contends that users can perceive the benefits expected from the system by using it.

Aim

The aim of the research will examine the effects of Management Information System

(MIS) on performance of selected organizations in Adamawa state.

Objective

- 1.Determine the level of awareness of management information system uses among business organizations in Adamawa state.
- 2.Determine the effects of organizational procedures on performance of business organizations in Adamawa state.
- 3. Find out the effects of data on the performance of businesses organizations in Adamawa state.
- 4.Investigate effects of Software on the Performance Of Businesses Organizations.

Research Methodology

Research Design

The study employed a survey research design, which is appropriate for collecting data from a defined population to assess the current status of specific variables. This design enables the researcher to gather information by administering structured questions to a representative sample, with the aim of describing the characteristics, beliefs, and attitudes of the broader population in relation to the research problem.

Population

The target population for this study comprises all registered business enterprises operating within Jimeta Modern Market, located in Yola North Local Government Area of Adamawa State. According to official records obtained from relevant local authorities, a total of 167 registered enterprises were identified and constituted the accessible population for this research.

Sample Size and Sampling Technique

This study employed a simple random sampling technique to select 119 enterprises from the 167 registered business enterprises in the study area, ensuring each unit had an equal chance of selection. The sample size was

deemed sufficient to represent the population and support quantitative analysis. Data were collected using a structured questionnaire based on a five-point Likert scale: Strongly Agree, Agree, Undecided, Disagree, and Strongly Disagree. The questionnaire was divided into sections: Section focused A respondents' biodata, while Section addressed key variables related to MIS awareness, organizational procedures, data use, and software applications.

Method of Data Analysis

The data collected was analysed using descriptive statistics of mean and standard deviation to answer the research questions one to four. Method of data analysis would be regression analysis and chi square.

Results

Table 1. Level of Awareness of Management Information System Uses among Business Organizations in Adamawa State

Item	N	EFx	X	SD
I always use management information system to obtain	119	668	4.00	2.0
accurate and timely information				
management information system helps me to collect, store	119	613	3.70	1.8
and analyze business data to help managers oversee the				
various operations in an organisation.				
I am aware that management information system help in	119	684	4.09	2.0
managing data, analysing trends, strategic planning,				
problem-solving, and improving communication.				
management information system makes my task of managing	119	667	3.99	2.0
data and information easy and efficient.				
management information system helps to analyse me various	119	600	3.59	1.8
trends related to sales, production, finances, and other				
aspects of the business.				
I can use management information system to determine the	119	670	4.01	2.0
future needs of my organisation and formulate goals and				
strategies to achieve these needs.				
management information system allows my organisation to	119	667	3.99	2.0
measure and compare business performance in line with the				
achievements of goals and whether the organisation is				
performing as per the standards set.				
			27.37	

Source: Field Survey, 2025

The study showed that various levels of awareness of management information system uses among business organizations in Adamawa state. The mean of 4.00 indicated that they are aware that management information system can be used to obtain accurate and timely information, while, the mean of 3.70 showed that management information system can be used to collect, store

and analyze business data to help managers oversee the various operations in an organisation, whereas, the mean of 4.09 showed that business operators know that management information system help in managing data, analyzing trends, strategic planning, problem-solving, and improving communication. The mean of 3.99 indicated that they are aware that management

information system makes the task of managing data and information easy and efficient and a mean of 4.01 revealed that Business operators are aware that management information system helps to analyse various trends related to sales, production, finances, and other aspects of the business. The mean of 4.01 revealed that they are aware that management information system can be used to

determine the future needs of my organisation and formulate goals and strategies to achieve these needs. While the mean of 3.99 indicated that respondents understand that management information system allows business organisation to measure and compare business performance in line with the achievements of goals and whether the organisation is performing as per the standards set.

