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Administration of Information in Higher Education-Role of ICT

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Abstract

A good Higher Education System is required for overall prosperity of a nation. A tremendous growth in the higher education sector had made the administration of higher Education institutions complex. Many researches reveal that the integration of ICT helps to reduce the complexity and enhance the overall administration of higher education. This study has been undertaken to identify the various functional areas to which ICT is deployed for information administration in higher education institutions and to find the current extent of usage of ICT in all these functional areas pertaining to Information administration. The various factors that contribute to these functional areas were identified.

Keywords: ICT, Higher Education, Information Administration.

Introduction

Education is the backbone of a nation. Despite knowing this, a huge number of people of less developed countries are far beyond the reach of higher education. One of the key reasons may be the poor economic condition of those countries. Perhaps this is the crucial challenge to be addressed by those nations for overall development where education may be on the top list. Information, Knowledge, and Communication Technology also play vital role in the growth as well as producing and offering goods and services at relatively reduced costs. Smart use of ICTs can process information, create knowledgebase and make them available wherever and whenever necessary. But despite having relatively poor economic condition, Information and Communication Technologies (ICTs) in most cases have tremendous success in providing services at reduced costs to the people's door steps. ICTs have the same to do for making the higher education available to all classes of people throughout the country at a lower cost.

In 21st century, one can hardly find a country where higher education through distance mode is not available. In fact it has been practiced since long before. But at present days, having revolution of ICTs, the higher education through distance mode has been more practical and well accepted by the all people around the globe. It is now being called Virtual learning. In developed country, people are getting more interested in learning through Virtual Campus than that of a Brick-and-Mortar Campus. Virtual Campus is nothing but ICT enabled campus, where students are attending their classes, discussing with teachers, accessing learning resources, seating exams, joining forums/clubs,

submitting assignments etc virtually having the facility of real-time interactions between teacher and students.

Rapid growth in the field of education has made governance in academic sector a very complex task. In present era, century has witnessed tremendous advancements in technology which has led to far-reaching developments in the administrative system. Cost-effective technology combined with the flexibility in learning and administrative activities is essential to enhance efficiency.

Importance of the Study

Information and Communication Technology (ICT) plays a vital role in supporting powerful, efficient management and administration in education sector. It is specified that technology can be used right from student administration to various resource administration in an education institution. The various ways of introducing technology in education institution administration are the following:

- Sending e-mail notices and agendas to staff, rather than printing and distributing them.
- Submission of lesson plans through e-mail.
- Foster technology growth by asking parents to write e-mail addresses on medical forms.
- Insist that all teachers create a class Web page.
- Attend technology conferences to see what other schools are doing, what other teachers are doing to integrate technology, and what principals are doing to encourage the use of technology in their schools and classrooms.
- Admissions through web-enabled services.

- All day-to-day activities of the institution (General Administration)
- Staff administration.

Important Areas in ICT

Communication and general administration are the two main areas in which ICT is used in the management of higher educational Institutions. It is evident from the above that administrative activities in a higher education institution consists of student administration, staff and resources administration, communication and general administration.

“Information and Communication technology provides several facilities and possibilities for educational administrators to do their tasks” .Communication and information systems have changed the very nature of higher education, allowing information to be transferred, stored, retrieved, and processed by almost all who work, study or interact with a given institution. Various research studies conducted to evaluate the extent of usage of Information and Communication technologies in multiple aspects of higher education revealed that heads of faculties utilized technology in planning, and to a large extent in the supervision and evaluation of academic affairs, student affairs, financial affairs and administrative affairs.

ICT in Maintenance of Student and Staff Records

ICT is used in maintenance of student and staff records and for communication and document management. ICT facilitated contact and information exchange and also promoted access to higher education.

ICT is included in systems for student admission and records, examination results and transcripts, finance database, human resources database, and management information.

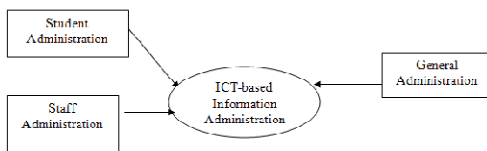


Figure 1: Theoretical model for Information administration

Information administration in this context refers to activities relating to the management of higher education institutions which is often mentioned in other studies as managerial activities in higher education institutions.

The administrative systems include Personnel administration, student administration,

resources administration, financial administration and general administration. Great significance for day-to-day management of higher education institutions was identified as follows:

- Student administration
- Staff administration
- General administration

Student administration is an important and integral part of information administration. This involves various activities commencing from the admission process to learning activities till processing of results and performance analysis. The integration of ICT into this process enhances the overall admission activities of higher education institutions by making it more accessible to many. This includes admission enquiry by students, applying for admissions through electronic media, registration / enrolment using computers, course allotment, and availability of information like timetable / class schedule in electronic form and attendance Monitoring/Maintenance through e-media. Further it includes the various communications relating to transport, hostel accommodation and other communication to guardians/parents.

