An overview of present status, opportunity and challenges of digital India

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Abstract

Digital India is one of the dream projects of Government of India which was launched on 1st July 2015 by Prime Minister Sh. Narender Modi. It is beginning of digital revolution in India. It was started by the government to ensure that government services are made available to citizens electronically, even in remote areas, by increasing connectivity and improving online infrastructure. The mission and target of this programme is to take nation forward digitally and economically. This initiative will enable people to get engaged in the innovation process which is needed by the economy to move forward. However to implement this programme is a great challenge. In this paper an attempt has made to study the present status, opportunities and challenges of Digital India. The research methodology used is descriptive cum analytic in nature. Data is collected from secondary sources like websites, research journals, newspapers, magazines etc.

Keywords: digital India, opportunities, challenges, internet, governance

1. Introduction

The Government of India has been providing its citizens with e–governance services on a broad scale since mid-90. The approach to e-governance is citizen centric and service oriented. The aim is to increase transparency and efficiency in government department. The early initiative taken to digitalised government did not cause any significant impact on the economy. So the government came up with National e-Governance Plan (NeGP) in 2006 to accomplish the task of digitalising various government sectors, but the improvement has not been very significant. In order to remove the hindrances in the path and to speed up the process of digitalising the government came up with Digital India Programme in 2015.

Indian history will be remember the day, 1st July, 2015, forever when a flagship programme 'Digital India' was launched by the Prime Minister of India Sh. Narendra Modi with an objective of connecting rural areas with high speed internet networks and improving digital literacy. Digital India is a step by the government of India to inspire and fasten Indian economy to a knowledge savvy world, where all the information can be acquired with within no time. It will provide all services electronically and endorse digital literacy. The programme targets to make government services available to people digitally to have the benefit of the newest information and technological innovations. The programme is designed to ensure that government services are accessible even to the poor and downtrodden people through electronic means, thereby, fastening the rendering of services and improving the quality of life of even the lowest stratum of the society. It aspire to transform India into a digitally empowered society and knowledge economy through infrastructural reforms such as high speed internets in all gram panchayats, lifelong digital identification for citizens, mobile and internet banking for all, easy access to common service centres, shareable private spaces on an easily accessible public cloud and cyber security. Digital India also aims to transform ease of doing business in the country. The programme is projected at Rs. 113000 core which will prepare the country for knowledge based transformation.

2. Review of Literature

Gupta & Arora (2015) [1] in their paper studied the impact of Digital India project on India's rural sector. They concluded that many schemes have been launched in Digital India to boost agriculture sector and entrepreneurship development in rural areas. Digital India programme has also set the stage for empowerment of rural Indian women.

Rani (2016) [2] in her paper concluded that the Digital India project provides a huge opportunity to use the latest technology to redefine India the paradigms of service industry. It also pointed out that many project may require some transformational process, reengineering, refinements to achieve the desired service objectives.

Padhi (2017) [3] in her study concluded that the goal of Digital India is far away as most of the nine pillars of Digital India mission are facing serious challenges in implementation. Persistent attention must be given to each and every pillar so that this programme does not be a failure project.

Sheokand & Gupta (2017) [4] in their study find that digitalisation improves effectiveness and efficiency of work being done. Digitalisation of governance activities i.e. e-governance enhances quality of life of its citizens by increased transparency in government departments and easing service delivery. It increases speed and reduces time duration requirements for performing various activities and functions. Various steps need to be taken to remove obstacles and hindrances from the path of digitalization. Proper implementation of Digital India programme will lead to better per capita agricultural return, better cost output ratio of industrial produce and better service quality.

Sirivastava (2017) [5] in his paper concluded that despite a few Remarkable achievements, many more initiatives need to be undertaken. Public-Private-Partnership (PPP) models must be explored for sustainable development of digital infrastructure. The Government should try to make additional spectrum available to telecom service providers for deployment of high speed data network. In rural and remote area private sector players should be incentivised to provide last mile connectivity. The Digital India is in infant stage, so there is enormous unfinished agenda for India and it is an area of serious concern to address it effectively and expeditiously.

