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M- GOVERNANCE – AN EFFECTIVE WAY TO UTILIZING E-GOVERNANCE IN INDIA

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Abstract

Information and Communication Technology (ICT) is the most indispensible fastest growing sector in the world. The government can use ICT to provide better services to the citizen as well as in the government departments. The government can interact with the citizen through a service called e-governance portal which is based on internet. E-Governance usage is increased in urban area, but has failed in the rural area due to the lack of proper infrastructure and illiteracy. The government can combine internet and mobile technologies to implement government services more effectively. Mobile devices and its subscription are comparatively higher than the Internet usage in India. The high penetration of mobile devices and the high speed broad band technologies like UMTS (Universal Mobile Telecommunications System), wireless networks offer various opportunities in the government administration to provide better service to the citizen. E-Governance has already improved to speed-up of public utility services, but mobile services with their 24X7 –functionality can facilitate mobile governance to establish a direct contact with the citizens. This paper discusses the various initiatives of e-governance and m-governance in India

Introduction

The main objective of good governance is to give more meaningful fast, reliable and transparent government services. Due to the rapid growth of internet usage in today's age the government also shifts their process of working style from manual to computerize, as well as provide their service through online to the citizen. E-Governance refers to the application of information technology (IT) to improve the services provided by the government sector to benefit the citizen. IT is changing rapidly, and it is almost essential for the government to use the IT services in an effective way to provide hassle-free services to the citizen. Information and Communication Technology (ICT) is a versatile tool for the government to bring the public closure to it and understands every possible need of the citizens' to give them the best possible services (Sigdel, 2007). ICT is a best one to redress citizens' delays in getting information from the government and it is a key instrument that supports the government to have good governance. E-Governance has the ability to govern with unfurling transparency, accountability and to assist them to drastically reduce the cost of government business operations (Harris, 2000). Citizens except their services at their door step and get more update information. With the increase in the popularity of the internet, citizens want to access the information through government websites. The online services provided by the government to the citizen should be used effectively in order to achieve the objective of e-Governance. The major challenges of e-Governance are the lack of infrastructure, internet speed, power, low income level, illiteracy etc. To overcome these problems the government can provide e-governance services through mobile devices. In developing countries like India the mobile penetration is increased quite visibly a lot in the recent years and the mobile device offers various functionalities like internet access, mobile financial transaction etc. The mobile device is considered as a personal device which makes mobile governance more user-friendly and easy to use. The major two factors that hinder the implementation of e-governance are poor penetration of internet as well as the literacy rate in India The mobile penetration is high both in rural as well in the urban population, the government can reallocate the direction of these services to the mobile, which offer government services to citizens to their door steps in their personal handset. The government can offer the government services either by computer peripherals or by mobile devices. The citizen can use any of these services based on their convenience. India ranks second, worldwide in mobile penetration (Wikipedia) and according to a report by the Telecom Regulatory Authority of India (TRAI, 2016), there are 936 million wireless subscribers in India. The Government of India can use the high penetration of mobile which has the capacity to reach more people in both urban and rural areas to provide government services through mobile apps. M-Governance is an alternative channel to offer various services to citizen. The Government of India is developing



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more mobile apps across different mobile operating systems so that every citizen can utilize the services. The mobile devices, small handheld devices and the wireless networks jointly provide a platform to offer government services to the citizen which is called as mobile governance. It can be considered as the utilization of all kinds of wireless and mobile technology, services, applications and devices for giving better services to citizens, business and all government units. The Government can use mobile device as a tool to offer various government services to the citizen. The Government can deliver its services in the streets, in people's homes or other convenient locations, rather than the citizen to visit government offices or log on to the e-government portals to access these services. The main success factors of mobile governance are convenience, availability, and easy to use interface. Convenience means that a citizen can avail all the government services for 24 hours and 7 days without standing in any queue in front of the government offices. To avail the government services, customer need not procure any technologies or devices; he can get all the services with his own mobile device. There is no need of any special skills or training required to use mobile governance because mobile device is considered as a personal device. For implementing mobile governance, no additional cost is required to procure technologies, devices or infrastructure like e-Governance. The citizen can avail these services through mobile devices. To implement mobile governance, the Government has to create a user friendly application through which citizen can get the government services in his mobile phone. He need not have to acquire any special skills or knowledge to use these services. Mobile Governance can also be viewed as an alternative channel to e-Governance. To make a better citizen friendly government, the government authorities can use both e-Governance and m-Governance simultaneously. To reach the government services to rural population in a fast and efficient manner, mobile devices will be a better channel than computers because even in rural population the mobile penetration is very high. E-Governance has already improved to speed-up of public utility services. but mobile services with their 24X7 -functionality can facilitate mobile governance direct contact with the citizens.

