2. Bridging The Digital Divide Through Digital India For Effective E-Governance Leading To Financial Inclusion

Dr. Rohini Jha

Assistant Professor, Department of Management, Birla Institute of Technology, Mesra, Ranchi.

Mr. Sunit Prasad

Research Scholar, Department of Management, Birla Institute of Technology, Mesra, Ranchi, India.

Abstract:

E-governance is the rendering of government services and information to the public using electronic means and is a new pattern over traditional approach. The issue of illiteracy, poverty and unemployment in India still persist in spite of the boom in the IT sector such as Internet blue chips, online shopping and nanosecond email. The chapter is an endeavour to present a few facts about the digital divide based on the global and the USA perspective. The chapter discusses the infrastructural bottleneck that exists in India regarding the digital divide that includes electricity, IT penetration, Internet industry and its enabling policy to transform India as a knowledge society. India has made several attempts to overcome the digital divide in the form of e-governance projects. The chapter investigates the efforts to overcome the digital divide which will lead to financial literacy and will result in financial inclusion. The chapter examines how after the launch of the digital India program financial literacy has improved, which is a critical component in financial inclusion. Much effort has been made towards increasing the literacy rate through e-governance initiatives by providing digital infrastructure in rural India.

Key Words: E-Governance, Digital Divide, Access, India, ICTs, Infrastructure, Financial Inclusion

Introduction:

The Information and communication Technology (ICT) is the basis of modern civilization and has brought changes in the economic and social well-being of human actions in almost all areas at a faster pace ((Nandi, 2002).ICT facilitates communication uninterrupted by distance, volume, medium or time, therefore it reduces the time (Fletcher et al, 2000). ICT has changed the way of doing business. It can help in transforming the total number of non-bankers into bank users through a user friendly and low-cost web based channel which will enhance financial inclusion. The issue of transparency can be solved by ICT easily and improves the development process of the system (Jesus, 2003). Access and adoption of technology is very important and a deciding factor to avail the benefits of technology. Adoption rate in developing countries is much lower than in the developed world because millions of people in this world are deprived of access to technology. There is a serious issue of the 'Digital Divide' between who **ICT** those who those have access and do not (United to nations, 2006). Various research reveals that good governance is not possible without ICT (Lawrence and Lee, 1999; Leizero, 2000; Pastor et al, 2004; Norris, 2001; Sumanjeet, 2006) .The paper highlights the importance of overcoming digital divide in India by identifying the barriers of digital divide which will help in good governance and how the Digital India programme will form a digitally empowered society. The paper also outlines the status of financial inclusion in India after the launch of Digital India. There is a digital divide between the rural and urban India (Dasgupta et al, 2002; Nath, 2001; Singh, 2007; Mahajan, 2003; Dutta, 2003).

The chapter is concentrated on India and tries to explore the macro aspect of the digital divide in India. The chapter tries to explore the matter of digital divide within India. Thus, within the context of this chapter, the digital divide essentially means the tele-density, mobile and Internet divide between the agricultural and

concrete areas. The most objective of the chapter is to review the matter of digital divide within the Indian context and address the challenges in bridging the gap of digital divide. It also makes an effort to spot the causes of the digital divide in India. Furthermore, in the end, an attempt has been made to suggest the policies to deal with the challenges of bridging the gap of digital divide in India. This chapter has been divided into five sections. Section 1 deals with the concept of the digital divide. Section 2 discusses this status of digital divide in India. In section 3, an effort has been made to review the causes of the digital divide in India. Section 4 tries to deal with the matter of the digital divide by suggesting some policy options. Section 5 deals with the concluding remarks. The present chapter is concentrated on India and tries to explore the macro aspect of the digital divide in India. The chapter tries to explore the matter of digital divide within India. Thus, within the context of this chapter, the digital divide essentially means the tele-density, mobile and Internet divide between the agricultural and concrete areas. The most objective of this chapter is to review the matter of digital divide within the Indian context and address the challenges in bridging the gap of digital divide. The study also makes an attempt to identify the causes of the digital divide in India. Furthermore, in the end, an attempt has been made to suggest the policies to deal with the challenges of bridging the gap of digital divide in India. This chapter has been divided into five sections. Section 1 deals with the concept of the digital divide. Section 2 discusses this status of digital divide in India. In section 3, an effort has been made to review the causes of the digital divide in India. Section 4 tries to deal with the matter of the digital divide by suggesting some policy options. Section 5 deals with the concluding remarks.