3. Objectives of the study
▪ To understand the concept of Digital India.
▪ To find out the opportunities and challenges in implanting the Digital India programme.
▪ To find out the present status of the programme.

4. Research Methodology
The present study is entirely based on secondary source of data which have been collected from government official websites, journals, newspapers, magazines and related studies. The research methodology used is descriptive cum analytical in nature.

5. Vision and vision areas of Digital India
Vision of Digital India
The Vision of Digital India programme is to transform India into a digitally empowered society and knowledge.

Vision areas of digital India
The Digital India Programme is centred on three key areas:

Table 1

Digital Infrastructure as a Utility to Every Citizen	Governance & Services on Demand	Digital Empowerment of Citizens
▪ Availability of high speed internet as a core utility for delivery of services to citizens. ▪ Cradle to grave digital indent that is unique, lifelong, online and authenticable to every citizens. ▪ Mobile phone and bank account enabling citizens participation in digital and financial space. ▪ Easy access to Common Service Centre. ▪ Sharable private space on a public cloud. ▪ Safe and secure cyber-space.	▪ Seamlessly integrated services across departments or jurisdictions. ▪ Availability of services in real time from online and mobile platforms. ▪ All citizens' entitlements to be portable and available on the cloud. ▪ Digitally transformed services for improving ease of doing business. ▪ Making financial transactions electronic and cashless. ▪ Leveraging Geospatial Information System (GIS) for decision support system and development.	▪ Universal digital literacy. ▪ Universally accessible digital resources. ▪ Availability of digitally resources/services in Indian languages. ▪ Collaborative digital platforms for participative governance. ▪ Citizens not required to physically submit Govt. documents/certificates.

Source: https://digitalindia.gov.in/content/vision-and-vision-areas#

6. Nine Pillars of Digital India
Digital India aims to provide the much needed thrust to the nine Pillars of growth areas. Brief summary of nine pillars of Digital India is as follows:

Table 2

S. No.	Pillar	Summary
1.	Broadband Highways	▪ To provide high speed broadband coverage highways connecting about 2, 50,000 villages, various governments departments, universities etc. ▪ To provide an integrated information infrastructure with integration of State Wide Area Network (SWAN), National Knowledge Network (NKN) and National Optical Fibre Network (NOFN).
2.	Universal Access to Mobile Connectivity	▪ To provide connectivity to about 43,200 villages.
3.	Public Internet Access Programme	▪ To make 2, 50,000 Common Service Centres (CSCs) operational at Gram Panchayat level for delivery of government services. ▪ To convert 1, 50, 0000 post offices into multiple service centres.
4.	E-Governance-Reforming Government Through Technology	▪ To use business process re-engineering to transform government processes and make them simple, automated and efficient.
5.	E-Kranti-Electronic Delivery of Services	▪ To use technology for service delivery such as e-education, e-healthcare, technology for planning, farmers, security, financial inclusion, justice etc.
6.	Information for All	▪ To provide open access to government information and documents online. ▪ To provide two-way communication between citizens and the government through online platforms and social media.
7.	Electronics Manufacturing	▪ To promote electronics manufacturing with target of Net Zero Imports by 2020 through various actions in areas such as taxation/incentives, economies of scale, skill development, government procurement etc.
8.	IT for Jobs	▪ To provide necessary skills and training that enable the youth to avail jobs in IT/ITES sectors.
9.	Early Harvest Programme	▪ To focus on execution of project within short timelines, such as IT platforms for messages, e-greetings from the government, biometric attendance, Wi-Fi in all universities etc.

