



CHALLENGES AND OPPORTUNITIES OF DIGITAL ECONOMY IN INDIA

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ABSTRACT: Digital economy is playing an important role in growth of economy especially; in India it refers to the role of digital India in Indian economy. Digital India starts as digital revolution in India as the digital consumers can utilize services provided with the online infrastructure and internet facilities. Indian government has target to update country economically and digitally. This paper shows the impact of digitalization on Indian Economy. The aspects are focusing on challenges and opportunities on digital economy, technical skills, job creation and internet market. This paper clarifies the distinctive features of business startup in the digital India. Empowered digital economy develops effective, efficient and faster due to better utilization of its human resources and capital. India has huge manpower resources, if it fully utilized, can achieve fastest growth rate and increase the countries position on top among the developing economy.

KEYWORDS: Digital Economy, digitalization, Internet Market, Human Resources.

INTRODUCTION:

Digitalization is a dream of Government of India to ensure availability of services digitally, to the provision of electronic sources govt. introduced digital India which improving the online infrastructure and internet connectivity. In 2013 India was the second largest market of internet subscriptions in the world with 238.71 million, and in 2018 with 560 million internet subscriptions India was the among top three global economies.¹ In 2014 digital index score of India was 17 which moved to 32 in 2017 (on a scale of 0-100), and after Indonesia India's rate of growth of digital adoption is fastest. Mobile consumption data of per Internet user in India is 8.3 gigabytes (GB) per month.

Content creator's life looking quite dazzling as millions of followers, new events, paid partnerships and free merchandise to make famous brands. Indian youtuber (singing) Bhuvan Bam was the first who crossed 10 million subscribers at the age of 25 setup an example how creator's economy changed the way of work in world. Former bartender personality Nikunj Lotia in the world of comedy said "There is a lot of competition in every industry. To stand out in your field, you have to take risks, come up with fresh ideas and develop a thick skin.". The book has stories from a variety of other niches as well — including those of travel influencers, Kabita Singh cook, fitness junkie, Ranveer Allahbadia; Abhi and Niyu; dancing duo Nicole Concessao and Sonal Devraj; Prajakta Koli YouTuber-turned-actress and many more".

BACKGROUND:

(Barefoot, 2018) defined digital economy as "the digital -enabling infrastructure needed for a computer network to exist and operate, digital transactions that take place using the system ("e-commerce") and the content that digital economy users create and access (digital media)." Computer networks founded the digital economy, physical materials used for it is computer hardware, software, telecommunications equipment and services, structure and internet of things. Structure of digital economy included the services provided to the digital products and constructed data centers, installations of fiber optic cables, repeaters, and fabrication

plants etc. Study has found over last decade digital goods and services have driven growth in GDP. According to (Lane, 1999) digital economy was driven by internet centered convergence of computing, communications and information that focused on the ways of federal government addressed long range policies of the digital economy. He suggested to explore applications of digital economy on economic and social implications, importance of understanding about new knowledge of digital economy. (Borah, 2020) studied digital India improved digital literacy, generated employment to benefit citizens and increase internet connectivity to boost economic growth. (Wang, 2021) concluded that construction of online infrastructure and information technology were the key factors that had restricted the development of digital economy.

PURPOSE OF THE STUDY

Proposed research will be helpful to analyze the impact of digital India in Indian economy and generation of literate of skilled employment.

OBJECTIVE OF THE STUDY

1. To study the Vision Areas and understand the concept of digital India.
2. To study the challenges and opportunities in the implementation of digital India.
3. To analyze the impact of digital India on Indian economy.

METHODOLOGY

The research paper is descriptive in nature. The data has been collected from various secondary data sources such as a published book, articles, journals, different newspapers, conference papers and website mainly Ministry of electronics and information technology etc. The first section of the paper has discussed the 'vision and vision areas' the Digital India. And next sections Average is used to get the increased registered, trained, and certified Digital literates.

