ABSTRACT

Like many other developing countries, India has taken great steps in promoting e-governance applications in recent years. E-Governance has become a necessity in public administration in the 21st century. Good governance is expected to be ensured through e-Governance by means of transparency and accountability. The pace of e-Governance is increasing even in states. States are competing with each other in implementing e-Governance for better service delivery. Kerala is not an exception to this. Government of Kerala has implemented several programmes with the ultimate aim of serving citizens in a speedy and transparent manner. This paper discusses some of the e-governance initiatives and projects successfully implemented in Kerala.

Keywords: e-Governance; e-Office; e-Procurement; ICT driven governance in Kerala

INTRODUCTION

E-Government is “the use of ICTs, and particularly the Internet, as a tool to achieve better government” (OECD, 2003, p. 23). According to the European Union “e-Government is the use of Information and Communication Technologies in public administrations combined with organizational change and new skills in order to improve public services and democratic processes” (European Union, 2004). India is one of many developing countries currently launching major e-governance projects aiming to improve government processes, connect government to citizens and build interactions within civil society. However, in a developing country like India, it remains uncertain as to what contribution, if any, e-governance initiatives can make to overall development priorities. Taking note of the potential of e-governance to improve the quality of life of the vast population of the country, the Government of India has formulated a national program – the National e-Governance Plan (NeGP). This plan attempts to cover all the important areas relating to e-Governance – Policy, Infrastructure, Finances, Project Management, Government Process reengineering, Capacity Building, Training, Assessment and Awareness etc. across the Central and State Governments. Today, wide ranges of e-governance projects are being implemented in different parts of the country including projects aimed at reaching areas and people that had traditionally not been connected to the outside world. Kerala is not an exception to this. Government of Kerala has implemented several programmes with the ultimate aim of serving citizens in a speedy and transparent manner. This paper discusses some of the e-governance initiatives and projects successfully implemented in Kerala.

OBJECTIVES OF THE STUDY

The present study aims at analysing various initiatives undertaken by Government of Kerala for the effective implementation of e-governance in the state.

ANALYSIS AND DISCUSSION

The Government of Kerala has a comprehensive view of Information and Communication Technologies as the engine for transforming the state into a knowledge-based, economically vibrant,
democratic state where the benefits of information should reach every single citizen of the rural and urban Kerala. In order to realize these objectives the State Government has initiated a number of measures and projects. As a part of these initiatives first IT policy of the state was announced in the year 1998. The Department of Information Technology was established in the year 1998 and a separate Kerala State IT Mission (KSITM) was constituted as an executive wing under the Department and was entrusted with the implementation of various IT initiatives and the promotion of the state as a preferred destination of IT investments. Majority of the government services have been transformed into the e-mode by this time. It is the Kerala State IT Mission, and autonomous nodal IT implementation agency which provides managerial support to various e-governance initiatives of the Department of Information Technology of the Government of Kerala.

Information Kerala Mission

IKM was set up with the mandate to strengthen local self-governance through ICT applications as early as in June 1999. It is the largest and most comprehensive local body computerization project in the country, which envisages computerizing and networking the 1,209 local self government institutions in Kerala. It addresses the entire issues concerning local body governance, decentralized planning, and local economic development. The Mission started off with a holistic approach and did a thorough system study and identified the requirements for business process re-engineering. The vision of the project is to establish efficient and responsive systems for good governance and improve public service with comprehensive citizen interface mechanisms, community Information Systems etc. A number of application suites covering different aspects of local government functioning were developed and implemented by the IKM. Table 1 gives an overview of the important application software developed by the Mission.

