Management Information Systems In Improving Administrative Work In Higher Education Institutions

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Abstract. *The efficiency and efficacy, information technology has becoming more widely used in university administration. In the early stages of its development, the major purpose and use of management information systems (MIS) was to improve the efficiency of university office functions. It was utilized to keep track of I formation for students and employees. The focus on data entry and collation rather than data transmission and analysis was the most major cause of concern. The value of management data was apparent during the integration phase. Workload, time management, and report quality have all improved. In the literature, time constraints, a lack of confidence or expertise, a lack of training, a lack of senior management support, and a lack of technical assistance have all been mentioned as obstacles to MIS adoption. Administrators and teachers can use MIS to gather the information they need to make educated decisions regarding planning, policy, and evaluation. Leadership, decision-making, and management are all skills that may be learned. As a result of MIS, workload, human resource management, communication, responsibility, and planning have all changed. These techniques can assist university administrators in determining the university's goals, developing strategic plans, and allocating resources.*

Keywords: Management Information Systems, University Administration, University Management.

I.   Introduction

Computers are thought to have the ability to improve university teaching, learning, and administration dramatically. If evidence exists that integrating information and communication technology (ICT) into universities has had a proportionate impact on university performance and effectiveness, a considerable amount of money will be invested in hardware, software, networking, and staff development [1]. The usage of Because of its efficiency and efficacy, information technology has become more prevalent in university administration. Because of technological improvements, university managers who previously spent a significant amount of time dealing with complicated allocation problems (e.g., staffing, resource allocation, and timetabling) and monitoring university operations now have additional options. Decentralization of work tasks and real-time coordination are made easier by information technology. [2] An interactive network. They foster dependency, interaction, and ongoing adaptation to an ever-changing environment by allowing for higher flexibility and networking [3].

Universities employ management information systems (MIS) to help with a variety of administrative tasks, such as attendance tracking, assessment records, reporting, financial administration, and resource and manpower distribution. Managers can use MIS to collect data that will help them run their business more effectively and efficiently. These systems differ from standard information systems in that they are intended to analyse and assist a company's strategic and operational decisions [3]. "An organizational technique of giving past, current, and projected information relevant to internal operations and external intelligence, ," Waston et al.[4] Explain the management information system (MIS). It helps decision makers by providing standardized information in a timely manner to support an organization's planning, control, and operation operations. MIS is defined by Telem as 'a system for managing information'. The management information system is customized to the university's structure, management tasks, instructional techniques, and special requirements [5].

According to the definitions above, MIS is a system that helps managers at all levels of an organization make operational, tactical, and strategic decisions by providing them with the information they need. Its primary purpose is to develop and implement procedures, processes, and routines that consistently, timely, and accurately provide comprehensive reports.

Although it can monitor system disturbances, MIS is crucial in decision-making because it allows you to choose a course of action and take action to put the system back under control. It's also important in non-programmed decisions because it helps with the search, analysis, evaluation, and decision-making process by supplying information [6]. These systems are capable of providing the information that their users demand.

They employ processed data, they can use analytical models, real-time information, and hypothetical scenarios to help them make better decisions.

This study will examine previous studies on the impact of MIS on university administration and management.

II. Literature Review

The first university administration computer applications were created in the late 1970s. In the early 1980s, a number of disparate, clerical and administrative functions are not integrated. Although programmers were created, management support was limited by these systems. support since data interconnections could not be evaluated. In the beginning, the primary The goal of creating and using software was to increase the efficiency of university office tasks [7]. During the integration phase, the usefulness of management data became clear. As a result, numerous countries have taken action. industrialized countries undertook a variety of projects, providing the motivation for them to advance to the next stage of development [8]. These initiatives aimed to improve educational information systems, resulting in enhanced efficiency and effectiveness in the classroom. The goal was to create a standard system that could be used by as many schools as feasible while remaining flexible. At the time, the use of a professional approach to system design was uncommon [9]. In the 1990s, developing nations began to place a greater focus on utilizing ICT to gather educational data and enhance educational system management.

Believes that MIS can offer administrators and teachers with the data they need to make educated planning, policy, and evaluation decisions. MIS has allegedly changed university administration in the areas of leadership, decision-making, workload, human resource management, communication, responsibility, and planning, according to the claim. [10] [11].

These techniques can help university administrators determine university goals, formulate strategic plans, allocate resources, and evaluate staff and organizational success [12] [13] [14]. According to the report, educators' growing interest in management information systems (MIS) and the trend toward serious, long-term planning for MIS adoption derives from a belief among educators that such systems may help them run their schools and districts more efficiently. Increase the accountability of a university or district to the community it serves through empowering employees at all levels. University administrators may be able to make more effective and timely decisions if they have access to accurate and up-to-date information given by MIS [15].

Several studies have been undertaken in recent years to examine the extent to which universities are developing the potential to integrate ICT into learning, teaching, and management operations. According to the literature, the quantity of computers and other technology has steadily increased over time, with most institutions meeting the baseline objective for computer-to-pupil ratios [16]. To some extent, this finding obscures major differences in regular access to trustworthy technology and internet connections inside and among colleges [17].