Source: Deloitte, ASSOCHAM, 2015

7. Some of the services provided under digital India Programme

1. **Digi Locker:** This service was launched to store important documents like Voter ID Card, PAN Card, Driving Licence, Aadhar Card, BPL Card, Education Certificates etc. in the cloud.
2. **Mygov.in:** Mygov.in is a platform to share inputs and ideas on matters of policy and governance. It is a platform for citizens engagements in governance through a 'Discuss', 'Do' and 'Disseminate' approach.
3. **Accessible India Campaign Mobile App:** It is an national nation-wide flagship campaign for achieving universal accessibility that enables peoples with disabilities to gain access for equal opportunities, live independently and participate fully in all aspects of life in an inclusive society.
4. **Agri Market App:** This app has been developed with an aim to keep farmers abreast with the crop prices and discourage them to carry-out distress sale. Farmers can get information related to the prices of the crop in markets within 50 km of their own device location using the Agri Market Mobile App.
5. **Beti Bachao Beti Padhao:** The campaign aims at ensuring girls are born, nurtured, and educated without discrimination to become empowered citizens of the country. The initiatives youtube channel show various videos related to the campaign.
6. **BHIM (Bharat Interface for Money) App:** This app makes payment transactions simple, easy and quick using Unified Payments Interface (UPI). It enables direct bank to bank payments instantly and collect money using a mobile number or payment address or bank account number.
7. **Crime and Criminal Tracking Network & Systems (CCTNS):** This scheme aims at creating a comprehensive and integrated system for enhancing the efficiency and effectiveness of policing through adopting the principle of e-governance and creation of a nationwide networking infrastructure for evolution of IT enabled state-of-the-art tracking system around investigation of crime and detections of criminal.
8. **Crops Insurance Mobile App:** This app can be used to calculate the Insurance premium for notified crops on area, coverage amount, and loan amount in case of loanee farmers. It can also be used to get details of normal sum insured, extended sum insured, premium details etc.
9. **E-Granthalaya:** It is an integrated Library Management Software and useful for automation of in-house activities of libraries and to provide various online member services.
10. **E-Panchayat:** It is an e-governance initiative for rural sector providing comprehensive software solutions attempting automation of Gram Panchayat Functions.
11. **E-District:** The e-District Mission Mode Project (MMP) is envisaged to strengthen the district administration of the state by providing ICT support to the participating departments and district administration.
12. **E-Office:** This aims to support governance by ushering in more effective and transparent inter and intra-government process. The vision of e-Office is to achieve a simplified, effective and transparent working of government offices.
13. **E-Pathshala:** NCERT developed e-Pathshala for showcasing and disseminating e-resources including text books, audio, video, periodicals and variety of other print and non-print materials and through websites and mobile app.
14. **E-Procurement Portal (CPP):** The Central Procurement Portal of Government of India facilitates all the Central Government Organisations to publish their tenders, corrigendum and award of contract details.
15. **E-Sampark:** It is an mechanism to connect the government directly with citizens across India by running mailer, outbound dialling and SMS campaigns. The platform is used for sharing informational and public service messages.
16. **Kisan Suvidha:** It is an omnibus mobile app developed to help farmers get relevant information instantly. The app provide information on various details such as whether, market prices, seeds, fertilizers, pesticides, agriculture machinery, dealers, agro advisers etc.
17. **National Career Service Portal:** A national ICT based portal has been developed, primarily to connect opportunities with aspirations of the youth. This portal facilitates registration of job seekers, job providers, career counsellors etc.
18. **National Scholarship Portal (NSP):** NSP is an one stop solution for end-to-end scholarship right from the submission of student application, verification, sanction and disbursal to end beneficiary for all the scholarships provided by the Government of India.
19. **Swatch Bharat App:** This app enable organisation and citizens to access information regarding the cleanliness drive and achieve the goal of the mission.
20. **E-Hospital:** This initiative enables people to avail services like online registration, payment of fees and appointment, online diagnostic report, checking on the availability of blood at.
21. **Swayam:** It seeks to bridge the digital divide for students who have hitherto remained untouched by the digital revolution and have not been able to join the mainstream of the knowledge economy. This is done through indigenous developed IT platform that facilitates hosting of all the courses, taught in classrooms from 9th class to post graduation to be accesses by anyone, anywhere at any time.

