ABSTRACT

In this modern age of Information technology we cannot even survive without applying computers and telecommunications equipment on any sphere of our life. By doing so we not only can easily store retrieve, transmit and manipulate data in the shortest minimum possible time but also achieve effective, transparent, errorless and immediate outcome of our objective. Various small and big industries are designed to be equipped with modern technologies to give out maximum possible outcome. When we talk about the latest interpretation of the word electronic in e-governance, it reflects us about its utilization in the modern technological pretext. Simply speaking electronic governance means flow and implication of knowledge to carry out governmental, semi-governmental or non-governmental services fully describing interrelated and mutual coordination among the various quarters involved in the above mentioned setups. It is crystal clear that by following such governance the referred setups would achieve accessibility, in spotless manner. Furthermore in such governance we cannot clearly assign distinctive features to the type of government, its subjects and socio-economic groups involved in their respective communications. The term can be applied to any organization, office, institution not only on small
scale but also on large scale. Its application to the education sector is equally important and cannot be ignored. E- Governance in universities reveals the methodology by which those are established, managed to run effectively. Governing structures for universities vary from one country to the other and are highly distinguished throughout the world. This study proposes an E-governance model for universities based on the comparative researches of the modern age.

**Keywords:** Information Technology, electronic governance

1. **Introduction**

In this modern age of Information technology we cannot even survive without applying computers and telecommunications equipment on any sphere of our life. By doing so we not only can easily store retrieve, transmit and manipulate data in the shortest minimum possible time but also achieve effective, transparent, errorless and immediate outcome of our objective. Various small and big industries are designed to be equipped with modern technologies to give out maximum possible outcome.

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E- Governance in universities reveals the methodology by which those are established, managed to run effectively.
Governing structures for universities vary from one country to the other and are highly distinguished throughout the world. This study proposes an E-governance model for universities based on the comparative researches of the modern age.

1.2 Scope of the study:
Scope and applicability of the research covers universities of Pakistan. He studies would cover the ways and means to carry out every possible function to introduce e-Governance in universities in Pakistan. The possible areas of e-governance in Pakistani universities are:
   i. E- Administration
   ii. E- Services
   iii. E- Participation

1.3 Significance of the Study:
It is very significant that our universities should match the standards of the educational institutions of modern world. The world of today is very much fast and equipped with all kinds of modern technological tools pre-requisite for not only for institutional growth but also for the well-being of the country too.

1.4 Objective of the Study:
The main purpose of this independent study is to bring our countries higher educational institutions (Universities) on the standardized level. This cannot be achieved without using modern tools of ICT and e-governance at universities levels.

1.5 Problem Statements:
There are certain issues faced by Pakistani universities that require immediate redressed:

   i. Lack of Infrastructure Development and Accessibility
   ii. Lack of E-literacy and computer skills
   iii. Lack of transparency on administrative and academic spheres
   iv. Lack of effective communication between all stakeholders universities.
   v. Lack of accountability in administration faculties etc.

2. Literature Review
According to Dey, S. K., & Sobhan, M. A. (2011, December) government services have been provided through interacting and portal websites by e-governance. Through this process the main motive of e-governance is obtained by simplifying the strategic goals for all concerned quarters such as people, government and business. It is the amalgamation of all applications that are ICT
enriched models of e-governance, the models are G to G, G to E, G to C and G to B. The main purpose behind this is to attain competence, usefulness, pellucidity and answerability the above models of e-governance. The grand social demand and advancement of the technology is there and almost all walks of life including higher educational institutes (HEIs) could be run through e- governance. The perfection in the system is accessible through framework of grid computing. It is a kind of a technology that ensures need based computational and on demand processing of all queries as effectively and efficiently as required by the society. It is possible through e-governance. So, if we are using such e-governance grids to acquire the digital facilities in the form of digital e-governance solutions to the citizens in general, and the stakeholders such as students and scholars in particular. The example of Digital Bangladesh is not hidden from anybody. Thus in this review Bangladesh HEIs are proposed as a framework of e-governance grid ensuring standard academic qualities to broader the e-governance in culminating and building digital Bangladesh. Gupta, A., & Bansal, R. (2013, April) highlights the benefits of e-governance in India. According to him that much experimental work is in progress in India. As Information And communication technology (ICT) has enabled E-governance to run effectively, so citizens and also the government there are going top priority to it. Not only services are provided in the best way but also the same is done through a transparent manner. Therefore, in India, earlier implementation of e-Governance on the cards. They consider the same effort in fact to bring the public in a direct access to IT. It is reportedly believed that a country like India is facing multi-dimensional challenges because of a wide range of issues such as poverty, ignorance, illiteracy, insufficient basic infrastructure and many other socio-linguistic and cultural issues. As the have benefited a lot due to e-Governance schemes initiated by Indian government, so their analysis is also given in this review regarding future of e-Governance in India. According to Mohammed, M.A. (2012) , Iraqi education, nowadays, is on the right track to flourish its institutional strength. Main purpose for establishing its educational and academic worth in the world. It was two years before in the year 2012, that the Iraqi educational authorities gave ten thousand scholarships in Phd to all Iraqi students. Due to this their educational strength rose up and there was a marked increase in graduate studies in all fields. The number of private and public universities has also been added by more than ten thousand universities since 2003. In Iraq it is amazing fact that all the universities use e-governance to connect with MOHESR. So there we find independency and stability in education sector by enhanced use of internet and effective databases. What is still required is that universities be given more powers to execute their own planes more effectively without much interference from MOHESR, which has been center of all powers. Through this paper an effort has been made to design a unique data ware house platform so that
all the universities databases may be combined in one common warehouse with e-governance technologies. It will ultimately result into sharing of the information effectively with active use of data warehouse applications and DW technologies.