Table 1. Applications Developed by IKM

<table>
<thead>
<tr>
<th>Name</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sakarma</td>
<td>Handling of council/committee agenda, minutes, etc.</td>
</tr>
<tr>
<td>Samoohya</td>
<td>Citizen database</td>
</tr>
<tr>
<td>Samvedhitha</td>
<td>LSGD web portal for all local governments and the Department</td>
</tr>
<tr>
<td>Sanchaya</td>
<td>Revenue and Licence System</td>
</tr>
<tr>
<td>Sanchitha</td>
<td>Repository of acts and rules relating to local bodies</td>
</tr>
<tr>
<td>Sanketham</td>
<td>Ensures transparency in granting Building Permits</td>
</tr>
<tr>
<td>Saphalya</td>
<td>Human resource package</td>
</tr>
<tr>
<td>Sevana</td>
<td>Registration of births, deaths and marriages</td>
</tr>
<tr>
<td>Sevana</td>
<td>Disbursement of social welfare pensions, with electronic money order (eMO) integration</td>
</tr>
<tr>
<td>Pension</td>
<td></td>
</tr>
<tr>
<td>Saankhya</td>
<td>Double entry accrual based accounting for all local governments</td>
</tr>
<tr>
<td>Sachithra</td>
<td>Map suite (GIS) and asset register for local governments</td>
</tr>
<tr>
<td>Soochika</td>
<td>Work flow application that allows status monitoring over the web, and eSMS integration</td>
</tr>
<tr>
<td>Sthapana</td>
<td>Payroll, PF accounting (Municipal and Panchayat employees PF accounts)</td>
</tr>
<tr>
<td>Subhadra</td>
<td>Financial Management System</td>
</tr>
<tr>
<td>Sugama</td>
<td>Cost estimation tool for public works</td>
</tr>
<tr>
<td>Sulekha</td>
<td>Plan monitoring for de-centralised planning at the local level</td>
</tr>
</tbody>
</table>

Source: Compiled from IKM website

Janasevanakendram

The ‘Janasevanakendram’ is a modern computerised front office designed for local self government institutions by the Information Kerala Mission (IKM) for improved service delivery. The intention of Janasevanakendrams is to replace the swarming and non user friendly counters in most Municipalities
with a clean, tidy and people friendly counter with appropriate queue management options. It now runs in all the five Municipal Corporations, sixty municipalities in the state. A unique brand identity encompassing the interior design, furnishing and equipment layout has emerged.

The objective of the ‘Janasevanakendrams’ shall be the following:

1. To provide computerised counters for automatic demand generation from the respective departments or sections in the Municipality and a facility for fast counter collection.
2. To provide counter collection from the public based on receipts issued to them earlier (for payment of the previous installment of property tax) till such time back end linkages are established.
3. To provide counter collection of profession tax based on statements prepared by the drawing and disbursing officers in the respective offices.
4. To facilitate online update of outdoor collections made by field staff on a daily basis so that identification of defaulters of revenue payment can be streamlined.
5. To provide a facility for online registration of births, deaths and marriages and for issue of certificates of registrations (for current registrations only) under section 12 of the Kerala Registrations of birth and death rules.
6. To provide a facility for search and issue of extracts for previously registered births, deaths and marriages as and when the past data entry of records is completed and integrated with the Janasevanakendram counter.
7. To provide generation of daily cash and cheque receipts counter wise and to prepare books of accounts in the local body based on this.

Digital Document File System

Digital Document File System is a web based file tracking & management system. An idea emerged from the vision of "Less-paper office" DDFS was introduced by Department of IT, Government of Kerala. DDFS covers the whole details of a document, beginning with the creation of a Tapal and ending with the closure of the File. Rich and user friendly interface enables the officers to work effortlessly with their files. The system is highly secure with each operation monitored and audited. All users are given access based on their user profile/ roles. It is also known as Digital workflow system. DDFS has been implemented in the following Government departments/ organizations:

- Department of Information Technology
- Directorate of Technical Education
- Kerala State IT Mission (KSITM)
- Kerala Sustainable Urban Development Project (KSUDP)
- Kerala State IT Infrastructure Limited (KSITIL)
- Agency for Non-Conventional Energy & Rural Technology (ANERT)
- Akshaya
- Citizen Call Centre
- State e-Mission Team

