Role of Management Information System (MIS) in COMSATS Institute of Information Technology

Muhammad Asif Chuadhry  
Kishwar Naz, Ph.D, Scholar  
Dr Muhammad Tahir Nawaz (Brig)  
Sumaira Liaquat, M.Phil. Scholar

Abstract

This study was designed to find out the role of the Management Information System (MIS) in COMSATS Institute of Information Technology (CIIT), Islamabad, to define the concept and scope of management information system (MIS), to explore the role of Management Information System (MIS) in smoothening the academic and administrative activities of COMSATS Institute of Information Technology and identify the bottlenecks of Management Information System (MIS) if any, and suggest measures to overcome these problems. There were seven campuses of COMSATS Institute of Information Technology in Pakistan. Keeping in view the time and finance constraints the study was delimitated to the COMSATS Institute of Information Technology Islamabad only.

12 managers using management Information System and 20 percent out of 4000 students of COMSATS Information Technology were randomly drawn from each faculty as a sample for this study. Two separate questionnaires were designed for the managers using Management Information System (MIS) and students of COMSATS Institute of Information Technology
(CIIT). The questionnaires are attached as annexure-A and annexure-B. Both of the questionnaires are consists on the 19 and 18 questions respectively. Questionnaires were personally delivered and collected by the researcher from the respondents of the study. For the purpose of the data analysis Statistical Package of Social Science (SPSS) was used. Data was analyzed and interpreted in the light of the objectives of the study. Findings were drawn on the basis of data analysis

**Key Words**: Management, Information, Technology, Institute, System, Comsats

**Introduction**

In this information age, coupled with the complex nature of increasingly large modern organizations such as the universities, there is the need for acquisition of appropriate information equipment to process data into information and disseminate the information for management use, towards effective university administration. Information is an important resource in the effective management of any organization. Information is based on facts, which is useful in making a specific decision among alternative courses of action. The information potential of data is enhanced by refinement, which involves selection, processing, sorting, and re-organizing the data into a usable form and transmission to the appropriate end-users. So, there exists a need for an effective Information System.

Information consists of data that have been processed and are meaningful to a user. A system is a set of components that operate together to achieve a common purpose. Thus a management information system collects, transmits, processes, and stores data on an organization's resources, programs, and accomplishments. The system makes possible the conversion of these data into management information for use by decision makers within the organization. A management information system, therefore, produces information that supports the management functions of an organization (Davis & Olson, 1985; Lucas, 1990; McLeod, 1995).

**Literature Review**

Management Information System (MIS) that provides managers tools for organizing, evaluating and efficiently running their departments. By using the past and present information, universities can predict their future result or estimate their expected expenses. An MIS can use software that helps in managing the data source of the university e.g. database, the hardware resources of a system, decision support systems, people management and project management applications, and any computerized processes that would enable them to making effective decisions.

**Educational Management**

Management in all business and organizational activities is the act of getting people together to accomplish desired goals and objectives efficiently and effectively. Educational Management comprises planning, organizing, staffing, leading or directing, and controlling an organization (a group of one or more people or entities) or effort for the purpose of accomplishing a goal.

Language in India www.languageinindia.com
13 : 1 January 2013
Muhammad Asif Chuadhry, Kishwar Naz, Ph.D, Scholar,
Dr Muhammad Tahir Nawaz (Brig) and Sumaira Liaquat, M.Phil. Scholar
Educational organizations can be viewed as systems; management can also be defined as human action, including design, to facilitate the production of useful outcomes from a system. 


Data

At the start, internal reporting and record was made manually in the organizations, which gave limited and delayed information for management activities. Previously, data had to be separated individually by the people as per the requirement and necessity of the organization. Later, data was distinguished from information, and so instead of the collection of mass of data, important and to the point data was stored that is needed by the organization. (Brien, J (1999), Management Information Systems – Managing Information Technology in the Internetworked Enterprise)

Information

Ajayi and Omirin, (2007) quoted about the information as, this view is buttressed by Murdick and Ross (1971), when they opined that: Information is absolutely essential to the survival of an organization. As organizations grow, the pressure of scale, complexity and an increased rate of change make adequate information processing capacity inevitable, if effective control, consequent upon coordination of individual activities to be achieved.

Information is a critical resource in the operation and management of organizations. Timely availability of relevant information is vital for effective performance of managerial functions. An information system in an organization is like the nervous system in the human body: it is the link that connects all the organization's components together and provides for better operation and survival in a competitive environment. Indeed, today's organizations run on information. (http://www.fao.org/docrep/w5830e/w5830e0k.htm retrieved on 02-Dec-10 at 2100)

Information consists of data that have been processed and are meaningful to a user. A system is a set of components that operate together to achieve a common purpose. Thus a management information system collects, transmits, processes, and stores data on an organization's resources, programs, and accomplishments. The system makes possible the conversion of these data into management information for use by decision makers within the organization. A management information system, therefore, produces information that supports the management functions of an organization (Davis & Olson, 1985; Lucas, 1990; McLeod, 1995).

