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e-Governance at University of Kashmir: Bringing Efficiency & Transparency

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Abstract

e-Governance is considered key to better governance. Institutions around the world are initiating various e-governance initiatives for delivering more transparent, efficient and cost effective services for its stakeholders. Changing with the time, the University of Kashmir has conceptualized two main e-governance projects / initiatives viz. Examination and University Admission system. This paper gives an overview of the e-governance initiatives taken up by the University and benefits reaped by establishing these services for its stakeholders.

Keywords: e-Governance,ICT,e-Government,e-University.

1. Introduction

The term 'governance' comes from an ancient Greek word, kebernon which in simple terms means to steer. In normal course, governance is the act, process, or power of governing the government. e-governance is the process and service by which the government services and information is provided to the citizens through the use of internet and other Information & Communication Technology (ICT) services. Convenience, comfort, affordability and easy to use are the main aims to drive the citizens to e-governance. The main use aim of the service is to drive the citizens to e-governance initiatives launched by the government, in a more transparent, affordable, easy to use manner. This makes the Government services more credible, transparent, efficient, accountable to the citizens and to empower citizens through access & use of information.

Governance is the act of governing. It relates to decisions that define *expectations*, grant power, or verify performance. It consists of either a separate process or part of

management or leadership processes. A government typically administers these processes and systems.

e-Governance is the process by which traditional governance is modernized so as to facilitate citizens with improved services and to ensure smooth government using ICT applications. e-Governance involves new ways of governance, leadership, debating, delivery, investment, transparency, etc.

2. Need for e-Governance

Governments and public sector organizations around the world are facing to reform their public administration organizations and deliver more efficient and cost effective services, as well as better information and knowledge to their stakeholders [3]. E-Governance is an effective use of Information & Communication Technology (ICT) to improve system of governance that is in place and in order to establish E-Governance of government services, we need to understand various types of services offered by the government. In India there are services offered by Central Government, State Government besides there are autonomous bodies to distinguish there are Central Universities, State Universities and Private Universities having varying enrollments and requirements.

Through the E-Governance, the government services can 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.

Good governance is considered to have eight major characteristics - Participation, Transparency, Effectiveness and Efficiency, Responsiveness, Accountability, Equity and Inclusiveness, Rule of Law, as in for the effective and efficient governance [10]. If all these properties revolve around the ICT, it would emerge as one of the best solutions for the citizens and ensures that beneficiary of the government services get it as citizen centricity, service oriented and in transparent manner. E-Governance is not about software and hardware, but about people and processes, it is to support and simplify governance for government, citizens and businesses. The use of ICT can connect all three parties and support processes and activities.

3. e-Governance Model

According to Gartner [6], e-governance will mature according the four-phase e-governance maturity model.

3.1 Phase **•**: Information - Presence

In the *first phase*, e-Governance means, publication of information on the web, providing the public (G2C & G2B) with relevant information. The government information is available to the public electronically and is visible 24x7x365 days a year; processes are described and become more transparent, which improves democracy and service.

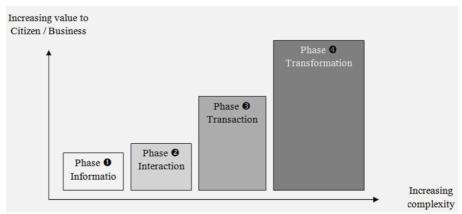


Fig. 1: E-Governance Maturity Model (Gartner, 2000).

3.2 Phase **②**: Interaction - Intake Process

In the *second phase*, the interaction stage offers simple interactions between governments and citizens (G2C), government to business (G2B) or government agency to government agency (G2C). Interaction stage websites provide e-mail contact and interactive forms that generate informational response. Application intake can be done online round the clock, which normally would only have been possible at a counter during opening hours.