Staff administration includes recruitment and work allotment of faculty and staff in the institution, their attendance and leave management, and performance appraisal. This also includes relevant communication to and from the institutions and among peers. Staff administration done through Information and communication technology (ICT) helps in processing of voluminous records in a quick, meticulous, and impeccable manner, Thereby making data retrieval easier.

General administration has brought increased efficiency and optimal resource utilization. The various items classified under this category include usage of electronic media for scheduling of halls and other resources, fee payment, and handling internal and external examination activities in coordination with the faculty members, all day to-day activities, intra and inter communication etc.,

Objectives of the Study

Information administration was identified as one of the important functional area in higher education institutions. It is often mentioned in various studies as managerial. Usage of appropriate information technologies could improve the overall environment and operational efficiency of higher education institution and it helps to improve the

following functional areas pupil/personnel services, student records, employee productivity etc. The Methodology adopted involved the following:

- Student Administration.
- Staff Administration.
- General Administration.

Sl.No	Constructs	Content Categories
1.	Student Administration	<ul style="list-style-type: none"> • Usage of electronic media by students to apply for admissions • Usage of computers for student registration / enrolment • Availability of timetable / class schedule in electronic form • Usage of computers for maintenance of attendance of students • Communication of academic details of students to their parents / guardians through e-media • Usage of e-media for notifications regarding hostel accommodation • Usage of e-media for notifications regarding transportation
2.	Staff Administration	<ul style="list-style-type: none"> • Usage of computers for recruitment and work allotment of staff in the institution • Automation of attendance and leave management of staff members in the institution • Usage of electronic media for performance appraisal • Communication with staff using e-media • E-circulars from the institution regarding official matters

3.	General Administration	<ul style="list-style-type: none"> • Usage of e-media for scheduling / allocation of halls for examinations • Usage of e-media by students to apply for university examinations. • Usage of e-media for the processing and display of results of students. • Facility for students to make fee payments electronically
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Conclusion

This study has identified a comprehensive set of functional areas of Information administration. It was found that current level of usage indicates a clear integration of ICT for managerial or information-based administration in higher education institutions. This study reveals that demographic factors do not have major impact on Information administration in higher education. This reveals that enhancing the usage of ICT on these functional areas and especially for general administration will enable enhancement of overall information administration in higher education institutions in the realm of global competitive environment. This study could serve as a base for education planers to deploy Technology based administration in higher education institutions.

References

- [1] Ashish Kumar and Arun Kumar (2005), "IT based KM for Institutions of Higher Education A Need" , Paper published in A weekly Journal of Higher Education in India from Association of Indian Universities, sNew Delhi India Vol. 43, No. 30, July 25-31, 2005, pp.
- [2] Ben-Zion Barta., et.al. (1995), " Information Technology in Educational Management", Chapman and Hall, London.
- [3] Caroline Salerno (2009), "Administrator's Role in Technology Integration", Education World 2009.
- [4] Christiana Maki (2008), "Information and Communication Technology for Administration and Management for secondary schools in Cyprus", Journal of Online Learning and Teaching Vol. 4 No. 3.
- [5] Hossein Zainally (2008), " Administration of Faculties by Information and Communication Technology and Its Obstacles", International Journal of

- Education and Information Technologies ,
Vol. 2,issue1 200*
- [6] Magni (2009), "ICT usage in Higher education", *International Technology and Education and Development Conference, Spain March 9-11 2009.*
- [7] Sharad Sinha(2008), *National Policy on ICT in School Education, Ministry of Human Resource Development Government of India*
- [8] Ulf Fredriksson et.al (2009), "Ways to use ICT in schools to optimize the impact on teaching and learning", *Paper presented at ECER, September 28 – 30 in Vienna, Austria*
- [9] Gunmala Suri (2005), "Organizational culture in ICT implementation and knowledge management in Spanish and Indian Universities: A conceptual Model", *published in A Special Interest Groups of CSI.*
- [10] Hasan et. al. (2007), *CIT reflections ,Annual Magazine of the FTK-Centre for Information Technology ,Jamia Millia Islamia , New Delhi, Issue-1 April 2007.*
- [11] Thomas Kwaku Obeng (2004), "Practical Application Of ICT To Enhance University Education In Ghana", *Feature Article, Ghana Web 2004.*