



## e-Governance in Karnataka – An Overview

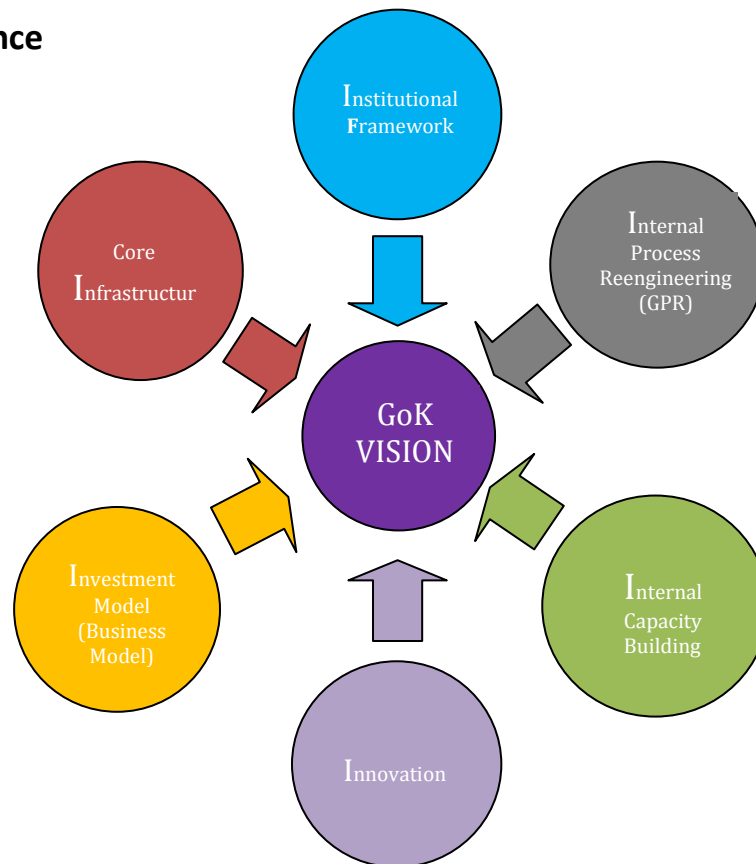
The Government of Karnataka (GoK) was a pioneer in leveraging information and communication technology (ICT) for better governance and has been at the forefront of implementation of electronic-Governance (e-Governance) initiatives in the country. GoK conceived and implemented a number of e-Governance projects like computerization of land records (Bhoomi) and treasury operations (Khajane) much before announcement of the National e-Governance Plan (NeGP) by the Government of India (GoI) in May 2016.

### Challenges in Designing and implementing e-Governance

The Department has, in its existence of 8 years, to its credit a number of pioneering initiatives. Unlike projects in other sectors, e-Governance is an area where there are no precedences or experiences to rely on. Some of the key challenges in designing initiatives include -

- Computerization of programmes given that the technology keeps growing at Moore's law's pace.
- Designing appropriate business models
- Change Management challenges
  - Internal stakeholders
  - External stakeholders
  - Political machinery
- Innovative response of GOK to the challenges – “6-I Model of e-Governance”
- Given this context, the Department has developed and implemented a 6 – ‘I’ strategy for e-Governance in Karnataka. The elements of these are
  - Creating appropriate Institutional framework
  - Creating necessary core e-infrastructure to enable agencies/ departments to plan and implement initiatives
  - Enabling Internal Business Process Reengineering
  - Designing appropriate Investment (Business) Model
  - Internal Capacity Building
  - Innovations in use of technology for delivering better outcomes for the citizens

## '6- I' e-Governance Framework



Six- I framework for e-Government, developed by DPAR (e-Governance), Government of Karnataka

### **Institutional Framework for e-Governance:**

e-Governance has been a core focus of the Government of Karnataka. Realising that the appropriate Institutional Framework is a pre-requisite to translate a vision into reality, the Government has put in place necessary policy and legal framework as well as organizational structure for e-Governance.

### **Legal and Policy Framework:**

Policy lays down principles/guidelines that can lead to achievement of a given goal. Policy framework comprises vision statements, guidelines, laws, rules, etc. Some of these elements adopted in Karnataka are:

## **Vision**

In terms of vision, e-Governance Department has focused on the goal of creating a single window delivery mechanism for Government Services to the Citizens of the state. The vision guiding the Department is:

*“To Enhance and Promote the use of IT in the functioning of the Government in order to make the required information available to all Citizens and to provide all Services in an Efficient and hassle-free manner and identified services on an On-line basis”.*

The Department seeks to enable Government to provide “Any Time, Any Where and Any Device” service to citizens.

