Journal of Advances and Scholarly Researches in Allied Education
Vol. XV, Issue No. 6, August-2018, ISSN 2230-7540

Mission Mode Implementation of E-Government Initiatives and the Growth of E-Governance in the State of Kerala

Reghunath V.*

Assistant Professor, Department of Political Science, NSS College, Pandalam, Pathanamthitta, Kerala

Abstract – Kerala, being the number one literate State in India is now the number one digital literate state also. The mission mode programme implementations up to date could establish Kerala a leading IT destination in India. The judicious implementation of a handful of information and communication technology-based government initiatives allowed an improved participation in the e-government by the common people and also generated direct and indirect employment opportunities to them in the information and communication sector. These initiatives also motivated to improve the socio-economic development of the state. Kerala could succeed to build an excellent e-governance administration model in the State, by its tireless efforts since 1990's to till date. The different governments that ruled in Kerala for many years paid more attention in bringing the state's digitalisation a success. The governments were successful in this venture because of the integration of various necessary conditions desirable for the creation of a well-developed e-government in the state. The different governments that ruled in Kerala since 1990 focused on capacity building, infrastructure creation, industry support and creation of e-government applications through different mission mode programmes which are use fulat large for the people of Kerala.

Key Words – Information Missions, E-Government, Digital Literacy, IT Parks, IT Mission, Capacity Building.

----------X----------

INTRODUCTION

The rational implementation of information and communication technology-based programmes and projects now let the people of Kerala to be the fore runners in the process of participation in e-governance. The Techno park that established in 1990 at the capital city of Kerala is the first IT park in India and that also became the real back bone of Kerala's efficiency in e- governance. The establishment of IT parks and its allied activities allowed the state of Kerala to start IT based service delivery systems for its people. Kerala, the number one literate state in India now become number one digital literate state also. All these achievements were made because of the active participation of all sections ofpeople in Kerala. This increased participation of the people in e- governance were ensured by state through the establishment of digital kioskslike Akshaya centres and various other programmes. Kerala is the number one state which could attain the increased participation of public in all its social, political and economic activities of the Government through e-participation.

Kerala has emerged as first digitally powerful State in the Country because of the visionary measures of the Government to inculcate digital literacy to its citizens. This has made the God's own country into the number one 'e-literate' state of India. The acclaimed Akshaya Project and IT at School programme of 2002 are the two wonderful programmes that allowed the State to bring its ambition to be a digital savvy state in India into a success.

E-Government

As the number one e-literate state in India, Kerala could initiate many e- government programmes and policies that are at a time beneficial to both the people and the governments at different levels. e-government is the process of change of the relationships of government with its constituents including the citizen, the business and between its on organs, through the rational use of the tools of information and communication technologies. The transformation of the existing governments into e-governments cannot happen by chance, it can only be the outcome of a long account of dedicated efforts(Satyanarayana, 2004)

Before the introduction of e-government the interaction between citizen and a government agency took place in the government office concerned. But with the emergence of information

and communication technologies, it is now possible to interact the citizen or business in a service kiosk located close to the client, or with the use of a personal computer a client can now interact with the government from their house or in their office.(Pankaj, 2004)

The use of Information and Communication Technology has proven to be powerful tool for reinventing governments. It encourages transformation from the traditional bureaucratic paradigms, which emphasises standardisation, departmentalisation and operational cost efficiency to the e-government paradigm, which emphasises coordinated network building, external collaboration and custom services. (Gupta & RK, 2008)

Technology-driven governance got a major boost in Kerala with a 'Digital Super Highway', enabling unlimited data sharing between panchayats in a secure mode, becoming a reality in the state. This would enable all panchayats in the state use an exclusive VPN (Virtual Private Network) over broadband to share unlimited data without the need to avail normal internet bandwidth. This facility has been set up by the state-owned Information Kerala Mission (IKM), the flagship e-governance project of the state government to strengthen the local self-governance through information and communication technology (ICT) applications (Moneycontrol, 2012)

INFORMATION KERALA MISSION (IKM)