3.3 Phase **3**: Transaction - Complete Transaction

With *phase three*, the complexity of the technology is increasing, complete transactions can be done without going to an office as fee paying for services/renewals can be done online, or submitting bids for procurement contracts. Examples of online services like filling online admission forms, examination forms, visa and passports etc.

3.4 Phase **4**: Transformation - Integration & Organizational Changes

The *fourth phase*, is clearly aligned with the concept of governance, involves a reinvention of how government functions are conceived and organized. In this phase cost savings, efficiency and customer satisfaction are reaching highest possible levels.

4. e-Governance Challenges

All implementers and drivers of e-governance initiatives agree that the biggest challenge of deploying e-governance is not technology but change management. Change management is important not only in terms of cultural change but also in terms of changing operations and processes workflow that the automated environment will introduce.

It's important to educate people at all levels about the benefits of technology. The various benefits and advantages of e-enabling the system should be communicated clearly right at the beginning to ensure popular support, which will lead to greater chances of success. People need to be made understand that the introduction of IT will not take away existing jobs but will make them easier, and if less manpower is

required for operations the staff can be re-deployed elsewhere with no threat to their career growth path.

The key challenges with electronic governance are not technology or Internet issues but organizational issues like [11]:

4.2.1 Redefining rules and procedures
4.2.2 Information transparency
4.2.3 Legal issues
4.2.4 Infrastructure. Skill and Awareness
4.2.5 Access to right information
4.2.6 Interdepartmental collaboration
4.2.7 Tendency to resist the change in work culture

5. e-Governance at University of Kashmir

The University of Kashmir has established a full-fledged Directorate of Information Technology & Support System (IT & SS) for its IT related activities. All efforts to modernize the system of governance through the implementation of E-Governance in the University and its established subsidiaries started with an ambitious project of e-Governance in year 2008; The project in collaboration with Ministry of communication & Information Technology, Govt. of India, New Delhi with an aim to bring transparency in University, admissions, student registration, examination and administration.

To begin with, the University made available on-line services pertaining to admission, examinations & its other allied activities. Information centers have been established under the e-Governance initiatives in all government-affiliated colleges ensuring the transmission of data through e-based mechanism on University Wide Area Network. These centers serve as e-services delivery centers for the students at their respective colleges & regions as well as support centers for the respective colleges by digitizing the data at their sources.

The entire e-Governance solutions are designed & developed in-house through a highly competent, committed & capable group of engineers working with a missionary zeal. To ensure development of quality solutions of international standards, the services of multinational companies through consultancy & collaborative exchanges are hired. This has helped in University developing its own core competencies. The E-Governance services developed and implemented generate sufficient revenue to meet E-Governance related various budgetary requirements for salaries of man power, upgradation and maintenance of IT infrastructure. The revenue is generated through different sources including IT service charges, consultancy & trainings.

5.1 Objectives of the e-Governance Initiatives at University of Kashmir

In order to create efficiency, transparency and accountability in the system the following e-Governance initiatives have been taken at University pf Kashmir:

- i. eGov Examination.
- ii. eGov Administration.
- iii. Development of requisite IT infrastructure at each University Campus / Department / Centre.
- iv. Introduction of online services for students, colleges / departments, paper-setters & evaluators.
- v. In-house development of entire E-Governance solutions.
- vi. Establishment of one Information Centre at each University affiliated college with appropriate infrastructure, connectivity and manpower.

5.2 e-Governed Systems Developed, Rolled and Live at University of Kashmir 5.2.1 E-Governance of Admission System

The e-governed system for management of the University admission processes automates the processes online and it has the following features:

i. Ensures	onl	ine	su	ıbmis	ssion	of
Application	ons	forn	ns	for	entra	nce
tests.						