VISION AREAS OF DIGITAL INDIA

(Patel, 2014) showed the limited internet connectivity and online infrastructure was available with high cost, low digital literacy, lack of awareness and unfavored for environment of business. Government of India launched a campaign *Digital India* in 2015, to improve online infrastructure by increasing internet connectivity and empower the field electronics and technology. *Digital India is a flagship programme of the government of India with a vision to transform India into a digital empowered society and knowledge economy.* There are three key vision areas of digital India, given as following: 1) Digital infrastructure focused on rural areas covered 2,50,000 gram panchayats by 201-17, with availability of high-speed internet as a core utility for citizens, cradle authenticable, unique and lifelong digital identity, enabling digital participation in financial and digital space, easy access and secured safe cyber space. 2) Integrated services in real time from digital platforms transformed services for improving ease of doing business also made financial transactions digitally leveraging geospatial information systems (GIS) for decision systems. (3) Universal digital literacy, accessible digital resources in Indian languages and digital platforms empowered citizens.

PILLARS OF DIGITAL INDIA

Digital India is transformational programme to build holistic digital infrastructure, manufacturing, technical skills and digital platforms moving to self-reliant and digital economy. It focused on direct services to citizens and improve ease of doing business of country. There are nine pillars of Digital India to grow.

1. Broadband Highways
2. Universal Access to Mobile Connectivity
3. Public Internet Access Programme
4. e-Governance – Reforming Government through Technology
5. e-Kranti - Electronic Delivery of Services
6. Information for All
7. Electronics Manufacturing – Target NET ZERO Imports
8. IT for Jobs
9. Early Harvest Programmes.

DIGITAL LITERACY

There are two schemes to introduce the digital literacy in India.

1. IT Mass Literacy (National Digital Literacy Mission): In 2012 a scheme IT mission / National Digital Literacy Mission introduces and in 2014 it was launched by PM Modi implemented to provide IT training to at least one person in each household to make e-literate. It approved the beneficiaries to earn and get employability. The scheme trained 10 lakh persons for literacy.

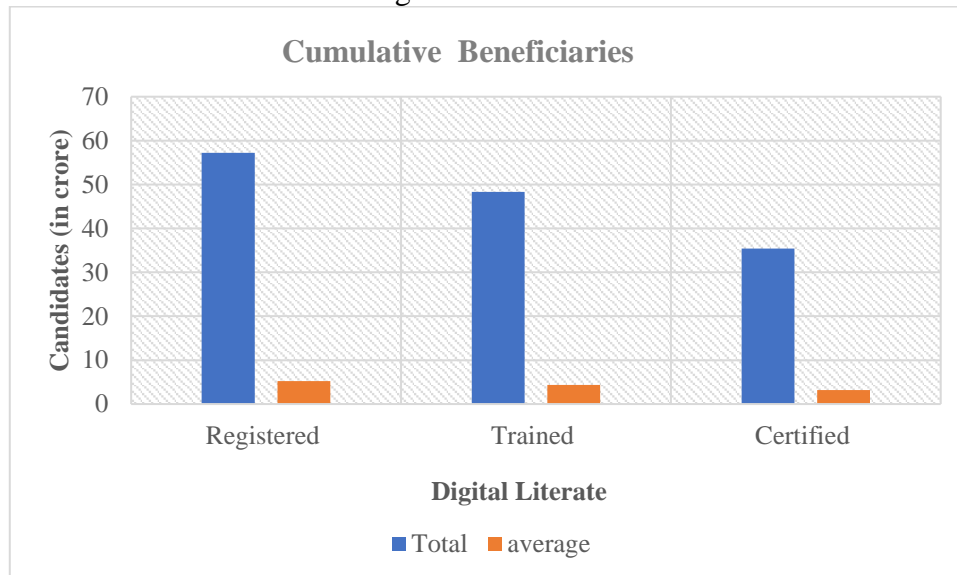
2. Scheme for Digital Saksharta Abhiyan (DISHA): This is expanded scheme under Digital India to digital literate 42.5 lakh persons in the period of four years. 5 lakh candidates target by industry, Non-Government Organisations and others. Government took responsibility to train 47.5 lakh candidates. Total 52.50 lakh candidate are targeted to trained under both the schemes.

