A Study of Sustainable Digital India; Challenges and Opportunities with reference to Pune District.

Amruta Urunkar¹ and Dr. Aniruddha Joshi².

1. Research Scholar, Department of Management Sciences (PUMBA), Savitribai Phule Pune University.
2. Assistant Professor, Department of Management Sciences (PUMBA), Savitribai Phule Pune University.

Introduction:

Concept of Digital India:

The Digital India programme has been announced by Prime Minister of India to transform the country into a digitally empowered society and knowledge economy. Digital India is an initiative of Government of India to integrate the government departments and the people of India. It aims at ensuring the government services are accessible to common citizens electronically by reducing paperwork. The programme also includes plan to connect rural India with use of high-speed internet networks.

Digital India vision is centered on three important areas as below.

- Creation of digital infrastructure a utility to every citizen.
- Digital delivery of services on demand (e-Governance).
- Digital literacy to achieve Digital Empowerment of Citizens.

The DEITY has formulated National e-Governance Plan (NeGP) for improving delivery of Government services to citizens and businesses.

Concept of e-Governance in context of Digital India:

During announcement of the Digital India programme in 2014, the Prime Minister Narendra Modi made it obvious that e-Governance is going to be an important area of focus for this government. Based on primary digital interaction in various actors and entities involved in e-Governance Project, e-Governance delivery models can be classified as:

---

Digital India is mainly the application of e-Governance to provide the government services to the citizens through the internet. This research paper highlights the main challenges and opportunities related to the implementation of e-Governance in India. This study investigates the success of e-Governance initiative in Digital India program with respect to various difficulties faced by users of e-Governance System in selected local governing bodies in Pune District from an individual perspective. To achieve digital empowerment of citizens, this study focuses on the government-to-citizen (G2C) domain. The other domains like G2E, G2G and G2B are out of the scope of this study.

E-governance has become an important and necessary tool in the context of reforming public administration. To analyze the pace of the changing administrative environment in Pune District, the changing character of administration in Pune District would necessitate qualitative shift in the structure and organization. The potentiality of ensuring citizen-administration partnership can be radically improved through e-governance through Digital India program. This needs to be viewed from the background of traditional administrative processes and the bureaucratic mind set in the District.
- **Government to Business (G2B):**
The goal of this model is to reduce business difficulties by providing business related information and services through digital communication so that more transparent and favorable business environment will be created.

- **Government to Citizen (G2C):**
The goal of this model is to provide various ICT services by government to citizens in an efficient and economical way which helps to strengthen the relationship between government and citizens using technology.

- **Government to Employee (G2E):**
The goal of Government to Employees to enable interactions between various government units and their employees through online communication tools.

- **Government to Government (G2G):**
The goal of Government to Government is to achieve online non-commercial interaction between two different Government units with each other so as to simplify governance for government.

**E governance Initiatives in Pune District:**
- E-Governance initiatives in PMC and PCMC under JNNURM like SARATHI, Grievances redressal.
- e-DISTRICT Project - One-window system to issue various kinds of certificates.
- e-Panchayat Project- SangramKendras and various e-Governance portals
- Common Services Centers –Mahae-Seva, SETU CSC
- RTO(Transport)
- Crime and Criminal Tracking Network & Systems (CCTNS)
- Public Distribution System
- The unique identification project (UID), e-Sign, Digital Locker
- Education MMP - National Scholarship Portal
- Passport MMP- web-portal and mobile apps
- Tax Information Network (TIN) for Income Tax
- Posts MMP: Postal, banking services and web-portal
- Agriculture MMP - Kisan-Centers, agricultural portal, e-Parawana.
- E-Governance Services Delivery Gateway- National(NSDG)/State(SSDGs, SWAN)
- e-Hospital

1. **Challenges and Opportunities for Digital India (e-Governance) in Pune DISTRICT:**
   There are many challenges for implementing “Digital India” including E – Governance in India also in Pune District which can be categorized as below:

   a) **Local Language diversity:**
   Most of the e-governance application Interfaces use English languages for interaction which may not be understandable by most of citizens especially in rural areas. So multilingual and multi-script diversity in different state is a huge challenge for implementing e-Governance projects.

   For the above challenge, the following opportunities are exist through which we can overcome the challenge:
   1. To support multilingual e-Governance project for handling multilingual data, transliteration of data stored in one language to another language is required. The e-Governance Software Vendors should provide various utility softwares to handle transliteration procedures in conformance with some approved ISO standard.
   2. The hardware vendors should provide Indian Script (inscript) keyboard facility and other keyboard lay-outs softwares depending at affordable cost on the user requirement.

   b) **Low Literacy:**
   Literacy means ability to read and write with understanding in any language. A person cannot be considered as literate who can just read but cannot write. Low Literacy is big challenge for e-Governance adoption by the people as illiterate citizens are not able to use the e-Governance applications; hence the e-Governance projects do not get much success.
Low ICT Literacy:-
Much of the Indian people those who are literate do not have much knowledge about Information communication Technology (ICT). So they are not confident about the usage of e-governance projects. So low ICT illiteracy is major hurdle in implementation of e-Governance in India.

