



Effect of Management Information System In Information Service Delivery In Federal College of Education, Kano State, Nigeria

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Abstract

The study examined the effect of management information system in information service delivery in Federal College of Education, Kano State Nigeria. The population of the study comprised of all the entire staff of Federal College of Education, Kano which is 1279. The sample size consisted of 220 staffs selected through stratified random sampling technique. An instrument titled Effect of MIS in Information Service Delivery in FCE, Kano Questionnaire (EMISDIFKQ) was administered on the respondents. Mean and Standard Deviation was used to answer the research questions. Findings from the study indicated that improving the efficiency of school office activities amongst others as the use of MIS; providing information for decision making on planning, initiating, organizing, and controlling amongst others as the objectives for the use of MIS in FCE Kano; MIS is directed towards the managerial functions amongst others as the internal control of MIS; development of new computerized based information system as the factors affecting MIS. Based on the findings, the study recommended that there is need to create backup of all the information to avoid lost of data whenever the server and website crashed amongst others.

Keywords: MIS, Information System, Information service delivery

1.1 Introduction

Every aspect of management in the modern age relies heavily on information to thrive. Nothing moves without information and it is generally believed that information is power and that he who has it has power. It is an important resource needed to develop other resources. Changing circumstances and environments have necessitated the need for the proper dissemination of information at various levels of management. The development and use of information management systems (MIS) is a modern phenomenon concerned with the use of

appropriate information that will lead to better planning, better decision-making and better results (Nasir, 2005).

Information management has been defined as the organization-wide capability of creating, maintaining, retrieving and making immediately available the right information, in the right place, at the right time, in hands of the right people, at the lowest cost, in the best media, for use in decision making. In the same vein, Seilheimer (2000) defines information management as the economic, efficient and effective co-ordination of the production, control, storage and retrieval and

dissemination of information from external and internal sources, in order to improve the performance of the organization.

One approach by which organizations can utilize computing capability is through the development of MIS. There is no universally accepted definition of MIS and those that exist reflect the emphasis and perhaps prejudices of their authors. However, the term “management information system” can be seen as a database management system tailored to the needs of managers or decision makers in an organization. MIS is ? a system using formalized procedures to provide management at all levels in all functions with appropriate information based on data from both internal and external sources, to enable them to make timely and effective decisions for planning, directing and controlling the activities for which they are responsible (Shahiduzzamana and Khorshed, 2013). ?

1.2 Objectives of the Study

The aims of this study are to critically examine the impact of Management Information System (MIS) on information service delivery. The objective of the study includes:

1. To identify the use of information and communication technology for information service delivery in Federal College of Education, Kano.
2. To find out the objective of management information system process in Federal College of Education, Kano
3. To determine the weather there is internal control of the management information system in Federal College of Education, Kano
4. To find out the factor affecting management information system practice

in Federal College of Education, Kano

2.1 Review of Related Literature

The Management Information System (MIS) is a concept of the last decade or two. It has been understood and described in a number ways. It is also known as the Information System, the Information and Decision System, the Computer- based information System.

The concept of the MIS has evolved over a period of time comprising many different facets of the organizational function. MIS is a necessity in all the organizations. The initial concept of MIS was to process the data available in the organization and present it in the form of reports at regular intervals. The system was largely capable of handling the data from collection to processing. It was more impersonal, requiring each individual to pick and choose the processed data and use it for his requirements. This concept was further modified when a distinction was made between data and information. Information is a product of an analysis of data. This concept is similar to a raw material and the finished product. However, data can be analyzed in a number of ways, producing different shades and specifications of the information as a product. It was, therefore, demanded that the system concept be an individual- oriented, as each individual may have a different orientation towards the information (Ahmaed, 2009).

Management Information System (MIS) is basically concerned with the process of collecting, processing, storing and transmitting relevant information to support the management operations in any organizations According to Gregus and Benova (2011) management information system is kind of organizational information computer systems, that take internal information from operating processing system and summaries them to Meaningful

and useful forms as management reports to use in performing management duties. According Wadhwa (2006) defined management information system as one of the major computer based information systems. Its purpose is to meet the general information need of all the managers in the firm or in some organizational subunit of the firm.

Management Information Systems (MIS), referred to as Information Management and Systems, is the discipline covering the application of people, technologies, and procedures collectively called information systems, to solving organisational problems (Al-Zhrani, 2010).