E-Government Definitions:

E-government refers to the delivery of information using digital means to citizens or business or other agencies in a timely manner and also empowering people through access to information without bureaucracy. Government interacts with

citizens in the form of obtaining information, filings or making payments using the World Wide Web (Sharma & Gupta, 2003, Sharma, 2004, Sharma, 2006). Table1 represents the definitions of the e-government of various sources.

Table 1: Definitions Of E-Government Of Various Sources

World Bank	"E-Government refers to the use by government agencies of information			
	technologies (such as Wide Area Networks, the Internet, and mobile			
	computing) that have the ability to transform relations with citizens,			
	businesses, and other arms of government. These technologies can serve a			
	variety of different ends: better delivery of government services to citizens,			
	improved interactions with business and industry, citizen empowerment			
	through access to information, or more efficient government management.			
	The resulting benefits can be less corruption, increased transparency, greater			
	convenience, revenue growth, and/or cost reductions."			
United	"E-government is defined as utilizing the Internet and the world-wide-web			
Nations	for delivering government information and services to citizens."			
Global	"Electronic government (hereafter e-Government) refers to a situation in			
Business	which administrative, legislative and judicial agencies (including both			
Dialogue on	central and local governments) digitize their internal and external operations			
Electronic	and utilize networked systems efficiently to realize better quality in the			
Commerce	provision of public services."			
Gartner	"The continuous optimization of service delivery, constituency			
Group	participation, and governance by transforming internal and external			
	relationships through technology, the Internet and new media."			

The use of ICT in governance facilitates greater participation of citizen in government and the internet is used by politicians and political parties. Therefore, some authors believe that e-government is a subset of e-governance ((Howard, 2001 and Bannister and Walsh, 2002). There is considerable confusion in explaining e-governance and e-government. When the focus is on stakeholders

outside the organisation, it is e-government whereas e-governance focuses on administration within the organisation concerned with the utilization of technology and other resources of the organization.

A broader concept of e-governance deals with all relationship and networks concerning the usage and application of ICT and e-government. It is a procedural approach of basic and standard procedure of administration (Sheridan and Riley, 2006). For e- government assessment, the United Nations' Division for Public Economics and Public Administration has developed a few indices followed by UN member countries. Several parameters and indicators are considered which is summarized in Table 2

Table 2: Parameters And Indicators Developed By United Nations'
Division For Public Economics And Public Administration For EGovernance Assessment.

Parameters I	ndicators
Web Presence measures	1.Stages of government
	websites
2. Telecommunications infrastructure (capacity of country's	2. a. Internet hosts per 10,000
ICT)	people
	b. Nation's population online
	c. Number of PC Penetration
	d. Telephone lines
	e. Mobile phones
	f. Television per 1000 people
3. Human Capital measures	3. a. Human Development
	Index
	b. Information access Index
	c. Urban and Rural
	population ratio

Table 3: Provides The Indices For The Top 10 Countries With The Denmark (0.9150) Being The World Leader Followed By Australia (0.9053) And Republic Of Korea At 3rd Global Position (0.9010).

Table3: United Nations E-Government Survey 2018

E-Government Development Index Top		E-Participation Index Top 11		
10 Countries		Countries		
Country	Index	Country	Index	
Denmark	0.9150	Republic of Korea	1.0000	
Australia	0.9053	Denmark	1.0000	
Republic of Korea	0.9010	Finland	1.0000	
United Kingdom	0.8999	Netherlands	0.9888	
Sweden	0.8882	Japan	0.9831	
Finland	0.8815	New Zealand	0.9831	
Singapore	0.8812	Australia	0.9831	
New Zealand	0.8806	Spain	0.9831	
France	0.8790	United Kingdom	0.9831	
Japan	0.8783	United States of	0.9831	
		America		

(Source: The UN Global E-Government Readiness Report 2018 "From E-Government to E-inclusion")

E-Governance: World View And India's Status.