Need of Management Information System

The growing complexity of education systems has made information one of the essential elements of the administration, management and planning of education system. The strengthening of an information system depends on a simple premise, all the organizations; have to generate information to inform their condition, functioning and results. Without data, no system can function rationally, and consequently no operational decision can be made.
Management Information System (MIS) can therefore produce summary reports for detailed data analysis as well as baseline information which can be helpful for the completion of ongoing project and forecasting future needs. (Luis Carrizo, Claude Sauvageot and Nicole Bella, 2003)

**Concept of Management Information System**

A management information system (MIS) is a system or process that provides information needed to manage organizations effectively. Management information systems are regarded to be a subset of the overall internal controls procedures in an organization. (Kotler, Philip; Keller, Kevin Lane, 2006)

A management information system (MIS) is a system that optimizes the collection, transfer and presentation of information throughout an organization through an integrated structure of database and information flow. It is, according to Sambo (1992), a system that uses formalized procedures to provide management at all levels and in all functions with appropriate information, based on data from both internal and external sources. In the same way, Lucy (1989) viewed MIS as a system to convert data from internal and external sources into information and to communicate that information in an appropriate form to management at all levels, to function.

**Educational Management Information System (EMIS)**

The term management information system (MIS) is well accepted, but the management information system (MIS) may also be called an organizational information system, a computer-based information system. When this management information system is used to help manager and administer by basing itself on modern management tools in the educational system it can also be termed as the education management information system or EMIS.

Educational management information system (EMIS) helps to generate multiple routine data and operational information such as, monthly and weekly records of the management and financial transactions, the presence and movements of personnel and pupils, the pay slips, results of tests and examinations, etc. Such information is mainly important for managing educational activities. The education management information system (EMIS) is a sub-system of an education system, which aim at to collect, store, process, analyze and propagate information. (L. Carrizo, Sauvageot, and Bella)

Educational management system (EMIS) is aimed to strengthen capacities in management, planning and dissemination of information at all levels of the education system. To attain this goal, it has to:

a) Improve capacities in such way that planners, administrators and managers could base their judgment on timely and reliable data.

b) Centralize and coordinate the dispersed efforts in acquiring, processing, analyzing and disseminating education management information.
c) Rationalize the nature and flow of information necessary for decision making by reducing and eliminating duplications, and by filling in the information gaps;

d) Link and assemble different existing information systems;

e) Integrate and synthesize in one single system the quantitative and qualitative data;

f) Improve data collection, and the use and dissemination of information for education management, in order to respond to the constantly evolving needs for information;

Management Information Systems (MIS) is important in educational institutions activities and helped educational institutions achieves mature level of automation.

**University Management Information System**

Managing universities activities requires University Management Information System (UMIS). According to Hazem, (2009); University Management Information System (UMIS) broadly refers to a computer-based system, a collection of hardware, software, people, data, and information, which provides managers with the tools for organizing, evaluating and efficiently running their departments.

There are many educational technologies have recently begun to be used separately as teaching and learning tools. These technologies include conferencing software, e-mail, on-line resources, search engines and multi-media databases, video-conferencing, shared whiteboards and interactive simulations.

Examples of university information system components include Student Information System (SIS), Library Information System, Faculty Information System, and Finance System.
Student Information System (SIS)

Student information system (SIS) is a use for educational establishments to manage student data. Student information systems provide capabilities for entering student test and examination scores, building student schedules, tracking student attendance, and managing many other student-related data needs in any educational institution. The basic functions of a student records system is to support the maintenance of personal and study information relating to:

- Inquiries from prospective students
- The admissions process
- Enrolling new students and storing teaching option choices
- Creating class & teacher schedules
- Records of examinations, assessments, marks and grades and academic progression
- Maintaining records of absences and attendance
- Recording communications with students
- Maintaining discipline records
- Providing statistical reports
- Communicating student details to parents through a parent portal
- Human resources services
- Accounting and budgeting services
- Student health records

(http://en.wikipedia.org/wiki/File:Student_Data_Management.gif, retrieved on 09-Dec-10 at 1900 hrs)
Library Information System

Library Information System is responsible for managing and automating library. Automated Libraries are called those libraries which contain material in digitized form. Automated Library Information System database record reflects managerial tasks performed by librarians in order to effectively manage libraries. A typical Library Information System record normally consist on Book ISBN, Name, Author(s), Keyword(s), and data like Section, List of all the books, List of books available, List of borrowed books, who is borrowing, when they should return, etc. (Haitham A. El-Gharee, 2009)

Faculty Information System

Faculty Information System is responsible for managing and automating managerial activities related to faculty and staff, Courses, and intersection between them. A typical faculty information system database record includes Faculty data; ID, Name, Departments, Courses data; Course ID, Name, Description, Name, Age, Gender, Address (Street, City, Country), Email, Username, Password, DOB (Date of Birth) etc. Faculty Information System by itself is not directly involve in the academic activates, its basic purpose is to organize faculty and university managerial activities; the learning process is not the main orientation. Faculty information system capabilities are to generate courses report(s), for example, that includes course managerial issues. (Hazem M. El-Bakry, (2009) E-Learning and Management Information Systems for E-Universities)

Finance Information System

Finance system is responsible for managing financial issues related to any organization. However, financial issue of the educational institution doesn’t have anything to do with academics activities at all. Some academic issues might include some financial issues relating to the cost of course materials, etc. However, this should not force academic activities to be under the control of university financial system. (Haitham, 2009)

Yet, the financial information system of the university can be used to keep the record of the submission of fees and about the salary of the employees. The record of the outside financial aids and its utilization regarding the project may also kept.