2.2 Objectives and Internal Control of MIS

The primary objective of any MIS is to capture, process, and store transactions and to produce a variety of documents related to routine business activities. These business activities can be directly or indirectly related to selling products and services to customers. Processing orders, purchasing materials, controlling inventory, billing customers, and paying supplier and employees are all business activities that result from customer orders. These activities result in transactions that are processed by the MIS (Allen, Heurtebise & Turnbull, 2010).

One objective of any MIS is error-free data input and processing. Even before the introduction of computer technology, employees visually inspected all documents and reports introduced into or produced by the MIS. Because humans are fallible, the transactions were often inaccurate, resulting in wasted time and effort and requiring resources to correct them. An editing program, for example, should have the ability to determine that an entry that should read "40 hours" is not entered as "400 hours" or "4000 hours" because of a data entry error (Sarlak & Forati, 2008).

Akbari and Asemi (2011) stated that management information systems (MIS)

could often give firms a competitive advantage by providing the right information to the right people in the right format and at the correct time. In many cases, firms and individuals are willing to pay firms for this type of information. The primary purpose of an MIS is to help an organization achieve its goals by providing managers with insight into the regular operations of the organization so that they can control, organize, and plan more effectively and efficiently. The authors further mentioned that one important role of the MIS is to provide the right information to the right person in the right fashion at the right time. In short, an MIS provides managers with information, typically in reports, that support effective decision making and provides feedback on daily operations.

The output of most management information systems is a collection of reports that are distributed to managers. Data mining allows a company to filter through a vast amount of data stored in databases, data warehouses, and data marts to produce a variety of reports, including scheduled reports, key-indicator reports, demand reports, exception reports, and drill down reports (Delbridge and Fisher, 2007).

Management information system reports can help managers develop better plans, make better decisions, and obtain greater control over the operations of the firm. It is important to recognize that various types of reports can overlap.

2.3 Factors Affecting Management Information System Process

Organizations still need different types of information systems serving various organizational levels, functions, and business processes, and they increasingly need systems providing enterprise-wide combination. These needs create both opportunities and challenges.

There are various types of challenges faced by organizations after applicable

information system as indicated by Geographic Information Systems Project (1993). These include:

1. Development of new computerized based information system is a challenge for the organization due to the cost factor and it creates problems, because with the change of time there is need of up-to-date of the information system. Employees should also be up- to- date about all changes on organisation websites.
2. Employees should have the capacity of learning of the information system with the changing competitive and business environment; otherwise it will be difficult for the organization to stay in the market. ?
3. Sometimes problem arises due to server crash and website crash. Some time it leads to the loss of information and further Employee resistance to adopt the information system is also a challenge. When a new technology is introduced, employees resist it because they do not want to go with new system, they want to proceed in old pattern, which they are doing from many years, and they are master in it.
4. Cost of the implementation of the information system in the organization

and its integrity with the various departments. Life of software system is also a challenge for the organization that which system would suit to the requirement of the organization because every system has its limited scope and with the passage of time, new inventions in technology are occurring. They have to implement the new changed technology, which would lead to the cost of Information system.

3.1 Methodology

The study adopted a survey research method; this research method was used due to its relevance in terms of efficiency and usefulness in collecting relevant data. The target populations for this study are the entire staff of Federal College of Education Kano, Nigeria. The total population is 1,239. In obtaining the sample size from the population, the study used the research advisors (2006) sample size standard. From the population of 1,239 a sample size of 220 is required. This will make a 95% confidence with a margin error of 5.0% for the population. The researcher adopted and used questionnaire as research instrument in the conduct of the study. Simple percentage was used for the demographic data while descriptive statistics such as mean and standard deviation was used for the analysis of data. Mean rating from 2.5 and above are accepted while below 2.5 are rejected. The information was shown using pie chart and bar chart.

4.1 Findings of the Study

Table 1 Demographic Background of respondents

S/N	DOMOGRAPHIC	FREQUENCY	PERCENTAGE
	Status		
	Academic	93	45.9%
	Non-academic	110	54.1%
	Total	203	100

Pie-Chart Showing Demographic Background of Respondents

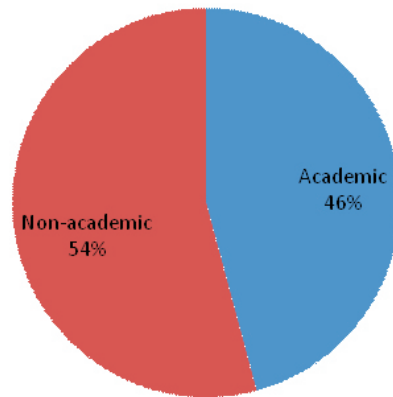


Table 1 above presents the respondent's status, as shown on the table, 93 representing 45.1% are into academics and 110 representing 54.1 % are Non academics.

