

E Governance in Education: Reasons for introduction and Impact

Dr Sami M. Alhomod, Mohd Mudasir Shafi
King Saud University

Abstract— Information Technology (IT) is said to be the technology of 21st century. There has been a huge growth in the field of information technology. Traditionally IT was used only to provide the back office support to organizations. Nowadays it plays a strategic role in organizations supporting many business functions and also shapes new strategies in organizations. The IT field has also been introduced in the field of governance called “E Governance”. This IT based E governance has also been introduced in the field of education. The implementation of e governance in education has led to new broader innovations. E governance has enabled universities to expand their current geographical reach, to interact to prospective students all around the world and to establish themselves as global education providers. This paper examines the need for implementation of e governance in education sector and its possible advantages. The aim of this paper is to examine the nature of change in Education with respect to the introduction and growth of IT based e governance.

Index Terms— E governance, e learning, Information and communication, Education, Improved Education, E services, E participation, E administration.

1 INTRODUCTION

Before elaborating about e governance in education, let first know the meaning of e governance.

UNESCO defines e-Governance as:[1]

“Governance refers to the exercise of political, economic and administrative authority in the management of a country’s affairs, including citizens’ articulation of their interests and exercise of their legal rights and obligations. E-governance may be understood as the performance of this governance via the electronic medium in order to facilitate an efficient, speedy and transparent process of disseminating information to the public, and other agencies, and for performing government administration activities.”

The main aim of e government is to enable the government agencies to improve the relations with citizens and businesses by the use of modern information technologies like wide area network, mobile computing and the internet and also to facilitate better communication between various arms of the government. E government uses information and communication technologies to promote more efficient and effective government and makes government more accountable to citizen’s. It facilitates improved access to government services and allows

greater public access to information. The modern information technology services like the internet, mobile communication,

Wireless devices and a mix of other technologies are used to Implement e government solutions. E government plays an important role in providing services to citizens and industry by providing easy availability and access to the information, providing efficient government management and making governments more accountable and transparent to the citizens.

The ultimate results of implementing e government are:

- Convenience to government and citizens.
- Decrease in cost of the services.
- Less corruption.
- Increased revenue.

2 WHY INTRODUCE E-GOVERNANCE IN EDUCATION SECTOR?

The main purpose for introducing e-governance in education is to enhance good education. E governance in education provides new ways of communicating to the students, new ways of imparting education and new ways of organising and delivering information and services. The advancements in the information technologies, internet and the mobile communication provide opportunities to trans-

• Dr Sami Alhomod is currently dean of e learning and distance learning deanship, King Saud University, Saudi Arabia.
E-mail: Alhomod@ksu.edu.sa

• Mohd Mudasir Shafi is currently Researcher at King Saud University, Saudi Arabia.
E-mail:mmudasir@ksu.edu.sa

form the relationship between administration and students in a new way, thus contributing to the achievement of the good education goals. The implementation of information technology may increase the broad participation of the students in the process of achieving good education goals at all levels by providing the possibility of online discussion groups and by enhancing the rapid development and effectiveness of the learning methods. Advantages for the administration involve that the administration may provide better service in terms of time, making governance more efficient and more effective. In addition, the transaction costs can be lowered and the services become more accessible. [2]

Implementing e-governance in educational systems will enable effective monitoring of academic standards. Fry (2001) proposes that if universities are to compete in a global higher education market they must introduce the technological advancements and use them as a strategic tool, capable of transforming educational and business practices. E-governance in education sector's allows use of information and communication technologies with the aim of improving education, improve information and service delivery, encourage student participation in the decision making process, making administration transparent and effective and give universities a new channel of educational deployment. [3, 4] The effective use of IT services in educational Sector can greatly enhance efficiency of the existing system, decrease the costs, and increase transparency in the functioning of various departments. In a broad sense e governance in educational sector provides better service delivery and the distribution of information to students and faculties using electronic means.

E governance can also be an important tool to the governing body of the institute. In general it provides following advantages to the administration:

- Empowerment of faculties, students and encouragement of their participation in governance.
- Transparency and absolute clarity in Administration, Governing and admission process.
- Increased efficiency of faculties and of administration processes.