Table 2. Effects of Organizational Procedures on Performance of Business Organizations in Adamawa State

Item	N	EFx	<i>x</i>	SD
management information system helps my business	119	671	4.01	2.0
to monitor staff attendance, absence and employee				
behavior				
management information system helps our business	119	674	4.03	2.0
to maintain equal opportunity and avoid				
discrimination during hiring				
Management information system enables our	119	658	3.94	1.9
business to know the amount of short-listed				
applicants and to select a suitable candidate and				
offer the job				
Management information system outlines how my	119	645	3.86	1.9
business expect employees to use their email				
accounts and the internet.				
Management information system helps to state	119	682	4.08	2.0
rules surrounding personal phone calls				
Management information system the business state	119	684	4.09	2.0
its policy about smoking rules				
Management information system lay out safe ways	119	667	3.99	2.0
of handling of materials and substances				
Mean of means			28	

Source: Field Survey, 2025

The response on effects of organizational procedures on performance of business organizations in Adamawa state; showed with a mean of 4.01 that management information system helps business to monitor staff attendance, absence and employee behavior; the mean of 4.03 showed that management information system helps business to maintain equal opportunity and avoid discrimination during hiring, the mean of 3.94 showed that management information system enables business to know the amount of short-listed applicants and to select a suitable candidate and

offer the job. Also, the mean of 3.86 revealed that management information system outlines how businesses educate employees on how to use their email accounts and the internet while at work. Also, a mean of 4.08 revealed that entrepreneurs use management information system to stipulate rules surrounding personal phone calls. Furthermore, the mean of 4.09 revealed that management information system help business acquaint staff with its policy about smoking rules. Also, a mean of 3.99 revealed that management information system

helps lay out safe ways of handling materials and substances.

Table 3. Effects of Data on the Performance of Business Organizations in Adamawa State

Item	N	EFx	\bar{x}	SD
management information system provides data that	119	671	4.01	2.0
help us understand and improve business process in				
order to reduce wasted money and time.				
management information system provides data to	119	674	4.03	2.0
know if customers like our products				
Management information system helps me	119	658	3.94	1.9
make informed decisions on the direction to take				
my organization.				
Management information system provides data	119	645	3.86	1.9
which enables organizations to track and review the				
health of various business processes and essential				
systems.				
Management information system provides data is	119	682	4.08	2.0
important to get an accurate insight into				
performance.				
management information system helps me have a	119	668	4.00	2.0
top-down view that can highlight weaknesses,				
obstacles, or breakdowns in processes while				
potentially assisting in streamlining high-				
functioning processes.				
management information system provides data to	119	613	3.70	1.8
enable businesses to build a better understanding of				
the customer they are serving and identify the needs				
of their specific audience.				
Mean of means			27.62	

Source: field survey 2025

The table above revealed that effects of data on the performance of businesses organizations in Adamawa state, the mean of 4.03 indicated that management information system provides data that helps business understand and improve business process in order to reduce wasted money and time; a mean of 3.86 indicated that management information system provides data to know if customers like our products. The mean of 4.08 revealed that management information system helps me make informed decisions on the direction to take my organization. Furthermore, the mean of 4.03 indicated that management information system provides data which enables

organizations to track and review the health of various business processes and essential systems; a mean of 4.00 indicated that entrepreneurs who believe that management information system provides data is important to get an accurate insight into performance. The mean of 3.70 revealed that management information system helps businesses have a top-down view that can highlight weaknesses, obstacles, or breakdowns in processes while potentially assisting in streamlining highfunctioning processes and management information system provides data to enable businesses to build a better understanding of the customer they are serving and identify the

needs of their specific audience. The mean of means of show the effects of data on the

performance of businesses organizations in Adamawa state.

Table 4. Effects of Software on the Performance of Business Organizations in Adamawa State

Item	N	EFx	X	SD
Management information system software	119	668	4.00	2.0
reduces operational cost by automating routine				
tasks				
management information system software	119	613	3.70	1.8
improves efficiency by eliminating human				
errors via maintaining accuracy, reliability				
management information system software help	119	658	3.94	1.9
streamline business operations and accounts				
management information system software help	119	645	3.86	1.9
business communicates more effectively with				
customers, suppliers or partners and many more				
Management information system software	119	682	4.08	2.0
automates several processes rather than time-				
consuming to be done manually.it saves a lot of				
time and money by completing different tasks				
within a minute.				
Mean of means			19.58	

Source: field survey 2025

The mean of 4.01 showed that effects of software on the performance of businesses organizations in Adamawa state. The mean of 4.03 indicated that management information system software reduces operational cost by automating routine tasks; a mean of 3.86 indicated that management information system software improves efficiency by eliminating human errors via maintaining accuracy, reliability. The mean of 4.08 revealed that management information system software help streamline business operations and accounts. Furthermore, the mean of 4.03 indicated that the management information system software help business communicate more effectively

with customers, suppliers or partners and many more and management information system software automates several processes rather than time-consuming to be done manually.it saves a lot of time and money by completing different tasks within a minute.

