OPPORTUNITIES, CHALLENGES, INITIATIVES AND AVENUES FOR DIGITALIZATION IN INDIA

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ABSTRACT

India in the fastest growing economy in the world, has undergone complete transformation with rapid uptake to digital technologies. Smart and connected technology has become an integral part of business, governments and communities. India is today among the top three global economies of digital consumers. India in at a topping point where robust foundation of digitalization and increased accessed to information and services in core economic and social sectors, leading to $ 1 Trillion Digital Economy while sustaining 55–60 million jobs by 2025. About $ 390-500 billion of this $ 1 trillion economic value would come from digital application in sectors e.g. agriculture, health, education. All those would together lead to the new India not just for economic transformation but for social transformation as well by focusing in inclusion, empowerment and bridging of digital divide. Hence this paper evaluates some key finding and suggestion to draw out a conclusion.

KEYWORDS: *Digitalization, Growing Economic, digital revolution, digital economy, social transformation, economic transformation. Tax evasion efficiency, effectiveness.*

INTRODUCTION

Digitization as a phenomenon made in onset long ago. But the pace was so gradual and the changes involved so subtle, that it went almost unnoticed. Early digital initiatives were mainly to preserve records, create in house office management systems, processing of development. From the betterment to artificial intelligence and robotics, emerging technologies have presented unprecedented opportunities for social and economic renovation India, the fastest growing economy in the world, has under gone complete transformation with the rapid uptake of digital technologies. Smart and connected technology has become an integral part of businesses, government and communities.

The story of India's Digital journey has been are of transformation and inclusion. The Digital India programme was launched by the government in 2015 with the aim to develop India into a knowledge economy and a digitally empowered society. Technology has been intrinsic in this transformative evolution by enhancing transparency, inclusion, productivity and efficiency.

The IT revolution has given a leap forward to Indian economy and proved to be a boon for the Indian youth as a generator of employment and revenue. Traversing through phases of Indian youth migration abroad for work followed by global IT giants Indian investing in India and jobs returning to India, the economy is now in the phase of start-ups and innovations. India's vibrant IT industry has been growing very fast in the year 2017-18 the total revenues of India's IT industry was $ 167 billion and exports made were to the tune of $ 125 billion.

The world is getting digitized at a rapid pace in all aspects be it enterprises making products and selling them, humans transacting their daily lives and governments delivering social services to their citizens.

REVIEW OF LITERATURE

Digitalization transition through Digital India programme aim to provide the mach needed thrust to the growth areas. Impact of digitalization on a country can be accessed on the basis of its impact on the government; on the economy and the society we have been a major change in every sector with the emergence of digitalization.

World Economic Forum (2013), intends to say that Digitalization of sectors related to manufacturing and services would lead to productivity gain and job creation. Manufacturing and financial sector faces job losses for digitization because productivity gains surpass output gains. Retail and hospitality sectors provide rising employment opportunities with output and productivity growth. Also, increased online shopping boosts logistic sectors recruitments. Thus key sectors are to be identified for digitization that would product with maximum tradeoff.

BCG & IAMAI (2015) have concluded that as digitalization is taking up a major role an economic growth driver it is essential to steer it as a source of national competitive advantage. Batter access and affordability of ICT services in now a minor part of the bigger picture. For creating a thriving presence in the increasing digitalized globe, India needs to be a digital market maker to unlock the potential of internet in the Indian economy, in broad sense, accessibility, awareness and regulatory framework for internet has to be improved.

Midha (2016) concluded that digitalization is a great plan to develop India for knowledge future but its improper implementation due to inaccessibility and inflexibility to requisite can lead to its failure. Though digitalization programme is facing number of challenges yet if properly implemented it can make the best future lf every citizen. So we Indian should work together to shape the knowledge economy.

Karamvir Sheokhand (2017) studied the impact of digitalization on Indian economy. The study found that digitalization improves effectiveness and efficiency of work being done. Digitalization of governance activities, e.g, e-governance, enhance quality of life of its citizenry by increased transparency in Government departments and easing service delivery. It increases speed and reduces time duration requirement for performing various activities and functions.