For the above challenge, the following opportunities are exist through which we can overcome the challenge:
1. Government education program should give special attention to groups (women, elderly and immigrants) and should design interactive training programs for them which helps get the participants involved and make the educational process more active and effective.

c) Awareness of e-governance services:-
People are not aware of e-Governance facilities offered by the government in their region is another challenge.
For the above challenge, the following opportunities are exist through which we can overcome the challenge:
1. Along with e-Governance project, government should invest in awareness of the e-Governance services through special campaigns to make them aware about the necessity and ultimate benefits of e-governance system which will help to overcome the logical social resistance of citizens.

d) Accessibility of Services:-
The goal of e-Governance is to increase effectiveness and efficiency of e-Governance services and this will be achieved on if these services will be available to the 100% of the citizens at anywhere and at any time. Even after growth of internet related services, there is still major part of Indian population which is residing in rural and remote areas is not able to access e-Governance services due to many reasons.

For the above challenge, the following opportunities are exist through which we can overcome the challenge:
1. To support e-Governance services government should provide internet access in remote and rural areas through public terminals. The Government should adopt new policies and programs to encourage private sector participation to raise telecommunications infrastructure in remote rural area.
2. It is very costly for government to create wired network in all the villages in the country. So e-Governance systems should use the wireless networks like existing cellular networks to reach the applications in remote rural areas

e) Interoperability:-
The information systems for e-governance projects supports multiple delivery channels which are spread across multiple locations. Presently most of e-Governance systems are legacy systems with heterogeneous platforms which are spread across various geographical locations so it is very challenging for government of India to integrate and collaborate various information sources spread across various departments in Centre, state and local government so they can function together.

For the above challenge, the following opportunities are exist through which we can overcome the challenge:
1. There should be standard technical guidelines for the development of a new e-Governance application.

f) Multimodal/multichannel Interaction:-
The goal for reaching all citizen can be achieved by the deployment of e-Governance services through several communication channels which are supported and accessed by end-users using different devices by the Multimodal/multichannel delivery of e-Governance services.

For the above challenge, the following opportunities are exist through which we can overcome the challenge:
1. Need to develop and maintain several versions of single e-Governance application across multiple devices. Also Simple Online version up-gradation facility should be provided so that end-user can choose desired version for interaction.

g) E-Governance websites:-
An important part of e-Governance strategy is to develop interactive and user-friendly websites through which government services and information can be made available and through which even non-expert citizens can easily interact with government.
For the above challenge, the following opportunities are exist through which we can overcome the challenge:

1. The websites should be tested on Desktop computers and smartphone devices to ensure they meet specification and accessibility standards. And feedback of addressed issue and recommendations should be shared with the respective vendors to get them implemented correctly.

   **h) Resistance to change to electronic ways:**

   Usually moving from paper based to web-based e-service, or any change in society is usually met by some form of resistance. Employees, Citizens and businesses can all have their biases with respect to new electronic procedures in e-Governance application. The main reasons of resistance to change are that users fear from new system and its impact on their lives.

For the above challenge, the following opportunities are exist through which we can overcome the challenge:

1. Training and campaigning activities can help to understand the benefits of the new procedures to implement e-governance which will encourage them to accept and use e-Governance system.

**Conclusion:**

India is happening place as far as IT is concerned. Digital India is not only depends on technology but also depends on citizens. Digital India is not for elite, but it is for poor people. It is for margin life style. Although Indian government is spending a lot of money on Digital India (e-Governance projects), but still these projects are not successful in all parts of India. In this paper, an in-depth study has been made in understanding the key characteristics of e-governance Projects (Digital India) that are already implemented in Pune District.

Low literacy, Unawareness in people, limited financial resources, per capita income, etc. are main challenges and if we overcome the challenges and see the opportunities in the implementation then Digital India initiative will be definitely successful. The participation of people can play a main role in implementation of e-Governance in India i.e. Digital India.

**References:**

3. Prabhudatt Dwivedi and Ganesh P. Sahu,”Challenges of E-government Implementation in India”
6. Dr. Sanjay Kumar Dwivedi, Ajay Kumar Bharti,”E-governance in India – problems and acceptability”
7. Neena Singh,”Bridging the Digital Divide in India: Some Challenges and Opportunities”