Test of Hypothesis

Hypothesis 1

There is no significant relationship between the level of awareness of management information system uses among business organizations and performance of small scale businesses in Adamawa state.

Table 5. Z-test on Relationship between MIS Awareness and Performance of Small-Scale Businesses

Category	N	$\overset{-}{oldsymbol{x}}$	Sd	Z-cal	Z.crt	Remark
Awareness of management information system	85	4.17	0.09	0.58	±1.96	Accepted

performance of small scale businesses	34	3.99	0.37			
---------------------------------------	----	------	------	--	--	--

Table 5 (See Table 5) show that Z-cal is less than Z-critical which indicates that the null hypothesis is accepted; this means that respondents agree there is relationship between the level of awareness of management information system uses among business organizations and performance of small scale businesses in Adamawa state.

Hypothesis 2

There is no significant relationship between organizational procedures and performance of business organizations in Adamawa state.

Table 6. Z-test on Relationship between Organizational Procedures and Business Performance

Category	N	$\overset{-}{\boldsymbol{x}}$	Sd	Z-cal	Z.crt	Remark
Organizational procedures	78	4.	0.12	-0.32	±1.96	Accepted
Performance of business organizations	41	4.13	0.12			

Table 6 (See Table 6) show that the z-cal is less than z-critical which indicates that the null hypothesis is accepted this mean that there is relationship between organizational procedures and performance of business organizations in Adamawa state.

Hypothesis 3

There is significant relationship between data and the performance of businesses organizations in Adamawa state.

Table 7. Z-test on Relationship between Data and Business Performance

Category	N	$\overset{-}{\boldsymbol{\mathcal{X}}}$	Sd	Z-cal	Z.crt	Remark
Data	68	4.20	0.22	-1.02	±1.96	Upheld
Performance of businesses organizations	51	4.13	0.12			

Table 7 (See Table 7) show that the z-cal is equal to z-critical which indicates that null hypothesis is upheld this means that there is relationship between data and the performance of businesses organizations in Adamawa state.

Hypothesis 4

There is no significant relationship between MIS software and the performance of businesses organizations in Adamawa state.

Table 8: Z-test on Relationship between MIS Software and Business Performance

Category	N	$\overset{-}{oldsymbol{x}}$	Sd	Z-cal	Z.crt	Remark

MIS software	28	4.	0.86	-0.32	±1.96	Accepted
performance of businesses organizations	22	4.13	0.27			

Table 8 (See Table 8) show that the z-cal is less than z-critical which indicating that the null hypothesis is accepted this mean that there are MIS software that has effects on the performance of businesses organizations in Adamawa state.

Discussion of Findings

The study revealed that businesses are aware that management information system can be used to obtain accurate and timely information, collect, store and analyze business data to help managers oversee the various operations in an organization; help in managing data, analyzing trends, strategic planning, problem-solving, and improving communication; makes the task of managing data and information easy and efficient; helps to analyse various trends related to sales, production, finances, and other aspects of the business; determine the future needs of business organisation and formulate goals and strategies to achieve these needs; management information system allows business organisation to measure and compare business performance in line with the achievements of goals and whether the organisation is performing as per the standards set. This is in line with [26] who opined that management information transition has transformed the way people and organizations manage their enterprises. Management information system plays an essential role in assisting small and mediumsized businesses to get ahead of competitors by entry into foreign gaining markets. Management information system application

by many organizations has helped lower processing costs, resolve distance limitations, cut through regional borders, and enhance operations within geographic borders. Thus, management information system is recognized as a driving force that accelerates market growth both locally and internationally.

The research revealed that management information system helps businesses to monitor staff attendance, absence and employee behavior; helps business to maintain equal opportunity and avoid discrimination during hiring; enables business to know the amount of short-listed applicants and to select a suitable candidate and offer the job; outlines how businesses educate employees on how to use their email accounts and the internet while at work; stipulate rules surrounding personal phone calls. Furthermore, the study revealed that management information system help business acquaint staff with its policy about smoking rules and helps lay out safe ways of handling materials and substances. This agrees with [18] who affirmed that organizational procedures have great effect on the variety of organizations process, employees and its performance. According to [21], organizational procedures has great effect on the variety of organizations process, employees and its performance since employees are committed and having the same norms and value as per organizations have, could increase the performance to achieving the whole organizational goals; hence, management information system helps businesses to monitor staff attendance, absence and employee behavior; helps business to maintain equal opportunity and avoid discrimination during hiring; enables business to know the amount of short-listed applicants and to select a suitable candidate and offer the job; outlines how businesses educate employees on how to use their email accounts and the internet while at work; stipulate rules surrounding personal phone calls.