Table 2: Mean Ratings and Standard Deviation on the Use of Information and Communication Technology in Federal College of Education, Kano.

S/N	Items	SA	A	D	SD	Mean	STD	Decision
1	To improve the efficiency of school office activities	140	43	18	2	3.81	1.82	Accepted
2	To store student and personnel data	178	12	12	1	3.68	1.88	Accepted
3	provide administrators and teachers with the information required for informed planning, policy-making, and evaluation	145	9	49	0	3.58	1.79	Accepted
4	Change the school management in the areas of leadership, decision making, workload, human resource management, communication, responsibility, and planning	139	64	0	0	3.47	1.86	Accepted
5	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	98	57	38	10	3.20	1.73	Accepted
	Cluster Mean					3.55	1.82	Accepted

Bar Chart Showing Mean Ratings and Standard Deviation on the Use of Information and Communication Technology in Federal College of Education, Kano.

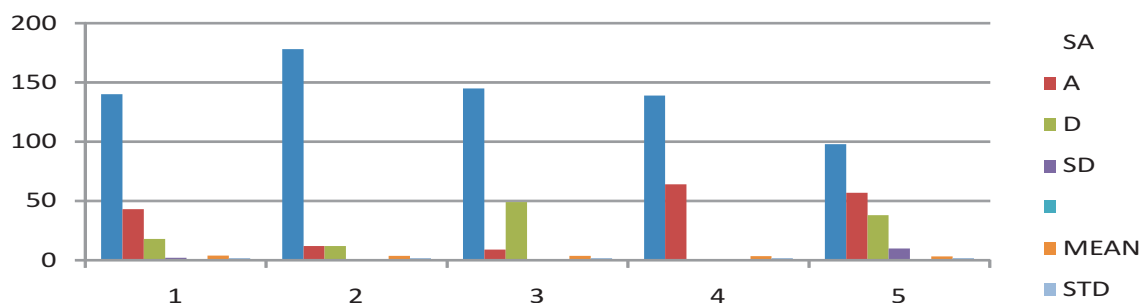


Table 2 above shows the use of information technology in Federal College of Education, Kano. Respondents rated to improve the efficiency of school office activities as the most choice. The cluster mean and standard deviation are 3.55 and 1.82.

Table 3: Mean Ratings and Standard Deviation on Objectives of MIS in federal college of education Kano

S/N	Items	SA	A	D	SD	Mean	STD	Decision
1	To provide information for decision making on planning, initiating, organizing, and controlling	180	14	8	1	3.84	1.88	Accepted
2	To facilitates the decisions-making process by furnishing information in the proper time frame	176	8	19	0	3.77	1.87	Accepted
3	To provide requisite information at each level of management to carry out their functions	155	45	2	1	3.74	1.86	Accepted
4	To provide a system of people, computers, procedures, and interactive query facilities	149	53	1	0	3.73	1.86	Accepted
5	To provide documents for collecting, and storing, retrieving and transmitting information to the users in federal college of education Kano	120	57	24	2	3.45	1.79	Accepted
Cluster Mean						3.71	1.85	Accepted

Bar Chart Showing Mean Ratings and Standard Deviation on Objectives of MIS in federal college of education Kano

