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# Challenges and Perspectives of the Digital India Programme

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## Abstract

The Digital India program is a plan that the Indian government started. They want India to be a country where people can use computers and the internet to get things done easily. They want to make sure the government is fair and helps people by working and being accountable. The government wants to use computers and the internet to give people the services they need. To make this plan work well the government needs to fix some problems. Some people in India do not know how to use computers. The internet is also very slow in some places. The government buildings and other facilities are not good enough. There are also issues with taxes and different government departments do not work well together. This paper is going to look at the Digital India program and what it is trying to do. It will look at the things, about the program and the new things the government is trying. It will also see how these new things are affecting people. The paper will also try to understand the security problems that the Digital India program is facing. The Digital India program has security challenges that need to be addressed to make it successful. The Digital India program is very important for India and the government needs to make sure it works well.

**Keywords:** Digital India, Security, Opportunities, Society, India, Cyber security.

## Overview Digital India Program: Conceptualization

The journey towards digitalisation can be the early 1990's when the Indian government started providing its citizens with e-governance services on a larger scale. The motive for introducing such services was to enhance the efficiency and transparency of government departments. Nevertheless, such an initiative to digitalise the government sector did not have any significance on the Indian economy. In 2006, the Indian government came up with the National e-Governance Plan (NeGP) to accomplish the task of digitalising various sectors of the government; however, the improvement has not been very significant (Sheokand and Gupta 2017). It was only on 2 July 2015 that the Indian government under Prime Minister Narendra Modi launched the Digital India Programme. The motive for introducing such a program was to transform India into a digitally empowered society. Also, the programme covers a wide range of developmental aspects like Encouraging entrepreneurship, promoting investments, generating IT jobs, providing financial inclusion, improving ease of doing business, endorsing literacy, and catalysing growth across all sectors, besides encouraging women's participation in economic, social, and professional arenas (Jayadatta and Chaco 2018). The first Indian state that has opted for this program is Andhra Pradesh. Through the Digital India Programme, all government information as well as services would be available anytime, anywhere, on any device that is easy-to-use, highly secured, and available. This will remove the digital gap between urban and rural India (Sharma 2016).

Digital India is an initiative by the Indian government to integrate administrative departments with the general population of the country. In addition, it intends to make government administrations electronically accessible to citizens by reducing paperwork. The Digital India programme intertwines a wide range of thoughts and ideas into a comprehensive and single vision in such a way that each of them is perceived as a part of a larger goal. The programme is coordinated by DeitY and executed by the entire government both at states and the centre (Luvy, 2018). To manage the program, DeitY created four senior positions in the department: the post of Additional Secretary for Digital India, Joint Secretary for Digital Enablement and Capacity Building, Joint Secretary for Infrastructure Development, and Joint Secretary for IT Applications in Process Reengineering and Uncovered Areas (Rajan, 2017). The Digital India programme commits to connecting 2.5 lakh villages across the country through public internet access, broadband highways, e-governance, easy access to mobile connectivity, e-kranti, a robust electronic manufacturing regime, information for all, IT for jobs, and early harvest programmes conferred as the nine pillars of Digital India shown in. In terms of public internet access, the government pledges to provide internet services "to 2.5 lakh villages which comprises of one in every panchayat by March 2017 and 1.5 lakh post offices in the next two years' (Boro 2017:924). Such post offices will turn into multi-service centres for citizens. To have broadband services for highways, the government proposes to lay the network of national optical fibre in all 2.5 lakh gram panchayats in the country. By December 2016, broadband for rural areas would be laid, while broadband for all urban areas would mandate communication infrastructure in new urban buildings and development. In addition, the government