The United Nations e-Government Survey 2018 finds that citizens are taking advantage of more advanced e-service delivery, better access to information, more efficient government management and improved interactions with governments, primarily as a result of increasing use by the general public sector of data and technology. Most countries have published an incredible amount of

data online, many goings beyond basic websites to supply national portals that function as a serious start line for users to attach to government services in several ministries. At an equivalent time, many developing countries got to devote additional energy to transactional services also because the electronic means of engaging citizens publicly is a means of consultation and decision-making. A number of the countries registered a drop in their country ranking vis-à-vis the UN e-Government survey conducted in the year 2018. A drop in a country's ranking may be a reminder of the necessity to devote greater resources to improving online services and expanding access to telecommunication infrastructure.

High-income countries enjoy the highest rankings within the e-Government development index in 2018 as in previous years. Among the highest five countries within the 2018 United Nations e-Government Survey, Denmark received the very best score, followed by Australia, Republic of Korea, the UK and Sweden. The bulk of positions within the top 20 rankings belong to high-income countries, which isn't surprising since they need the financial resources to develop and rollout advanced e-Government initiatives, also to create a favourable environment for citizen engagement and empowerment. Developed countries have a definite advantage in achieving higher rankings within the survey (comprising of 95 multiple choice questions), as nearly two-thirds of the load of the e-Government development index (an index received from the survey questionnaire) is allocated to the telecommunication infrastructure and human capital components, which both require long-term investment. For emerging and developing countries, the challenge is to take a position altogether in three dimensions – online services, telecommunication infrastructure and education to narrow the present digital gap. In other words, having an excellent website does little in e-service provision if the bulk of individuals within the country cannot read or write, nor if they need no access to the web.

Some developing countries have begun to catch up with higher-income countries despite these challenges. Bahrain for example, has made significant strides in the two years since the previous survey, moving up in the rankings to 13th place in 2010 from 42nd place in 2008. UN report 2018 reveals Bahrain is ranked fifth in Asia and 26th internationally in e-government development efforts. Bahrain's recent emphasis on citizen engagement and the electronic provision of government services has propelled the country into the top 15 in e-Government development, somewhat closer to Singapore which is among the global leaders in the provision of electronic and mobile public services. Mobile technology will become an affordable tool to fill in the digital gap between the developed and developing countries, given the rapid price decline of mobile products. Emerging and least-developed countries have already demonstrated that they are capable of narrowing the digital gap by investing in websites and Web portals and by applying tools such as tele-centres, kiosks, community centres and other similar outlets to increase access to the Internet. They are adopting the use of mobile technology at a fast rate, which will trigger the need to develop more mobile e-Government services. The private sector in these countries has an opportunity to work with the government to create and distribute mobile services. The 2018 survey recorded an increase in the use of mobile technology for communication from Governments to Citizens (G2C), whether it is simple SMS, alert notification or a full-fledged mobile service.

The 2018 survey found that some countries are increasingly active in seeking customer satisfaction through online polls, blogs, surveys and other means. This means that a growing number of nations have recognized the importance of citizen feedback via the Internet and are taking advantage of social networking tools to make better websites and Web portals. Emerging and developing countries have yet to fill the digital gap. The developing countries that have channeled more investment to telecommunications infrastructure, education and

online services could compete with developed countries and in some cases, even score higher. Mexico experienced the foremost significant drop in global rankings. It fell by 27 positions from the 2008 Survey to the 2018 Survey and is currently ranked 64th globally. The degeneration of Mexico's e-Government is especially attributed to the much lower score for online services. Among all the national portals of the developing countries, India has the very best ranking portal with the very best online services score. It's the foremost e-services and tools for citizen engagement. A number of the developing countries who improved their rankings are Iraq, Oman, Saudi Arabia and Turkey, while a couple of them who dropped significantly in their rankings are Azerbaijan, Jordan, Kuwait, Lebanon and Syria. India has improved by seventeen positions from its ranking of 113rd in the 2008 survey to 96th in the 2018 survey. It's vastly improved its online services however the transactional services offered as a part of NeGP still must be further implemented and improved.

Notable climbers within the online services provision to citizens are Bahrain, Chile, Colombia, Singapore and, therefore, the UK, which have joined the world's top performers in online service development. Only a couple of countries are ready to offer many transactional services online at this point. However, countries with the very best scores offer a good range of integrated transactional e-services that cater to several segments of society. They need comprehensive back office integration systems and secure networks on which these e-services operate, giving citizens security and confidence. The US, the Republic of Korea and Canada are the highest three countries in terms of transactional opportunities. The developing countries are well-represented within the top 10 with four countries: Bahrain, Chile, Colombia and Israel. Least developed countries don't have any real e-services, nor are they providing citizens with transactional opportunities. The overwhelming majority of the sites surveyed primarily contain e-information and therefore the beginning stages of citizen engagement with polls

and feedback forms. The highest two positions among the fewest developed countries within the online service assessment visited Bangladesh and Angola.