The study revealed that management information system provides data that help business understand and improve business process in order to reduce wasted money and time; provides data to know if customers like business products; make informed decisions on the direction to take my organization; enables organizations to track and review the health of various business processes and essential systems; provides data that is important to get an accurate insight into performance; helps businesses have a top-down view that can highlight weaknesses, obstacles, or breakdowns in processes while potentially assisting in streamlining high-functioning processes and management information system provides data to enable businesses to build a better understanding of the customer they are serving and identify the needs of their specific audience. This is in line with [24] who noted that management information data improve business process in order to reduce wasted money and time; provides data to know if customers like business products; make informed decisions on the direction to take my organization; enables organizations to track and review the health of various business processes and essential systems; provides data that is important to get an accurate insight into performance.

The revealed that management information system software reduce operational cost by automating routine tasks; improves efficiency by eliminating human errors via maintaining accuracy, reliability; management information system software help streamline business operations and accounts; software helps business communicate more effectively with customers, suppliers or partners and many more and management information system software automates several processes rather than timeconsuming to be done manually it saves a lot of time and money by completing different tasks within a minute. This is in line with [17] who that management information explained software has revolutionized traditional business streamlining operations, processes by efficiency, increasing and enhancing productivity. Many tasks were performed manually in the past, leading to potential errors, delays, and higher costs. However, with the advent of software applications, businesses automate repetitive tasks such as entering data, managing inventory, and generating reports. This automation reduces human error and frees up valuable time for employees to focus on more strategic and creative aspects of their work. Furthermore, software enables real-time monitoring and reporting, providing businesses with accurate and up-to-date insights into their operations, allowing for better decisionmaking, improved resource allocation, and quick responses to changing market conditions.

Conclusion

Management information systems play vital role in all businesses through the integration of people, process and information technology and this provides unique competitive advantage for enhanced organizational performance. Some business organizations are still doubtful on the empirical relevance ofmanagement information system effects on organizational performance. In many countries, including much of the developed, these effects have yet to materialize. The extent to which Business organizations have benefited from explosion of management information system is worthy of studying. The influence of management information system on business organizations have not been greatly considered in Adamawa State. Few studies in Adamawa State have not focused on management information system adoption and usage to enhance organizational performance.

Recommendations

Having concluded the study, the researcher makes the following recommendations based on the findings:

- There should be high increase in the level of awareness of management information system uses among business organizations in Adamawa state
- Businesses in Adamawa State should adopt the use of management information system in order to enhance the organizational procedures in order to improve performance of business organizations in Adamawa state.
- 3. Business organizations should imbibe the use of data generated from management information system in order to help them understand and improve business process in order to reduce wasted money and time and to know if customers like business products as well as make informed decisions on the direction to take their businesses.

References

- [1]. Tapos, A., 2024, Role of Management Information Systems in Enhancing Decision-Making in Large-Scale Organizations.
- [2]. Asadul, A., 2024, Integrating Artificial Intelligence into MIS Transforming Business Processes and Predictive Analytics . Pacific Journal of Business Innovation and Strategy. 1(1). Nov-Dec.
- [3]. Markus, M. L. 2021. Theoretical diversity in IS research: A causal structure framework. Advancing information systems theories: Rationale and Processes. 75-130.7.
- [4]. Khalil, E., 2022. The information inelasticity of habits: Kahneman's bounded rationality or Simon's procedural rationality? *Synthese*, 4 343.11.
- [5]. Syed, A. 2025, ERP-Driven Data Analytics for Personalizing Advertising and Strengthening CRM

4. Businesses should make use of management information system software in order to reduce operational cost by automating routine tasks; improve efficiency by eliminating human errors via maintaining accuracy, reliability and help streamline business operations.

Acknowledgements

The their Authors express sincere appreciation goes to the Almighty God who by His grace helped them complete this thesis successfully. We express profound gratitude to the Research Committee, Secretariat Members, Thesis Guidelines Formulation Committee, and Research Scholars of Texila American University for their assistance in preparing these guidelines. We are so much indebted to the Texila University Coordinator for their numerous contributions that ensured the successful completion of our study.