Literature Review

ICT and Governance

ICT is an integral part of development strategies of both developing and developed countries. It has great potential to bring in the desired social transformations by enhancing access to people, services, information and other technologies (Dutton et al., 2004). Application of ICT in processes of governance can be considered in two categories *viz.* for improving government processes and secondly for building interaction with and within civil society. The examples of the former category are: dissemination of public information grievance redressal mechanisms, utility payments and billing services (Mitra and Gupta, 2003). With the advancement of ICT e-Governance helps to solve the citizens' day-to-day problem effectively and efficiently with a considerable reduction in cost, time and skill.

E-Governance

The word Government can be said as an extension of Governance or Govern, giving the same meaning. Government is a powerful body, a tool for serving, to promote, to move forward, to rise to a higher level or position. The New Oxford English dictionary defines the word govern is a powerful verb, giving the meaning to direct, to control, to rule with authority. In fact E-Governance system is a power packed mechanism thrown out by the mighty wave of ICT. ICT is an empirical product and provides a platform where people interact with each other. E-Governance provides the easiest and gives better ability to manage all the governing affairs. The main concept of e-Governance is to pay more attention to public good and business interest and also concentrates on revenue maximization. E-Governance is an expanded form of E-Government aided by ICT requires a finly analyzed definition in order to implement uncompromised designs and policies in a successful system. In one simple definition we cannot put all the concept and meaning of E-Governance. E-Governance principally focuses on responsibilities of a politically elected government to effectively interact with citizens to attain the goal of socio-economic policies. E-Governance is the latest trend in the governing process all over the world. E-Governance is not to post all necessary information on the government website, but it is a process of reformed governance. E-Governance denotes the application of IT (Information Technology) to the process of government functioning in order to bring about better governance which has been innovatively termed as SMART governance(Simple, Moral, Accountable, Responsive and Transparent) (Budhiraja, 2003). All the developed nations of the world such as U.S.A, U.K, Canada, Australia and Singapore have adopted IT in a big



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way for e-Governance. Developing nations like India, China, Sri Lanka, Philippines, and Brazil, are also progressing well in e-Governance implementation. E- Governance is an evolutionary and Information and Communication Technologies (ICT) based model that seeks to realize processes and structures for harnessing the potentialities of ICT at various levels of government and others for the purpose of enhancing good governance (Bedi et al., 2001; Holmes, 2001; Okot-Uma, 2000, Saxena, 2005).

E-Governance Initiatives in India

The UNES of 2014 and 2016 focused special attention to recognize those countries with a population of over 100 million. The survey also found a remarkable fact that the countries over 100 million population have a tremendous progress and also registered their efforts to provide e-Government services to their people in spite of various challenges faced by them. Looking at the latest development in the e-Government services which is depicted in TABLE 1. India has recorded a drop of 11 points from the year (107th rank) 2016 to (118th rank) 2014. The retrogression fall of 11 points must be shared by both government and citizens'. India with its high potential of ICT emerged to show its ability in e-Governance. Being strong and serious in its aim the government has taken positive steps to provide valuable and factual information through ICT. India's greatest strength is information Technology (IT). Though we have highly disciplined wizards in ICT fields the desired policies, aim and objectives to provide simple, efficient, accurate services to public are held back due to non-building of adequate infrastructure, lack of literacy, poverty, political instability and high level of corruption etc. Having all the said setbacks, India has registered an unspeakably a commendable progress in the socioeconomic scenario and this will encourage India to go further to make all the so called impossible things possible through ICT.

