

Management Information System (Mis) for Effective Universities Administration In Nigeria

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Abstract: This paper looked at the roles management information system in aiding universities administration in Nigeria. The secondary data were sourced from print materials and online resources. The paper concludes that The roles of Management Information Systems in aiding universities administration in Nigeria includes; effective university planning and administration, decision making, students' administration, staff administration and data management. The paper also identified poor funding, high cost, inadequate ICT expertise, high maintenance cost and problem of poor training. To address these problems, the paper recommend that the government should increase the budgetary allocation to the universities. Universities administrators should use the funds to develop the management information system in their various universities. Universities administrators should employ adequate staff in the MIS department. Constant training and retraining should be given to staff in the MIS department. Private institutions and non-governmental organizations should assists the universities in the provision of technical support.

Keywords: Management Information System (MIS), Universities Administration.



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1.0 Introduction

University administration refers to the application of the universities' resources to implement the programme of the universities with the aims of realizing the objectives of the universities. University administration is the mobilization and arrangement of both human and materials resources for the achievement of the university's goals. University administration is the effective use of the resources of the university to implement the teaching programme, research programme and the community service programme of the universities. University administration is the

deployment of the universities' resources to accomplish the universities' programme (Ogunode, 2020).

The objectives of university administration include: to implement the programme of the universities as defined; to allocate resources for the implementation of the universities programme; to ensure implementation of teaching programme, to ensure implementation of research programme; to ensure delivery of quality community services programme, to ensure effective staff development, to ensure effective student administration, to ensure smooth implementation of academic calendar and to ensure quality education (Ogunode, 2020).

University administration include; staff personnel administration, financial management students' personnel administration, record management, maintenance of facilities among others. The Universities administrator is the executive head of the universities saddled with responsibilities of managing the human and materials resources of the universities. Ikediugwu (2016), opined that good school managers must carefully and effectively handle educational resources particularly money, material and machines including computers, teaching technology and internal facilities put under their custody for proper management of fund.

The high enrolment of students in the Nigerian universities demand for more deployment of both human and materials resources to meet up with the academic demand. This makes universities administration complex and demands the application of technological facilities. Such management and administrative demands can only be carried out effectively through administrative process that is characterized by the use management information system (MIS) in the areas of organized data processing, information storage and retrieval system among others (Thompson, & Anachuna, 2019). Management Information System is designed to assist managers in performing their work through an organized and most effective mode of information collection, processing, storage and retrieval model (Nwangwu, Ememe & Obike, 2013; Thompson, & Anachuna, 2019). It is the application of modern technologies and computerized methods imputing, processing, storing and retrieving organizational information for effective administration. It is based on this that this study seeks to discuss the roles of Management Information System in the university administration in Nigeria.

2.0 Literature Review

2.1 Concept of Educational Management Information Systems

Educational management information is the use of information technology in the educational institutions for data processing, to record, store and to produce information that school administrators can use to make decision and plan for the development of education. The full form of EMIS is Educational **Management Information Systems**. The purpose of EMIS is to extract educational data from educational institutions and derive insights that drive educational development (Matthews 2016).

The purpose of an EMIS is improved decision-making in schools by school administrators, EMIS provides up-to-date, accurate data on a variety of education departments, including: students, staff, finance, Inventory, Personnel, Project timelines. EMIS is useful in the early child education, primary school education, secondary school education and higher education. EMIS is use for educational planning, educational administration, supervision, research, financing, quality control monitoring and evaluation.

EMIS is the acronym for Educational Management Information System. EMIS is a set of procedures which, when executed, provides information to support decision making in schools. Educational management information systems (EMIS) provide valuable insights to school administrator through the systematic collection and analysis of data pertaining to student demographics, academic performance, teacher credentials, and overall school operations. In turn,

these insights allow for informed decision-making to improve the educational process in terms of efficiency, effectiveness, and overall quality. The Educational Management Information System (EMIS) is an online hub that provides vital data to influential people in the education sector, allowing them to improve education at all levels (Niar, 2022).

Education Management Information System (EMIS) refers to as system for the collection, integration, processing, maintenance and dissemination of data and information to support decision making, planning, policy-analysis, monitoring and evaluation of all levels of education system. EMIS is a system of people, technology, models, methods, processes, procedures, rules and regulations that function together to provide comprehensive, integrated set of relevant and timely education Data to planners, decision makers and managers of education at all levels (Matthews 2016). Education Management Information System (EMIS) refers to a system for the collection, integration, processing, maintenance and dissemination of data and information to support decision-making, planning, policy analysis, monitoring and evaluation of all levels of the education system. EMIS is a system of people, technology, models, methods, processes, procedures, rules and regulations that function together to provide a comprehensive, integrated set of relevant and timely educational Data to planners, decision-makers and managers of education at all levels (Guru, 2016).

Management Information System (EMIS) is a system that monitors the performance of education programs offered by the institute and manages the distribution and allocation of educational resources. It manages, plans, and strategize to implement work processes to execute the education system smoothly. Of course, in the field of education, education MIS has specific roles to help an educational institution grow. Initially, the primary purpose and use of management information systems (MIS) were to make school office activities more efficient. MIS provides administrators and teachers with the information they need for effective planning, policy development, and evaluation.