University Management Information System (UMIS) Role

University Management Information System (UMIS) achieving success from last many years and prove efficiency and effectiveness within educational institutions. University Management Information System (UMIS) is required for smoothly running the academic and administrative activities within the educational institutions. University Management Information System (UMIS) manages educational institutions, and more attention should be paid to the learning process with the presence of UMIS. (Hazem M. El-Bakry, (2009), E-Learning and Management Information Systems for E-Universities).

Language in India www.languageinindia.com
13 : 1 January 2013
Muhammad Asif Chuadhry, Kishwar Naz, Ph.D, Scholar,
Dr Muhammad Tahir Nawaz (Brig) and Sumaira Liaquat, M.Phil. Scholar
Objectives of University Management Information System (UMIS)

According to Ajayi and Fadekemi (2007), the following are the objectives of the University Information System (UMIS):

i. To standardize the system of obtaining reports and statistical information from the various universities on: students, staff, financial matters, and library.
ii. To record such information on diskettes or tapes at the universities for budgeting, information storage, analysis and retrieval purposes.
iii. To ensure that such information are accurate and timely.
iv. To organize information for planning, budgeting and decision making.
v. To help the universities put in place effective management system and improve utilization of resources. 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. (Ajayi, I. A. and Omirin, Fadekemi F. (2007), The Use of Management Information Systems (MIS) In Decision Making In The South-West Nigerian Universities)

Approach to Management Information System (MIS) Design

A classical systems and software engineering approach is recommended to ensure the development of a management information system that is fully responsive to the users’ performance, its objectives and resource constraints. The first step in an MIS development task is the development of an MIS management plan, which describes the major tasks and schedule of work for the MIS activity. This approach includes the following major components:

- **Systems analysis**, which includes information needs evaluation, requirements and specification analysis
- **Systems design**, which includes synthesis of alternatives, cost-effectiveness analysis, specification of criteria for selecting a preferred alternative, selection of a preferred alternative
- **Systems implementation**, which includes forms development, specification of data collection and entry procedures, development of editing and quality control procedures, software coding and testing, development of training materials and training, integration of the software components with other system components (e.g., personnel, communications, data transfer and assembly, report preparation and distribution, feedback), and system-level testing
- **Systems operation and support**, which includes not only routine operating procedures but also provision for on-going system financing and management, quality control, software maintenance and updating, personnel training, and system maintenance and improvement (including periodic review of system performance and diagnosis and correction of problems) While the preceding
system development phases are completed in sequence, there is some time overlap between them.

(Joseph George Caldwell, (2009), Approach to Management Information System Design Joseph George Caldwell) and (http://www.foundationwebsite.org retrieved on 7-Dec-10 at 1300 hrs)

Applications of Management Information System (MIS)

As this is a technology era, there's hardly any large business that does not rely extensively on their IT systems. However, there are several specific fields in which MIS has become invaluable.

Strategy Support

While computers cannot create business strategies by themselves they can assist management in understanding the effects of these strategies, and enable them for the effective decision-making.

MIS systems can be used to transform data into information which is necessary for the decision making. Computers can provide various sorts of the reports and statement which are helpful in the planning, monitoring, implementation and evaluation of the strategy.

Data Processing

Management Information System (MIS) not only allow to collection and interpretation of vast amounts of the data, but they also provide a valuable time saving benefit. Where in the past the information had to be manually processed for filing and analysis it can now be entered quickly and easily onto a computer by a data processor. That shows the quickest reflexes of the project and enables the managers for effective and faster decision making.

(http://www.bestpricecomputers.co.uk/glossary/data-recovery.htm retrieved on 7-Dec-10 at 1500 hrs)

Characteristics of MIS

To function effectively as an interacting, interrelated, and interdependent feedback tool for faculty and staff, Management Information System (MIS) must be useable. The five elements of a useable MIS system are: timeliness, accuracy, consistency, completeness, and relevance. The usefulness of Management Information System (MIS) is hindered whenever one or more of these elements are compromised.

Timeliness

To simplify prompt decision making, an institution's Management Information System (MIS) should be capable of providing and distributing current information to appropriate users. Information systems should be designed to accelerate reporting of information. The system
should be able to quickly collect and edit data, summarize results, and be able to adjust and correct errors promptly.

Accuracy

A sound system of automated and manual internal controls must exist throughout all information systems processing activities. Information should receive appropriate editing, balancing, and internal control checks. A comprehensive internal and external audit program should be employed to ensure the adequacy of internal controls.

