

REVIEW ON DIGITAL INDIA INITIATIVE AND CHALLENGES

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Abstract:- The Government of India has launched various IT related projects in various sectors with aim to provide better facilities to the citizens at lowest possible rates and at their door steps. These initiatives have been taken under one umbrella called Digital India Programme. The Digital India initiatives taken by the Government has brought very dramatic changes in the lifestyle of everyone. This paper includes the theoretical view on adoption of IT, cloud computing, Ecommerce, Security of Network in various sectors. This research paper also considers the major challenges in implementation of digital India such as internet speed, Cloud services, Threat to Network, E-Commerce related issues.

Keyword: Digital India, Cloud computing, E-commerce, Network Threats, 3g,4g,

[1] INTRODUCTION

Information & Communication Technology is a complete term for Information Technology that focuses on unified communications also integration of communications used in wireless signals & telephone lines termed as Telecommunications, computers as well as necessary middleware, audio-video systems, enterprise software & storage that allow users to not only access but also to transmit, collect & manipulate information.

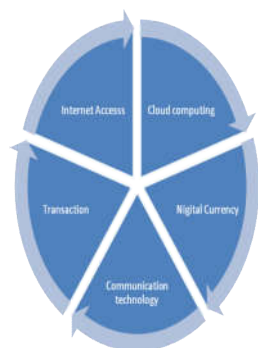


Fig 1 Component of Information & communication technology

Information & communication technology term is also widely used for convergence of telephone networks & audio-visual with computer networks using a single link system or cabling. Using such facility we would have big economic incentives that mean large charge saving because of removal of telephone network. In such computer network merges with telephone network system through a single cable, management & unified signal distribution.

Information & communication technology aims in field of Education

a) Personal objectives

To motivate learners to learn & develop personal skills that are necessary to know about appropriate independent Information & communication technology learning.

b) Cultural objectives

To assist those learners who appreciate affluence of our own cultural heritage with assist of accessing all aspects involved in unique culture.

c) Social objectives

To give confidence to learners in order to develop all suitable social skills that are necessary for collaborative & co-operative learning dependent Information & communication technology. To boost up all disadvantaged Information & communication technology learners by assuring sufficient access to all those dedicated learners who are having less out of school opportunities in order to make use of technology.

d) Utilitarian objectives

Information & communication technology assists those learners, who have become confident & competent Information & communication technology users & also could make effective, efficient & creative utilization of critical software applications within their daily activities.

Fourth generation

Fourth generation is generation of mobile telecommunications technology that is succeeding third generation. Fourth Generation system is predictable to help current and potential applications consisting IP telephony, mobile web access, gaming services, video conferencing, high-definition mobile TV,

three dimensional cloud computing and televisions.

The Fourth generation achieved new levels of client or customer experience. It provided multi-service which are as follow:

- a) General Packet Radio Service
- b) Global System for Mobile Communications
- c) IMT-2000-International Mobile Communications
- d) Bluetooth
- e) Wireless Fidelity

Cloud Computing

Cloud might be internet or network. It gives services over network which may be public or private. Cloud is available at remote location. They have been utilized in wide area network as well as in local area network. It may be used in virtual private network too. Lot of application such as email & web dependent conferencing usually implemented over cloud. Cloud computing has offered Platform independency because there is no necessity to set particular software on computer.

Cloud computing has several benefits which have been listed below

- a) Operators on internet would be able to get remote applications as utilities.
- b) Cloud computing is offering online development tools.

- c) Operator could modify & configure application online at any time
- d) Operators have been provided platform independent availability of cloud resources which would be available over internet.

Security of network

Security of network is known as any activity that was made in order to secure usability integrity of computer network Information. It is consisting hardware as well as software technologies. It is focusing on variety of threats in order to prevent them from accessing computer network.

[2] LITERATURE REVIEW

As mentioned by E-Governance Digital India Opportunities as well as Challenges by Kiran Yadav as well as Sanatan Tiwari, There are various issues for implementation of (Digital India) e-government in India. These issues are like low literacy, lack of awareness, low broad bas well as penetration, lack of system integration within a department, as well as all other reasons.

According E-Governance Digital India In India Problems As well as Acceptability By Dr. Sanjay Kumar Dwivedi, Ajay Kumar Bharti In spite of poor and inefficient infrastructure, , illiteracy, poverty language dominance as well as all other cause India has number

of award wining E-Governance Digital India projects.