It has been investigated how MIS usage affects university management capacities. Their research looked at the function of assistance in bringing about such changes, as well as the long-term effects. However, because university administrators required different types of analysis than teachers, it was clear that the relationship between data collection, collation, and data consumption was a critical issue to consider [19].

Collected a number of studies from a variety of countries that focused on essential components automated university information and management systems, their implementation in a variety of institutions, the repercussions of such implementation, and future directions research recommendations. investigation from the perspective of MIS, their research presents the most comprehensive picture of ICT and university management. However, their examination indicated that the majority of their worries were about data entry and collation rather than data transfer or analysis [20].

In Libya, the impact of ICT on management practices in smart institutions was studied by researchers. Their findings revealed a number of positive outcomes, including an increase in university ICT culture, enhanced information accessibility, more efficient management, and higher utilization of university resources. Time restrictions, higher administrative costs, poor acceptance/support from non-skilled employees, misuse of ICT services, and worries about the imposed strict procedural norms were only a few of the issues that the participating institutions had to deal with [21].

Significant effects of MIS on university administration and management have been found as a reduction in workload, a positive impact on time management, and an improvement in report quality. Some parts of teachers' work-load have decreased as their ICT abilities and confidence in using the technologies have increased, according to various research [22] [23].

According to the report, senior management appreciated the use of ICT in building university systems for administration and alleviating management duties [24]. The use of technology, according to staff at his chosen universities, has made administrative work easier in terms of budgets, attendance statistics, and the exchange of private information [25]. To put it another way, university information management systems boost efficacy and efficiency by saving time and allowing for the development of alternate solutions to complex situations [26] [27].

Certain members of staff were aided by ICT in dealing with workload difficulties, particularly those who were comfortable with its use. Data management, storage, and maintenance, as well as other duties like report writing, were seen as benefits by the staff. Several employees, however, noted that some administrative tasks took longer to complete. Lack of confidence or skills hampered personal development, while a lack of an ICT plan that directly addressed workload and inadequate networks were key negative factors at the university level. Good leadership, proper training, technical assistance, and effective networks were all positive factors in overcoming workload difficulties [28].

Demir proposed that university administrators be encouraged to use information systems, that data be considered as a useful source for decision-making, and that MIS assist in the implementation of educational reform [29].

She identified both good and negative elements that influence ICT use in universities in her research. Positive aspects included collegiality among computer users, technical help, money for university expansion, reduced Demir advocated that university administrators be encouraged to use information systems, that data be viewed as a valuable source of information for decision-making, and that MIS aid in the implementation of educational reform [30] [31] [32] [33].

Personal feelings, talents, and attitudes toward IT in general were also investigated in the literature [34] [35] [36].

Similarly, the literature has identified a number of barriers to ICT use, the most prominent of which is a lack of time. lack of training, a lack of senior management support, a lack of technical support, a lack of a genuinely supportive culture, and a lack of individual staff confidence and motivation [37] [38].

Some of the major challenges identified in the study, particularly for ICT usage in educational administration, include a lack of data analysis abilities among administrators, a lack of training in utilizing ICT-based management tools, and a lack of user-friendly software's for evaluating test results at the university level [39].

The purpose of this research was to determine the extent of ICT resources supplied by university administrations, the type and amount of ICT use in daily activities, faculty members' ICT proficiency levels, and the amount of ICT integration in instructional activities.

While public higher learning colleges did not offer as many amenities as private universities, the level of use was quite promising, according to the data. When it comes to employing ICT, there were considerable differences in instructors' evaluations of their talents and incorporation of computer technology. Instructors should look at the obstacles that are preventing them from using ICT, according to the study.

University management research is beginning to indicate that attitudes toward ICT are changing, and often significantly. The impact on ICT and university administration is projected to be severe. The role of information and communication technology in university administration.

III.   Conclusion

Information technology in educational administration is a relatively new area that necessitates extensive research not just on how technologies are employed in schools, but also on how they influence university operations and possibly outcomes [40].

Furthermore, while much research has been done on the use of information systems in the classroom and in teaching, according to this thesis, little research has been done on their use in educational management and their impact on managers [41]. According to Passey, one of the most important areas of future research is determining how MIS contributes in good university management. This industry faces challenges, both in terms of the technology employed and the lack of ways for customers to use the data that is already available. Research could be highly helpful in assisting educational endeavours and practise in this area [42].

ICT utilization has a highly positive impact on educational management, according to a review of the literature. Principals and instructors' ability to deal with ICT has increased substantially over time, and they increasingly use it to help with a number of administrative responsibilities at both the class and university levels.

University management information systems have come a long way in the last two decades, and the bulk of them now provide a variety of critical services to university administration; nonetheless, each university has its own set of requirements.

More research is needed to find the areas where MIS could be improved, as most of these systems aren't intended to match the demands of specific locations. These systems are frequently imported from elsewhere and, depending on the site's administration, may require further development. According to Fulmer, in order for faculty to take ownership of the system and use it successfully, it should be developed through an inductive process that includes stakeholders from all levels of the institution [42].

MIS research should focus on finding ways to improve the use of MIS by university presidents and administrators.

Appropriate training and capable leadership may aid in enhancing the benefits of MIS in university administration.

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