Information and Data Exchange Advanced System

Information and Data Exchange Advanced System or 'IDEAS' is a web based online File, Petition and Government Order tracking system implemented by Kerala State IT Mission with technical support of...
National Information Centre (NIC). The system facilitates tracking and monitoring of government documents, serves as a mechanism for reminding the Government departments about the pending status of files and also provides a real-time status of Government files/ petitions. It is developed using open source technology. This system makes the government more transparent and approachable for the citizens, bringing benefits in its overall governance.

Benefits of IDEAS

- The citizens can obtain online information about the current status of their petitions submitted to the government.
- The officers can obtain online information about the movement of files related to their subject, office, department or ministry under the government.
- The Government obtains an advanced information support system that facilitates more efficient administration.

Service and Payroll Administrative Repository for Kerala

Service and Payroll Administrative Repository for Kerala (SPARK) is a web based G2E integrated solution for Service and Payroll Management. SPARK is an attempt to bring the payroll and finance related activities of Kerala State employees within a single application. The system has been developed with a view to cater to the Administration, Payroll and other Accounts activities of Government Establishments. Each employee is allotted with a unique Permanent Employee Number (PEN) through the system.

Main features of SPARK

- Government-to-employee (G2E) web based Personnel Administration and Accounts software for Government Establishments
- Addresses all requirements in Service and Salary matters
- Entire Service Book of each employee is digitised
- Centralized database helps in quick decision making and applying rules and regulations uniformly to all employees
- Salary Processing of NGOs
- All reports in PDF format
- Provision to generate Identity Cards
- Interface for individual employees to view their salary, loan, leave, GPF, accounts and personnel details
- Provision for filing Annual Property Returns for Government Employees and All India Service(AIS) officers
- Processing of Self Drawing Officer's Salary (SDO's)
- Increment Sanctioning
- Leave salary and arrear bills preparation
- Management of recoveries, advances, loans etc of employees
- Online Transfer processing
- LPC Generation
- Transfer Management module
Income tax computation and generation of statutory forms etc
- All kinds of statistical reports using queries
- Comprehensive database of Government offices across the state
- Inbuilt Notice Management Module

Common Mail Service
The Email Server project envisages one another medium of communication to Kerala Government Employees, ie Email. Email provides a better speedy communication with multi platform support solution and it can also be implemented in a short span. The security features available with email ensures the integrity of this communication. This project aims to transmute the present Government communication to another competent level. Each mail account will also have the facilities like calendar, address, file manager etc. This gives us the possibility of having communication round the clock with no interruption and delay. This project is designed and developed on open source software.

Kerala State Wide Area Network (KSWAN)
Kerala State Wide Area Network (KSWAN) is being setup as a backbone of the State Information Infrastructure (SI), connecting Thiruvananthapuram, Kochi and Kozhikode, extending to 14 districts and 152 Blocks of the State. The network will also connect 1500 offices of Government Departments through Wireless and a larger number through Leased Lines and LAN. The infrastructure would support integration of a large number of G2G, G2C services in hand with the applications hosted in the State. An infrastructure like the State Wide Area Network supports integration of a large number of citizen services. For Departments like the Revenue, Registration, Rural Development, Civil Supplies, Police etc., KSWAN provides advantages like high degree of citizen interaction.

State Data Centre
Under National e-Governance Plan (NeGP), State Data Centre (SDC) has been branded as one of the core infrastructure components to consolidate services, applications and infrastructure to provide proficient electronic delivery of G2G, G2C and G2B services. Along with providing services for government's own access, the State Data Centre will act as a mediator and convergence point between open unsecured public domain and sensitive government environment.