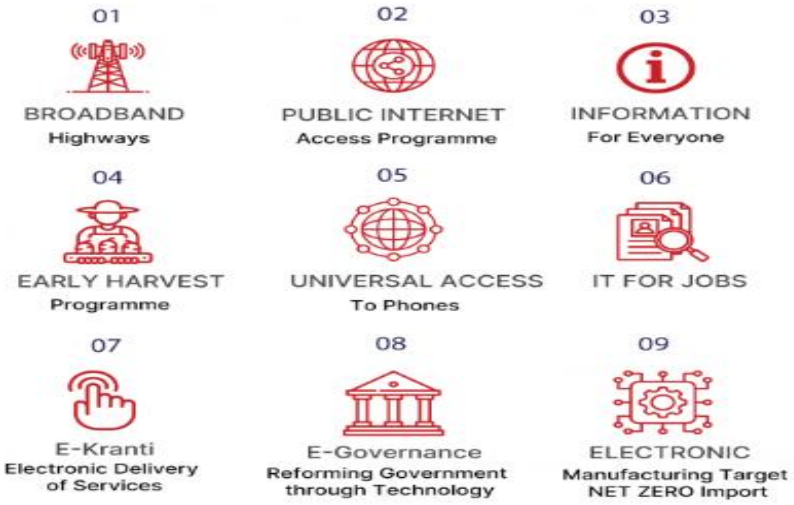
intended to provide nationwide information infrastructure by March 2017.

Another pillar of Digital India programme is the e-governance in which the government plans to improve thedelivery and process of services through e-governance with a payment gateway, UIDAI, mobile platforms, and EDI. Thus, voter ID cards and school certificates are provided online. This aims for a faster examination of the data (Boro, 2017). To provide easy access of mobile connectivity, the government aims to take steps towards ensuring the mobile connectivity to all villages by 2018. The motive is to enhance the network penetration as well as cover gaps in all 44,000 villages (Narang 2016: 03). The fifth pillar of digital India programme is e-kranti, which aims to deliver electronic services to citizens in terms of education, health, financial inclusion, security and justice. The robust electronic manufacturing regime is another pillar of the programme. In this context, the government is focusing on zero import of electronics. To achieve this, the initiative have been upheld to create smart energy meters, mobile, micro ATMs, medical and consumer electronics. Besides, the government aims to host data online as well as engage social media platforms for governance as part of seventh pillar of Digital India.

**Digital India's Nine Pillars**

Source: Neha Rakshitha, (2024)




To ensure the IT training for jobs, the government has taken the initiative to train ten million people in villages and towns for IT sector jobs in next five years. Also, it intends to train 0.3 million agents in order to run viable businesses delivering IT services (Singh 2016: 36). Moreover, the project includes to train 0.5 million IT workforces in rural areas in five years, along with the establishment of BPOs in each North-eastern state (Boro 2017: 924). The last pillar of Digital India Programme is the early harvest programme. To achieve this, the government aims to establish the Wi-Fi facilities in all universities across the country and the Email would be made the primary mode of communication. Besides, the Aadhaar Enabled Biometric Attendance System would be installed in all central government offices by which the recording of attendance will be made online (Mahindrakar 2017). The estimated cost of this programme is valued at Rs 1, 13, 000 crores. The Advisory Group of Digital India would be monitored by the Prime Minister and his office and chaired by the Cabinet Secretary (Digital India 2014, para. 02). The contemporary world has witnessed a transformation from "knowledge know-hows to techno knowledge savvy' (Luvy 2018:1285), in which everything is accessible and available in one click. In this way, Digital India is a step to connect and inspire the Indian economy to such a gene-savvy world. It intends to make government administrations available to individuals sensibly and delight in the mechanical advancements and the most current data. Besides, the programme outlines several plans like Digital Locker, e-Education, E-Health, E-Sign, etc. Apart from this, the program perceives specialist organisations and clients similarly. Through this program, consumers would benefit by saving money, time, and cognitive and physical energy consumed in lengthy government courses. Moreover, it looks after public accountability through "mandated delivery of government's services timely and electronically; a Unique ID and ePramaan based on authentic and standard based interoperable and integrated government applications and data basis' (Luvy 2018:1285). On 1 July 2015, at the launch of Digital India Week in Delhi, top CEOs from abroad as well as from India committed to invest 224.5 lakh crore towards this

initiative (Shafiullah and Krishna 2016: 78). The purpose of investing such an amount will be towards making internet devices and smartphones at an affordable price in India that will help in generating jobs in the country and reducing the cost of importing them from abroad. Also during the Indian Prime Minister's visit to California in September 2015, the leaders from Silicon Valley expressed their support for Digital India. Besides the CEO of Facebook, Mark Zuckerberg changed his profile picture in support of Digital India and initiated a chain on Facebook, along with promised to work on Wi- Fi Hotspots in rural areas of India. Moreover, Microsoft pledged to provide broadband connectivity to five hundred thousand villages in India and make the country its cloud hub through Indian data centres, while as "Google committed to provide broadband connectivity on 500 railway stations in India". Similarly, "Oracle plans to invest in 20 states of India", along with pledges to work on payments and the initiatives of Smart city (Shafiullah and Krishna 2016: 78).