- ii. Auto Filled Academic Details
- iii. Auto-Eligibility Check
- iv. Campus Preferences
- v. Auto Roll No Allocation
- vi. Exam Centre Allocation

vii. Auto generation of e-Admit Cards

- viii. Form Printout & Fee Receipt
- ix. Pay at any J&K Bank branch
- x. Submit Hardcopy at any College
- xi. Scanning of OMR Sheets
- xii. Auto Generation of Merit List, Selection List and Waiting List

e-Report Generation

List of candidates (Date-Wise, Category-Wise, District-Wise, Gender-WiseProgramme-Wise Statistics

5.2.2 E-Governance of Registration System

The e-governed based registration system of the University is a complete solution for University Registration System and is capable of registering about 1 Lakh students every year appearing in various Under Graduate (UG), Post Graduate (PG) and Professional Courses. It's also capable of storing academic details of all the UG, PG and Professional Courses students from 2007 onwards. The e-registration system has the following features:

i.	Online System for Student Registration	v.	E-Migration	Certificate
	through Colleges		Module	
ii.	Web Based Registration Verification	vi.	Online Migrat	tion Dispatch
iii.	Registration Revival Module		Module	
iv.	Auto Verification of Students	vii.	Report	Generation
	riate verification of Stadents		Modules	

5.2.3 E-Governance of Examination System

Under the e-governance of examination system, the following processes have been e-governed and are live:

Pre-Conduct processes of examination viz. online submission of auto verified / filled forms and acceptance, updation of online forms, fee reconciliation and e-admit cards.

Post-Conduct processes of examination viz. e-governed system for auto roll number allocation, centre location and centre notification.

E-Enrollment generation system for result processing.

5.2.4 E-Governance of Student Award System

This system automates the end-to-end process of assignment and submission of the students' marks award rolls. It has made the process error-free and reduced the time and cost-overhead involved in the manual submission process. The features of e-award system are:

- i. Management of courses offered.
- ii. Intake capacity at each department viii. / college / campus.
- iii. Management of all evaluators / subject Experts
- iv. Management of the University's academic sessions.
- v. Maintaining course structure of all programmes.
- vi. Semester-wise subjects in each programme.

- vii. Optional and core papers.
- viii. Auto-assign, un-assign & reassign awards by Head of Department (HoD).
- ix. Deadline for submission set/extended by HoD.
- x. Backlog candidates / old cases also handled.
- xi. Randomized coding and decoding of answer scripts.
- xii. Online filing and submission of e-Awards.
- xiii. Auto-generation of evaluation bills for evaluators.

5.2.5 E-Governance of Grievance Redressal System

This e-governed system automates all processes related to student counseling, queries, complaints and suggestions pertaining to various academic and administrative departments of the University. It provides a reliable and time-efficient method of grievance redressal and information dissemination for various stakeholders of the University including current students, teachers, administrators and other employees.

6. Conclusion

The initiatives taken by University of Kashmir have not only brought improvement in the system but also these e-governed services have made information available to the citizens round the clock in a convenient, efficient and transparent manner resulting in good governance by obtaining its eight major characteristics - Participation, Transparency, Effectiveness and Efficiency, Responsiveness, Accountability, Equity and Inclusiveness, Rule of Law, as in for the effective and efficient governance. Success of the E-Governance is not only determined by technology but also by the consequences & acceptability by the society in general & stakeholders in particular. Universities image in the society has levitated high and these initiatives taken have played a vital role in University achieving grade "A" accreditation.

7. Acknowledgments

Taking these initiatives wouldn't have been possible without the support from Department of Electronics & Information Technology, Ministry of Communication & Information Technology, Government of India. Support from top management at University of Kashmir played a vital role in its successful implementation.

I would be failing in my profession, if I don't pen down here, the dynamic leadership qualities rendered by our former Director IT & SS & Chief Coordinator (Late Dr.(Er.) Mehraj Ud Din Dar) in achieving target oriented objectives i.e. transforming the University System into an efficient and transparent system which is benefiting the society in general and students in particular. We continue to improve and create more e-governed systems in the University of Kashmir for more transparency, accountability, better reliability and service.

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