Consistency

Data should be processed and compiled consistently and uniformly. Variations in data collection and its reporting can distort information and trend analysis. Data collection and reporting processes will change over times; organizational management should establish a reluctant procedure which accepts the changes in the systems. These procedures should be well defined and documented, clearly communicated to appropriate and should monitor properly.

Completeness

Decision making process needs accurate relevant and complete information in a summarize form. Therefore, generated reports should eliminate confusions and voluminous detail. Information that is inappropriate, unnecessary, or too detailed is in vain for effective decision making. Management Information System (MIS) must be appropriate and supported the management of all level.

Management by Objectives

Management Information System (MIS) is very useful in generating statistical reports and data analysis. It can also be of use for a Management by Objectives (MBO) tool.

Management by Objectives (MBO) is a management process by which managers and their subordinates agreed upon a series of objectives to achieve within a set time period. These objectives are set using the SMART ratio. This SMART ratio means that objectives should be Specific, Measurable, Agreed, Realistic and Time-Specific.

Goal of Management Information System (MIS)
Management Information System (MIS) is used mostly at every levels of management. It should be supportive for the institutions in term of achieving its goals and objectives. On the other hand Management Information System (MIS) can be used as financial accounting systems that are used to maintained record keeping activities of the financial matters. According to Comptroller’s Handbook, An institution's Management Information System (MIS) should be designed to achieve the following goals:

- Enhance communication among employees.
- Deliver complex material throughout the institution.
- Provide an objective system for recording and aggregating information.
- Reduce expenses related to labor-intensive manual activities.
- Support the organization's strategic goals and direction.

As Management Information System (MIS) provides fact to the decision makers, it supports and enhances the overall decision making process. Management Information System (MIS) also enhances job performance throughout an institution. At the top level management, management information system (MIS) provides the relevant information which is helpful for the strategic planning or decision making. On the other hand Management Information System (MIS) also provides the means through which the organization activities are monitored and information is disseminate to management, employees, and end users.

Effective Management Information System (MIS) should ensure the appropriate presentation formats and time frames required by operations. Management Information System (MIS) can be maintained and developed by either manual or automated systems or a combination of both. It should always be sufficient to meet an institution's unique goals and objectives. These systems should be accessible and useable at all appropriate levels of the organization.

Management Information System (MIS) is a critical component of the institution's overall risk management strategy. Management Information System (MIS) supports management's ability to perform such reviews. Management Information System (MIS) should be used to recognize, monitor, measure, limit, and manage risks. Risk management involves four main elements:

- Policies or practices.
- Operational processes.
- Staff and management.
- Feedback devices.

Frequently, operational processes and feedback devices are intertwined and cannot easily be viewed separately. The most efficient and useable Management Information System (MIS) should be both operational and informational. As such, management can use Management Information System (MIS) to measure performance, manage resources, and help an institution comply with regulatory requirements. Management Information System (MIS) can also be used by management to provide feedback on the effectiveness of risk controls.
Controls are developed to support the proper management of risk through the institution's policies or practices, operational processes, and the assignment of duties and responsibilities to staff and managers. (Comptroller’s Handbook, Management Information Systems, p 5)

**Benefits of Management Information System (MIS)**

The Management Information System (MIS) can deliver great benefits to enterprises in educational institutions. These benefits are following:

**Core Competencies**

Every market leading enterprise will have at least one core competency, a function they perform better than their competition. By building an exceptional management information system into the enterprise it is possible to push out ahead of the competition. MIS systems provide the tools necessary to gain a better understanding of the market as well as a better understanding of the enterprise itself.

**Enhance Supply Chain Management**

Improved reporting of business processes leads inevitably to a more streamlined production process. With better information on the production process comes the ability to improve the management of the supply chain, including everything from the sourcing of materials to the manufacturing and distribution of the finished product.

**Quick Reflexes**

As a corollary to improved supply chain management comes an improved ability to react to changes in the market. Better MIS systems enable an enterprise to react more quickly to their environment, enabling them to push out ahead of the competition and produce a better service and a larger piece of the pie.

Further information about MIS can be found at the Bentley College Journal of MIS and the US Treasury’s MIS handbook, and an example of an organizational. MIS division can be found at the Department of Social Services for the state of Connecticut.