Moinak Maiti & Parthajet (2017) researched about Digitization its impact on Economic Development & Trade. He concluded that the effect of digitization on India's services and MSME sector. The performance of the service sector improved significantly since 2000 onward. Development in IT and ITES digitize and automated the overall business process. This resulted in overall improvement in both manufacturing and services sectors. MSME sector is very important for an economy to achieve a sustainable growth. India's MSME sector is one of the most vibrant sectors. The major issue with MSME is 'access to finance' which effecting the overall performance of this sector.

OBJECTIVE OF THE STUDY

1. To study the impact of digitalization on the upliftment of Indian economy .
2. To study how digitalization will be lead to empowerment of entrepreneurship in the country.
3. To study the impact of digitalization empowerment of core economic and social sectors.
4. To study how digitalization improves effectiveness and efficiency of e-governance.

RESEARCH METHODOLOGY

The present study is based on the secondary data collected from National &International journals, articles, Government reports, books, newspapers, magazines, websites and published data from various issues of RBI and deferent Institutions. Various studies on the subject have also been referred in this study.

SOME OF THE KEY INDICATORS OF DIGITALIZATION

Digital Identity:

Digital Identity is the key of unlock access and potential of Digitalization. To provide a unique digital identity, Aadhaar has covered around 122 crore residents of country. It has provided a digital identity to supplement the physical identity of individuals for delivery of various social welfare programmes and enabled portability. It has curbed leakages and corrupt practices from the public welfare delivery mechanism. Today financial in entitlements under 434 Government services are being delivered using Aadhaar based Direct Benefit Transfer. According to the estimate of the World Bank if Aadhaar is used across all welfare schemes, it will help to save of Government about US $ 11 billion every year.

Digital Infrastructure:

Building robust digital infrastructure is essential for the success of digitalization.

➢ **Bharat Net**:- Bharat Net aims to provide high speed internet in rural areas of India by building optical fiber network connecting all the 250 lakh Gram Panchayats of India. About 291689 km. of optical fiber have been laid connecting, 119947 Gram Panchayats by 3rd Nov. 2018.

➢ **National Knowledge Network**:- National Knowledge Network (NKN) is a state of the art network to promote collaboration and exchange of knowledge among educational and research institutions. Some the NKN enabled applications are: Virtual Class Rooms, collaborative research group over NKN, NDL, NPTEL, various Grids e.g. Cancer Grid, Brain Grid, Climate Change Grid etc. As on October 2018, 1672 Edge links to Institutions have been commissioned and made operational under NKN across the country which includes 388 links migrated from NMEICT to NKN. 497 district links to NIC district centers have also been commissioned under NKN.

➢ **GI Cloud (Meghraj)**:- In order to utilize and harness the benefits of cloud computing, this initiative aims to accelerate delivery of e-services in the country while optimizing ICT spending of the Government. This has ensured optimum utilization of the infrastructure and speed up the development and development of e-Gov. applications. More than 890 applications are running on 15300 virtual services.

➢ **e Sing** :- e Sing Electronic signature services in an innovative initiative for allowing easy, efficient and secure signing of electronic documents by authenticating signer using e-KYC services. Some applications enhancing services delivery are Digital Locker, e-filing financial sector, account opening in banks and post office, driving license renewal, vehicle registration, certificates for birth, caste,

marriage, income certificate etc. 5 e-Sing providers have been on boarded and more than 5.89 crore e-Sings have been issued.

Digitalization for Better Governance:

JAM Trinity for Direct Benefit Transfers (DBT). The combination of 32.94 crore Jandhan Bank Accounts, 121 crore mobile phones and digital indentify through 122 crore. Aadhaar in helping the poor receive the benefits directly into their Bank Accounts, Financial entitlements under 434 Government schemes are being delivered through Direct Benefit Transfer. In the last five years total of 5.09 lakh crore have been transferred directly into the bank accounts of beneficiaries leading to a saving Rs. 90,000 crore. This has not only enhanced efficiency of service delivery mechanism but also eliminated leakages and curbed corruption.