**Legal Framework:** Government has enacted two important pieces of legislation to give teeth to implementation of e-Governance initiatives. These include:

- Karnataka Information Technology (Issue of Digital Extracts and Certificates for e-Governance Projects) Rules, 2007: These rules provide for a comprehensive process for delivery of electronic delivery of e-Governance services to citizens. The rules, among other things, provide for -
- Appointment of departmental document security controllers, departmental digital certificate controllers and e-Governance digital systems controllers and supervise their functioning,
- Supervise the departmental e-Governance centres and conduct periodical audit of their activities,
- Notification of e-Governance services,
- Appointment of e-Governance delivery centres and organizations,
- Karnataka Transparency in Public Procurement Act, 202: Amendment issued in 2008, making e-procurement a part of this act.

### **Organisational Framework:**

The importance given to the e-Governance can be ascertained by the fact that a separate Department of DPAR (e-Governance) was created by Government in 23, to plan and leverage the ICT for the benefit of the common man. This is a unique feature, as no other state had a separate Department for e-Governance. Creation of this Department as part of Administrative Reforms stems from the strong conviction of the State that e-Governance is a tool to bring about administrative reforms.

### **Department of e-Governance plays the following roles:**

- Creation of Policy framework, setting the vision and guidelines for e-Governance projects.
- Creation of Administrative framework for approval of e-Governance Projects of all the Departments.
- Creation and maintenance of Core e-infrastructure that can be used by Departments for planning and implementing e-Governance initiatives.
- Development and promotion of common standards in designing of the e-Governance projects.

The Department has created two unique institutions to give thrust to planning and implementing e-Governance infrastructure that can be used by all the Government Departments for planning and implementing e-Governance initiatives. These are:

Centre for e-Governance: A Society created in 2000 with the mandate of establishing and maintaining the core e-structure such as Networks, Data Centre, core applications and capacity building activities.

Directorate of Electronic Delivery of Citizen Services (EDCS): a Government Department mandated with the operations of common citizen service delivery centres such as Bangalore One & Karnataka One.

This institutional structure is unique to Karnataka.

### **Ecosystem for Approval and monitoring of e-Governance Projects:**

Government of Karnataka has put in place a complete ecosystem for approval and monitoring of the e-Governance Projects in Karnataka. This includes:

### **Oversight mechanism common to all the Departments:**

- i. Empowered Committee under the Chairmanship of Chief Secretary to Government, with Principal Secretary (e-Governance) as the Member Secretary: For scrutiny and approval of all the e-Governance Projects in Karnataka.
- ii. Annual Action Plan Approval Committee, under the Chairmanship of Principal Secretary (e-Governance) to review and approve annual action plan concerning e-Governance in all the Departments.
- iii. Core Committee on e-Governance, under the Chairmanship of Prof. S. Sadagopan and comprising of experts from academia, industry and Government to review the e-Governance status of departments and suggest roadmap.

### **Committees specific to each Department**

- i. Project Implementation and Approval Committee under the Chairmanship of respective Secretary
- ii. Technical Advisory Panel with external experts for technical scrutiny of e-Governance Projects of the respective Departments

### **Core e-Infrastructure:**

Establishment and maintenance of the core infrastructure to enable Departments to plan and implement e-Governance initiatives. e-Governance Department through the Centre for e-Governance provides the services of the core infrastructure to all the Departments. These include:

- MobileOne, KSWAN, KSDC, KSECLAN, Mail Services and SSDG [data year – 2016]

# STRATEGIES

## Internal Process Engineering

Government Process Reengineering is one of the critical elements that the e-Governance Department has focused on. The Department has adopted the following approach to enable this:

- I. Create a common core e-infrastructure platform, such as KSWAN, SDC, etc. to enable bring about GPR. This includes,
  - a. Development of application, eg. HRMS, e-Proc, etc.
  - b. Creation of backend infrastructure for workflow delivery, eg. Govt. Business Centres in Taluks under KSWAN
  - c. Hosting of centralized application, database, etc. eg. SDC, KSDC
  - d. Creation of frontends like Bangalore One and Karnataka One
  - e. Provision of gap-filling IT infrastructure such as computers, printers, scanners, connectivity, etc., to enable workflow automation. For eg. Provision of computers to DDOs for using HRMS, computers to offices for eProcurement.
- II. Working with and facilitating GPR in major departments having high citizen interface, to enable them to deliver citizen services. This ensures maximization of impact of process reengineering.
- III. Develop and implement core initiatives that bring fundamental changes in working of all Government Departments, eg. HRMS and eProcurement. These in turn create capacity and experience amongst the Government Departments to take up further GPR in respect of their other core services.
- IV. Create legal framework for delivery of services electronically: Rules have been formulated as early in 2007 to enable the Government Departments to electronically deliver the services. Rules are called the 'Karnataka Information Technology (Issue of Digital Extracts and Certificates for e-Governance Projects) Rules, 2007.
- V. Issue of Digital signature certificates: DSCs are issued to the concerned officials of the Government to ensure digital signing of the documents and thus ensure security and accountability.