(http://www.bestpricecomputers.co.uk/glossary/data-recovery.htm retrieved on 3-Dec-2010 at 2300 hrs)

The importance of management information technology in an organizational and its effectiveness is being realized over the world. As elucidated ‘by Dan-Isa (2001), the fact that the provision of efficient information system in an organization, which is almost as crucial as the supply of funds to an organization, has led to the emergence of a special unit in organizations, called “Management Information Systems” (MIS). Management Information Systems (MIS) focus primarily on resource administration and provide top management with reports of collective data

Language in India [www.languageinindia.com](http://www.languageinindia.com)

Muhammad Asif Chuadhry, Kishwar Naz, Ph.D, Scholar,
Dr Muhammad Tahir Nawaz (Brig) and Sumaira Liaquat, M.Phil. Scholar
(Adamu, 2001). Available literature on Management Information Systems shows that studies on the relevance of MIS to organizational management and effectiveness are mainly on business organizations. Furthermore, studies on MIS in the school system focus attention largely on higher educational institutions, especially the Universities. Batsman (1972) determined the current status of MIS assisted by electronic data processing in higher education in America and found that MIS was predominantly utilized in the areas of student records and finance. However, Garret’s (1990) study concluded that information systems are useful for decision-making with a particular reference to fiscal planning and allocation of personnel resources in the North Carolina Universities. Alabi’s (1998) study revealed that MIS was significantly used for administrative decision making in the Nigerian universities, while the system was not effectively utilized for budgeting control in state universities. (W.B. Adeoti-Adekeye, The importance of management information systems p 324)

COMSATS Institute of Information Technology

Introduction

The Commission on Science and Technology for Sustainable Development in the South (COMSATS) is an international organization. It aims to reduce the ever-growing gap between the developed and developing world through useful applications of science and technology.

One of the most successful projects of the COMSATS has been the establishment of the COMSATS Institute of Information Technology (CIIT) in Islamabad, Pakistan. It was established with the objectives of providing quality education and training in the field of Information Technology (IT).

The COMSATS Institute of Information Technology made a humble start in April 1998 by initiating certificate and diploma courses in IT. The achievements in its initial two years were so impressive that when the CIIT requested for its own charter, the Government of Pakistan readily acknowledged its excellent services and reposed its confidence by according to it the degree awarding status in August 2000. Ever since, the CIIT has been progressing and growing by leaps and bounds. The CIIT has been ranked among the top 7 universities/DAIs during 2006 by the Higher Education Commission.

The CIIT is now slated for upgradation as a university by the name of ‘COMSATS University’ through an Act of the Parliament.

At present the CIIT, besides its principal seat, has seven other fully functional campuses at Islamabad, Lahore, Abbottabad, Wah, Attock, Sahiwal, and Vehari, while more campuses at Gujrat and Toba Tek Singh are in advanced planning stage. On the advice of the Federal Government of Pakistan, efforts are under way for opening up of more campuses in the provinces of Sindh and Balochistan as well. The CIIT is exploring possibility of opening an overseas campus in the Gulf region.
Vision

The CIIT is dedicated to the search for truth through advancement of learning and extending the frontiers of knowledge; to the sharing of this knowledge through education in academically diverse disciplines; and to the application of this knowledge to benefit the people of Pakistan in particular, and the Muslim Ummah and the world, in general.

The Mission

CIIT, founded in the belief that understanding enriches all people, is dedicated to the search for truth through advancement of learning and extending the frontiers of knowledge; to the sharing of this knowledge through education in an academically diverse range of disciplines; and to the application of this knowledge to benefit the people of Pakistan in particular, and the Muslim Ummah and the world, as a whole. The Institute’s mission is threefold:

Research and Discovery

Generate and preserve knowledge, understanding, and creativity by instigating enquiry, conducting high-quality research, and promoting scholarship that benefit students, scholars, and communities across the country, Muslim Ummah, and the world at large.

Teaching and Learning

Share that knowledge, understanding, and creativity by providing a broad range of educational programs among a diverse community of teachers, and taught, and prepare professional graduate, and undergraduate students, as well as non-degree-seeking students interested in continuing education and lifelong learning, for active roles in competitive and culturally diverse environments.

Outreach and Public Service

Extend, apply, and exchange knowledge between the institute and society by applying scholarly expertise to intellectual, social and technological problems, by helping organizations and individuals respond to their changing environments, and by making the knowledge and resources created and preserved at the institute accessible to the citizens. Using the resources of its multiple campuses in an integrated fashion, the Institute vies to strengthen the services to the society through educating a modern work force, undertaking research and development, technology commercialization, and partnership with businesses, government and civil society groups.
Table: 4.1 *MIS make it easy to answer the daily queries.*

<table>
<thead>
<tr>
<th>Strongly Agreed</th>
<th>Agreed</th>
<th>Uncertain</th>
<th>Disagreed</th>
<th>Strongly disagreed</th>
</tr>
</thead>
<tbody>
<tr>
<td>F %</td>
<td>F %</td>
<td>F %</td>
<td>F %</td>
<td>F %</td>
</tr>
<tr>
<td>4 33.3</td>
<td>8 66.7</td>
<td>0 0</td>
<td>0 0</td>
<td>0 0</td>
</tr>
</tbody>
</table>

Table: 4.2 *MIS reduce the work load*

<table>
<thead>
<tr>
<th>Strongly Agreed</th>
<th>Agreed</th>
<th>Uncertain</th>
<th>Disagreed</th>
<th>Strongly disagreed</th>
</tr>
</thead>
<tbody>
<tr>
<td>F %</td>
<td>F %</td>
<td>F %</td>
<td>F %</td>
<td>F %</td>
</tr>
<tr>
<td>4 33.3</td>
<td>8 66.7</td>
<td>0 0</td>
<td>0 0</td>
<td>0 0</td>
</tr>
</tbody>
</table>

