

## Effective Communications through e-Governance and e-Learning

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***ABSTRACT:** e-Governance and e-Learning are two important facets of electronic transmission of information on two different planes. If electronic government programs are vital for the improvement of public services, then 'e-Learning' is a boon for ensuring qualitative education all around. Many people are still confused if 'e-Governance' and 'e-Learning' are synonymous. This paper attempts to unveil this confusion by highlighting some of the assorted facets of each concept. Moreover, the paper explores the potential impact of e-Governance upon the modern society, focuses on the latent advantages of e-Learning in academic environment, and addresses the core aspects of the two sides of the same coin. The authors deduce that 'e-Governance' and 'e-Learning' are the two emerging concepts of modern ICT that are introduced and implemented at government and institutional levels respectively to promote efficient and effective communication of electronic information so as to bridge the gap of digital divide worldwide.*

## I. Introduction

E-governance involves the use of information and communication technologies (ICTs) to transact the business of government. At the level of service, e-governance promises a full service available 24 hours a day and seven days a week. At all level of basic factors such as government accountability and general acceptance of state institutions, e-governance contributes to the functioning of democracy by online provision of government information which would otherwise be difficult to obtain or unavailable, and through online debates and plebiscites (Saxena, 2005; Teicher et al., 2002). At the same time, e-learning seems to have taken the world by blizzard and is fast becoming a major form of learning. It is an approach to teaching and learning that is now used widely by schools, colleges, universities and distance learning cells, and academic institutions. In this regard, if e-learning is a process, e-governance is a means. However, all forms of e-learning do not come under the purview of e-governance. Though 'e-learning' and 'e-governance' have different connotations, they are just two pictures on the same paper. Nevertheless, successful implementation of e-learning and e-governance policy helps in bridging the digital divide through a wide-ranging approach to digital environment across the world. If implementation of e-learning addresses some of the fundamental issues, for instance, infrastructure, digitization, curriculum designs, content developments, evaluation of students' needs, etc, then e-governance possesses some issues of its own. This unfastens a stimulating research prospect. Therefore, it is vital to assess some of the assorted facets of web enabled digital environment before being endemic to the situation.

## II. e-Governance

Torres et al. (2005) define governance as the rules, processes and behaviors that affect the way public administration functions, that is, the organization and culture of public administration. It is believed that governance itself is much more than the physical authoritative institutions, organizations and process within the public sector. The effectiveness of systems of governance he argues is particularly important because, if failure occurs, then government will ultimately be held accountable. Torres et al. believe that e-governance should now be at the heart of national ICT strategies to make the development of e-government sustainable, encompassing the wide-ranging

challenges to corporate management brought about by technological advancements (Wong et al., 2007).

E-government commonly refers to the processes and structures pertinent to the electronic delivery of government services to the public (Saxena, 2005). As a concept, e-governance can be perceived to be contextually inclusive of "electronic democracy (Okot-Uma, 2001). In this context, e-democracy refers to the processes and structures that encompass all forms of electronic communication between government and the citizen, such as information, voting, polling, or discussion, thereby enabling citizens to participate in the governments policy making (Gronlund, 2001)