The possible areas of implementation of e governance in educational sector are: [2]

- **E – Administration:** It involves the use of ICT (Information and Communication Technology) in order to improve administration processes and the internal working of the departments within a Educational organisation
- **E – Services:** The main aim is to improve the delivery of services to students by providing interactive services. Some examples of interactive services are: requests for documents, requests for certificates, issuing admit cards and id cards.
- **E – Participation:** It asks for greater and more active student, faculty and administration participation and involvement enabled by ICTs in the decision-making process

The use of Information Technology (IT) in every aspect of life has resulted in faster, easier and much better delivery of services by redefining the fundamental principles of delivery of services and operation of service sectors [6]. Universities and higher educational organisations all around the world have started to implement the advancements in IT to be utilized to provide better services to students and faculties. The information technology imparted, E governance when applied in education has provided a huge impact on the functioning of the educational sector by revolutionising the way information is provided to the students and other related people to the way education is imparted and the way learning is done. As a result, a wide range of IT applications are being custom developed and delivered in various educational organisations. Some of the areas of which have been immediately impacted are:

2.1 Improved education system [5]

The quantity and quality of output from education system has been substantially improved with the introduction of e-governance in this sphere. However in order to be really effective, the e-governance system deployed needs to go beyond mere computerisation of records or processes. The implementation of the e governance been able to provide the management of the educational institution information about the areas of concern so that adequate action can be taken. An integrated e governance system can enable the authorities to analyze the performance of one of the best performing institute in related field and compare it with other colleges to identify the gap areas. 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.

2.2 Enhanced Teaching Tools [7, 4]

There has been rapid development in learning technologies so as to turn them to advantage in learning. A student who is learning in a way that uses information and communication technologies (ICTs) is using e-learning. With the introduction of new technological initiatives the structure of higher educational institutions has changed over the past decade. Scott (2000) supports this opinion that eLearning is now facilitating a more flexible learning approach. The impact of eLearning initiatives has direct effects on the future structure of universities on both strategic and tactical levels. The changing role of lecturers, the changeable learning environment and the design of eLearning facilities all contribute to a potentially more flexible organisational structure. The future delivery of education will be based through eLearning technology providing lecturers with superior teaching tools. The online methods enable more effective education and offer significant advantages over traditional teaching methods. This has been possible by technological implementation based environments such as bulletin boards, virtual lectures and e Libraries. In an eLearning environment lecturers can offer constant educational support, as students are able to communicate with classmates and lecturers, visit web sites and view course material regardless of their time and location.

2.3 Centralised Information:

E-Governance has provided electronic information infrastructure to simplify service delivery, reduce duplication, and improve the level and speed of service at a lower cost. It allows for creating, managing, and sharing information electronically among the various university/collage departments and the different courses offered by them. That is, information captured once can then be shared and re-used by all authorized users. This avoids manual transcription and re-entering of the same information repeatedly whenever a student goes to a new university/collage department for some services.

2.4 Integrated Services [6]:

Different types of services offered by different departments like collecting fees, granting admission, administering regulations, paying salaries and benefits, can be availed at one place. This greatly facilitates the students by allowing them to perceive the administration as a single body to interact with instead of a number of unrelated entities, operating at different locations in different university/collage buildings.

2.5 Anywhere, Anytime Information [6]:

Delivery of public-domain information to students can be done without any official and student interaction. Students can obtain information related to university processes and procedures through an on-line system without interacting with any university official. In fact, e-Governance allows the average student quick, interactive access to a vast array of information, through computers at home or work or through kiosks in convenient public locations, because this access to information can be available at many different locations and at all hours, there is no pressure on individuals to physically visit a university Office.

2.6 Lowering Costs

E-governance saves universities money. Putting services on the Internet gets rid of the wasted time that is spent on getting the services that otherwise would have been available only in the university. University/collage Web sites are managed through a content management tool. This tool makes it easier to make changes on university Web pages. This, in turn, reduces the time and energy required to keep university Web pages up-to-date.

The E-Governance also provides hardware and software needed to create and update state Web sites. This results in reduction of licensing fees and increases the ability of the state to maintain its Web sites.

2.7 Improved Decision Making and Better Planning:

The ability of e-Governance to provide centralised information helps governing body, decision makers and faculties to perform extensive analysis of stored data to provide answers to the queries of the students. This facilitates taking well informed policy decisions for student facilitation and accessing their impact over the intended section of the students. This in turn helps them to formulate more effective strategies and policies for student facilitation.