Table: 4.3 *Data updation is made on regularly basis*

<table>
<thead>
<tr>
<th>Strongly Agreed</th>
<th>Agreed</th>
<th>Uncertain</th>
<th>Disagreed</th>
<th>Strongly disagreed</th>
</tr>
</thead>
<tbody>
<tr>
<td>F %</td>
<td>F %</td>
<td>F %</td>
<td>F %</td>
<td>F %</td>
</tr>
<tr>
<td>2 16.7</td>
<td>2 16.7</td>
<td>8 66.7</td>
<td>0 0</td>
<td>0 0</td>
</tr>
</tbody>
</table>

Table: 4.4 *In Service training are given*

<table>
<thead>
<tr>
<th>Strongly Agreed</th>
<th>Agreed</th>
<th>Uncertain</th>
<th>Disagreed</th>
<th>Strongly disagreed</th>
</tr>
</thead>
<tbody>
<tr>
<td>F %</td>
<td>F %</td>
<td>F %</td>
<td>F %</td>
<td>F %</td>
</tr>
<tr>
<td>4 33.3</td>
<td>6 50.0</td>
<td>0 0</td>
<td>2 16.7</td>
<td>0 0</td>
</tr>
</tbody>
</table>

Table: 4.5 *The MIS contribute to generate different sort of report in short period of time*

<table>
<thead>
<tr>
<th>Strongly Agreed</th>
<th>Agreed</th>
<th>Uncertain</th>
<th>Disagreed</th>
<th>Strongly disagreed</th>
</tr>
</thead>
<tbody>
<tr>
<td>F %</td>
<td>F %</td>
<td>F %</td>
<td>F %</td>
<td>F %</td>
</tr>
<tr>
<td>2 16.7</td>
<td>10 83.3</td>
<td>0 0</td>
<td>0 0</td>
<td>0 0</td>
</tr>
</tbody>
</table>

Language in India [www.languageinindia.com](http://www.languageinindia.com)
13 : 1 January 2013
Muhammad Asif Chuadhry, Kishwar Naz, Ph.D, Scholar,
Dr Muhammad Tahir Nawaz (Brig) and Sumaira Liaquat, M.Phil. Scholar

998
<table>
<thead>
<tr>
<th>Strongly Agreed</th>
<th>Agreed</th>
<th>Uncertain</th>
<th>Disagreed</th>
<th>Strongly disagreed</th>
</tr>
</thead>
<tbody>
<tr>
<td>F</td>
<td>%</td>
<td>F</td>
<td>%</td>
<td>F</td>
</tr>
<tr>
<td>5</td>
<td>41.7</td>
<td>7</td>
<td>58.3</td>
<td>0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Strongly Agreed</th>
<th>Agreed</th>
<th>Uncertain</th>
<th>Disagreed</th>
<th>Strongly disagreed</th>
</tr>
</thead>
<tbody>
<tr>
<td>F</td>
<td>%</td>
<td>F</td>
<td>%</td>
<td>F</td>
</tr>
<tr>
<td>7</td>
<td>58.3</td>
<td>5</td>
<td>41.7</td>
<td>0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Strongly Agreed</th>
<th>Agreed</th>
<th>Uncertain</th>
<th>Disagreed</th>
<th>Strongly disagreed</th>
</tr>
</thead>
<tbody>
<tr>
<td>F</td>
<td>%</td>
<td>F</td>
<td>%</td>
<td>F</td>
</tr>
<tr>
<td>5</td>
<td>41.7</td>
<td>5</td>
<td>41.7</td>
<td>0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Strongly Agreed</th>
<th>Agreed</th>
<th>Uncertain</th>
<th>Disagreed</th>
<th>Strongly disagreed</th>
</tr>
</thead>
<tbody>
<tr>
<td>F</td>
<td>%</td>
<td>F</td>
<td>%</td>
<td>F</td>
</tr>
<tr>
<td>2</td>
<td>16.7</td>
<td>8</td>
<td>66.7</td>
<td>0</td>
</tr>
</tbody>
</table>

Table: 4.25. *Your MIS is centralized.*

Table: 4.26. *Your MIS is connected with others departments.*

Table: 4.27. *Other departments / campuses are also getting benefits by your MIS.*

Table: 4.28. *The facilities provided by the university are satisfactory to run this*

<table>
<thead>
<tr>
<th>Strongly Agreed</th>
<th>Agreed</th>
<th>Uncertain</th>
<th>Disagreed</th>
<th>Strongly disagreed</th>
</tr>
</thead>
<tbody>
<tr>
<td>F</td>
<td>%</td>
<td>F</td>
<td>%</td>
<td>F</td>
</tr>
<tr>
<td>6</td>
<td>50.0</td>
<td>6</td>
<td>50.0</td>
<td>0</td>
</tr>
</tbody>
</table>