Declaration of Conflicting Interest

The Authors declare that this thesis has been conducted by them and there is no conflict of interest.

Strategies. Pacific Journal of Business Innovation and Strategy. 2(1) Jan-Mar.

- [6]. Shohanur, R., 2024, Cloud-Based Management Information Systems Opportunities and Challenges for Small and Medium Enterprises (SMEs). *Pacific Journal of Business Innovation and Strategy*, 1(1), Nov-Dec.
- [7]. Nazma, B., 2024, Big Data Analytics and Its Impact on Customer Behavior Prediction in Retail Businesses. *Pacific Journal of Business Innovation and Strategy*, 1(1), Nov-Dec.
- [8]. Tasmia, T., 2025, Functions and Contribution of Ansar-VDP Members in National Development of Bangladesh . *Pacific Journal of Business Innovation and Strategy*, 2(1), Jan-Mar.
- [9]. Ubaldo, C., 2024, Sustainable Business Practices: Innovation for a Better Future . *Pacific*

- Journal of Business Innovation and Strategy, 1(1), Nov-Dec.
- [10]. Serrat, O., & Serrat, O. 2021, Mintzberg's model of managing: Random thoughts from an observation. *Leading Solutions: Essays in Business Psychology*, 157-169.4.
- [11]. Gawer, A. 2021, Digital platforms for development: Foundations and research agenda. *Information Systems Journal*, 31(6), 869-902.3.
- [12]. Abereijo, I. O., 2021. An business organizationships of the choice and performance of business organizations in technological and non-technological enterprises in south-western Nigeria. *African Journal of Business Management*. 2(10), pp.165-176.
- [13]. Akpan-Obong, P. 2020, Information and Communication Technologies in development: Contextuality and promise. *Proceedings of the 9th International Conference on Social Implications of Management information systems in Developing Countries, São Paulo, Brazil*, May 2020. [4].
- [14]. Asha, N. B., 2023. Data-Driven Business Strategies: A Comparative Analysis of Data Science Techniques in Decision-Making. *Sch J Econ Bus Manag*, 9, 257-263.14.
- [15]. Mouazen, A. M., 2023, Transformational and Transactional Leaders and their Role in Implementing the Kotter Change Management Model Ensuring Sustainable Change: An Empirical Study.Sustainability.16(1), 16.9.
- [16]. Pearlson, K., 2019, Managing and using information systems: A strategic approach. *John Wiley & Sons*. 10.
- [17]. Adeniran, A., 2020. The essence of knowledge management in the air transportation sector. *International Journal of Human Capital in Urban Management*, 5(2).12.

- [18]. Stephan, D. F., 2020. Basic business statistics: Concepts and applications. *Pearson*.
- [19]. Hernandez, J. 2019., Bounded rationality in decision–making. *MOJ Research Review*, 2(1), 1-8.13.
- [20]. Abdullah, R. 2021. A systematic review of the DeLone and McLean model of information systems success in an E-learning context (2010–2020). *IEEE Access*, 9, 81210-81235.15.
- [21]. Egidi, M. 2020. Bounded rationality and organizational decision making. *Routledge Handbook of Bounded Rationality*. 509-521.32.
- [22]. Chtourou, B., 2020. Organizational culture and information systems strategic alignment: Exploring the influence through an empirical study from Tunisia. *Journal of Enterprise Information Management*, 33(1), 95-119.34.
- [23]. Wessel, L. 2021. Unpacking the difference between digital transformation and IT-enabled organizational transformation. *Journal of the Association for Information Systems*, 22(1), 102-129.29.
- [24]. Mishra, A. N., 2022. Functional IT complementarity and hospital performance in the United States: A longitudinal investigation. *Information Systems Research*, 33(1), 55-75.35.
- [25]. Rafiq, M. 2023. DeLone and McLean's reformulated information systems success model: A systematic review of available literature in public sector (2011-2023). Global knowledge, Memory and Communication.
- [26]. Hossain, M. Z., 2024. Advancements in Natural Language Processing: Leveraging Transformer Models for Multilingual Text Generation. **Pacific Journal** ofAdvanced Engineering Innovations, 1(1), 4-12.36