As a part of Digital India Programme, the Indian government had started various websites from time to time so that the citizens of the country will be benefitted through this programme. The first of this kind is the MyGov.in. The government has launched a website to facilitate two-way communication with citizens. This platform allows individuals to share their comments and suggestions on various topics, such as net neutrality, that the government addresses. It serves as a means for citizens to participate in governance through a strategy of Discuss, Do, and Disseminate. Similarly, the government on 01 July 2015 launched the Attendance.gov.in with the intend to keep a record of the attendance of government employees on a real-time basis. Such an initiative started with the enactment of a common Biometric Attendance System in the offices of central government located in Delhi. Besides, a framework of e-sign was also started to allow the citizens to digitally sign a document online using Aadhaar authentication. In terms of health sector, the facility of e-hospital was started by the Indian government in order to provide important services like the online registration, enquiring availability of blood online, online diagnostic reports, payment of fees and appointment etc. The National Scholarship Portal has been launched in the education sector as a comprehensive solution for managing the entire scholarship process. It handles everything from the initial student application, through verification and approval, to the final disbursement to beneficiaries for all scholarships offered by the Indian government (Shafiullah and Krishna 2016).

The overall aim of Digital India programme is to bring together various existing schemes and to restructure them. Besides, such schemes need brought into focus, along with their implementation into a synchronised way. Although, several existing schemes merely require process improvement with less cost effect. It is within this context that DeitY has already created a platform to make easier participative and collaborative governance known as "MyGov". The project of executing the National Optical Fibre Network has been assigned to Bharat Broadband Network Limited (BBNL), along with the charge of constructions Digital India projects. The BBNL have placed an order to "United Telecoms Limited to connect 250,000 villages through Gigabit Passive Optical Network (GPON) to confirm Fibre to the Home (FTTH) based broadband" (Shafiullah and Krishna 2016: 77). This is the basic



step towards achieving concept of Digital India.

**The Impact of Digital India Programme on E-governance**

Digital India Programme is an initiative having the potential and depth to change India into a advanced economy and a digitally empowered society, thereby, impacting all facets of businesses, environment and citizens. To implement this programme, the Indian government is planning to strengthen the National Informatics Center (NIC) by restructuring it to support the state governments, along with all central government departments. Besides, there would be the creation of Chief Information Officers in around ten key ministries so that the projects of e- governance could be designed, developed and implemented faster. Although, the estimated impact of Digital India Programme in the coming years is assumed to be huge, ranging from Wi- Fi in schools and universities, broadband connectivity in all Panchayats and Public Wi-Fi hotspots. Also, it would generate huge number of jobs in the Telecom, IT and Electronic sectors both directly as well as indirectly (Shafiullah and Krishna 2016).

The Digital India project bears the potential to provide a huge opportunity by using the latest technology to redefine India on the paradigms of service industry. Connecting India digitally has the potential to boost and enhance the economic and social well-being of individuals, regardless of where they are located (Mohanta et al. 2017). As per the McKinsey report (2015), achieving the goals of Digital India could lead to a 20-30 percent increase in GDP by 2025. By that year, the integration of technology in crucial sectors such as financial services, healthcare, agriculture, energy, infrastructure, and education is expected to contribute an additional $550 billion to $1 trillion to the Indian economy each year (Ghosh 2015, para. 03). Immediately, after the announcement of programme, several organisations have come into forefront to provide their support for achieving India a digitally prepared nation. The Telecom industries like BSNL and the Reliance have extended their support and cooperation to spread digitalisation among villages and due to their efforts over 42000 Indian villages have seamless mobile connectivity in 2018. As believed by Mahatma Gandhi that India resides in its villages and technology plays a vital role in its growth and prosperity. Similarly, Prime Minister Modi said that “we have attacked poverty by using the power of networks and mobile phones to launch a new era of empowerment and inclusion” (Dashora 2017: 1598-1599). As a matter of fact, the agricultural earning in 2016 grew at 1.1 per cent by simply increasing the mobile connectivity (Dashora 2017). Besides, the digitalization will create better infrastructural facilities like the green houses storage of produce, warehouses and ease in transportation, which will enhance the life of the produce. As Indian agriculture depends a lot on monsoon and digitalisation of this sector will offer farmers with improved irrigation facilities and thereby lessening the dependence on monsoon (Sheokand and Gupta 2017).