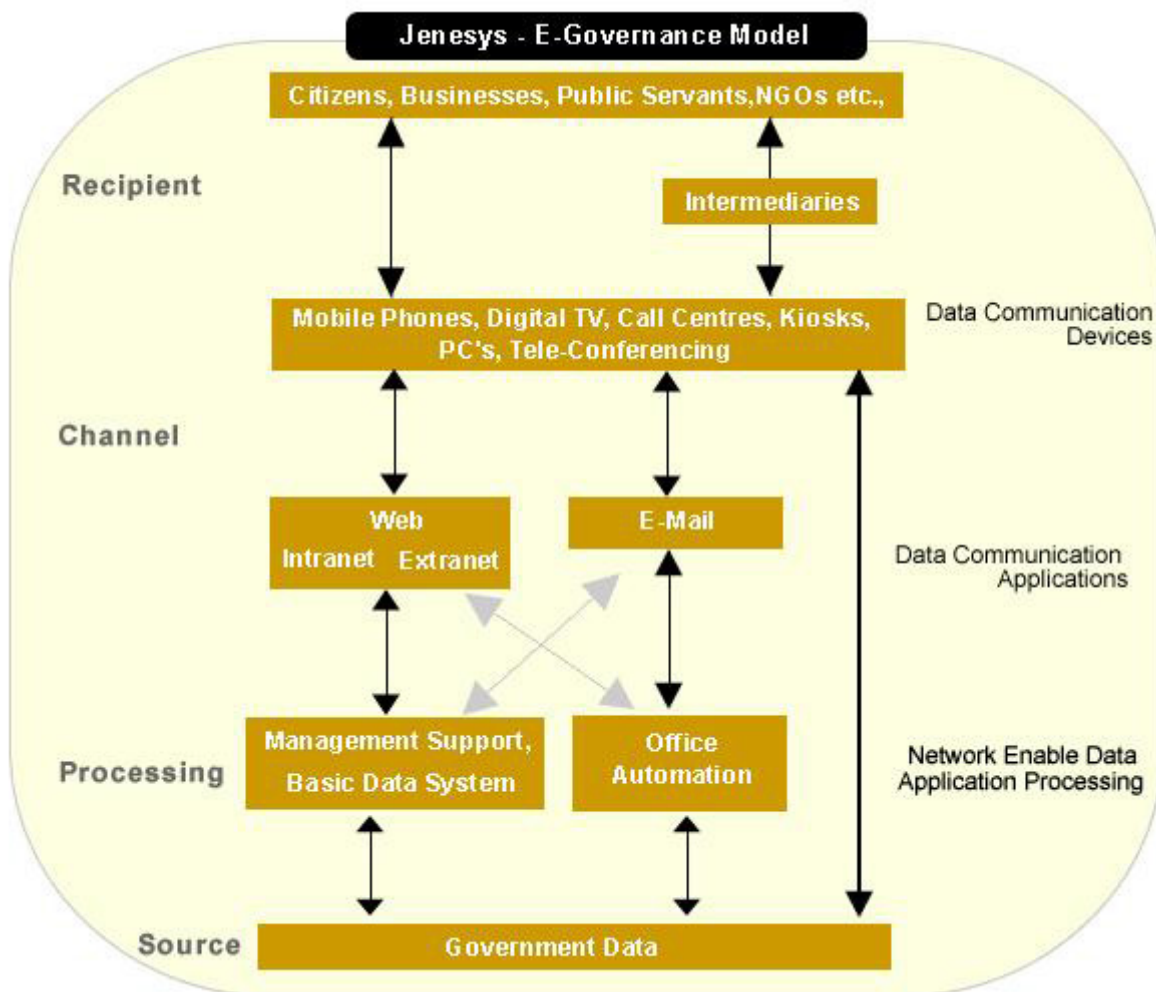
E-governance goes beyond simple service provision to build external interactions (Heeks, 2001), enhance democracy by improving representative participation in political decision making (Lenihan, 2002), strengthen democratic institutions and processes , and involve the public in political choices so that their needs and priorities are respected (Kolsaker, 2008; Council of Europe, 2007). In addition, the growth of an online public sphere may require a reassessment of traditional conceptions of the role of the citizen and the nature of government-citizen relations (Kolsaker, 2008; Lips, 2006) that makes the concept of e-governance pervasive.

### **III. Features of e-Governance**

E-governance provides the following three major functions:

- e-Administration: improving government processes by cutting costs, managing performance, making strategic connections within government, and creating empowerment
- e-Citizens and e-Services: connecting citizens to government by talking to citizens and supporting accountability, listening to citizens and supporting democracy, and improving public services
- e-Society: building interactions beyond the boundaries of government by working better with business, developing communities, building government partnerships, and building civil society

Figure1: e-Governance model



(Source: <http://www.jenesystech.com/E-governance.html>)

#### IV. e-Government Impact

Some developing country governments have been eager to utilize these new technologies to enable efficiency gains, cost savings, and improvement of service delivery. Schwabe and Deane (2008) have expressed in brief the impact of e-government on society as presented in Table 1:

Table 1: e-Government impact

Impact	Definition	Project Example
<b>Direct citizen Value</b>	Citizens gain value from increased access and reduced delays, improved service delivery, and less interaction with intermediaries.	India: Andhra Pradesh: Land registration: Payment of property taxes and issue of land titles at 230 locations. Process takes five minutes instead of 15 days.
<b>Social value</b>	Improved trust in government; Increased sharing of information; Monitoring of regulatory compliance; Greater visibility	Estonia: TOM Portal: Citizens participate in government decision making; citizens review and comment on draft legislation online and send proposals online to the government.
<b>Government operational value</b>	Improvement in current performance and in participation for future requirements: on-time, completion rate, redundancy, network congestion flexibility.	Philippines e-customs: Quick clearance of major transactions has brought down the cost of trade significantly. Cargo is released in four hours to two days as opposed to eight days in the previous system.
<b>Strategic/political value</b>	Organization perceived as moving toward fulfilling its mission: improved public image, legislative guidelines met.	Mexico: Declarant: requires civil servants to declare their patrimonial assets online.
<b>Government functional value</b>	Benefits that impact organizational and other federal government budgets: reduced cost and steps per transaction, decreased cost of materials, reduced cost of correction.	Chile: e-procurement system estimated to provide government with efficient gains of \$200 million per year, a total of 1.38 percent of government expenditure.

(Source: Schware & Deane, 2008)

## V. e-Learning: The Concept

Different terminologies have been used for e-learning, a fact that makes it difficult to develop a generic definition. E-learning is defined as instructional content or learning experiences delivered or enabled by electronic technology (Aydin & Tasci, 2005). Terms that are commonly used include "online learning", "internet learning", "distributed learning", "networked learning", "tele-learning", "virtual learning", "computer-assisted learning", "web-based-learning", and "distance learning". All of these terms imply that the learner is at a distance from the tutor or instructor and other learners and that some form of support is provided to learners (Sharifabadi, 2006). Therefore, in brief, e-learning can be redefined as a type of learning for off-site learners by means of electronic technology.

## VI. Merits of e-Learning in Academic Sphere

Educational institutions are moving towards the use of the internet for delivery, both on campus and at a distance. However, for institutions to make this often expensive move, there must be some major perceived benefits from e-governance. Some of the benefits pointed out by Sharifabadi (2006) are given as follows:

- For learners, e-learning knows no time zones, and location and distance are not an issue;
- In asynchronous e-learning, students can access the online materials at any time;
- Synchronous e-learning allows for real time interaction between students and instructors;
- E-learners can use the internet to access up-to-date and relevant learning materials, and can communicate with experts in the field in which they are studying;
- Situated learning is facilitated, since learners can complete online courses while working on the job or in their own space, and can contextualize the learning;

- Online materials can be updated as per the needs of the learners, and learners are able to see the changes at once, and;
- When learners are able to access materials on the internet, it is easier for instructors to direct them to appropriate information based on their needs.

The advantages of e-learning must outweigh its disadvantages for its implementation to be worthwhile. Amongst its many advantages is that e-learning is less expensive to deliver. E-learning is self-paced, provides consistent content, and works anywhere at anytime for learners. The instructional materials are easily updated and permit the use of multimedia which leads to reinforced learning through the use of video, audio, quizzes and other forms of interaction. E-learning can improve retention, provide immediate feedback and allow learners to customize learning materials to meet their individual needs (Uhomobhi, 2006; Kirsh, 2002; Turk & Robertson, 2000).

## **VII. Digital Libraries and e-Learning**

One of the natural responses to the challenges of e-learning environment is the introduction of the digital library to support e-learning with resources network, designed to meet the needs of the learners, in both individual and collaborative settings, constructed to enable the dynamic use of a broad array of materials for learning primarily in digital format, and managed actively to promote reliable access anytime and anywhere to quality collections and services, available both within and outside the network (Lippincot, 2002).

The introduction of digital libraries into the education process was made easier by distance education, which has developed over the years. With the internet and the World Wide Web, distance education programs can mount sets of materials on web servers to support online courses. One of the basic ideas is to aggregate learning materials on various topics, written by many educators, in a digital library of courseware. Digital libraries have the potential to significantly change fundamental aspects of the classroom in ways that could have an enormous impact on teaching and learning. New pedagogical methods should accompany digital libraries as an emerging technology for education to reach the compelling vision of education (Sharifabadi, 2006). Therefore, for an ideal e-learning situation, digital libraries are regarded as the hub of the library collections and services that function together in the real e-learning environment.