2.8 Better Security and Protection of Information:

The centralised information approach of e-Governance keeps all information at one place in electronic form. This approach of making information secure prevents it against any theft or leakage. Proper backup mechanisms valuable information helps in protecting the information from getting lost due to natural calamities such as fires, earthquakes, and floods.

3 ISSUES AND CHALLENGES

The benefits of e-Governance are not easy to achieve and must go far beyond mere computerization of education

processes. The successful implementation not only presents technical challenges but also asks for a fundamental change in the manner in which the education sector operates today. In fact, the challenges that are most likely to occur would be how to adapt with reinvention of the Education processes and functions and related issues of new responsibilities for employees, faculties and students. It also raises important questions in terms of protecting information from unauthorized changes and safeguarding personal privacy. Proper user authentication and access control mechanisms need to be implemented in order to ensure that only authorized users can have access a particular piece of information. Another important issue is the cost involved in implementing the e governance. Lack of adequate training programs is another important issue in implementing the e governance system. The success of many e-Government projects suffers immensely from lack of adequate training programs. Training is of vital necessity in familiarizing users with computers and breaking their fears.

4 CONCLUSION

The most important driving force behind e governance establishment and development is Innovation. To achieve a world class standard in education it is imperative to have an improved and innovated means of access to information all over the world which is possible only by the introduction of information and communications technology based e governance in educational institutions. For achieving the goals of efficient administration and to meet the challenges of globalisation, international competition and modern science and technology development, it is necessary to implement fast and reaction based e governance into education sector. The way in which higher education is designed, implemented and delivered is changing with the introduction of e governance. Higher educational institutions have been traditionally static in their functioning and delivery of programs. However as there is an increased demand for quality learning there is a need for higher educational institutions to broaden their geographical limits to introduce e governance initiatives. E governance provides higher educational institutions like universities with a way to exceed competition and take full advantage of their traditional and already established reputations.

The ways to enhance learning by enabling access to universal information are possible with the introduction of e governance initiatives. For lecturers, e governance programmes represent a change in the way teaching was imparted. For students, e governance has provided an alternative to the ways learning was done by implementing the means in which learning can take place outside the lecture hall. E governance will change the way Students relate to

institutions as much as it changes how students relate to each other. It will bring forth, new concepts of governance, both in terms of needs and responsibilities.

5 REFERENCES

- [1] Governance and good governance
<http://mirror.undp.org/magnet/policy/glossary.htm>
- [2] Defining E-Governance - Updated: 03-08-2005 18:57
http://portal.unesco.org/ci/en/ev.php-URL_ID=6616&URL_DO=DO_TOPIC&URL_SECTION=201.html
- [3] Fry, K. (2001). ELearning Markets and Providers: some issues and prospects. Training and Education, 43(4), pp. 233-239.
- [4] Gurmak Singh, John O'Donoghue, Harvey Worton "A Study Into The Effects Of eLearning On Higher Education "
- [5] N.N. Sachitanand," Integrate e-governance in education sector"
<http://www.digitalopportunity.org/comments/integrate-e-governance-in-education-sector/?searchterm=None>
- [6] Dr. Pradeep Sinha "Engineering eGovernance Solutions"
<http://www.cdac.in/html/connect/3q2000/art02.htm>
- [7] Scott, T. (2000). The Wired Campus, Business Weekly, p. 102.
- [8] SHAJEE MOHAN B .S. (Assistant Professor, C .S .E .D.)"Impact of IT on Higher Education through Continuing Education "
<http://arxiv.org/ftp/cs/papers/0411/0411038.pdf>
- [9] Naim Shaikh & Kishori Kasat. *E-Governance In Education As An Effective Management Control Tool In Developing Human Resource-Faculty Appraisal System* Retrieved 9 April 2011 on <http://www.computer.org/portal/web/csdl/doi/10.1109/ICETET.2009.83>
- [10] RESOURCE-FACULTY APPRAISAL SYSTEM"
<http://ieeexplore.ieee.org/stamp/stamp.jsp?arnumber=05395002>
- [11] Rev. Fr. Paul Raj Kumar, Dr. K. Murugadoss "E-Governance and Impact in Educational Sector"
http://www.indianmba.com/Faculty_Column/FC1231/tc1231.html
- [12] e-GOVERNANCE : CONCEPTUAL FRAMEWORK
http://arc.gov.in/11threp/ARC_11thReport_Ch2.pdf