Digital Payment:

The growth of Digital payment ecosystem in set to transform the economy. Over the past four year digital payment transactions have grown multifold from 316 crore transaction. Today, BHIM-UPI (Unified Payment interface) platform and Rupay debit cards have become very popular digital payment instrument for sending, colleting the money and for payments at merchant outlets. In sep.2018, more than 48 crore transactions of value Rs. 74,978 crore were made using BHIM-UPI platform. BHIM-UPI is a unique mobile based payment innovation of India that is being appreciated world over.

UMANG (Unified Mobile Application for New Age Government) - It has brought government services to the fingertips of the citizens of India. It is a single mobile app that offers more than 307 government services, with the target being to provide more than 1200 digital services or a single mobile app. It has reduced the drudgery of searching for relevant Government app for availing the services. More than 8.4 million users have downloaded this app since its launch in Nov.2017.

Digital Delivery of Services:

- *National Scholarship Portal* has become a source of facilitating education. It is a one-stop solution that ensures students to access various services starting from student application, application receipt, processing, sanction and disbursal of various scholarships with ease. It has comprehensive coverage of schemes and departments. Since its launch in 2015, more than Rs. 5,257 crore have been disbursed to 1.8 crore beneficiaries.
- *Jeevan Parmaan* provides the ease to pensioners to generate their Digital Life Certificate at home, bank, CSC centre, government office etc, using Aadhaar biometric authentication. Now, the physical presence of the pensioner at the government office is not needed for generation of her life certificate and availing the entitled services. So far, around 1.75 crore Digital Life Certificate have been generated.
- *Government e-Market place(GeM)* India spend a considerable percentage of its GDP on public procurement with the challenges of decentralized procurement of commonly used items. The challenges in public procurements, Government e-marketplace (GeM) were launched. GeM provides and online marketplace for public procurement for both goods and services. It has made lives of sellers to Government extremely simple by eliminating physical meeting of Government buyers and brought transparency. There are 1.55 lakh seller and service providers, 29,729 buyer organizations and 5.97 lakh products on the platform. The growth of buyers and sellers on GeM is indicative of its use and ease of selling on the portal.
- *e NAM* (*electronic National Agriculture Market)* is a pan - India electronic trading portal which networks is existing Agricultural Produce Marketing Committee (APMC) Mendes to create a unified market for agricultural commodities. Over 585 markets in 16 States have already been integrated. It has around 93 lakh farmers and 84,000 traders registered.
- *E Court* with e-court mobile app and portal it has become easy to keep a track of case status of cases going on in different courts across India. Lawyers and litigants can also avail notification services about their cases.
- *Digital locker:-* It is now possible to eliminate the need to carry any paper to avail a government services with more than 1.57 crore registered users, 68 issuer and 27 requester. Digital locker provides access to over 336 crore certificates in digital format on a single platform. Various important documents can be stored in digital form on digital locker.

Digital Services Delivery:

In order to sustain a decent standard of living, employment is fundamental. In this direction, the government has taken significant initiatives in the area of Electronics manufacturing, BPO Promotion, IT ITeS etc. Indian start-ups are already developing to take advantage of the humungous potential created through this transformation more than 1,200 startups come in 2018, including eight unicorns, taking the total number to 7,200 startup.

- Mobile manufacturing has increased multifold, from 2 units on 2014 to 127 units manufacturing mobile handset and components. This has generated 4.5 lakh direct and indirect jobs. Greenfield Electronic Manufacturing Clusters (EMC), approved for 20 locations and 23 Common Facility Centre (CFC), are poised to create approx 6.5 lakh jobs.
- The BPOs have reached the small towns to the country covering around 100 cities across 20 states and 2 UTs. These are creating jobs in the small cities and bring the benefits of IT Industry to youth of small towns and cities.
- To keep up the accelerated pace of the digital disruption and the ever changing digital economy, the skill set of the people also have to be continuously improved and enhanced for adoption. Hence, the guest to promote digital literacy and future skilling in of almost importance. Pradhan Mantri Gramin Saksharta Abhiyan (PMGDISHA) aims to make 6 crore people digitally literate. Over 1.23 crore people have been imparted training.
- The sustainability of the digital economy rests upon its resilience and security. The cyber Swachha Kendra has been set up to provide alerts to users for preventing losses of financial and other data.