FINDINGS

Figure 1, showed beneficiaries under digital literacy, x-axis presented the Total and average number of candidates registered, trained and certified from April 2021 to February 2022. So, number of total cumulative beneficiaries are accounted in crores as registered candidates (57.21crore), trained candidates (48.34 crore) and certified candidates (35.38 crores). Average of registered, trained and certified shown below is 5.2 crore, 4.39 crore and 3.21 crore respectively.

It has found that order of beneficiaries Registered > trained > certified.

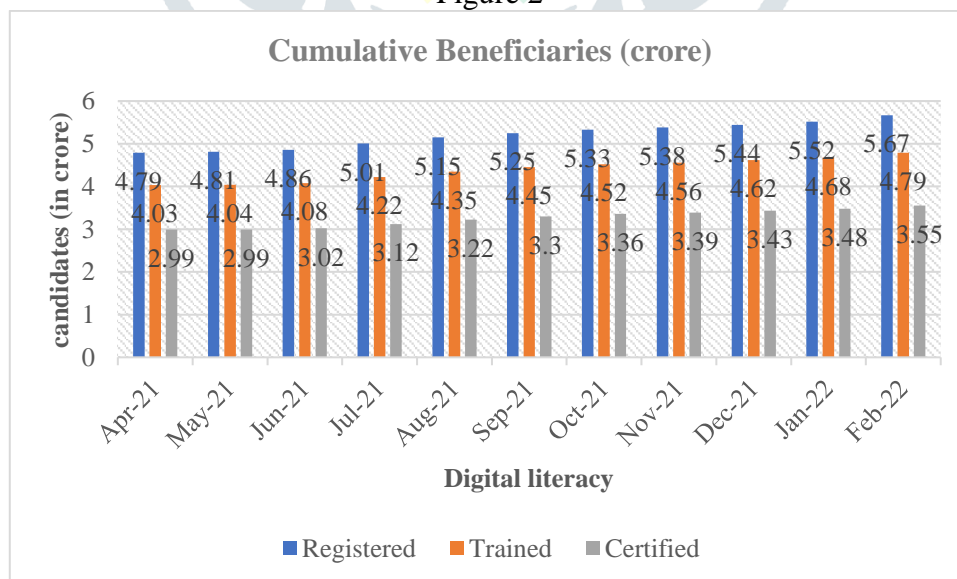
Figure 1



Source: Ministry of electronics and information technology.

Figure 2 showed the number of monthly registered, trained and certified candidates. Average monthly registered 5.2 crore, trained 4.39 crore and certified 3.21 crore. In the month of April, May, June, July and August 2021 the participation for registered, trained and certified is less than the average, but participation for September, October, November, December in 2021 and January, February 2022 presented more than the average of candidates. In April 2021-May 2021 there was lowest registered and trained and certified candidates, Reason for this was COVID-19 second wave lockdown and strictly closed Institutions.

Figure 2



Source: Ministry of electronics and information technology.

IMPACT OF DIGITAL INDIA ON INDIAN ECONOMY

Digital India playing an important role in macroeconomic factors such as employment generation, labour productivity, growth of GDP, businesses and leakages of revenue (Mohanta, et. Al.2017). This Study contributed on the importance of employment factor.

JOBS AND SKILLS:

India is second highest populated country in world after China, and its population mostly young people so country has demographically dividend. To use population as dividend, need to create employment opportunities, to increase number of jobs, types of jobs, workforce participation rate. The growth of India's working age population was 16 million every year up to 2017 and 31 percent of women was labour force participation rate, 17 % contributing to GDP which is lowest in world.