3. Research Design

The research methodology used in this Independent study is ‘QUALITATIVE’ one. A thorough review of few of the following cases is given in form of extracts as under:

3.1. Extract - I

3.1.1. Theoretical Outline for presenting technology based governance in University Administration

This study proposed by Subrata K. D., Sobhan M. A, 2007. The authors have focused their research on raising e-governance models on university levels by adopting it to perform in better way by ensuring not only the transparency but also improved quality in disseminating education and administration.

The authors also describe fully at length, all the possible categories and subject descriptors. They have marked management, design and standardization as the general terms for their work with laying main emphasis on e- governance framework, university administration.

The study provides an insight for readers to bring out revolutionary changes that can result into an effective and holistic learning environment. It is a pre- requisite for e-governance. The clear definition of e-governance models and its linked research is a great effort on their part and is of a leading nature. The proposed three frame works are marvelous on different spectrums and are cited as illustrated reference:

3.2. Extract – II

3.2.1. E-governance in Education: The above researchers have done an exclusive study encompassing and elaborating almost all aspects of e-governance in education. They have also given a form of e-governance to execute and run services with full convent access to the information and the management by making them more transparent and accountable to every related quarter. They ensure utilization of e-governance tools to empower faculties and students as the major stakeholders. The provision of fully accountable transparent is their chief concern along with an enhanced approach for efficient teaching as well as administrating. Thus, the authors fully display: E-administration, E-services and
E- participation, thereby resulting in an improved education system free of all issues and challenges.

3.3. Extract – III

3.3.1. MPRA: E-governance Of Universities: The above researchers have laid down various proposals for raising e governance at university level by following their proposed new digital e-governance platforms. They devise a model which gives effective flow of economic activity models into the network of higher academic institution. They have given various effective transactional phases also. It is given in their research paper that there is a lack of various legislative works and legal regulations to transform the co existent framework into their proposed form of e-governance. The study discusses various benchmarking manuals for universities. He one of the effective tool helping and promoting systems based on e-governance. It can be illustrated through following figure displaying Inter-relations in the field of e-governance.

![Interrelation in the field of e-governance](image)

Figure 4 : Inter relation in the field of e-governance (Mario Raposo, 2006)

3.4. Extract - IV

3.4.1. E-Governance in India – Problems and Acceptability

This research is rather a broad based and generalized form of effective study for e-governance in India. It mentions for an effective use of information Technology based on troika of ICT illustrated as under:
E – Governance Model for Universities

The authors also have discussed on various E-governance projects and acceptability of it in Indian environments. The contents are very helpful for devising a model for e-governance at university level too. The overall atmosphere and cultural values of South Asian countries are inter-related and common, thus having homogenous society the research matter is quite helpful for adopting at university level too.

3.5. Extract – V

3.5.1. “A common outline for technology based government: Description, Issues, prospects, and achievement”

This research based study is really a great effort on the part of above authors to provide a research work exhaustively and objectively. It provides in detail and depth the concept involved and also discusses exclusively all the aspects of E-governance.