Action Plans In India:

There is transparency in the governance process by the changed government using electronic means. E-governance has made the government citizen centric by facilitating easy government services and allowing greater public access of information which is a new way of public administration to promote more efficient and cost-effective government. Governance is a wider term which covers the states Institutional management, decision-making processes, implementation capacity and the relationship between government officials and the public e-governance is caused by the use of ICT by the government. Therefore, e-government can be viewed as a subset of e-governance and focuses largely on improving administrative efficiency and reducing administrative corruption (Bhatnagar, S., 2004).

Government of India has launched a number of initiatives during the year 2003-2007. National e-governance Action plan for implementation was approved by the government of India. The plan provided inspiration and provides impetus for the future growth of e-governance within the country. In this plan the standard of speed and implementation of procurement procedures for IT services to the citizens through a single window was incorporated. To utilize the complete potential of personal sector investment efforts were made to market and develop public private partnerships to utilize the complete potential of personal sector investments and the endeavour towards connectivity was extended up to the block level within the states. Alongside the action plan adoption of data Technology Act, 2000 by the Government of India to supply legal framework to facilitate electronic transaction was introduced, establishment of National Taskforce of data Technology and software Development in May 1998, development of centre

of e-governance to disseminate the simplest practices within the area of e-governance to be used by the central and government act as a nodal centre to supply general information on e-governance. Therefore, to form e-government a reality in India, NeGP plan was launched in 2006 with a vision to form government services available to all or any citizens.

Digital India:

Digital India program was set in motion by the honourable Prime Minister, Mr. Narendra Modi on 2nd July 2015 aiming towards Universal digital literacy, delivering government services digitally and development of secure digital infrastructure. All the developing countries are feeling the challenge to prove them globally. So, getting connected globally and upgrading yourself with the latest technology is of prime importance. Though opportunities for growth of India have been created by visionaries of India, they found that citizen participation is important in meeting the challenges the country is facing regarding digital divide, skill divide and financial inclusion. Digital literacy is the ability to understand and use the information in multiple formats from a wide range when it is presented on computers. Digital literacy involves the knowledge skill and attitude to effectively navigate, critically evaluate create or adapt information using a range of digital technologies (Seattle, G., 2014).

The digital India program has been envisioned by the ministry of communications and IT, ministry of rural development, ministry of human resource development, ministry of health et al. to vary India into a digitally empowered society and knowledge economy. Digital India program has facilitated Preparing India for knowledge domain transformation and delivering good governance to citizens by coordinated and synchronized engagements and taking the nation forward digitally and economically.

Digital India aims at a universal digital literacy. All digital resources are universally accessible, all government documents/certificates to be available on the cloud. Availability of digital resources/services in the local language. Collaborative digital platforms for participative governance.

Digital India has improved the job opportunities at its launch and has made a hit of the more than 4 lakh crore investment. With the largest number of IT professionals and very large MSME (Micro, small and Medium) sector, still India has the highest import category of electronic goods because it has not developed its capabilities to manufacture in this sector. The aim of making the net zero import will be accomplished by Make in India and Digital India programme to step up manufacturing and increasing domestic demand Digital India (Ministry of Electronics & Information Technology, Government of India, 2016)

The roadblocks in the way of its success are digital illiteracy, poor infrastructure, low internet speed, connecting 250000 villages gram panchayat through National Optical Fibre, lack of coordination among various department, issues related to taxation, digital gap between urban and rural India and fear of cyber-crime and breach of privacy is the determinant in the adoption of digital technologies. High-speed internet in India is at the 105th position in the world in average internet speed. Digital India program had the objective of connecting rural areas with high speed internet network and improving digital literacy.