The various Information Communication Technology missions of the Government of Kerala like the Information Kerala Mission, Kerala State IT Mission etc., act as the real catalyst in developing e-governance in Local self-governments throughout the state. The Information Kerala Mission is a self-governing body that created for the execution of e-governance programmes in Local self-governments in the State. In order to fulfil the ambition of smart governments in the grass root levels of Kerala, the mission is determined to develop efficient and friendly software all these days from its inception. As an autonomous body under local self-government department, Government of Kerala, it attempts to strengthen local self-governance through the judicious application of Information &Communication Technologies. It envisages computerisation and networking of local self-government institutions in Kerala. Being the largest and most wide-ranging local body computerisation initiative in the country it addresses the entire range of issues relating to local body governance, decentralized planning, and local economic development.

Information Kerala Mission was actually created for phased transformation of the existing systems of governance into electronic systems. IKM has adopted a humane approach in doing so. Therefore, enabled faster and objective decision-making, more citizen-friendly interfaces and better accountability. IKM methodology homes the employees and functionaries at the dominant stage of this transformation and focuses on their empowerment and capacity building as a machinery for improving performance. The software applications are developed as per the feedback of the users. Emphasis is placed on explanation of technologies and on establishing adequate technical support systems. IKM has taken out extensive pilot deployment of its application suites and is gearing up towards state level implementation in a Build-Transfer-Maintain (BTM) mode.

OBJECTIVES OF IKM

1. Transformation of local bodies into institutions of self-governance by implementing transparent, efficient and responsive mechanisms of electronic governance and delivery of service in a time bound manner to the stake holders.

2. Establish collaborations with local ICT institutions to involve them in the strengthening of e-governance initiatives of the State.

3. To create a mechanism for automating and monitoring various operations at the local body level like plan monitoring and management, accounting, finance, public services, purchase, works and other e-governance related tasks, thereby making a quantum leap in accountability, transparency and efficiency in public service and considerably strengthening the social security network.

4. Business processes re-engineering for improved revenue generation, resource identification and utilization capabilities of local bodies and provide inputs to bring about substantial administrative reforms and modernization of government.

5. Give technical support through district/ state level help desk to ensure network applications are up to date and running properly.

E- GOVERNMENT PROGRAMMES OF IKM

Sulekha

This is a plan monitoring software developed by Information Kerala Mission for Local Self Governments. Sulekha is being used in Kerala for more than one decade to track the plan formulation, appraisal, approval, monitoring, revision processes and expenditure tracking of the plan projects of local governments of Kerala. This web application also

meets the requirements of the State Planning Board and State Government.

Sanchaya

This is an e-governance application software set for revenue and licence system in local self-governments of Kerala. This application software is used for property tax, profession tax, rent on Land and building and licenses such as Dangerous and Offensive (D&O) and Advertisement tax etc. Utility payment services like Hall booking, ambulance, vehicles, crematorium, payment on water bill etc, can also be done through this software

Sanketham

This software developed for granting building permits in a transparent and standardised manner to the public, following the Kerala Municipal Building Rules (KMBR) and Kerala Panchayath Building Rules strictly. This software developed by Information Kerala Mission brings innovative and value-added solutions to the public/client, through the use of information and communication technology.

Sevana

This website contains 10 independent applications for handling different types of activities related to the civil registration system (Birth, Death & Marriage Registration) in local bodies.It is comprehensive and strictly in accordance with the requirements of the acts and rule concerned.

Sanchitha

This is a repository of acts and rules relating to local bodies. The public can therefore, search government orders, circulars, gazette notifications etc. in an easy manner through this repository. Query facility on acts, rules, government orders, court judgements based on titles, sub titles, year, reference numbers etc. and keyword search functionality are other features of this repository.

Sugama

Sugama software is one which aims to bring more transparency in all activities connected with execution of Public Works. It deals with, preparation of estimates, checking the estimate, issuing technical sanction, rates and schedule arrangement of work under any mode as required, scrutiny of tender, selection of executing agency, execution of agreement, measurement of works executed, bill preparation and payment

Sahaaya (School Management System)

Sahaaya school management system is a new application introduced by the IKM for monitoring the attendance and performance of School students in Kerala. By this application the teachers and parents can monitor academic activities other activities of students. The email alerts and messaging system provided by this application creates continuous communication between parents and teachers.