Table 1 : E-government Development in largest Population countries (source: United Nations of e-Government Development Database, 2016)

	E-Government development Index		World E-Government development ranking		
Country	2016	2014	2016	2014	Population (in millions)
China	0.6071	0.4700	63	70	1,373
India	0.4638	0.3567	107	118	1,266
United States	0.8420	0.8510	12	7	323
Indonesia	0.4478	0.4026	116	106	258
Brazil	0.6377	0.5006	51	57	205
Pakistan	0.2583	0.2755	159	158	201
Nigeria	0.3291	0.2687	143	141	186
Bangladesh	0.3800	0.3028	124	148	156
Russian Federation	0.7215	0.5136	35	27	142
Japan	0.8440	0.7152	11	6	126
Mexico	0.6195	0.5150	59	63	123

M-Governance

Kushchu and Kuscu (2004) who define m-government as a "strategy and its implementation involving the utilization of all kinds of wireless and mobile technology, services, applications and devices for improving benefits to the parties involved in e-government including citizens, businesses and all government units". Mobile interface can be used to bridge the gap between the e-governance process and the government department. Mobile communication will help government to reach the citizen in fast way to get a guaranteed result especially in the rural area. (Hellstrom, 2009).In m-governance services, the government has to make services as universally available to all mobile users. The government should not force the citizen to upgrade for new devices in order to activate the m-governance services (Rannu, 2004).

Kaur(2010) suggests the implementation of MANETS along with 4G inparallel with current m-governance projects in India offered through mobile phones. MANET has the potential of constant connectivity and high



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transmission quality. Hellström(2011) studied mobile governance initiatives in East Africa and pointed out the suggestions for the success of m-governance. The three important points are the m-governance services should provide direct value to the end user, it should be marketed and promoted well so that everyone will aware of these services, and these services should be more transparent and accountable which empower trust to the citizen. Poblet(2011) pointed out that through m-governance can open new avenues for public participation and political debate. Even though it unbolts new challenges such as technological choices, target populations, usability, scalability of projects, cost of implementation and privacy issues. Kumar (2016) critically analyzed the Mobile Seva project launched by Department of Electronics and Information Technology (DeitY)in India which is a cloud based platform for all government departments and agencies in the country for delivering their mobile based services through various channels. The success factors include a national policy framework for m-governance, responsiveness of the implementing team, ease of implementation for the departments, portal effectiveness, performance reliability, transparency and participatory design. The challenges identified are the lack of technical knowledge and qualified resources within the government departments, lack of infrastructure support, lack of understanding of the project, lack of understanding about the departments and lack of face-to-face interaction.

M-Governance Initiatives in India

Department of Electronics and Information Technology (DeitY) in India developed m-App store to deploy and delivery of public services through mobile phones. Each state in India has developed some mobile apps for m-governance. Table 2 summarizes these details.

Table 2: Statewise Mobile Applications (source: https://www.mgov.gov.in/)

S.No	States	Total No.of Mobile Applications	Total No. of Downloads
1.	Andhra Pradesh	26	16437
2.	Arunachal Pradesh	4	1341
3.	Bihar	12	4676
4.	Chandigarh	4	4688
5.	Chhattisgarh	4	3079
6.	Delhi	4	1162
7.	Goa	11	3531
8.	Gujarat	10	1205
9.	Haryana	7	3334
10.	Himachal Pradesh	35	13474
11.	Jharkhand	10	21645
12.	Karnataka	4	4434
13.	Kerala	11	951
14.	Madhya Pradesh	13	13260
15.	Maharashtra	68	27283
16.	Manipur	11	5765
17.	Meghalaya	6	806
18.	Mizoram	2	42
19.	Nagaland	1	801
20.	Odisha	12	473
21.	Punjab	20	21362
22.	Rajasthan	30	21051
23.	Sikkim	61	30480
24.	Tamil Nadu	2	718
25.	Uttar Pradesh	3	29503
26.	West Bengal	27	12327