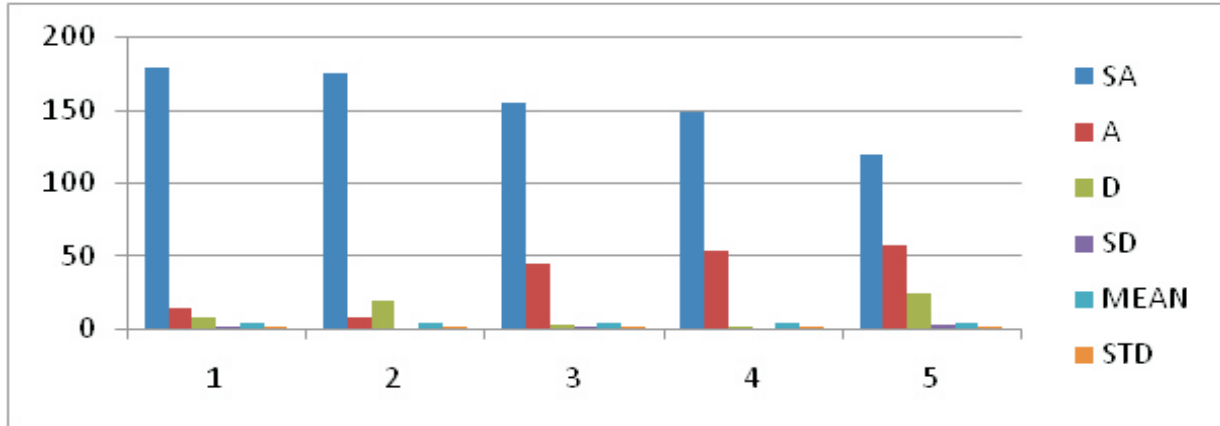


Table 3 above shows the objectives of MIS in Federal College of Education, Kano. Respondents rated to provide information for decision making on planning, initiating, organizing, and controlling as the most choice. The cluster mean and standard deviation are 3.55 and 1.86.

Table 4: Mean Ratings and Standard Deviation on Internal Control of MIS in Federal College of Education Kano

S/No	Items	SA	A	D	SD	Mean	STD	Decision
1	MIS is directed towards the managerial functions	176	18	9	0	3.82	1.88	Accepted
2	It is directed towards the planning, controlling and monitoring, and decision making	171	24	8	0	3.80	1.88	Accepted
3	It is directed towards the evolving methods for communicating the plans to employees in the organization.	169	25	9	0	3.79	1.87	Accepted
4	Relieve management from converting data into information	156	47	0	0	3.77	1.87	Accepted
5	Provide relevant and effective conduct of the job function and present information that is current and readily usable and is available	147	39	17	0	3.64	1.84	Accepted
	Cluster Mean					3.76	1.87	Accepted

Bar-Chart Showing Mean Ratings and Standard Deviation on Internal Control of MIS in Federal College of Education Kano

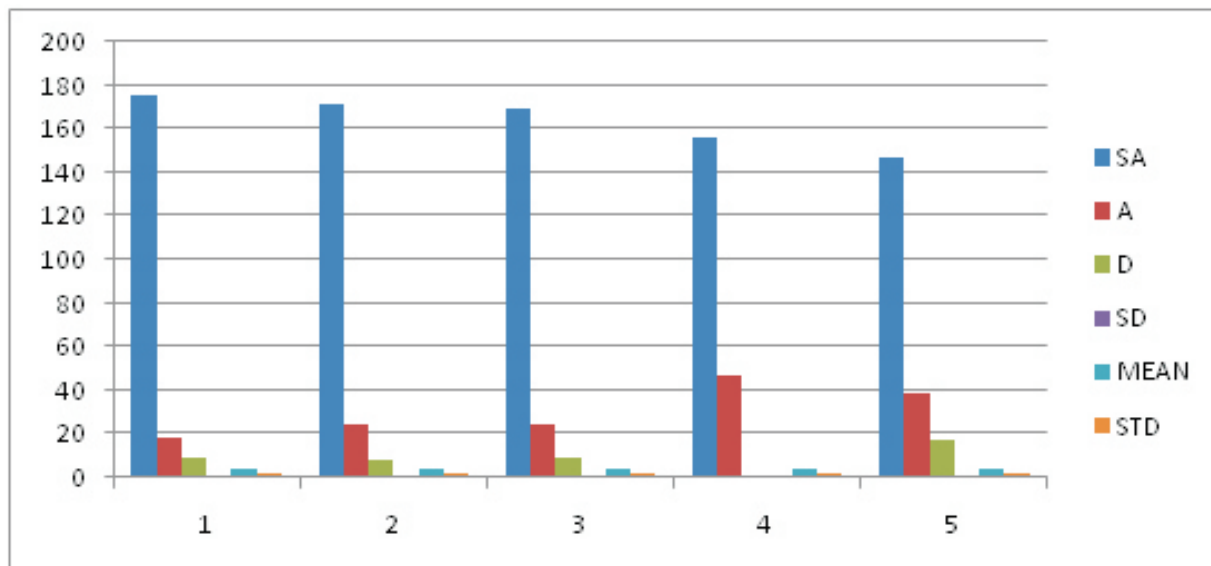


Table 4 above shows the mean ratings and standard deviation on internal control of MIS in Federal College of Education, Kano. Respondents rated MIS is directed towards the managerial functions as the most choice. The cluster mean and standard deviation are 3.76 and 1.87.