Security framework by various methods provided dynamically By S Subashini & V Kavitha proposes a security framework by various methods provided dynamically, that one of components of such framework refers to provide information security by storage & access to information dependent on meta-data, that is similar to storing related information in various areas dependent on meta data, & if destruction of user information takes place, it could be retrieved.

Achieving Secure, Scalable, & Fine-grained Data Access Control in Cloud Computing by Shucheng Yu, Cong Wang This research objectives at fine grained information access control in (CC) cloud computing. This proposed scheme could enable information owner to own delegate almost of calculation overhead to potent cloud servers. Formal security proofs represents that proposed plan is secure under typical cryptographic models.

Security Architecture of Cloud Computing by V. Krishna Reddy & Dr. L.S.S. Reddy proposed security issues at various levels of architecture of cloud computing and services have been studied. Security of customer-related information is a considerable need for services that is provided by every model of cloud computing. They have calculated matters

of on-going safety software as a service (SaaS), stage as a service (PaaS) and Infrastructure as a Service (IaaS). This research focuses on use of cloud services & security for working cross-domain Internet connected.

In 2016 AL-Muselem Waleed, Li Chunlin assesses how security & privacy issues transpire in context of cloud computing & examines ways in that they might be addressed. These research objectives to solve privacy & safety issues in cloud computing using Ubuntu Enterprise Cloud. The methodology used involves encrypting & decrypting information to ensure privacy & security in cloud.

In 2016 Nidal Hassan Hussein et. al. wrote a paper. In such research a inclusive survey of existing literature for cloud computing safety issues & solutions is presented. At end of such research authors propose a mold for cloud computing safety.

[3] DIGITAL INDIA

Digital infrastructure is going to focus on delivery of high speed secure Internet. Governance and services on demand is going to raise stress across departments on integrating services. It is also considering jurisdictions as well as avail services in real time for mobile and online platform. Need of investment for individual project

for Digital India would be worked out by relevant nodal ministries/departments. The estimation of government is Rs 113,000 crore.

VISION OF DIGITAL INDIA

The Infrastructure as a utility to every citizen

High speed internet shall be made available in all gram panchayats support to give importance to digital identity along with following things:

- a) Mobile & Bank account are going to enable participation in financial and digital space at individual level.
- b) Provision of secure and safe cyber space in country.
- c) Provision of private space on a public cloud that is shareable.
- d) At their locality quick and access to (CSC) common service centre should be provided.

Services and Governance on Demand:

This section involves concentrate on following:

- a) All citizen entitlements to be accessible on cloud to ensure easy access.
- b) Access at Single window to everybody by seamlessly integrating jurisdictions or departments along with

- presence of government services in mobile platforms.
- c) Making financial transactions above a threshold, electronic & cashless.
 - d) Government services to be digitally transformed for improving ease of doing business.
 - e) Leveraging GIS for decision support systems.

Citizens Digital empowerment : This vision of digital India aims at following:

- a) Each digital resource universally accessible.
- b) Universal digital literacy.
- c) Collaborative digital platforms for participative governance.
- d) Each government certificates as well as documents should be available on cloud.
- e) Portability of each entitlement for individuals through cloud.
- f) Availability of digital services in Indian languages.

Distinct challenges of digital India programme are given below:

Implementation - The whole programme is visualized as a top level model on technological front High-end consumers are directly connected to main nine pillars of this programme. The success of such programme depends on ground level because approximately 70% of o

population in India lives in rural areas Therefore, it requires proper guidance how to perform same on ground level. Deploy Wi-Fi centers & Hotspot: - BSNL must provide facility of Wi-Fi Hot-spots across country. If government forces BSNL to confirm at least one hotspot per village, marvelous positive outcomes could be experienced. Make sure, places for hotspot should be backward castes & geographically difficult areas.

Upgrade IT Literacy:- IT Literacy plays vital role in almost everyone's people life. So, it must be update. People who are using internet should know how to make safe their online data. Proper guidance must be given to masses.

Data vulnerability:- At present, we could see all personal details like bank details, income tax details & PAN details of almost each citizen of India . In such type of information is not secured properly might be unshielded to other. It is a big loss of one's privacy.

Excessive server Hits: - In such age of technology, number of people are rising day by day who use internet. By utilizing more internet, number of hits on government's portal server has been increased. That is why, hance of server crash are more than before.