Apart from this, there are so many e-government programmes that made the state of Kerala as the fore runner in IT based governance. For instance, the centrally-controlled, server-based e-ticketing mechanism for film theatres. Information Kerala mission has been assigned to develop an e-ticketing system by the local self-government department, under which the film theatres in the state function. IKM is also in the process of developing an app to book tickets.(revi, 2017)

KERALA STATE IT MISSION

The Kerala state IT mission is another nodal agency that aimed for the establishment of a well-developed e-Governance scenario in the state of Kerala. Over the last three decades, rigorous efforts are being made by the government of Kerala to transform the state into a digital knowledge-based society. The information communication technology is used to achieve the desired economic growth of the state and as a tool for increasing productivity, speed and transparency in governance. By this mission the State Government intends to define ways to control on ICT to renovate the public sector's internal operations and provision of Government services to the public. This change as envisioned by the state involves providing the services and information on an 'anywhere and anytime' basis.

The vision of e-Government programmes of Kerala is to create a collaborative environment that promotes the reinvention of governance by ensuring high-quality services to the public. The State government envisions a future where all components of society can communicate and transact their operations in an effective and efficient manner.

Milestones of IT mission

1995: Techno park, Thiruvananthapuram India's First Technology Park was inaugurated

1999: Kerala state IT mission got established under Department of Information Technology, government of Kerala

2000: Fast Reliable Instant Efficient Network for Disbursement of Services (FRIENDS)as a single window for different departmental services was established.

2002: To bridge the gap between the 'Information Rich and the Information Poor in the society the Akshaya Project launched

2005: Government Contact Centre-Kerala (Citizen's Call Centre) and State Data Centre 1 established

2006: Video Conferencing launched

2008: Kerala State Wide Area Network established

2010: e-District, Malayalam Computing, m-Governance and UID-Kerala launched

2011: CERT-Kerala, e-Procurement project, Kerala State Spatial Data Infrastructure and State Data Centre 2 established

2013: Capacity Building and e-Office started

2016: Digital Empowerment Campaign launched

2017: Kerala Becomes the 1st State to Declare Internet as Basic Right

From the proclamation first IT policy in the year 1998 to till date, the Kerala state has been trying to introduce periodic changes in IT application structures of government. The government has allowed the telecom operators to network the state with optical fibre cable and allowed the mobile internet providers to operationalise wireless internet facility in every nook and corner of the state. The hands-on policy of the State Government has increased the rate of internet penetration even in the remotest villages of Kerala. Along with these activities the Kerala had also established its first State Data Centre (SDC) in 2005 to deliver e-Governance services to its population. This was further strengthened by the addition of second SDC in 2011. These two state data centres now turn as the central repository of the databases for the state to secure data storage, online delivery of services, citizen information/services portal, state intranet portal and remote management service integration of the state.

During these years the Kerala IT has emerged as cybernetic brand because of the state's recognition of the information and communication technology as the key vehicle for the overall reasonable development of the state. It also echoes its commitment to the sector specific deliverables all over the state with brand recognition. Therefore, it is known that the objective of all these IT missions up to date are to establish Kerala as a leading IT destination by generating direct and indirect employment opportunities in the IT sector and improve the socio-economic development of the state.

Kerala could succeed to build an excellent e-governance administration model in the State because of its tireless efforts since 1990's to till date. The different governments that ruled in Kerala for many years paid more attention in bringing the state's digitalisation a success. The governments were successful in this with the integration of necessary conditions desirable for the creation of a well-developed e-governance in the state. The various governments that ruled in Kerala since 1990 focused on capacity building, infrastructure creation, industry support and creation of e-government applications in every walk of life of the people of Kerala.