The above strategy has been successfully implemented. Some of the Departments where Process Reengineering has been done include the following:

- i. Revenue Department: Issue of various certificates (38 different certificates) such as Caste, income, living, agriculture, etc., through Nemmadi RDS application
- ii. Revenue Department: Societal Security Pensions (5 Services)
- iii. E-Procurement: Completed Process Reengineering of procurement process implemented in Departments and agencies
- iv. HRMS: Completed Process Reengineering of Employee Paybill generation – implemented across all the Departments.
- v. Treasury Department: Khajane – Financial Management of the Government
- vi. Survey and Settlement Department: Mojini – preparation and issue of the maps in respect of individual parcels.
- vii. Registration Department: Electronic registration of the property documents
- viii. Transport Department: Issue of Driving Licenses and Registration Certificates
- ix. Commercial Tax Department: e-Filing of returns and electronic payments of Tax
- x. Food and Civil Supplies: Issue of Ration cards

Initiatives that were listed to go live included:

- Labour department services – with GPR
- Agricultural Department services
- Right to Information application and appeal
- Integrated Decision Support System for Monitoring Developmental Programmes of Karnataka
- Suvarna Arogya Suraksha Yojana – Cashless insurance for the BPL families for 42 identified diseases
- Creation of State Portal and Service Delivery Gateway

Karnataka was the only state (till 2012) in India, where GPR had been carried out to the extent outlined above. It is the only state where more than 50 G2C services are being provided through a reengineered process. This has been done by e-Governance Department.

### **Investment Model:**

Designing of an appropriate business model for e-Governance Projects is extremely critical for sustainability, scalability and replicability of initiatives. Investment or Business Model for e-Governance Projects varies with the nature of projects. Hence depending on the focus of the project, revenue flows (if any), implementational complexity and financial position of the Government, the business model is decided.

### **e-Governance has broadly two business models:**

**Transaction based Revenue Sharing Model:** This is implemented in the projects where there is a steady stream of revenues and where incentive has to be created to maximize the transactions by the Private Partner. This ensures alignment of business interests of the private partner with the service interest of the Government. Examples of such business model are: B1, eProc, etc.

**Capex and Opex on a QGR Model:** This model is implemented where there is heavy investment in the beginning itself and involves O and M, such as core e-infrastructure projects such as networks, data centre. In such projects, Capex is converted into QGR and paid over a period of time. This ensures continued stake for the Partner to maintain the level of services as per the requirement throughout the project period. Examples of such business models are KSWAN, SDC, SECLAN, etc.

Business interests are also secured through proper exit management. Depending on the nature of projects, business model is decided.

### **Internal Capacity Building**

Building the capacity of the Government Departments to conceptualise, plan and implement e-Governance initiatives, e-Governance Department has adopted the following approach to ensure capacity building of the Departments by:

- Organising and facilitating capacity building activities such as workshops, seminars, etc., to create awareness about use of ICT for governance.
- Designation of Chief Information Officers in each Department to create a focal point for management and implementation of e-Governance initiatives.
- Training Programmes – specific to projects as well as general and basic skill building programmes both at the central level and in the field.
- E-Governance Consultancy Support, through Centre for e-Governance: Under this, assistance is extended to the Departments for requirement assessment and preparing e-Governance Project Documents. Consultants are provided the Departments under the NeGP funded Capacity Building Schemes, for the following activities:
  - a. Process Study (as is and to be)
  - b. Gap Analysis (Both technical and process)
  - c. Functional requirement Specification, preparation
  - d. DPR (Detailed Project Report)
  - e. RFP preparation, and
  - f. Bid Process Management

Consultancy support has been provided to many departments to plan and implement initiatives. This enabled launch of major initiatives such as Khajane II, Financial Inclusion Programme, UID Enrolment (ongoing), Registration Services, Urban Property Record Project, etc.

## **Innovations**

Building blocks for realizing the above vision is

- Citizen Centric Reforms
- Administrative Reforms
- Creation of Core infrastructure to enable Government process reengineering

The Department has conceptualized and implemented several e-Governance initiatives that have set the agenda for e-Governance at the national level. Many initiatives of the Government of Karnataka have been unique in the country and have set the agenda for national initiatives by Government of India. Karnataka is rated as the leader in e-Readiness amongst all the states by Gol (NCAER Study, March, 2010).

## **Impact of the initiatives of the Department of e-Governance**

Initiatives that have been launched by the e-Governance Department have led to a profound change in the landscape of Governance of Karnataka. Some of the key impacts include:

- Increasing transparency in administration
- Improved accountability in administration as well as service delivery
- Better delivery of services to the citizens, leading to -
  - Reduction in transaction costs
  - Reduction in drudgery in accessing citizen services
  - Convenience of accessing citizen services under one roof
  - Significant savings to the Government due to improved competition in the e-Procurement process
  - High e-readiness of the State to implement e-Governance initiatives
  - Replication of the efforts elsewhere.

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