## **VIII. e-Learners' Expectations from Librarians**

Communication is not just important to break the isolation of students in an e-learning environment but also for a much more basic reason: Whatever one person says or writes, the receiver of the information will always interpret the information in the receiver's personal context, created through upbringing, culture, language, etc. This does often lead to deep misunderstandings. The only way to make sure that information is properly understood is not by reading, hearing, or seeing, but by being able to check or ask if things have been understood. This is why an e-learning system that ignores the importance of communication will not work.

What do e-learners need from librarians? Suggestions advocating changes in librarians' role in support of e-learning in the information age appear throughout the literature. Librarians must assert themselves as key players in the learning process, thereby changing their roles from information providers to educators (Cooper & Dempsey, 1998), and they have been transferred

from 'information gatekeepers' to information gateways (Sharifabadi, 2006; Haricombe, 1998). Lippincot (2002) advocates librarian involvement in teaching communities so as to shift the focus from explaining library resources to meeting the ongoing information needs of the students in the broad information environment.

In responding to the need to provide ongoing digital library support, librarians have worked at translating what they do in a traditional library into virtual or digital environments while customizing their services and resources for e-learners. The traditional role of academic library services has always been to provide information resources for the teaching and learning activities within the academic sphere. Its role in supporting the virtual learning environment is no different. The linking of digital libraries and virtual library environments is required to provide a meaningful connection between learning activities and learning resources. The digital libraries can help provide information content to teaching staff who are engaged in e-learning. Traditionally, libraries offer circulation services, interlibrary loans, course reserves, an information desk, a reference desk, and library instruction. To serve learners connected to their institutional libraries primarily through a computer network or internet, librarians are providing remote access to, and delivery of, library resources and are using communication technologies to deliver electronic reference services and instructional support.

As the literature suggests, e-learners are a wider community of learners than "students". An academic library's learners may include students, faculty, staff, teachers, etc. The library is seen as a source of training and guidance to a community of learners who are concerned with navigating the complexities of locating and using digital resources and services. Moreover, the move towards a digital environment has resulted in a shift from the systematic one-to-one information flow of the past to a new model in which the users and the providers of information are able to relate in a many-to-many, dynamic relationship. For example, in the traditional model, a librarian provides a bridge between learners and information providers by selecting and cataloguing resources and by providing assistance with these resources. In the new model, the library serves as a facilitator by offering ongoing support, enabling learners to interact and exchange knowledge with others, to communicate directly with the publishers and vendors of information resources, and to participate in a collaborative endeavor to make available rich collections of online scholarly information resources (Sharifabadi, 2006).