The importance of educational management system according to Matthews (2016) include:

- a) Facilitates M & E for education system by providing information, which is used to improve efficiency and effectiveness, etc.
- b) Allows for setting of new policies, and revising old ones, based on evidence instead of self-perceptions.
- c) Stakeholders such as parents require information about education institutions and student outcomes in order to make decisions about education choices and opportunities
- d) Strengthens capacities in collecting, processing, storing, analysing management, planning and dissemination of information at all levels of the education system
- e) Coordinates, disperses and makes efforts to acquire, process, analyse and disseminate all education management information
- f) Decision makers need to understand how resources are translated into learning outcomes, especially the efficiency and effectiveness of existing processes
- g) Helps provide analysts and decision makers with information to understand how educational inputs are transformed into educational outputs
- i) Access to quality and timely data helps improve decision-making and ensure that limited resources target areas in most need and where returns will be highest. The following are some of the benefits of educational management information in schools. Management information system (MIS) as opined by Madiha (2013) is being used by schools to support a range of administrative activities including attendance monitoring, assessment records, reporting, financial management,

and resource and staff allocation. The aspects of school administration that this study focuses on are students' personnel administration and financial management.

3.0 Method

This paper is apposition paper. The paper used secondary data. The secondary data were collected from both online and print resources. The resources includes; abstracts, government documents, journals and books.

4.0 Result and Discussion on Benefits of Management Information Systems for Universities Administration in Nigeria.

The roles of **Management Information Systems in aiding universities administration in Nigeria includes;** effective university planning and administration, decision making, students' administration, staff administration and data management

A) Effective university planning and administration

University planning is done by university administrators with the aids of management information system. The integration of management information system in the universities can help to aid effective universities planning. Data and financial resources are needed for universities planning. Thompson et al (2019) and Nwangwu, Ememe and Obike, (2013) submitted that Management Information System is designed to assist managers in performing their work through an organized and most effective mode of information collection, processing, storage and retrieval data model. It is the application of modern technologies and computerized methods imputing, processing, storing and retrieving organizational information for effective resources planning and universities planning. Helal,et al (2021) observed that EMIS stands for education management information system, and it is a system for managing educational data. This system is known by a variety of names in various situations. According to EMIS, an EMIS can handle a wide range of data, including demographics, enrollment, discipline, and other functional elements for students; learning data such as assessment and achievement data, teacher evaluations, curriculum effectiveness data, and other factors related to progression through educational institutions. Assessing the status of education in a nation requires knowledge about the educational system's inputs, resources, governance, operations, and results. An education management information system (EMIS) offers systematic, high-quality data in a well-structured enabling environment that makes it easier to use the data in planning and policy discussions. The primary goal of this article is to sketch out the EMIS Tool's structure.

Thompson et al and opined by Madiha (2013) observed that Management information system (MIS) is being used by schools to support a range of administrative activities including attendance monitoring, assessment records, reporting, financial management, and resource and staff allocation. Musa (2016) opined that MIS can provide administrators and teachers with the information required for informed planning, policy-making, and evaluation. MIS have changed school management in the areas of leadership, decision making, workload, human resource management, communication, responsibility, and planning. These systems can assist the school manager in determining the aims of the school, formulating strategic plans, distributing resources, and evaluating staff performance as well as organizational success.

B) Effective Decision making

Effective deployment of MIS in the universities administration can lead to effective decision making in Nigeria. MIS is designed and programme to help universities administrators make the right decision from the many alternatives. The aim of MIS is to develop a viable system to maximize the effective use of modern data approach to university management practices in decision making. It is also aimed at assisting university managers and operating personnel to produce timely and accurate information not only to decide present and future operations, but also

to pinpoint potential problems that need to be rectified in the system. Bright, and Asare, (2019) submitted that management information system supplies decision makers with facts, likewise, it supports and enhances the overall decision making process. MIS also enhance job performance throughout an institution. At the most senior level it provides the data and information to help the board and management to make strategic decisions (top management decisions or long lasting decisions) and at other levels of management. The management information systems in the universities helps to provide the necessary information to make decisions with the effectiveness and efficiency, and as far as accuracy, comprehensiveness and timeliness in the providing information increase the efficiency of those decisions, which leads to improved performance (Al Tai, 2005; Bright, & Asare, 2019). Helal, Ahmed and Bhuiyan, (2021) noted that EMIS facilitates decision-making in both structural and unistructural issue situations, as well as at all levels of the organization. It is meant to be weaved into the organization's fabric rather than standing alone. People, computers, processes, databases, interactive query tools, and other components make up MIS