Digital India program has benefitted India in making all government services available to people of the country through common service delivery points and enabling inclusive growth through easy access to education, healthcare and government services to all citizens of the country. Also ensures transparency because data is available online and accessible to citizens. It can also boost GDP growth. World Bank report presents that 10% increase in mobile and broadband penetration increases per capita GDP by 0.81% and 1.31% respectively in

developing countries. Table 4 depicts the challenges being faced in the Digital India program

Table 4: Challenges Of Digital India

- Creating Awareness
- Connectivity with each and every village
- Delayed infrastructure development
- 80 Lacs hotspots to reach global level
- Poor private participation
- Non-availability of digital services in local languages
- Fear of cyber crime

Status Of Financial Inclusion In India:

Financial inclusion in India has been under continuous growth since independence. The efforts of the government of India are tremendous to reach the unbanked population of the country which lies around 21% of the world's and 67% of south Asia's unbanked population (Patel, 2016). Major steps taken to enhance inclusion are Pradhan Mantri Jan Dhan Yojana (2014), Pradhan Mantri Jeevan Jyoti Beema Yojana, Pradhan Mantri Suraksha Bima Yojana, Atal Pension Yojana and Digital India program (2015) for digitalized access. Financial inclusion is defined as "the process of ensuring access to financial services and timely and adequate credit where needed by vulnerable groups such as weaker sections and low-income groups at an affordable cost", by Dr. C. Rangarajan (Prasad and Jha, 2018). India has come up with a much-diversified banking sector. Overall performance of the banking sector has witnessed a credit boom. The credit-GDP was 35.5% in 2000, and after almost a decade in the year 2013, it has increased by 15.5% (Barua et al. 2016). India has achieved developed

financial structure which is summarized in Table 5 but is not successful in accomplishing the needs of the unbanked population.

Bank	Туре	Name	Number of Branches
Commercial	Public sector banks	State bank of India	14,699
Banks	(26)	Associate banks	5,482
	, ,	Nationalized banks	52,480
		Other public sector	1
		banks	
	Private sector banks	old private sector banks	6,047
	(20)	New private sector	
		banks	9,522
		Branch mode of	
	Foreign banks (43)	presence	332
		Limited area of	
	Regional rural banks	operation	
	(64)	Limited area of	
	Local area banks (4)	operation	
Cooperative	Urban co-operative	Multi state urban	43
Banks	banks	cooperative banks	
		Single state urban	1,563
		cooperative banks	,
	Rural cooperatives	Short term	92,834
	•	State cooperative banks	31
		District central	
		cooperative banks	371
		Primary agriculture	
		cooperative societies	92,432
		Long term	
		State cooperative	717
		agriculture and rural	20
		development banks	
		Primary cooperative	
		agriculture and rural	697
		development banks	
Microfinance	There are 52 MFIs	Arohan, Bandhan, BSS,	10,553
Institutions	that have either	Cashpor, Disha, Equitas,	
	received or applied	ESAF, GramaVidiyal	
	for registration from		

Bank	Туре	Name	Number of Branches
	the Reserve Bank of		
	India as of June		
	2015. They		
	constitute over 90%		
	of total micro		
	finance industry		
	business in the		
	country.		

(**Source:** Barua et al. 2016)

Proximity, convenience and security acts as major limitations in the path of full financial access (Patel, 2016) which could be easily overcome by the digitalization programs. The nine pillars of digital India program (Figure 1) have helped in achieving the targets of IT based banking services across the nation.

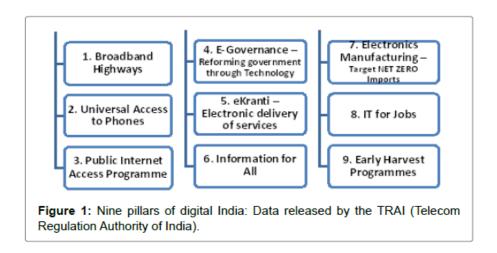


Table 6: Highlights Of Telecom Subscription Data As On 31st October 2016

Particulars	Wireless	Wireline	Total (Wireless+ Wireline)
Total Telephone Subscribers (Million)	1,078.42	24.52	1.102.94
Net addition in October 2016 (Million)	28.68	0.02	28.7
Monthly growth rate	2.73%	0.10%	2.67%
Urban Telephone Subscribers (Million)	621.77	20.61	642.37