Table: 4.29. *Sometimes you face hurdles to maintain the system.*
Table: 4.30. **MIS is used to forecast future**

<table>
<thead>
<tr>
<th>Strongly Agreed</th>
<th>Agreed</th>
<th>Uncertain</th>
<th>Disagreed</th>
<th>Strongly disagreed</th>
</tr>
</thead>
<tbody>
<tr>
<td>F %</td>
<td>F %</td>
<td>F %</td>
<td>F %</td>
<td>F %</td>
</tr>
<tr>
<td>5 41.7</td>
<td>2 16.7</td>
<td>0 0</td>
<td>2 16.7</td>
<td>0 0</td>
</tr>
</tbody>
</table>

Table: 4.31. **Record kept under MIS is better than manual.**

<table>
<thead>
<tr>
<th>Strongly Agreed</th>
<th>Agreed</th>
<th>Uncertain</th>
<th>Disagreed</th>
<th>Strongly disagreed</th>
</tr>
</thead>
<tbody>
<tr>
<td>F %</td>
<td>F %</td>
<td>F %</td>
<td>F %</td>
<td>F %</td>
</tr>
<tr>
<td>8 66.7</td>
<td>4 33.3</td>
<td>0 0</td>
<td>0 0</td>
<td>0 0</td>
</tr>
</tbody>
</table>

Table: 4.32. **Chances of the errors are reduced due to MIS.**

<table>
<thead>
<tr>
<th>Strongly Agreed</th>
<th>Agreed</th>
<th>Uncertain</th>
<th>Disagreed</th>
<th>Strongly disagreed</th>
</tr>
</thead>
<tbody>
<tr>
<td>F %</td>
<td>F %</td>
<td>F %</td>
<td>F %</td>
<td>F %</td>
</tr>
<tr>
<td>7 58.3</td>
<td>5 41.7</td>
<td>0 0</td>
<td>0 0</td>
<td>0 0</td>
</tr>
</tbody>
</table>

Table: 4.33. **MIS version are made regularly**

<table>
<thead>
<tr>
<th>Strongly Agreed</th>
<th>Agreed</th>
<th>Uncertain</th>
<th>Disagreed</th>
<th>Strongly disagreed</th>
</tr>
</thead>
<tbody>
<tr>
<td>F %</td>
<td>F %</td>
<td>F %</td>
<td>F %</td>
<td>F %</td>
</tr>
<tr>
<td>3 25.0</td>
<td>4 33.3</td>
<td>5 41.7</td>
<td>0 0</td>
<td>0 0</td>
</tr>
</tbody>
</table>

Table: 4.34. **MIS is essential for the smooth administrative activities.**

<table>
<thead>
<tr>
<th>Strongly Agreed</th>
<th>Agreed</th>
<th>Uncertain</th>
<th>Disagreed</th>
<th>Strongly disagreed</th>
</tr>
</thead>
<tbody>
<tr>
<td>F %</td>
<td>F %</td>
<td>F %</td>
<td>F %</td>
<td>F %</td>
</tr>
<tr>
<td>3 25.0</td>
<td>5 41.7</td>
<td>2 16.7</td>
<td>2 16.7</td>
<td>0 0</td>
</tr>
</tbody>
</table>
Table: 4.35. Do you evaluate your system using MIS on regular basis?

Table: 4.36. Do you think professional/training education is require to run MIS system?

<table>
<thead>
<tr>
<th>Respondents</th>
<th>Strongly Agreed</th>
<th>Agreed</th>
<th>Uncertain</th>
<th>Disagreed</th>
<th>Strongly disagreed</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F</td>
<td>%</td>
<td>F</td>
<td>%</td>
<td>F</td>
</tr>
<tr>
<td>Students</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Strongly Agreed</td>
<td>4</td>
<td>25.5</td>
<td>5</td>
<td>41.7</td>
<td>3</td>
</tr>
<tr>
<td>Manangers</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Strongly Agreed</td>
<td>5</td>
<td>2.5</td>
<td>63</td>
<td>31.5</td>
<td>56</td>
</tr>
</tbody>
</table>

| 5 | 41.7 | 2 | 16.7 | 5 | 41.7 | 0 | 0 | 0 | 0 |

| 5 | 41.7 | 7 | 58.3 | 0 | 0 | 0 | 0 | 0 | 0 |
Table: 4.1. *You have account on COMSIS.*

<table>
<thead>
<tr>
<th>Strongly Agreed</th>
<th>Agreed</th>
<th>Uncertain</th>
<th>Disagreed</th>
<th>Strongly disagreed</th>
</tr>
</thead>
<tbody>
<tr>
<td>F</td>
<td>%</td>
<td>F</td>
<td>%</td>
<td>F</td>
</tr>
<tr>
<td>50</td>
<td>25.0</td>
<td>69</td>
<td>34.5</td>
<td>25</td>
</tr>
<tr>
<td>41</td>
<td>20.5</td>
<td>10</td>
<td>5.0</td>
<td></td>
</tr>
</tbody>
</table>