The centre is providing facility to clean botnets in real-time. This aims to create an inclusive, safe and secure cyber space for people.

CHALLENGES FOR DIGITALIZATION

High Level of Digital Illiteracy:- Digital illiteracy is prevalent in most of the towns and villages in India. Cities have adopted digitalization but limited to certain extent. Full fielded digitalization is cashless transaction on daily bases, use of internet services to get government certificates. This requires administration changes, Taxation changes and change in public mentality. So it's a team work which includes citizen responsibility and support the new system.

Connectivity to Remote Areas:- It is a mammoth task to have connectivity with each and every village, town and city. The problem of connectivity is a complex issue become every state has different laws pertaining to its execution. Also it is challenging for the central authorities to make a database where such a huge information can be stored.

Compatibility with Center State Databases:- Every state has different internet protocol because every state is diversified. It is not only in the sense of religion but also in language. Hence, software compatibility with the centre is crucial issue.

Cyber Crime:- This is cyber threat all over the globe and digital India will not-be any exception. Hence, was need a strong anti-cyber crime team which maintains the database and protects it round the clock.

Inter-Departmental Co-ordination:- Within the government there are various department while should be integrated integration has technical as well as co-operate issue, corporate in the sense self ego of the officers and staff of our government services are hurdle in the change. Also, middle man policy will be eliminated completely because of digital India, hence, there will be imminent resistance from the working staff.

Finance:- Though there are resources with India but there is a huge capital cost which is to be invested and the fruits of the investment will be received after few years.

Net Neutrality:- The issue is still on the table and we are blindly following the digital India. Net neutrality is must and we should make sure that digital India without net neutrality would be a great blow to entrepreneur and citizens of India.

Changing the Mind Set:- This point will come into picture when you have allocated the required resources and material but when it comes to implementing them, most of them will be hesitant to change. People are accustomed with years of some of proactive that they are not ready to change.

Exchange of Information:- The information stored should also be used by other government offices. For example, police, surveillance and other security issue can be easily resolved with digital India but its co-ordination is mammoth task. It is not only a technological question but also deals with the question of privacy and security.

SUGGESTION

1. Digital literacy in step in empowering citizen. People should know how to secure their online data.
2. To make this programme successful, 9 massive awareness program has to be conductive. There is pressing need to educate and inform the citizens especially in rural and remote areas, about the benefits of internet services to increase the growth of internet usage.

3. Manufacturing content is not government's strength. This mission needs content and service partnership with telecom companies and other firms.
4. PPP models must be explored for sustainable Development of digital infrastructure.
5. Private sector should be encouraged to development of last mile infrastructure in rural and remote areas. To encourage private sector, there must be favorable taxation policies, quicker clearance of projects.
6. The success of digitalization depends up maximum connectivity with minimum cyber security risks. For this we need a strong anti-cyber crime team which maintains the database and projects it round the clock.
7. To improve skill in cyber security we need to introduce cyber security course at graduate level and encourage international certification bodies to introduce various skill based cyber security course.
8. There is need for effective participation of various department and demanding commitment and efforts. Various policies and deferent areas should support this goal.
9. For successful implementation, there must be amendments in various legislations that have for long hindered the growth of technology in India.

CONCLUSION

The Digitalization brings innovation, improves effectiveness and efficiency of work brings done. It helps to bring new technologies and services based and mobile connectivity, social media, data analytics, cloud computing, financial inclusion, transparency in tax evasion etc. are being designed today. These technologies and services have blurred geographical boundaries, created exciting business models, created job opportunities, empowerment the citizen and attracted world digitalization leaders to India.

Digitalization transitions under Digital India Programme various initiative have been undertaken towards providing digital identities, creating digital infrastructure, enabling digital delivery of services and promoting employment and entrepreneurial opportunities that has transformed India into a digitally empowered society while bringing significant in the lives of citizens.

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