Man in middle attack:-Strategic planning & competitive models Organizations all around world develop tactical plans. They

warily create a vision of their potential & strategies required to get there. But, several fail to understand their vision & failed to deliver expected strategic results. For example – A company want to establish its business into any other country, Firstly it has to analyse political & economic stability of interested country along with study of its critical infrastructure.

Not only political & economical analysis is required but some others also. Firstly, company need to enquire for competitors in that area. Secondly, business laws & practices, banking & taxation all vary from place to place finally, it need to understand cultural differences that could effect business viability. On other hand, company must investigate 'SWOT'

Identification of SWOT is significant because they could inform later step ladder in planning to accomplish objectives first decision makers should believe whether objective is possible, given SWOT. If objective is not reasonable, they must select a various objective & repeat process. SWOT examination of Digital india scheme consists of proper assessment of strengths, weakness, opportunities & fear from implementation of scheme.

[4] Pradhan Mantri Kaushal Vikas Yojana

This Scheme's objective is to encourage development of skill for adolescence by providing monetary rewards and by this approved training programs can be successfully completed . Pradhan Mantri Kaushal Vikas Yojana is a flagship scheme of Ministry of Skill Development & Entrepreneurship. The objective of the Skill official recognition Scheme is to make able a number of Indian youth to get industry-relevant skill training which will assist them in securing a better living.

Key Components of Scheme:

1. Short Term Training

The main aim of Short Term Training at PMKVY Training Centres is to benefit candidates of Indian nationality who are either unemployed or school/college dropouts. Besides providing training in accordance with National Skills Qualification Framework, TCs shall also provide training in Entrepreneurship ,Soft Skills, , Financial & Digital Literacy. Duration of training varies according to job role, which ranges among 150 & 300 hours.



Fig 2 The Short Term Training imparted at PMKVY Training Centers

2. Recognition of Prior Learning

Individuals who have prior learning practice or skills would be assessed & certified under Recognition of Prior Learning component Scheme. RPL objective is to align competence of country’s unregulated workforce to NSQF. For addressing knowledge gaps, PIAs should offer overpass Courses to candidates of RPL.

3. Special Projects

The Special Project component of PMKVY helps in creation of a platform which would facilitate trainings in particular areas or Government bodies premises, Corporates or Industry bodies, & trainings in special job is not defined under the Qualification Packs /National

Occupational Standards which are qualified.

4. Kaushal & Rozgar Mela

Mobilisation of Social community is extremely critical for the success of PMKVY. Transparency & accountability is ensured by active participation of community, & it assists in leveraging cumulative knowledge of community for its better functioning.

5. Placement Guidelines

PMKVY Forecasts to link aspiration, aptitude, & knowledge of skilled workforce which is created with employment opportunities & demands in market. Therefore every effort made by PMKVY TCs providing placement opportunities to (students) candidates, to make trained & certified under Scheme. TPs would also support to entrepreneurship development.

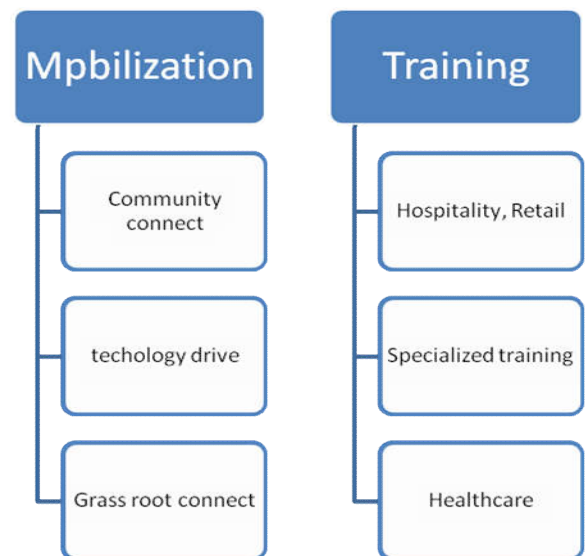


Fig 3 Placement Guidelines

[5] FUTURE SCOPE

This thesis has a depth study & analysis of recent & contemporary economic development theory, practice & outcomes in an effort to set stage for variety of project implementations including IT projects i.e. Digital India. As such it has been focused at current Digital India initiatives taken by Government but at same time it has attempted to recognize critical elements of past 30 years of economic information technology development not in India but all over world too.

India's Fourth generation & 3G user base would touch 300 million by March 2018, according to a market research undertaken by investment group, Credit Lyonnais Securities Asia.

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