Table: 4.10. *The management information system is reliable as compare to manual record keeping.*

<table>
<thead>
<tr>
<th>Strongly Agreed</th>
<th>Agreed</th>
<th>Uncertain</th>
<th>Disagreed</th>
<th>Strongly disagreed</th>
</tr>
</thead>
<tbody>
<tr>
<td>F</td>
<td>%</td>
<td>F</td>
<td>%</td>
<td>F</td>
</tr>
<tr>
<td>15</td>
<td>7.5</td>
<td>73</td>
<td>36.5</td>
<td>35</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>52</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>25</td>
</tr>
</tbody>
</table>

Table: 4.11. *Library MIS system is facilitated to search a book.*

Table: 4.12. *MIS of library record is up to date.*

Table: 4.15. *You can register yourself in any course online.*

**Conclusion and Discussion**

All students have access to the COMSIS account from anywhere; the system is friendly in use but the required information regarding admission, time table and date sheet is not available to the majority of the students. Students have facility to register online in any course and their results are also available to them online. Students have access to digital library. Library Management
system is up to date however a majority of the students do not use it for searching books. The Management Information System (MIS) facilitates the academics and administrative activities and is more reliable than manual record keeping. The Management Information System (MIS) is not centralized for all the campuses; updating is not made on the regular basis. Managers of MIS sometimes face hurdles regarding the maintenance of the system. Management Information System (MIS) contributes to forecast the future, evaluate the system and to generate different sorts of the reports in short period of the time. Management Information System (MIS) make easy to address daily queries and has reduced the work load and chance of error. Almost all managers were professionally qualified. However, they are of the opinion that in service trainings are essential for the smooth functioning of the system.

**Recommendations**

There are seven campuses of COMSATS Institute of Information Technology (CIIT), they may be interconnected with centralized database, e.g. COMSIS. Although majority of the manager were professional qualified but in service training would be useful to keep their knowledge update to meet emerging challenges and problems. System may be evaluated on regular basis to make it more effective. For better utilization of the system, student may be given orientation trainings and feedback about the effectiveness of the system can be taken from them. To make the system more effective information about the time table, date sheet, lectures etc, may be provide to the student through the system. Due to the time and finance constrains; this research was restricted to only COMSATS Institute of Information Technology (CIIT), Islamabad, so its, so its result would not be over generalized. To overcome these deficiency following are the recommendation of the future studies: Further studies can be undertaken to find out the role of the Management Information System (MIS) in all campuses of the COMSATS Institute of Information Technology (CIIT).Sample size may also be enlarged. Different tools for the data collection e.g. interview and check list can also be taken for the future studies.

====================================================================

**References**


A.T. Alabi, Management Information System Equipment Utilization In Federal And State Universities In Nigeria

Brien, J (1999), Management Information Systems – Managing Information Technology in the Internetworked Enterprise

Language in India www.languageinindia.com
13 : 1 January 2013
Muhammad Asif Chuadhry, Kishwar Naz, Ph.D, Scholar, Dr Muhammad Tahir Nawaz (Brig) and Sumaira Liaquat, M.Phil. Scholar 1003
Charles A. Gallagher, Perceptions of the Value of a Management Information System

Charles D. Schewe, The Management Information System User: An Exploratory Behavioral Analysis

Charles D. Schewe James L. Wiek, Innovative Strategies for Improving MIS Utilization

E.W. Martin, Information Needs of Top MIS Managers

Hazem M. El-Bakry, (2009), E-Learning and Management Information Systems for E-Universities

Joseph George Caldwell, (2009), Approach to Management Information System Design

L. Carrizo, C. Sauvageot and N. Bella Information tools for the preparation and monitoring of education plans

Robert P. Bostrom J. Stephen Heinen, MIS Problems and Failures: A Socio-Technical Perspective

W.B. Adeoti-Adekeye, The importance of management information systems

Web References

http://www.foundationwebsite.org
http://en.wikipedia.org/wiki/Management
http://www.fao.org/docrep/w5830e/w5830e0k.htm
http://www.leeds.ac.uk/educol/documents/00001237.htm
http://wiki.answers.com/Q/management_by_objective#ixzzs12wdeXsa
http://www.bestpricecomputers.co.uk/glossary/data-recovery.htm
http://wiki.answers.com/Q/What_is_the_role_of_database_management

Muhammad Asif Chuadhry
Deputy Director Mass Education
SUIT, Peshawar
asif.epm@gmail.com

Language in India www.languageinindia.com
13 : 1 January 2013
Muhammad Asif Chuadhry, Kishwar Naz, Ph.D, Scholar,
Dr Muhammad Tahir Nawaz (Brig) and Sumaira Liaquat, M.Phil. Scholar
Kishwar Naz, Ph.D. Scholar
Faculty of Education
AIOU

Dr Muhammad Tahir Nawaz (Brig)
Visiting Faculty Member OF UET
Taxila

Sumaira Liaquat
M.Phil Scholar
Faculty of Education
AIOU