It has given the unique idea of E-government by definition and clarifies the concept through figure:
This study rightly provides various levels and very easily one can extract out the required relevant information and can right benefit from it.

Illustrated pyramid E-government levels are shown as under:

Thus, it is the best full of all requisite information helpful and useful for devising an E-governance model at university levels.

4. Proposed Model and Results

The independent study of the various models for e-governance at universities are no doubt a great way to follow but I want to raise my own model having in view the following weakness in the case studies referred in literature reviews.
4.1 Weaknesses of the referred systems for e-governance at university levels

These are as under:

The frameworks given are not fully equipped with all the pre-requisite factors to run them properly.

i. There are not much close relations mentioned between the academic faculties and administrative high-ups.

ii. No access of information for all quarters is available in the given infrastructure.

iii. No active participation is shown by the main stakeholders (Students and Parents) in the related policies directly affecting them. These are normally expounded and given by administration itself. Thus indicating a gape among various quarters.

iv. It has been observed that very less legislation has been done in this regard.

4.2 Why e-governance at universities level:

i. E-governance seeks to achieve for better success in solving the multidimensional issues suffered by the major stakeholders in the universities. Through e-governance we can acquire perfection not only in decision making but also in devising policies to tackle problems arising from time to time

ii. E-governance is the lone and only means to have indirect access to maximum possible number of the related problems.

iii. E-governance would bring the modern technology at the very door step of universities, thereby accessing all sorts of information to all related persons but it acts as a tool of ‘check and balance’ on all persons who make use of it.

iv. E-governance would bring not only the perfection in processes of learning but also in all other related fields. It may result every classroom into the ‘e-rooms’ where the persons may have direct access to internet, e-mail, EDI, Smart cards, fax, pad etc.

4.3 Proposed Model for Universities:

There is a strong desire for raising universities in Pakistan that are fully equipped with the latest and updated modern techniques. Government model for universities may be divided into four categories:

i. U 2 ADMIN (UNIVERSITY TO ADMINISTRATION)

ii. U 2 ACAD (UNIVERSITY TO ACADEMICS)
iii. U 2 P (UNIVERSITY TO PARENTS)
iv. U 2 S (UNIVERSITY TO STUDENTS)

4.4 Explanation

All the above E-Links would operate through internet and LMS Accounts and all the above persons would be well linked with one and other and operate easily without much effort and time consumption. The flow of information would be so accurate that everybody related will get maximum of it.

4.5 Results:

The effective working of above model universities in Pakistan would in Pakistan. It would be a hallmark of following features:

i. Pakistan would practically enter in to 21st century.
ii. Universities would factually become hubs of great academic treasure.
iii. Every single flow of information would be accessible by all related quarters.
iv. Administrative actions and monitory transaction would be transparent and crystal clear before all interested persons.
v. Everybody is held accountable with 100% transparency
vi. There will be a boom in education sector and the unflinching and disinteresting attitudes and behaviors will be routed out revolutionize system of education from the society.
vii. Subsequently, a great influx of students will spring out both inwards and outwards directions.
viii. A huge number of skilled expertise would be raised up a sea of human resources.
4.5 E-LINKS OF PROPOSED MODEL:

- E-rooms
- E-conference halls
- Video conferencing labs

4.6 E-Governance and Economy:

The proposed model would be helpful and beneficial for the economic well-being of Pakistan as follows:-

i. A great number of expertise would be nurtured and they would be enough capable to bring prosperity to country by providing services.

ii. E-Governance would ultimately result into perfection of service sector performance vise

iii. E-Governance in universities would also result into a establishing e-government on national level, with the fastest e-transactions economy would flourished.
Thus we can draw a graphical illustration as Under:

![Graph showing social indicators](image)

**Figure 8:** E-gov in Uni Social Indicators

### 4.7 Explanation

The bars given in the graph clearly show that if e-Governance in universities in Pakistan is introduced it would result into perfection of all related quarters with gradual increase in economy there will be boom everywhere. If perfect expertise are produced then their allocation in governmental and private sectors will be maximized and specially the gap between different quarters will be minimized.

### 5. Conclusion:

It may be concluded that e-governance in universities is very necessary and also a pre-requisite for not only academic excellence but also for positive development of useful effects on national level.

### References


E – Governance Model for Universities


[8] Education in Bangladesh”; published in the proceedings of8th International Conference on Information Technology