The IT infrastructure like the high-speed rural broadband network of the National Optic Fibre Network (NOFN) was commissioned in Kerala's Idukki district in 2017 itself. With this, the district, which has a large tribal and rural population, has become the country's first district to have its entire village panchayats connected to NOFN, the world's largest rural broadband connectivity project through optical fibre cable.(Suchitra, 2017)

CAPACITY BUILDING INITIATIVES

International centre for free and open source software (ICFOSS)

ICFOSS is a self-governing organization set up to promote Free and Open Source Software (FOSS) for universal use. ICFOSS launched the first public LoRa WAN in Kerala for Internet of Things (IoT) applications. LoRa WAN is a Low Power Wide Area Network (LPWAN) specification intended for wireless battery-operated things in a regional, national or global network. It is essentially a media access control (MAC) protocol for wide area networks designed to allow low-powered devices to communicate with Internet-connected applications over long-range wireless connections.(Express, 2018)

ICT Academy

ICT Academy of Kerala is a Social Enterprise created in a Public Private Partnership model (PPP) for providing ICT skills to the youths of Kerala and expands their employability prospects in the Industry. The Company is supported by Govt. of India, partnered by Govt. of Kerala and the ICT industry. The government of Kerala is working on an initiative to establish a state-of-the-art e-learning network linking 150 engineering colleges in the State, under plans to equip students with skills to suit industry requirements. The government has approved the detailed project report submitted by the ICT Academy and the Kerala State IT Infrastructure Limited (KSITL) has been designated as the special purpose vehicle.(Nandakumar, 2018)

Knowledge City

In order to support education, innovation and entrepreneurship among youth, the knowledge City Thiruvananthapuram started. It is a tactical

Knowledge City that is base to strong knowledge sector industries, an entrepreneurial spirit and a skilled workforce. The city is regularly exploring new avenues in creating a vibrant economy of knowledge-based public and private organisations. The Knowledge City is focusing on building capabilities in technologies such as Cognitive Science, IOT, Artificial Intelligence & Big Data Analytics, Cyber security, Block Chain and FinTech, Space Applications, and Electric Mobility.

INFRASTRUCTURE

Public Wi-Fi

The 2000 Wi Fi hotspots along with 300 Mb of free data, in selected locations across the state, digitally connect government offices, bus stops, parks, tourist destinations, courts and public seva kendras. Chief Minister Pinarayi Vijayan said public can avail various e-governance and m-governance services without interruption through these public hotspots.(Post, 2017)

Skill Development Platform of Kerala (SDPK)

The skill development platform is a database of two lakh dedicated engineering hands in the state. By linking engineering colleges with the IT parks at Thiruvananthapuram, Kochi, and satellite centres in different parts of the state, SDPK aims to help engineering student's advancement and build their skills and enhance employability. Kerala State IT Infrastructure Ltd., Kerala State IT Mission, APJ Abdul Kalam Technological University, and ICT Academy provide the required support to the platform.

INDUSTRY

IT Parks

To build an ecosystem for IT-led growth and development through synergistic linkages between the industry, government and academia, the Government of Kerala has started three IT parks in three Districts. The government has envisioned a holistic growth plan for the state with the hub-and-spoke model of development. Techno park (Thiruvananthapuram), Info park (Kochi) and Cyber park (Kozhikode) act as hubs for satellite centres in the hinterland. The three IT parks together have more than 800 companies that provide employment to over 1 lakh IT professionals.

Incubators

The incubators are aimed at to strengthen the start-ups and support industrial growth in the Kerala State. It has been developed by the state in a Public Private Partnership model. Today, the Start-up Village of Kerala is a role model for other states in India. Since its inception in 2006, Kerala Start up Mission (KSUM) has helped in the formation of more than 132 companies and hosted many more companies virtually and physically. Kerala Start up Mission (KSUM) is designed to provide a springboard to budding entrepreneurs who wish to launch themselves into the world of technology-based business careers. Entrepreneurs' bright ideas to develop a product or service using advanced technology solutions can find a fertile ground in Kerala start-up Mission.(TS, 2017)