Particulars	Wireless	Wireline	Total (Wireless+ Wireline)
Net addition in October 2016 (Million)	17.96	0.03	18
Monthly growth rate	2.97%	0.17%	2.88%
Rural Telephone Subscribers (Million)	456.66	3.91	460.57
Net addition in October 2016 (Million)	10.72	-0.01	10.71
Monthly growth rate	2.40%	-0.26%	2.38%
Overall Tele-density	84.34	1.92	86.25
Urban Tele-density	155.35	5.15	160.5
Rural Tele-density	51.98	0.45	52.43
Share of urban subscribers	57.66%	84.04%	58.24%
Share of rural subscribers	42.34%	15.96%	41.76%
Broadband subscribers (Million)	200.49	17.93	218.42

(Jhamb, A. and Aggrawal, S. 2018)

Various digitalization platforms will eradicate the issues related to non-maintenance of Non-frill accounts. Under PMJDY and MGNREGA scheme government has opened zero balance NFAs to enhance rural financial inclusion but most of the accounts remain dormant due to insufficient usage knowledge related to the account and high operational transaction cost charged by banks. Both the issues can be resolved by digitizing the banking services.

Digital India Program: Steps Towards Success:

Rural unbanked population prefer using post offices for keeping their funds. Through digital India program over 12,000 branches are connected digitally and very soon it will operate cashless (Luvy, 2018).

Cashless transactions of various e-governance projects have increased tremendously in just 1 year by 3.42 billion (3.53 billion in 2014 and 6.95 billion in 2015) (Luvy, 2018).

Barriers Of Digital Divide And Initiatives In India:

There is a huge impact on economic, political, social and cultural lives by PCs and the Internet (Castells 2001). It is not only important to realize the change brought by the technology but also the means of diffusion of technology (OECD 2000, 2001; NTIA 1999, 2000, 2002). There is difference in access across the population. The term "digital divide" also to refer to the inequality of access to digital resources and services (Paul 2002). Digital divide is also interpreted as a gap between those who have physical access to technology, and the skills and resources also required to use it.

There are barriers to the digital divide in the Indian context like low literacy rates, education system and language. The literacy rate has improved by 9.2% as per Population census of India 2011 (India Online 2011). Literacy rate in 2001 was 65.38% and increased to 74.04% in 2011. There is a increase in literacy rate but when compared to the urban and rural area the difference between the literacy rates seems to be the major stumbling block in the digital divide.

In India 216 mother tongues are clubbed into 114 languages (Mallikarjun, B 2004). The inseparable barrier to Information Technology is the Indians not speaking English because basic knowledge of English is required to operate the widely accepted operating system (Keniston, 2002). The step towards diminishing the digital divide is the introduction of technological aspect content right from school level but in India the number of children pursuing secondary education gets reduced to those who take up an undergraduate course (Yajnik, 2005). Right from the 1st standard, information technology is introduced in the syllabus.

Since there is a difference in literacy rate between the urban and rural India, the Government of India had already taken steps to harness IT in the agriculture like KISAN Call centers set up by the ministry of agriculture on January 21,2004

which extend help to the farmers community across the country. The agriculture graduate expert can be contacted by farmers through phone calls and the queries are also recorded on holidays and responded by post. This is a step to bridge the gap between the information resource and the user. Lifelines India, a mobile phone-based information services where farmers retrieve a recorded reply is another initiative which has proved very effective in educating rural users to use technology to ask for advice and learn to move towards the improvement of their community. Gyandoot is a rural Information network which caters to the everyday needs of the masses. It is the first project in the Dhar District of Madhya Pradesh which has the highest percentage of tribes and forest.

Conclusion:

Information and Communication Technology requires multipronged approach to bridge the digital divide as it cannot be a secluded component. Better IT infrastructure which facilitates the digital literacy among the masses will diminish the gap. There is an improvement in quality, effectiveness and efficiency with egovernance as several measures taken by the Government of India have improved the literacy rate in several districts and villages where people are very poor.

All government departments have come up with websites with information and are interfaces for the citizens. India's partial success with e-governance is due to lack of Internet infrastructure, high cost of access, lack of awareness and low digital literacy concluding mass financial exclusion. Building institutional capacity and implementing a sound e-governance policy will help to get a better hold of e-governance. Digitized banking platform is the only way to include people across the country due to its low-cost operability and accessibility. Financial inclusion through digitized platforms will be a great success if the Digital India program makes its way to reach the target.