C) Students Administration

EMIS also aid effective students' administration in the universities. Thompson et al (2019) and Ejeh, Okenjomand Chizi-Woko (2016) acknowledged that student personnel administration refers to all the activities and services that are rendered to students by school and its staff, outside the normal classroom instructions for the achievement of the educational objectives. Thompson and Anachuna (2019) and Akpan and Onabe, (2016) agreed that it involves all the activities and services that are rendered to students for the achievement of the educational objectives. There is a growing demand for educational services across all levels in the school system. The enormous rise in the number of students in schools as well as the multiplicity of programmes coupled with the complexity of administering a given secondary school have made school principals to handle large volumes of data which they must process speedily to provide information to the Ministry of Education, the school boards, the teaching and learning personnel within the precincts of the school, as well as the general public (Asiabaka, 2010). Thompson et al (2019) observed that MIS is used for numerous activities of student personnel administration which include processing admission, monitoring students' attendance in school, computation of students results, transmitting information to students and parents using email and website among others. According to Prashant, (2019) Student behavior can be largely tracked through the EMIS. UNICEF East Asia and Pacific (2020) maintaining that student tracking systems were also utilized in the nations studied to monitor students in and out of school and manage dropout problems in the school via MIS.

D) Staff administration

One of the cardinal goals of Universities administration is to coordinate the activities of personnel and ensure every staff in the school realize their goals. The staff need to be properly organize and supervise. One of the resources to realize the human resources management information system objective according to Madiha (2013) is the used of management information system (MIS) by managers of universities to provide support to a range of administrative activities that includes attendance monitoring, assessment records, reporting, financial management, and resource and staff allocation.

E) Data Management

Education Management Information Systems aims to help educational institutions improve data collection, data and system management, and data use in decision-making, thereby improving different elements of the education system and contributing to the end goal of improving learning for all children and youth. By using an MIS in the universities, universities administrators are able to analyze and utilize data to improve the lecturers' job performance and quality input and output

in the system. When implemented effectively in the universities, MIS can also potentially support both management and planning by principals and administrators, as well as teaching and learning in the classroom. An EMIS helps generate several valued-added components to improve educational quality, including quality data, efficient expenditures, institutionalized data systems, enhanced management practices, data-driven policies, smart investments, and targeted instruction (World-Bank, 2016).

4.1 Challenges Management Information System in Universities administration in Nigeria

The challenges militating against management information in universities administration Nigeria include; poor funding, high cost, inadequate ICT expertise, high maintenance cost and problem of poor training.

i) Poor Funding

Poor funding of the Nigerian universities is another factor contributing to the development of management information system in the various universities. Shooebridge, (2006) noted that how to fund EMIS development and maintenance is no doubt the biggest challenge facing some countries including Nigeria. This is an issue beyond the scope of the current review. Inadequate funding has prevented most schools from having well equipped computer laboratories.

ii) High Cost

One of the challenges hindering effective use management information system in universities administration in Nigeria is high cost of acquiring the facilities and maintaining. Ogunode (2021) identified high cost of buying ICT infrastructure facilities to MIS in the universities Musa, Yahaya and Ajapa (2021) also listed high cost, unstable power and poor implementation of ICT policies as challenges hindering deployment of ICT facilities in universities.

iii) Inadequate ICT Expertise

Another problem hindering the use of information management system in the universities in Nigeria is lack of inadequate ICT expertise. Salako, (2012) submitted that considerable knowledge and skills are required to build, maintain and use an EMIS. Lack of available human resource capacity significantly limits EMIS development. Building human resource capacity has long been known as a critical factor in the success of EMIS development. Limited capacity for more effective use of data in management and decision making, particularly at the school levels is often cited by local educators and external evaluators as a critical factor limiting the development of EMIS in Nigeria.

iv) High Maintenance Cost

The cost of operating and maintaining management information system in universities is high. Musa (2018) noted that sometimes a problem arises due to server crash and website crash. Sometimes it leads to the loss of information. So, maintenance cost is needed to tackle the above problem is very high. This is what many public secondary school administrators do not have to maintain such system. Salako, (2012) submitted that how to fund EMIS development and maintenance is no doubt the biggest challenge facing some countries including Nigeria. This is an issue beyond the scope of the current review. Inadequate funding has prevented most schools from having well equipped computer laboratories. High maintenance cost of MIS is a major problems in the development of the system in the educational institutions (Ogunode, 2021; Ogunode, Ekundayo, Abatan, & Folakolade 2022).

vi) Problem of poor training

Poor training is another problem that is affecting effective use of management information system in Nigerian universities. Universities do not have adequate fund to provide constant training and

retraining programme for staff in charge of MIS in their respective institutions to upgrade their knowledge and skills for effective use of management information facilities. Musa (2017) identified a number of inhibitors to Management information system use in Nigerian schools to include lack of time, lack of confidence or skills, lack of training, lack of senior management support, and lack of technical support.

Conclusion and Recommendations

This paper examined at the roles management information system in aiding universities administration in Nigeria. The paper concludes that The roles of **Management Information Systems in aiding universities administration in Nigeria includes**; effective university planning and administration, decision making, students' administration, staff administration and data management. The paper also identified poor funding, high cost, inadequate ICT expertise, high maintenance cost and problem of poor training.

To address these problems, the paper recommend that the government should increase the budgetary allocation to the universities. Universities administrators should use the funds to develop the management information system in their various universities. Universities administrators should employ adequate staff in the MIS department. Constant training and retraining should be given to staff in the MIS department. Private institutions and non-governmental organizations should assists the universities in the provision of technical support.

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