REVIEW OF LITERATURE

'E- Governance for smart cities' is a book edited by TM Vinod Kumar that throw light on the success story of e-governance both in urban and rural areas of Kerala. As per the book one unique feature of Kerala is its comprehensive programme aimed at decentralising e-governance to the district and town levels.(Vinodkumar, 2015)SMEs can drive e-governance in Kerala, says MAIT is an article published in Business Line .There is so much that small and medium units can contribute to e-governance initiatives in Kerala.(Kurian, 2014).'E-Governance in India Interlocking politics, technology and culture 'is a book analysing e-Governance in India and argues that such initiatives did not take place in isolation but followed in the footsteps of broader governance reform agenda that has already made considerable impact on the discourses and practices of governance in India.(Chaudhuri, 2014).'Compendium of E-governance Initiatives in India' is an edited book by Piyush Gupta, R. K. Baggawhich explores various e-governance initiatives in Kerala.(edited by Piyush Gupta, 2008).'e-Government the science of the possible' is book that gives a detailed insight in the subject of a e-governance and e-government. This book analyses the things in theoretical perspective. (J.Satyanarayana, 2004). Various other periodicals are also referred to complete this study.

CONCLUSION

Kerala the land of advanced literacy and knowledge is now capable of handling every activity of Governmental administration in e-government manner. Its visionary measures like the building up of IT parks in 1990s and the introduction of IT training to School children through the programme like IT @ School paved the way for the state to advance in information communication technologies. Gradually, using these two strong foundations, the state could build a strong IT foundation and thereby an IT oriented generation in the state. Along with these programmes, the State could also introduce some mission mode activities to cope the IT revolution and its amazing ability to ease human efforts in daily livelihood of the common people in the state. In Kerala the political socialisation of the people is also different from the rest of the Nation, here the politics is cantered into two blocks led by two national parties. These two parties and their alliances form the government in Kerala alternatively but this alternative changes in government didn't affect the growth of IT in Kerala

because both these governments paid much attention to improvise IT and its allied growth in the state. The Kerala State IT Mission and Information Kerala Mission are the major mission mode programmes introduced by the governments from time to time. From the analysis it found that these two programmes proved very successful in Kerala for building the state into a model e-governance state in India. Further, it sees the possible emergence of an e-democracy in the State of Kerala, if things go in this manner in the state. Many programmes and policies of e- governance that are introduced by the state of Kerala become the bench mark for other states to follow. The state of Kerala in this direction is a model now for the central government to implement new and new IT policies in the Country.

REFERENCES

Chaudhuri, B. (2014). E-Governance in India Interlocking politics, technology and culture. e book: Routledge.

Edited by Piyush Gupta, R. K. (2008). Compendium of E-governance Initiatives in India. Universities Press.

Express, T. N. (2018, April 25). First public LoRa WAN in Kerala to be launched today . The New Indian Express.

First public LoRa WAN in Kerala to be launched today. (2018, April 25). The new Indian Express.

Gupta, P. & RK, B. (2008). Compendium of E-governance Initiatives in India.

J. Satyanarayana. (2004). e-Governemnt the science of the possible. New Delhi: Prentice hall of India.

Kurian, V. (2014, December 5). SHARE SHARE SHARE. Business Line, p. Online.

Moneycontrol. (2012, September). Digital super highway launched for panchayaths in Kerala. Money control, p. Online.

Nandakumar, T. (2018, January 6). Engg colleges to get hitech facility for skills training. The Hindu, p. online.

Pankaj, S. (2004). Electronic Governance. New Delhi: APH Publishing Corporation.

Post, T. F. (2017, August 7). KERALA GEARS UP FOR 2,000 PUBLIC WI-FI HOTSPOTS, TO OFFER FREE INTERNET UP TO 300 MB. The First Post Tech 2, p. Online.

Revi, R. (2017, April 6). Kerala set to do a first in India, set up a centralised movie e-ticketing mechanism. Financial express.

Suchitra, M. (2017, May). The world's largest rural broadband connectivity project through optical fibre cable: Idukki first district – Kerala. Tribal cultural heritage in India foundation .

TS, A. (2017). Commercialising Technical Innovation: Role of Business Incubators in. Journal of Entrepreneurship &, 1.

Vinodkumar, T. (2015). E-governance for Smart Cities. Singapore: Springer.

Corresponding Author

Reghunath V.*

Assistant Professor, Department of Political Science, NSS College, Pandalam, Pathanamthitta, Kerala