## **IX. Parameters of Success in e-Learning Implementation**

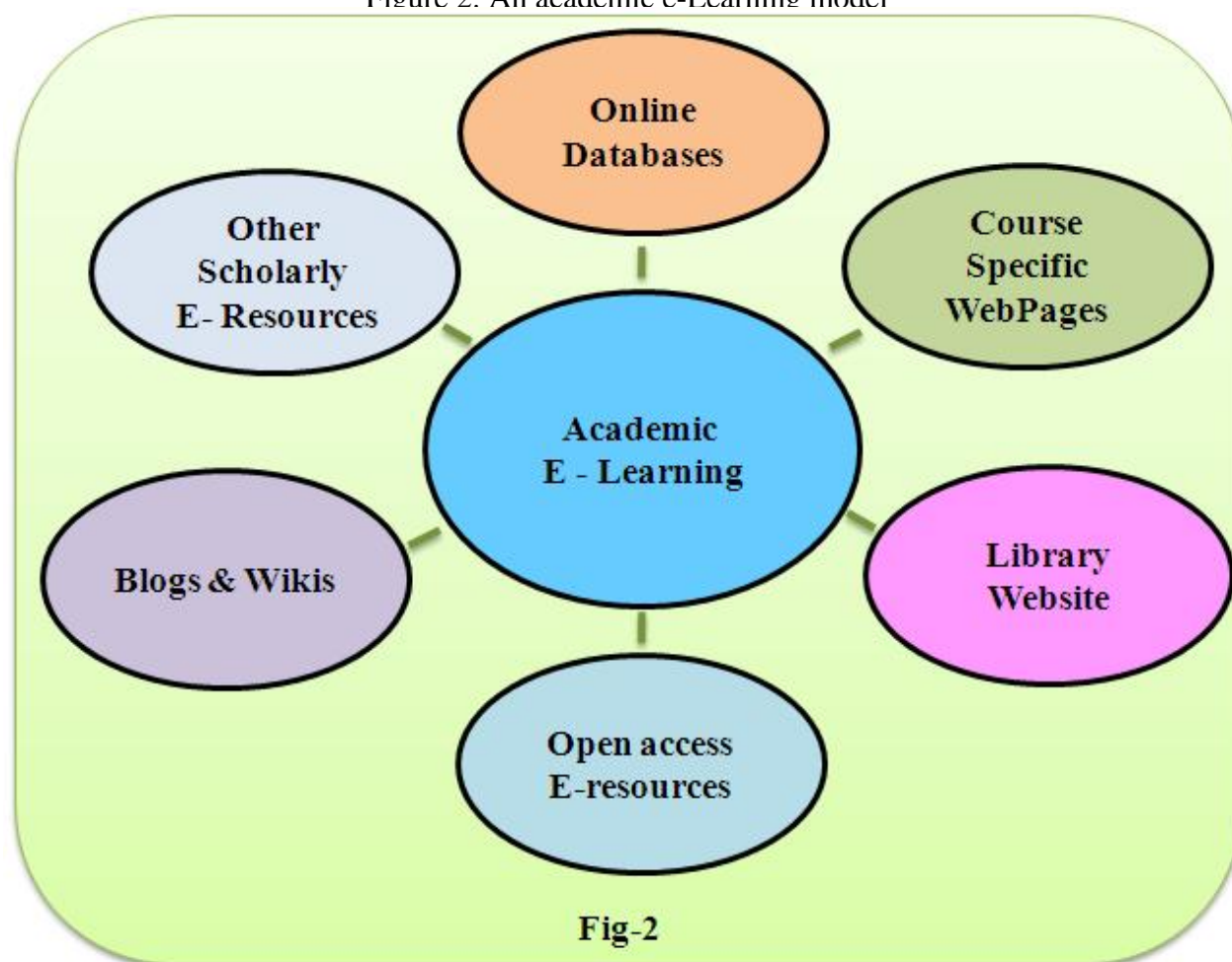
The success of e-learning depends on how learning takes place online, that is, the underlying pedagogy and the real value of e-learning lies in our ability to deploy its attributes to train the right people to gain the right knowledge and skills at the right time. The successful implementation of e-learning depends on the adherence to underlying principles that are embedded in the e-learning experiences. Though these principles apply to both the e-learning and the traditional classroom delivery method, they are yet to be included in the former. These pedagogical principles should form the basis for inclusion of features in e-learning management systems. Bixler and Spotts (2000) have identified seven parameters affecting the successful implementation of e-learning: institutional support; course development; teaching and learning; course structure; student support; faculty support; and evaluation and assessment

The availability of strong institutional support is crucial for e-learning deployment and success. The changing roles of staff must be recognized and acknowledged. Support strategies must be

developed for management of the transformation processes. Standards must be set and applied consistently. Although the teaching and learning process encourages a flexible and independent approach to knowledge acquisition, the notion of student support is markedly different from the traditional method.

Assessment reinforces the learning approach a student adopts and is an indispensable part of teaching and learning. Evaluation and assessment of learning should be based on higher order thinking skills so that students may adopt a deep holistic approach to e-learning (Uhomoihi, 2006; Twomey, 1996). Basing upon the underlying parameters, the authors have developed the following conceptual academic e-model as depicted in Figure 2:

Figure 2: An academic e-Learning model



## X. Conclusion

Governments' initiatives for e-governance and academic implementation of e-learning are two hot issues which have been prioritized these days for the benefit of the general public and students respectively. In this regard, the Government of India has taken right e-government initiatives for making different systems and procedures transparent by setting up different information kiosks at block levels so that rural people can get information online and put their subsequent feedbacks on different issues. At the same time, institutions are gradually building up their e-resources, digitizing their contents, and subscribing to online databases for providing truly qualitative and cost effective online services to the students. Therefore, it is deduced that e-governance and e-

learning will shortly bring about an absolutely saturated global electronic world to bridge the gap of digital divide.

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