India is a developing nation and Digital India is a platform for the growth of people digitally. In order to beat the objectives of e-governance and acclaim success it is important to adopt preventive measures regarding privacy and security of information to promote more inclusive growth otherwise the results of success will not be overwhelming. Lessons can be learned from the world leaders in e-governance, like Australia, which is focusing on standardization of data, interoperability in e-governance and offering more services for effective edelivery. Digital India has given form to better connectivity and with a vision to transform India into a digitally empowered society has offered a mere technological opportunity. Digital India aims to make the best future for every citizen though it is facing many barriers. Today the urban and semi-urban lifestyle has virtually changed the lifestyles. In the rural areas various successful egovernance initiatives, new IT infrastructure and new projects for rural development give hope to lessen the digital divide. Many technologies are developed for the literate class, but the technologies had to be availed by the masses provided they are digital literate. It is a real challenge to connect a million rural populace to the knowledge economics is a task ahead.

Policies are also coming up to establish safe and secured digitized platforms. Proper cyber law infrastructure will boost citizen confidence by the protection of data in electronic documents, digital signatures and minimizing cyber-crime. Cyber literacy is expected from policy makers and bureaucrats. There are over forty countries which provide the right to access state held information. It is recognized that politics will be affected by the Internet which keeps people informed and helps in making choices based on a variety of information.

References:

- Bannister, F. and Walsh, N. (2002) The virtual public servant: Ireland's public services broker. Information Polity: The International Journal of Government & Democracy in the Information Age, 7 (2/3) pp115
- Barua, A., Kathuria, R. and Malik, N. (2016). The Status of Financial Inclusion, Regulation and Education in India.
 https://www.adb.org/sites/default/files/publication/183034/adbi-wp568.pdf (accessed 29 Jun 2019).
- 3. Bhatnagar Subhash (2004), e-government from vision to implementation, sage publications, New Delhi.
- 4. Castells, Manuel 2001 The Internet Galaxy; Reflections on the Internet, Business and Society, Oxford: Oxford University Press.
- 5. Dasgupta, S.; Lall, S. and Wheeler, D. (2002) Policy Reform, Economic Growth, and the Digital India, Policy Review Working Paper of the World Bank, No.WPS-2567, Washington, DC.
- 6. Dutta, Subrat. (2003) "Impact of Information Communication Technology on Society." Yojana, Vol. 47, No.2, p 24. Fletcher
- 7. Fletcher, Ameila; Simon, Gaysford and Adele (2000) "OFT Study on E-Commerce and Competition", accessed on http://www.out-law.com/page-954
- 8. Howard, M. (2001) E-Government across the globe: How will "e" change government? Government Finance Review, vol. 17, Issue 4, pp. 6-9. 8
- 9. India Online. 2011. Literacy rate in India. Retrieved 19 October 2018, from http://www.indiaonlinepages.com/population/literacy-rate-in-india.html
- 10. Jeusus, M., Frias (2003) "The Importance of ICTs for Developing Countries", Interdisciplinary Science Review, Vol. 28, No. 1, pp 10-14.
- 11. Jhamb, A. and Aggrawal, S. (2018). Digitalized Financial Inclusion: A Cause of Development in India.

- https://www.omicsonline.org/open access/digitalized-financial-inclusion-a-cause-of-development-in-india-2151-6219-1000338-98459.html (accessed 29 Jun 2019).
- 12.Keniston, Kenneth 2002. The Four Digital Divides. Retrieved 19 October 2018, fromhttp://web.mit.edu/people/kken/PAPERS/Intro_Sage.html
- 13.Lawerence, Steve and Lee, Giles (1999) "Accessibility of Information on the Web", Nature, Vol. 400, pp 107-109. Leizerov.
- 14.Leizerov, Sagi (2000) "Privacy Advocacy Groups Versus Intel: a Case Study of How Social Movements are Tactically Using the Internet to Fight Corruptions", Social Science Computer Review, Vol. 18, pp 461-483.
- 15.Luvy (2018). Impact of Digital India by 2019.International Journal of Scientific and Engineering Research, 9(4), 1285-1288.
- 16.Mahajan, Subrat. (2003) "Impact of Digital Divide on Developing Countries with Special Reference to India." SERALS Journal of Information Management. Vol. 40, No. 4, pp 328–329. Mark
- 17.Mallikarjun, B. 2004. Indian Multilingualism, Language Policy and the digital divide. Retrieved 19 November 2018, from http://www.languageinindia.com/april2004/kathmandupaper1.html
- 18.Ministry of Electronics & Information Technology, Government of India. (2016, December 20). digitalIndia.gov.in. Retrieved from www.digitalindia.gov.in/content/about-programe
- 19. Nandi, B. (2002) Role of Telecommunications in Developing Countries in the 21st Century, 14th Biannual Conference, International Telecommunication Society: Seoul.
- 20.Nath, V. (2001) "Employment and governance through ICTs: Women's Perspectives", The International Journal of Information and Library Review, Vol. 33, pp 317339
- 21. Norris, P (2001) The Digital Divide" Civic Engagement, Information Poverty and Internet Worldwide, Cambridge University Press: Cambridge.