Conclusion

The socio-economic factors like income, education, age, gender and linguistic difference, lack of infrastructure, lack of awareness among citizens are the major issues in implementing e-governance successfully. The government can take a different direction to implement the government services from electronic form to mobile apps. The 'always on' technology of mobile devices will enable mobile devices to be used to receive, send and



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access a huge range of information and services in real time. The Government can use mobile device as a tool to offer various government services to the citizen. The Government can deliver its services in the streets, in people's homes or other convenient locations, rather than the citizen to visit government offices or log on to the e-government portals to access these services. The mobile governance will have a higher usage rate than e-governance due to the large accessibility of mobile devices. To reach the government services to rural population in a fast and efficient manner, mobile devices will be a better channel than computers because even in rural population the mobile penetration is very high. Mobile Governance can also be viewed as an alternative channel to E-Governance. To make a better citizen friendly government, the government authorities can use both e-governance and m-governance simultaneously.

References

- [1] Bedi, K., Singh, P. J., & Srivastava, S. (2001). Government @ Net: New Governance Opportunities for India. Thousand Oaks, CA: Sage Publications Pvt. Ltd.
- [2] Budhiraja, R. (2003). Electronic Governance: A key issue in the 21st century. Electronic Governance Division, Ministry of Information Technology, Government of India. renu@miti.gov.in.
- [3] Dutton, W. H., Gillett, S. E., McKnight, L. W., & Peltu, M. (2004). Bridging broadband Internet divides: reconfiguring access to enhance communicative power. Journal of Information Technology, 19(1), 28–38.
- [4] Harris Blake. (2000). e-Governance. http://www.iadb.org.
- [5] Hellström, J. (2011). Mobile governance: Applications, challenges and scaling-up. In Mobile technologies for conflict management (pp. 159-179). Springer Netherlands.
- [6] Hellström, J., 2009 forthcoming. Mobile Democracy Challenges and Way Forward. In Big Brother and Empowered Sisters, Uppsala University.
- [7] Holmes, D. (2001). eGov: e-Business Strategies for Government. London: Nicholas Brealey Publishing.
- [8] https://www.mgov.gov.in
- [9] Kaur, B. (2010). Factors influencing implementation of 4g with mobile ad-hoc networks in m-governance environment.IJCA on MANET.
- [10] Kumar, R. (2016). Enhancing the reach of public services through mobile governance: sustainability of the Mobile Seva initiative in India. Electronic Government, an International Journal, 12(2), 142-159.
- [11] Kushchu, I. -Kuscu, M. H. 2004: From E-government to M-government: Facing the Inevitable. mGovLab.org.
- [12] Mitra, R.K., & Gupta, M.P. (2003). Evolution of e-Governance in India: Learning from Select Cases, Indian Management. A Journal of All India Management Association, New Delhi, India.
- [13] Okot-Uma, R.W. (2000). Electronic Governance: Re-inventing Good Governance. London, U.K: Commonwealth Secretariat.
- [14] Poblet, M. (2011). Rule of law on the go: New developments of mobile governance. J. UCS, 17(3), 498-512.
- [15] Rannu, R. (2004). M-Governance from vision to reality, Baltic IT &T review, 35, 35-40.
- [16] Saxena, K. B. C. (2005). Towards excellence in e-governance. International Journal of Public Sector Management, 18(6), 498–513.
- [17] Sigdel, S. (2007, April 14). E-Government for Good Governance. Weekly English Spotlight Retrieved February 15, 2011from http://egovernancenepal.blogspot.com/2007/04/e-governance.
- [18] TRAI. (2016). The Indian Telecom Services Performance Indicators July September.
- [19] United Nations of e-Government Development Database, 2016 from https://publicadministration.un.org/egovkb/en-us/reports/un-e-government-survey-2016