ROLE OF E-GOVERNANCE TO STRENGTHEN HIGHER EDUCATION SYSTEM IN INDIA

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ABSTRACT

An Impact of modern technology in Higher Education can be done through a good higher education system is required for overall development of a nation. A remarkable growth in the higher education sector had made the administration of higher education institutions intricate. Many researches reveal that the integration of ICT helps to reduce the intricacy and enhance the overall administration of higher education. Electronic Governance (e- Governance) is the use of Information and Communication Technologies (ICT) for the planning, implementation, and monitoring of government programs, projects, and activities. E-Governance is expected to help deliver cost-effective and easy-to-access citizen services, and improve processing of transactions both within the government, and between the government and other agencies. E-Governance is understood as a set of activities involving the effective contribution of information and communication technology (ICT) for strengthening administration and management in higher education system in India has declined somewhat over the past three decades due to remarkable increase in the number of colleges and universities and their privatization. It has become very important for the government to keep track of their functioning. Educational institutions may have various requirements that include computerization and management of processes such as registration, admission, student information, classes, time table, transport, attendance, library, salary and expenses, examinations, performance, grades, hostels, security and reports. Many of the software providers allow their clients to choose from the available modules to suit their needs to monitoring of these aspects. In this study, an attempt has been made to discuss the concept of E-Governance and use of latest application in higher education sector.

Key Words: *E-Governance, Information and Communication Technologies (ICT), Indian higher education system (HIS), MIS (Management Information System)*

1. Introduction

E-Governance can transform citizen service, provide access to information to empower citizens, enable their participation in government and enhance citizen economic and social opportunities, so that they can make better lives, for themselves and for the next generation. Formation communication transactions, integration of various stand-alone systems and services between Government-to-Citizens (G2C), Government-to-Business (G2B), Government-to-Government (G2G) as well as back office processes and interactions within the entire government frame work. Through the

e-Governance, the government services will be made available to the citizens in a convenient, efficient and transparent manner. The three main target groups that can be distinguished in governance concepts are Government, citizens and businesses/interest groups. In e-Governance there are no distinct boundaries. Generally four basic models are available-Government to Customer (Citizen), Government to Employees, Government to Government and Government to Business. Governments are specialized institutions that contribute to governance. Representative governments seek and receive citizen support, but they also need the active cooperation of their public servants. Governance is the outcome of politics.

Change has been happening at an uneven pace in any growth-oriented industry, and the education sector is no exception. Rapid growth in the field of education has made governance in academic sector a very complex task. The 21st 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. Computers can be used extensively for educational administration. There are some of the areas where computers can be used for effective educational administration

• General Administration
• Pay Roll and Financial Accounting
• Administration of Student Data
• Inventory Management
• Personnel Records Maintenance
• Library System

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 mentioned the various administrative challenges for Indian education system of the 21st century as given below:

• Global and local challenges
• Universal and individual challenges
• Competition and equity challenges
• Extraordinary expansion of knowledge

Moreover many studies revealed the need for ICT integration into administrative activities of higher education institutions. 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
• Single Window System for students

Objectives:

The proposal aims with:

A Goal for Education in the 21st Century – "To Establish a quality education system that provides learning experience relevant to current and future needs for continued economic & Social development".

The Main purposes of Higher Education is
• Preparation for the labor market
• Preparation for life as active citizens in democratic societies

- Personal development
- Development and maintenance of a broad, advanced knowledge base.

Benefits of e-Governance in Higher Education:

The benefits of e-governance in an educational sector are improved efficiency, increase in transparency and accountability of educational administrative activities convenient and faster access to services, and lower costs for administrative services. The multi-faceted benefits of e-governance can be described as under these points

Benefits to university

(i) Centralized information access from anywhere
(ii) Increase in student enrollment ratio.
(iii) Provide quality e-services, e-participation,
(iv) Increase clearness
(v) inventive teaching tools
(vi) Improved decision making, Private Public Participation
(vii) less paper work

Benefits to students

(i) Increase participation in education affairs
(ii) Personalized login for each students
(iii) extensive saving in time cost & efforts
(iv) Information & transaction services
(v) Job opportunities
(vi) Social connectivity for collaboration
(vii) Students can access virtual lectures & Seminars.
(viii) Students can solve their problems like-examination queries, result verification etc.
(ix) Students can submit feedback to university.

Benefits to colleges

(I) Data can access easily

(ii) Electronic data exchange with university
(iii) Saving of hidden operational cost
(iv) Instant statistical report generation
(v) Helpful for NAAC accreditation

Overall education system

(i) Long term impact on organization goals
(ii) Improve education system
(iii) Empowerment of faculties, students & encouragement of their participation in governance.

Suggestions and Recommendations:

The online methods enable more effective education and offer significant advantages over traditional services.

Provide E Services – After the implementation e-governance, we improve the delivery of services to students, faculty by providing services like enrollment, examination, result, feedback, requests for documents, requests for certificates, issuing admit cards and ID cards, employment etc.. The system provide timely alert to colleges through SMS /Emails. E-governance in education provides new ways of communicating to the students, imparting education and organizing and delivering information and services.

Improved education system - E-governance in education sectors allows use of information and communication technologies with the aim of improving education, improve information, service delivery, encourage student participation in the decision making process, making administration transparent and effective and give universities a new channel of educational unemployment. Also, the system can obtain feedback from industry and students to modify course curriculum if deemed appropriate by the authorities. This will allow all the lesser performing colleges to reduce the gap with better performing institutes. It will be help in the

betterment of the higher education in the country and increase the number of employable students.

Methodology:

The following could be the approach and need not be a complete methodology

• **Data collection and Sampling:**

In this paper we concentrate on technical aspects rather than social and economic. Secondary data will be reviewed initially through e-governance and other central Universities situated at various parts of India. We also look for internet for the successfully implemented projects of other states and countries. To aid research table of key terms are constructed and sources are located which are related to our project. Secondary cross references table will be developed so that data can be viewed from different prospective.

This Paper mainly depends on primary data so different methods like questionnaire, onsite observation are applied to collect the required data. Even though prime importance is given to primary data but equal importance is also given for the secondary data. Three kinds of secondary data are considered. Firstly, data extracted from e-governance database. Secondly, Data from bug tracking tool gives information regarding technical problems faced. Thirdly, data from tools used by the development team during development of project is also used. As we know sampling is a challenge because reduction in samples will lose minute things of the project and it is too early to decide on sampling techniques.

• **Data Analysis:**

Data analytics software (spread sheets) like SPSS, SAS, MINITAB and SYSTAT are using statistical tools to a large extent providing the organizations a user friendly environment in data processing and timely decision making. Data Mining helps for further exploration of databases to unravel the relationships, patterns hidden in the data, thus data miners sort through huge datasets using sophisticated software to identify undiscovered patterns and establish hidden relationships where as data analytics focuses on inference, the process of deriving a conclusion based solely on what is already known by the researcher. Data Mining along with the data analytics skills is proved to be an asset to the organizational decision making.

For analysis and conducting the study the available tools such as MS-Excel, SPSS, Data Mining tools like statistica,, R-software will be used. More sophisticated analysis tools available within university and different IT centers will be used.

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