



Impact of Management Information System (MIS) on productivity in some selected higher institutions of learning in North-Eastern, Nigeria

Hashim Sabo Bello

Department of Business Administration, School of Management Studies, Abubakar Tatari Ali Polytechnic, Bauchi, Bauchi State, Nigeria

DOI: <https://doi.org/10.66856/ijme.2026.8.2.8027>

Abstract

Management Information Systems (MIS) systematically boost productivity in tertiary institutions by streamlining administrative processes, enhancing decision-making, and improving data accuracy. Fundamental impacts include reduced workloads, faster access to students and staff information, better resource allocation, and optimized operational efficiency. The research was carried out to determine the impact of Management Information Systems (MIS) on productivity in some selected higher institutions of learning within the North-Eastern, Nigeria. The total of sixty (60) structural questionnaires were distributed to various tertiary institutions within the study areas using random sampling techniques. The questionnaires were allocated to both academic and non-academic staff within the tertiary institutions in the study areas. The allocated structured questionnaires were successfully retrieved and thereafter indicated that 50% of the respondents believed that Management Information Systems (MIS) plays a key role on academic productivity by streamlining the academic and administrative processes within the institution, while 30% of the respondents recommended that Management Information Systems (MIS) plays a role by reducing the workloads of staff both in terms of teaching and research and also drive in faster access of students and staff information. 20% of the respondents also recommended that MIS plays a fundamental role by enhancing a decision making, and optimization of operational efficiency. Conclusively, Management Information Systems (MIS) plays a key role in streamlining administrative processes, enhancing decision-making, and improving data accuracy. It can be recommended that higher institutions of learning should employ the use of MIS across their academic and administrative engagement due to its high efficiency.

Keywords: MIS, productivity, efficiency, higher institutions of learning

Introduction

Management Information System (MIS) is generally thought of as an integrated, user-machine system providing information to support operations, management and decision-making function in an organization. MIS is an accessible and rapid conveyor belt for appropriate high-quality information from the generation to its users. The heart of an effective MIS, however, is a carefully conceived, designed and executed database. Its level corresponds to adaptive decisions. As a result, Management Information System (MIS) enhances the administrative process and the operations decision-making powers of an organization. This explains why standard and digitalized information processing devices such as the computer, word processing and inter-net are highly welcome by organizations across the world.

Management information systems (MIS) are being increasingly adopted by Nigerian tertiary institutions. It is expected that this will contribute to the operation efficiency of the institutions through effective record management, improved response time and organizational agility. However, there are still widespread reports of students' academic records misplacement, delay in making important decisions, poorly designed call roster (timetable) and unstable program scheduling among others. All these are having adverse effects on the operation of tertiary institutions. It has been reported that the contribution of MIS to organizational efficiency depends on certain attributes of the system such as system quality, information quality and services quality. These qualities are often

missing in the MIS created by Nigerian tertiary institutions with the results being the lack of impact of the MIS on the overall efficiency of the institutions. This study, therefore, aims to investigate whether the adoption of MIS has contributed to the effectiveness of tertiary institutions in Nigeria. The objectives of the study will be to investigate how various qualities of information systems such as information quality, service quality and system quality of the MIS contribute to the operational performance of the institutions by enhancing record management activities, improved response time and organizational agility. The thesis is divided into five chapters. The first chapter deals with the background of study. The second chapter focuses on the commissioner. It traces the establishment, development and the philosophy guiding the operations of the commissioner as well as the operational environment dictating its approach to the education of its students. Management Information System (MIS) helps management in effective planning, organizing and controlling its workforce to achieve desired objectives. However, ineffective utilization of Management Information System (MIS) can result in low and poor quality production by workers (both teaching and non-teaching staff). Also, it implies that Management Information System (MIS) is a necessity for successful management which could adversely affect the productivity of workers if not properly-managed. Designing and implementing an effective information system for human resource management becomes a challenge to most government organizations and tertiary institutions. The cost and management of these systems at

times becomes constraints in the achievement of organizational goals.

Statement of the problem

Management Information System (MIS) helps management in effective planning, organizing and controlling its workforce to achieve desired results. However, meaning that the ineffective utilization of Management Information System (MIS) can result in low- and poor-quality production by workers. Also implies that Management Information System (MIS) is a necessity for successful management which could adversely affect the productivity of workers if not properly managed.

Objectives of the Study

1. To determine the role played by Management Information System (MIS) in the development of Academia.
2. To determine the overall benefits of Management Information System (MIS) in the academic sector.

Significance of the Study

In view of the role played by information on how Management Information System (MIS) affects employee’s productivity, the long essay was expected to be of benefit to students, employers, employees, learning institutions and future researchers.