- 22.NTIA 2000 US Department of Commerce. Falling Through the Net: Towards Digital Inclusion. http://www.ntia.doc.gov/: US Department of Commerce.
- 23.NTIA 2002 US Department of Commerce. A Nation Online. http://www.ntia.doc.gov/: US Department of Commerce.
- 24.NTIA. 1999. Falling Through the Net III: Defining the Digital Divide. Washington, DC: US Dep. Commerce
- 25.OECD 2000 The Digital Divide: Diffusion and Use of ITs. Paris: OECD DSTI/ICCP/IE.
- 26.OECD 2001 Understanding the Digital Divide. Paris: OECD.
- 27.Pastor, Satorras; Romualdo and Alessandro, Vespignani (2004) Evolution and Structure of the Internet: A Statistical Physics Approach, Cambridge University Press: Cambridge.
- 28. Patel, A. (2016). Financial Inclusion: Harnessing Poor Families' Potential for Development. FHB Business Review, 6(1), 15-22.
- 29.Paul, J. 2002. Narrowing the digital divide: initiatives undertaken by the Association of South-East Asian Nations (ASEAN). Program: electronic library and information systems 36(1): 13-22.
- 30.Prasad, S. and Jha, R. (2018). Financial Inclusion and Financial Education are Complementary for the growth of MSMEs: An Indian Case. Conference Paper: International Conference on Financial Inclusion and Inclusive Growth (24-25 November, 2018), Ranchi University, Ranchi, Jharkhand.
- 31.Seattle Goodwill (2014). Technology Access, Usage, & Digital Literacy: Issues & Strategies. Retrieved from http://www.seattlegoodwill.org/system/assets/general/JTE/Digital%20Literacy/TechAccess-UsageDL-IssuesStrat-2014.pdf.
- 32.Sharma, R. (2017). Digital Infrastructure in India.

 https://main.trai.gov.in/sites/default/files/presentations_&_cv/Day-3_25Aug2017/Session2_Digital%20world/Digital%20Infra_Rajesh%20Sharma.pdf (accessed 29 Jun 2019).

- 33.Sharma, S. K. (2006) An E-Government Services Framework, Encyclopedia of Commerce, E-Government and Mobile Commerce, Mehdi Khosrow-Pour, Information Resources Management Association, Idea Group Reference, USA, pp. 373-378. 2006.
- 34.Sharma, S. K. and Gupta, J. N. D. (2003) Building Blocks of an E-government

 A Framework, Journal of Electronic Commerce in Organizations, (1:4),
 2003, pp. 34-48
- 35.Sharma, S.K. (2004) Assessing E-government Implementations, Electronic Government Journal, 1(2), 2004, pp. 198-212
- 36.Sheridan, W., and Riley, T.B. (2006) Commonwealth Centre for e-Governance, e-Gov Monitor, Monday, 3 July 2006
- 37. Singh, Neena (2007) "Bridging the Digital Divide in India: Challenges and Opportunities", World Libraries, Vol. 17, No. 1.
- 38. Sumanjeet (2006) "E-Governance: An Overview in the Indian Context", Indian Journal of Political Science, Vol. 67, No. 4.
- 39.UN Global E-government Readiness Report. From E-government to E-inclusion, UNPAN/2005/14, United Nations publication, United Nations, 2018.
- 40.United Nations (2006) Encyclopedia Britannica, accessed on http:search.eb.com/eb/article-250455.
- 41. Yajnik, Nilay M. 2005. E-learning and the digital divide. In National Seminar in eLearning and e-Learning Technologies (ELELTECH INDIA-2005) August 08-09, 2005 Retrieved October 2018, from http://elearn.cdac.in/eSikshak/ eleltechIndia05/papers.htm