In the recent past, the economic sector in India has witnessed a significant growth of 7.3 percent in 2015 as against 6.9 per cent in 2014. Also, the Gross Domestic Product (GDP) of India have shown positive results due to the steps taken by the government at “factor cost at constant (2011- 12) prices 2014-15 is Rs 106.4 trillion (US$ 1.596 trillion), as against Rs 99.21 trillion (US$

1.488 trillion) in 2013-14, registering a growth rate of 7.3 per cent" (Narang 2016: 05). This indicates that the initiative of Digital India has contributed greatly towards improving the economy of the nation. Besides, the Programme itself will generate an employment opportunity for 17 million citizens either directly or indirectly that will help in fighting against the unemployment problems in the country (Narang 2016). Also, the government is intending to provide IT training to 100 million students in smaller villages and towns, taking into consideration the higher chances employment opportunity of IT sector in India (Mahindrakar 2017). In addition, the initiatives towards digital literacy and training by the government and private sectors like Digital Literacy Mission and the National Digital Literacy Mission (NDLM) have been successful in reaching out to millions of people. Such steps have resulted in enhancing the employability of the trained personnel, empowerment of a large section of society as well as higher adoption of digital technologies (Deloitte 2016).

On the other hand, the Indian government is taking several initiatives to enhance the contribution of agriculture sector in the economy, along with motivating farmers to move towards improvedfarming skills like t he soil health cards scheme, kissan credit cards, My Village My Pride scheme and the e-NAM (National Agriculture Market). Also, several web portals and mobile applications have also been established to help the farmers by automatising multiple services like the e-mandi, m-kisan portal, pusha krishi, crop insurance portal, kisan suvidha, India weather and the like. Apart from this, the Department of Agriculture and Cooperation has also been renamed by the Department of Agriculture, Cooperation and Farmers Welfare on 15$^{th}$ January 2015 (Sheokand and Gupta 2017).

Not only in the economic sector, has the Programme pledged to digitally empower the service sector too. In the educational field, it assures broadband connectivity in all schools, libraries, panchayats and other public places. Despite the broadband connectivity, every village in India is provided with universal phone connectivity across the country. Also, the internet and mobile banking can improve the financial inclusion in India. The banks can reach new customer groups incurring lowest possible costs while as the telecom operators get additional revenue streams. Moreover, the digital inclusion across the nation ensures the manufacturing sector to revive the manufacturing of electronics. With the Digital India and Make in India campaign, India is planning to attain net zero imports by 2020, which indicates that the exports will be equal to the imports and this helps in the economic prosperity of the country. Besides, India is largely a service based country due to which it had focused only on software development, but with the advent of Digital India programme, the country would now stress on making India a manufacturing hub (Mahindrakar 2017). Thus, the initiative of Digital India can/has play a vital role in macro-economic factors such as employment generation, GDP growth, labour productivity, revenue leakages for the government and growth in number of businesses (Mohanta et al. 2017).

In addition to the service sector, India's low literacy rate is primarily attributed to the lack of physical infrastructure in rural and remote regions. To tackle this issue, services such as m-Education can be crucial in reaching individuals living in the country's most isolated areas. According to estimates, "digital literacy in India is only 6.5 percent, and internet penetration