Government launched National Digital Literacy Mission (NDLM) to e-literate the one person from each household and 6 million candidates certified and approximately 12 million candidates trained since its inception in 2014.

National Institute of Information Technology (NIIT) is a private company for vocational education to generate next generation technology consists of DigiNXT, StackRoute, NIIT.tv, Training.com. NIIT planned to train 10 million learners for virtual training g programs and DigiNXT courses enrolled 1628 learners and Training.com switched to 23 advanced courses.

Potentials actions to ensure accelerated progress; 1) Outcome based training schemes and programmes e.g. biometric based enrolment system 2) to approve online training platforms on a single point of contact from ministry of skill development, human resources and labour and Employment. 3) to regulate remoted training schemes such as SWAYAM and MOOCs. 4) Implement programme to reskill industry workforce will collaboration of government industry platforms 5) clarity on sector skill councils- NSDC (National skill development council).

COVID-19 PANDEMIC IN INDIA ECONOMY:

Economic situation consisted to pre pandemic slowdown, ratings on the GDP estimates, Exports and imports, energy, agriculture manufacturing, stock markets and e commerce, defence, state income and expenditure.

(Mukherjee and Narang, 2022) investigated that even in post-pandemic times higher percentage of employees opinionated for continuing work from home which was distinct inclination towards digitally work culture to socially run physical presence. It was found in same study as 54% of respondents improved their efficiency and productivity levels. The COVID-19 pandemic took step for real time management and successfully moved society from physical engagements to digital meetings like various virtual platforms skype, Microsoft teams, webex, zoom, and google meet. This step has risen the flexible workspaces as working hours under work from home.

CHALLENGES OF DIGITAL INDIA IN ECONOMY

1. Digital India implementation has challenges of high cost on creation of new online infrastructure.
2. Presently, Indian education and training ecosystem is not progressive for the industry needs, it challenges to create educated but not employable job seekers.
3. It has challenge of complex and long regulatory process in Government projects so lack of private participation in projects.
4. Digital Economy has challenge to develop the digital infrastructure in rural areas to introduce new technology.
5. It has another challenge adoption of internet in India will be difficult due to availability of digital devices, to affordable of internet facilities and digital literacy.
6. It challenges India to compete with digitalizing world, to address the dynamics of labour market and skilled build workforce.

OPPORTUNITIES OF DIGITAL INDIA IN ECONOMY

1. E- Governance benefits the society in real time management and reducing corruption.
2. Digital India mission helps in promoting the cashless transaction system.
3. Digital India plays and key role in development of Indian Economy and GDP growth.
4. Digital India benefits in increasing the digital literacy of the country.
5. The Digital India mission helps in the availability of online government services to the people of the country.

CONCLUSIONS:

This study has found that order of beneficiaries Registered> trained >certified. In April 2021-May 2021 there was lowest registered and trained and certified candidates. This study concluded that digital technology presented an effective opportunity to access the basic skills through mobile and web-based training

programmes which leads to productive growth of country. The study suggests that digital technology can be gripped to improve the skills and technology.

POLICY IMPLICATIONS

1. Government should initiate the basic research on the advance techniques of electronics and information technology.
2. To investigate the social and economic implications of digitalization which is revolution in Digital sector.
3. Government should focus on the improvement of digital infrastructure in the rural areas for the innovation of new generation technologies.
4. It should need to government, academia and IT sector join together to improve skills of employees of information technology sector to potential impact of dynamic workforce.
5. To indicates a demand driven training ecosystem in India to rapidly transform industry demands and increase use of digital technology along various sectors.
6. There must be strategic programmes for awareness of National Career Services for pursuing employment.
7. Government should focus on the improvement of digital literacy as registered candidates are more than trained and certified, if number of total registered candidates will be certified then people of household get e-literate before.

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