Table 5: Mean Ratings and Standard Deviation on Factors affecting Management Information System Practice in Federal College of Education, Kano State, Nigeria

S/No	Items	SA	A	D	SD	Mean	STD	Decision
1	Development of new computerized based information system	195	8	0	0	3.96	1.91	Accepted
2	Server crash and website crash that some time leads to the loss of information	199	4	0	0	3.98	1.92	Accepted
3	Cost of the implementation of the information system	189	14	0	0	3.93	1.90	Accepted
4	Lack of relationship with the broader governmental entity	179	24	0	0	3.88	1.89	Accepted
5	lack of funding to acquire, update, and maintain critical MISs and new technologies	172	31	0	0	3.85	1.89	Accepted
Cluster Mean						3.92	1.90	Accepted

Bar-Chart Showing Mean Ratings and Standard Deviation on Factors affecting Management Information System Practice in *Federal College of Education, Kano State, Nigeria*

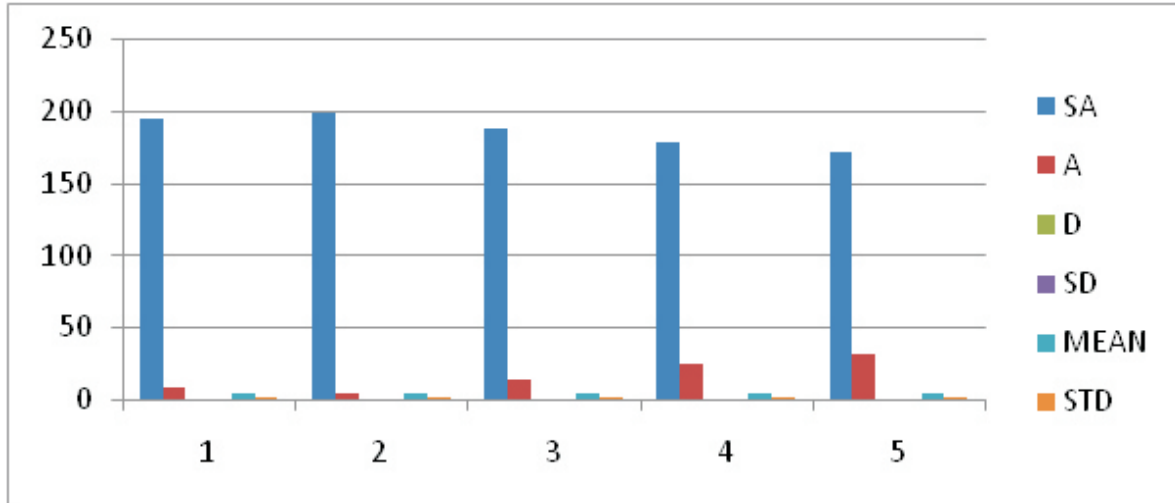


Table 5 above shows the mean ratings and standard deviation on factors affecting MIS in Federal College of Education, Kano. Respondents rated development of new computerized based information system as the most choice. The cluster mean and standard deviation are 3.92 and 1.90.

Conclusion

Based on the findings of the study, it could be concluded that, Management Information System is rapidly increasing due to the efficiency and effectiveness is recognised as a major resource like capital and time. The objectives of MIS is to provide information for decision making on planning, initiating, organizing, controlling and facilitates the decisions-making process in the college. It has been concluded that there are factors influenced application of Management Information system such as development of new computerized based information system, server crash and website crash that some time leads to the loss of information, cost of the implementation of the information system, lack of relationship with the broader governmental entity, organisations are

frequently organised under the finance department rather than under an administrative. Maintaining minimum standards for hardware/software, greater support for agency wide policies and procedures, training in existing hardware/software and related technologies, inadequate education regarding new developments in MIS and lack of funding to acquire, update, and maintain critical MISs and new technologies has also influenced the process and implementation of MIS in federal college of education, Kano.

Recommendations

Based on the findings from this research, the following recommendations were made:

1. There is need to create backup of all the information to avoid lost of data whenever the server and website crashed.
2. Relationship with the broader governmental entity and organisations should be regularly structured under the finance department relatively than under an administrative only.
3. There is need to maintain the minimum standards for hardware/ software, training

in existing hardware/software and related technologies should be given a greater support.

4. Funding should be allocated for the acquisition, update, and maintaining critical MISs and new technologies for effective communication of information.

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