stands at 20.83 percent out of every 100 people" (Deloitte 2015: 16). Within this framework, the digital India initiative is expected to be effective in delivering real-time education and addressing the shortage of teachers in the education system through virtual and smart classrooms. Furthermore, education for underprivileged communities, fishermen, and farmers can be facilitated via mobile devices. A high-speed network can offer the necessary infrastructure for online education platforms like Massive Open Online Courses (MOOCs) (Sharma 2016: 68). In the health sector too, Digital India has the potential to provide solutions to problems related to fewer quality physicians, poor doctor patient ratio (1:1674), insufficient healthcare infrastructure, high healthcare costs as well as lack of equal access to healthcare facilities and advice (24 percent in rural areas). In this direction, the e-hospital program is enhancing the delivery speed of services related to healthcare by allowing patients to book online appointments (Vanita and Sachdeva 2017: 05). Also, the Social Endeavour for Health and Telemedicine (SEHAT) will enhance coverage by giving healthcare access to the people regardless of their geographical location with nearly sixty thousand Common Service Centres (CSCs) delivering tele-consultation services as part of SEHAT. Apart from the healthcare sector, the Programme is vitally important so far as financial inclusion is concerned. As for instance, India Post Payment Banks (IPPB) is expected to benefit nearly 40 percent of the citizens that are presently outside the system of formal banking by providing online banking and digital services through post office. The internet and mobile banking will enhance the volume and coverage of financial transactions that is a significant move towards cashless economy as well as a step towards recent demonetization (Deloitte 2016).

The Digital India Programme has not only had an impact on the technology, agriculture and the service sector, but has also contributed towards clean environmental practices. The programme through the use of next generation technologies would help in reducing the carbon footprint by lowering the fuel consumption, greener workplaces, waste management and thereby leading towards a greener ecosystem. In this context, “India has pledged to reduce the intensity of its carbon emissions by 33-35 percent as well as boost the capacity of renewable energy to 40 percent by 2030” (Jha 2017, para. 01). In 2018, India had already achieved a reduction of 20 percent in its emissions intensity against the 33 percent level as it had pledged to attain by 2030 at the United Nations Framework Convention on Climatic Change (Saluja and Singh 2018). The Digital India program is likely having a significant contribution towards achieving these goals. The cloud computing technology along with the wide spread implementation of telepresence under Digital India will lead to decrease in carbon emissions. For instance, “telepresence can eliminate 20 percent of the business travel, leading to reduction in carbon emissions by 1.08 million tonnes globally” (Deloitte 2016: 33). The use of cloud storage for documents will considerably limit the consumption of natural resources like paper (Deloitte 2016).

Besides, India stands at the fifth-largest producer of e-waste, disposing nearly 1.8 million tonnes of e-waste each year (The Hindu 2016). Under the adoption of Digital India and ICT solutions like the waste management information and prognostics as well as waste collection



automation are expected to significantly reduce e-waste. Also, through use of digital infrastructure, city municipalities would be able to better manage the disposal and collection of solid sewage and waste. Apart from this, the availability of digital infrastructure in the multiple locations coupled with customized applications and sensors would help to provide better information related to environmental challenges like climate change, pollution, weather monitoring etc (Deloitte 2016). While summing up the overall impact of Digital India Programme by 2019 (Dashora 2017), the following points will be visualised:

- Approximately 4 lakh Public Internet Access Points
- Broadband facility in 2,50,000 lakh villages and widespread phone connectivity
- Wi-Fi in 2,50,000 schools and all universities and Wi-Fi hotspots for citizens
- Net Zero Imports of electronics items by 2020
- 1.7 Crore direct Employment and 8.5 Crore indirect Employment
- 1.7 Crore persons trained for Telecom, IT and Electronics Jobs
- E-Governance and E-Services for government department
- Digitally empowered citizens-internet access and public cloud
- India to be leader in IT use in services-education, health, banking etc.

**Challenges in Digital India Programme**

Since the announcement of Digital India Programme, there exist multiple challenges in its successful implementation. To begin with, majority of India's rural population does not have access to internet, besides the content in regional languages is not adequate to keep the readers engaged. In these areas only little populace can access the mobile broadband, while as nearly as 15 percent of the households can access the internet. Although, this scenario is enhancing despite the growing affordability of ICT tools in India. Moreover, "according to World Economic Forum (WEF) 2016 report reveal that there are nearly 33 percent of India's population is functionally illiterate, and one-third of youth does not join secondary education" (Srivastava 2017: 08). Also, there exists a wide gap between the urban centres like metropolitan cities and the remote rural areas of the country in terms of basic service (such as electricity) to run the Digital India Programme (Srivastava 2017). Along with this, India's internet speed is very low as compared to other developed countries. "According to third quarter (2016) Akamai report on internet speed, India stands at 105$^{th}$ position at the global level so far as the average internet speed is concerned and has the lowest speed in the entire Asia Pacific region. Such a low internet speed cannot facilitate online delivery of various services" (Padhi 2017: 48).