Literature Review

Management Information Systems

Management information systems, as the name implies, are information systems designed to provide the management of an organization with the necessary information for effective decision-making. The management information system, therefore, encompasses the aggregate of the information available to various units in the organization (Berisha-Shaqiri, 2014 [3], 2). Theoretically, management information systems (MIS) refer to an integrated collection of digital databases built with relevant software and supported by appropriate computer hardware for the purpose of gathering, processing, organizing, analyzing, and disseminating information vital to the effective management of various types of organizations and institutions including universities (Rahman, Park, & Suh, 2019). The main function of an MIS is to provide timely, accurate, and easily accessible information for decision-makers. The implementation of MIS in private universities is therefore expected to aid effectiveness in the areas of leadership, decision making, academic planning, human resource management, communication, as well as for monitoring and evaluation purposes. Achieving efficiency in these areas is expected to ultimately lead to operational efficiency which is a situation whereby the university can achieve its objective at a minimal cost, both in terms of financial and human resources. Bright and Asare, (2019, 4) observed that there is no unanimous definition of management information systems (MIS). The authors choose to define management information systems as computerised systems set up to collect, store, organize, process, and disseminate data and information for the use of organisations. This is a functional definition that properly outlines what the MIS is expected to do in the organisation. However, other authors have focused on what the MIS is expected to add to the organisation instead of its ‘mechanical’ functions of collecting,

processing, and disseminating information. In this respect, Odusanya (2019a, 55) conceptualised Management Information System (MIS) as a computer-based system used by decision-makers in the educational sector for various purposes such as planning, organizing, decision making, monitoring, control, and evaluation to ensure that their operations proceed efficiently. Berisha-Shaqiri, (2014 [3], 1) also defined MIS from the perspective of the purpose for which it is set up by organisations by defining MIS as flow-processing procedures based on computer data and integrated with other procedures in order to provide information in a timely and effective manner to support decision-making and other management functions. A typical tertiary institution’s Management Information System is made up of various Transaction Processing Systems (TPS) designed to serve 6 various purposes related to the activities of the institution (Berisha-Shaqiri, 2014) [3]. For instance, Odusanya (2019b, 30) identified various information systems that constitute MIS in tertiary institutions such as course registration portals, online learning platforms, admission processing portals, examination result checkers and others that include management functions such as procurement management, human resources management, course allocation, payroll, and employee benefit management among others. All these separate interfaces are brought together in one system to provide management with a bird eye view of what is going on in the institutions. From the various definitions and descriptions of management information systems, it is possible to deduce the main roles that they play or are expected to play in an organisation. It is obvious from the definitions that an MIS is used to collect relevant data from various sources, process the data, organise it and keep it safe with the aim of meeting present and future information needs of the organisation and its members.

Methodology

The total of sixty (60) structural questionnaires were allocated to various higher institutions of learning within North-Eastern Nigeria using random sampling techniques. The quantitative research method is considered very appropriate for the current study as it will enable the researcher to collect data from all relevant members of the institutions. They structural questionnaires were distributed to various teaching and non-teaching staff within the study areas. Data generated were statistically analysed using T-test model. However, the results generated were presented in tabular form.

Results

The results obtained can be presented as follows:

Table 1: shows sex of the respondents

S/n	Sex	Respondents	Percentage
1.	Male	40	66.7
2.	Female	20	33.3
Total		60	100

The table above shows that majority of the respondents were male representing 66.7%, while 20% of the respondents were female representing 33.3% of the respondents. This implies that majority of the staff were male followed by the female staff respectively.

Table 2: Shows the impact/overall benefits of Management Information System (MIS) on staff productivity in the study area.

S/N	Overall benefits/impacts	Respondents	Percentage
1	Streamlining administrative processes	13	21.7
2	Enhancement of decision making	10	16.7
3	Improvement of data accuracy	17	28.3
4	Reducing workloads, courses allocation	10	16.7
5	Faster access to staff and student's information	10	16.7
Total		60	100

The table above indicated that majority of the respondents recommended that MIS play role by improving data accuracy with 28.3%, followed by streamlining the administrative processes 21.7%, followed by the enhancement of decision making, reduce in workloads and faster access to staff and students records respectively.

Conclusion

It can be concluded that Management Information Systems (MIS) plays a vital role in the education sector and this has obviously impacted on its operational efficiency as the respondents have a highly positive perception of the impact of the use of management information system in eliminating waste, creating students' satisfaction, improving quality of teaching, and bring about better allocation of material and human resources. This shows that the investment in the implementation of the MIS was worthwhile.

Recommendation

1. Government should provide adequate ICT facilities that will enhance the proper use of MIS across all higher institution of learning in Nigeria
2. Government should provide adequate infrastructure that will contained MIS activities within the campuses
3. Government should mandate the compliance of MIS at all levels in various higher institutions of learning in Nigeria.

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