Functions of State Data Centre
- Central Repository of the databases for the State
- Secure Data Storage
- Online Delivery of Services
- Citizen Information/Services Portal
- State Intranet Portal
- Remote Management
- Service Integration

Akshaya
India's first step in taking ICT to the masses has been rolled-out in Kerala, named as Akshaya the state's first district-wide e-literacy project, one of the largest known Internet Protocol (IP) based wireless networks in the world. As a part of Akshaya, at least one person in each of the 65 lakh families in the State will be made IT-literate. This project, piloted in Malappuram district has evolved into one of the most dynamic interventions in public-private-partnerships in the State. Akshaya was conceived as a landmark ICT project by the Kerala State Information Technology Mission to bring the
benefits of this technology to the entire population of the State. Akshaya is acting as an instrument in rural empowerment and economic development. Quality ICT dissemination and service delivery facilities (Akshaya Centres) has been set up within a maximum of 2 kilometers for any household and networked leveraging entrepreneurship.

**FRIENDS**

FRIENDS (Fast Reliable Instant Efficient Network for Disbursement of Services) is a single window 'no queue' integrated remittance centre, where the citizens have the opportunity to pay all taxes and other dues to the Government, under one roof at no extra cost. An ongoing project of KSITM, FRIENDS is now operational in all 14 districts of Kerala. The recently launched enterprise enabled 'any-where any-payment system' titled 'FRIENDS Re-Engineered and Enterprise Enabled Software' (FREES), developed by National Informatics Centre, Kerala is a centralised web enabled system that help the citizens to pay utility bills at any FRIENDS centre. FREES Application has centralised database system with the feature utility payment can be done on any FRIENDS or AKSHAYA all over Kerala with a single user interface. Through this system new services or agency can be added without changing the software. It has online data fetching and updation from and to the departmental servers - for Vehicle Tax, Water Bill and Property Tax.

**Mobile Service Gate Way**

M-Governance or Mobile Governance involves the utilization of all kinds of wireless and mobile technology services, applications and devices for Governance. M-Governance, initiated by Kerala State Government, has started with the aim to utilize the strengths of Mobile penetration in the State using the concept of "always-on" connection for the delivery of government services to common people. And there by offers various government department services through mobile phones accessible to the citizens in the field, in the street, at home or other convenient locations on a 24 X 7 basis, rather than the users having to visit government offices or log on to the internet portals to access services. M-Governance project in Kerala is perhaps the first comprehensive project of its kind undertaken by any state in the country. The vision of m-governance project is to build or showcase solutions and applications which will be benchmarks in M-governance services across the world.

**E-District**

E-District is a State Mission Mode Project under the National e-Governance Plan. E-District as a concept proposes integrated, seamless, and online delivery of citizen services at the district level through automation of work flow, backend digitization, integration and process redesign. The project aims to target aggregate services delivered at the district level and to undertake back-end computerization for enabling the delivery of citizen services through Akshaya Centres.

**Integrated Call Centre**

Citizen Call Centre (CCC) is a single window IT enabled facility of Government that act as an intermediate between citizens and Government to interact effectively through telephonic. Envisaged as a government-to-citizen (G2C) interface, the Call Centre enables the quick delivery of critical information, which is otherwise either inaccessible or difficult for the citizens to trace. The relevance of a Government/Public Call Centre is more important in the context of increased focus on e-Governance and with the implementation of the Right to Information Act 2005. CCC is providing all the services in a 24x7 fashion and working on all calendar days except national holidays. The calls are being answered by a team of Call Centre Executives, who are highly experienced and skilled professionals.

**CONCLUSION**

In short Government of Kerala has implemented several programmes with the ultimate aim of serving citizens in a speedy and transparent manner. The state realises the importance of 'Information and Communication Technology' as an instrument for the State's overall development. The state uses the
potential of ICT as an engine of economic growth. It improved productivity speed and transparency in governance and quality of life for the common man.

**REFERENCE**

5. http://www.itmission.kerala.gov.in