Apart from this, India's growing economy coupled with the digital push has attracted attention of hackers, which has led to an increasing wave of cyber-attacks having negative consequences upon the digital infrastructure of the country. It is in this context that the Indian government together with the corporate world need to procure "state-of-the-art, New Age

security solutions" to thwart the plans of cyber criminals (Srivastava 2017: 08). The threats related to the cyber arena are not only related to technological advancements, but also relates to the issues of security and privacy. At the same time, the major challenge faced by the Digital India Programme is the delayed and slow development of the infrastructure in the country. In Indian metropolitan cities, the spectrum availability is almost tenth of the same in cities located in developed nations. Besides, every arena of Indian society faces several challenges be it the policy making, bureaucratic culture or the work flow. Along with this, there exists a need to integrate various departments within the Indian government as active involvement of these departments like telecommunication, health, planning, finance, justice are of paramount importance. The Programme would not be properly implemented to its full strength without a smooth teamwork between them (Srivastava 2017). Also, the Programme includes within its ambit a huge number of projects which fall under the jurisdiction of various departments. Therefore, the timely and strong support of departments is very crucial for timely and properly completion of the projects (Dashora 2017). The digital India programme is limited by the availability of access in remote parts of the country, lack of digital literacy and digital hygiene amongst users, and lacunae in security measures[1].

One of the biggest challenges faced by the Programme is to create standard performance indicators in order to measure the magnitude to which the ICT is being assimilated in societies. The stakeholders in the ICT sector primarily focus on access, along with building networks that connect much of the planet in present times and have devised metrics accordingly. However in the Indian context, where there is little access to ICT related activities, the policymakers need a new way to look at this sector. Another challenge is related to lack of tools which determine the impact, which the mass adoption of connected digital applications and technologies is having on economies and societies. On the contrary, with reliable and practical tools to measure the benefits of digitization, governments across the globe could potentially be more ambitious in investing as well as developing in the ICT sector. In addition, it becomes vitally important for the policymakers to adopt new policy tools in order to enhance the process of digitisation and reap its accompanying benefits. Although, some success has been made over the past two decades as the policymakers have established rules to increase access to communication services (Shamim 2016). The digital infrastructure is subject to vulnerabilities at various points ranging from that of the vendors, the third-party services, the core infrastructure providers, and even the applications and software producers. That said, providing a safe digital infrastructure is not the sole responsibility of the government; other aspects come into play such as the cyber hygiene practiced by the user, his digital behaviour, the quality of the endpoints such as handsets and computer software and hardware used etc[2].

As India is a diversified country in terms of tradition, culture, language, food habits, laws, custom and tradition, therefore the Digital India Programme needs to integrate the whole country digitally. The comprehensive integration of technology as well as language is possibly one of the major challenges that the Programme is going to face in its implementation. Along with this, internet protocols in different states of India depend on

what kind of software and hardware they

[1] *Based on interview held with Cherian Samuel, Research Fellow, Institute for Defence Studies and Analyses, New Delhi, on 04 Feb 2020.*

[2] *Based on interview held with Cherian Samuel, Research Fellow, Institute for Defence Studies and Analyses, New Delhi, on 04 Feb 2020.*

implement, thereby creating chances of connectivity glitches. In this context, there exists a need of standardising all types of protocols. Moreover, one of the main pillars of Digital India Programme is the public internet access, but in India, the illiteracy and poverty stand as the chief obstacles in internet access. Amongst them, the high rate of illiteracy although acts as a main obstruction in enhancing the reach of internet (Jayadatta and Chaco 2018). "According to ASSOCHAM-Deloitte report on Digital India (2016), there are nearly 950 million Indians which do not have an access to internet" (Padhi 2017: 48). Besides, it is a difficult task to connect 2.5 lakh Gram Panchayats through National Optical Fiber, which certainly ensures that broadband reaches in every accessible areas of India. However, it is an uphill task to execute broadband connection country wide. It is estimated that nearly 67 percent of National Optical Fiber points are non-functional even at the pilot stage (Padhi 2017).