8. Opportunities of Digital India Programme

According to Union IT and Law Minister Sh. Ravi Shankar Prasad, Digital India will be a $1 trillion business opportunity, combining the requirements of the telecoms IT/ITeS and electronics manufacturing sectors. Some of the opportunities of Digital India programme are as follows:

▪ Digital India is one of the initiatives taken up to transform India into an empowered society with access to IT for everyone. The main focus of this programme is on providing every citizen the digital infrastructure as a core utility, services and e-governance and digital empowerment of citizens.
▪ Every citizen in India gets benefitted through this programme. With e-governance coming in and with the introduction of digital locker where one can store their documents safely in the cloud and access any time from any place with a click. This reduces the paperwork which in fact eliminates various illegal happening in the government.
▪ Digital India programme could change the Indian education system with all the villages having access to internet will

provide access to different teaching aids and materials and increase the literacy level in the country.

- The internet penetration into rural India would help farmers in accessing information regarding cropping techniques, seeds, fertilizers, pesticides and various government schemes.
- India, with huge demand for telecommunication services is big opportunity for domestic as well as foreign investors. Hence Digital India is also beneficial to businesses.
- Digital India also aims at eliminating imports of electronics goods into India and manufacture them in India thereby providing huge potential for employment.
- Red tapism hinders the progress of any project. Digital India is to eliminate red tapsim, bureaucracy and improve the transparency.
- With e-healthcare, e-commerce, e-ticketing etc. benefits people of every age, gender and region to communicate easily with each other and make their lives comfortable by bringing everything to one's doorstep.

9. Challenges of digital india programme

- High level of digital illiteracy is the biggest challenge in the success of Digital India programme. According to market research agency Kantar IMRB internet users in the country has exceeded half a billion people for first time and pegged at 566 millions. But still more than half of the Indians are not on internet.
- Creating an awareness regarding the Digital India programme benefits among common masses is a big challenge.
- It is a very difficult task to have connectivity to each and every village, town and city.
- The internet speed in India is very low. The low internet speed cannot facilitate online delivery of various services.
- India's digital infrastructure is inadequate to tackle increase in digital transactions. The slow and delayed infrastructure development is the biggest challenge faced by Digital India Programme.
- The private participation in government projects in India is poor because of long and complex regulatory processes.
- Many villages in India still remain deprived of mobile connectivity because providing mobile connectivity in such locations is commercially viable for service providers.
- India has 1600 languages and dialects. Non-availability of digital service in local languages is a great barrier in digital literacy.
- Fear of cybercrime breach of privacy has been deterrent in the adoption of digital technologies.
- There is a wide digital divide between urban and rural India. Funds have not been deployed effectively to meet the cost of infrastructure creation in rural areas.

10. Conclusion

A closer evaluation of Digital India programme reveals that while this appears great on paper, the execution has been far behind schedule. One of the major obstacles towards smooth implementation is the digital divide that exists in India. Internet connectivity is extremely low, which gives the process a setback, making its effectiveness highly restricted. Even where, there is internet connectivity, network strengths are feeble, resulting in deplorable speed even in 4G networks. Language barriers, poor digital literacy and lack of understanding of new technologies contribute to this issue. Inexpensive smartphones have been made available, but people do not know how to use them, particularly in rural and semi-rural areas.

However, despite flaws in the system, it is noteworthy to see that this campaign has successfully improved India's technological performance. The number of internet subscribers in the country stands at more 550 million. Digital transactions have been increased manifold. Overall, the outcome has been more or less positive. In order to facilitate crystallization of the vision of Digital India, parallel reforms in multidisciplinary areas need to be initiated. With better implementation, accompanied by a few changes, it has the potential to transform the functioning of the country, particularly the rural sector. Government services can be rendered seamlessly, without delays and friction. Paperless work will also contribute in reducing government expenses and an overall awareness will make wonders in making our country travels towards the path of progress and achieving its long term goals. The success of this programme lies not only in the hands of government, but it requires all round support from all the citizens and other stakeholders of the nation.

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