Moreover, the digital infrastructure of India is largely inadequate to tackle the growing enhancement in digital transactions. The delayed and slow infrastructure development is the biggest challenge faced by Digital India programme. Along with this, India mostly resides in its villages, but there exists the disparity in terms of infrastructural development between the rural and urban India. In other words, it requires more amount of funds to meet the cost of infrastructure creation in rural areas than the urban areas and hence the division of funds among the two areas is not an easy task. Besides, India has nearly 1600 languages as well as dialects but the unavailability of digital services in local languages acts as a critical obstacle in digital literacy. Moreover, creating an awareness related to the Digital India Programme among the common people is also a great challenge (Padhi 2017).

In contemporary times, the cybercrime and internet have become inseparable entities. Besides, breaches of privacy, along with the fear of cybercrime have been deterrent in adoption of digital technologies. Also, most of the technology in India is imported including the cyber security tools and there exists lack of sufficient skill to inspect for hidden malwares. Moreover, India needs one million trained cyber security professionals by 2025, but the estimates revealed that there are only 62 thousand cyber professionals as of now (Kalaivani and Saileela 2018). Along with this, the entire architecture should essentially be designed in such a way that there is proper authentication done vis-à-vis all documents put online by citizens. In order to ensure cyber security, India should have privacy norms (Jayadatta and Chaco 2018). As India is a developing country, it requires substantial financial resources to ensure the success of this program, necessitating financial support from external sources. Beyond financial concerns, the nation is likely to encounter various technical challenges, such as firewalls, adequate bandwidth, antivirus software, filters, and protection against



hackers. Another obstacle for the program is the high cost of electronic devices and internet services within the country. With many citizens struggling to afford basic necessities, spending on expensive electronic devices becomes impractical. Additionally, those involved in transforming several government departments from human-operated to machine-operated systems need proper training to manage these changes efficiently and effectively. However, training such a diverse group of individuals with varying interests and abilities in a unified discipline is a daunting task. Furthermore, a significant portion of the Indian population lacks the basic technical qualifications required for these roles (Sheokand and Gupta 2017).

Furthermore, the issue relating to regulatory guidelines and taxation have proved a great obstacle in realising the vision of Digital India Programme. Some of the hurdles related to common policy include lack of clarity in FDI policies that have impacted the growth of ecommerce. Besides, the digital infrastructure of India is largely inadequate to tackle the growing enhancement in digital transactions. At present, India has the availability of about 31000 hotspots, however there is the need over 80 lakh hotspots to reach the global level. Along with this, several request proposals issued by government are not picked up by competent private sector organizations since they are not commercially viable (Boro 2017: 925).

**Conclusion/Discussion**

To make digital technology accessible to every citizen, substantial efforts are required to customise services and apps to cater to local needs. In this direction, locating vendors who can provide such applications has proved to be a challenge. In this context, net neutrality is important, and understanding the Digital India Programme without net neutrality would be a great blow to the citizens as well as entrepreneurs of India. In addition, there is great diversity in terms of culture, language, laws, etc. Thus, the integration of language and technology remains a major challenge. Along with this, there exists lack of clarity in policies and infrastructural bottlenecks, which create hurdles towards the successful implementation of the Programme (Srivastava 2017). The paper concludes the overall findings of this study and gives the idea of cyber security in general and in the Indian context in particular. The paper talks about what this study found out about security.

It gives us an idea of what cyber security's all about not just in general but also in India. We get to know about the problems India and other countries are facing with cyber warfare, cyber crime, cyber terrorism and cyber espionage. This is important for Indias security. The paper also looks at the threats to things in India like defence, finance, energy and telecommunication. It checks if Indias National Cyber Security Policy is good or not. It also looks at the cyber partnerships India has with countries.The paper analyses the Digital India Programme what's good, about it and what is not. Also, it brings into limelight the challenges confronting India and the nations across the globe in terms of cyber warfare, cyber-crime, cyber terrorism and cyber espionage its relevance for national security, specifically that of India. Besides, special attention has been laid on the threats confronting the critical infrastructure of India like the defence, finance, energy and telecommunication. Moreover, the critically assessment of National Cyber Security Policy as well as India's cyber

partnership have been undertaken. Finally, the Digital India Programme have been analysed along with its strengths and loopholes.

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