

Multidimensional digitalization of indian economy

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MULTIDIMENSIONAL DIGITALIZATION

The Digital India program (DIP) emphasizes on our digital inclusion and empowerment by improving online infrastructure, delivering services electronically with a special attention on our digital literacy. India is swiftly shifting towards digitization with its policies and governance to ensure transparency, accountability and counter corruption. Various initiatives taken by government in digitization of India in various stream includes

GOVERNANCE

PRAGATI- makes governance in India more effective and responsible addressing common man's grievance and monitoring the functions of state and centre.

Online facility to get PAN CARD, e Registration of voter id, income tax return filings etc.

Digital boost to MGNREGA - helps implementation agencies with live data from the worksites, an online and real-time updating of data base, real-time visibility of the data for complete transparency, and location of assets with geo-tagging for easy verification.

TWITTER Samvad- facilitates communication of leaders with public making them aware of all happenings of the government

FINANCE

1. e-money order, instant money order, mobile money transaction system (MMTS) by department of posts ensuring quick and secure transfer of money

2. CASHLESS transactions and payment wallets
3. Promotion of JAM trinity

SOCIETAL

SMS based cyclone warning system and satellite warning system for disaster management

MADAD portal- where Indians living abroad can register consular grievances and get Jeevan pramaan scheme- pensioners can provide digital life certificates

DIGITAL LOCKER: Have the digital certificates of academics and personal data which could be shared when necessary other than carrying hard copies of certificates.

The effectiveness of such initiatives can be analyzed from the following facts;

First, number of people having access to internet through broadband has seen a whooping rise. Second, Google has partnered with 120 railway stations and made them internet enabled and about 15000 people are using it on daily basis. Third, BHIM has become one of the most popular apps in India. Also use of e-wallet services & PoS machines have picked up pace in post demonetization period. fourth, Govt's programs like Digital India and " Bharatnet" to connect village panchayats initiative has provided impetus to the digital mission , national digital literacy mission has already trained them in digital work. fifth, also there has been increase in the no of users of mobile computer and laptops.. sixth, Many mandis across several states have

become live on e-NAM. Seventh, Bharatnet Project has laid down OFC in more than 1.5 lakh Kms and Many Gram Panchayats have been connected to broadband.

The above achievements are indicators that India is becoming digital

CHALLENGES INCLUDED IN DIGITISATION OF NATION

1. Rural areas have not still been fully covered under the digital India mission.
2. Lack of infrastructure in the form of optical fibers and funds to provide universal coverage of broadband.
3. The challenge of digital literacy when major part of rural Indian folk is illiterate

proper and efficient access to connectivity in geostrategic areas with challenging physical features like seven sister states, border States
4. Cyber security is a big challenge and thus making it safe is a big priority
5. Effective database management, skilled professionals
6. Problem of e-waste management is also present.
7. Lack of adequate infrastructure to protect data. E. g. Security

Details of cardholders of some leading banks were compromised recently.
8. Many rural areas remain isolated from internet and cellular services. In many parts of the country people are still not using

the Internet as they are not aware about its benefit and function which is the biggest challenge in front of the government.

9. Digital services are not robust enough to cater need to large customers at a time.

Potentials of digital India:

Digital India has the potential to transform Indian economy that would provide impetus to the development of India

10. India is the largest exporter of IT services which is evident of having skilled and qualified human resource that would help in building a digitally aware society by public private partnership programmes and community programmes.
11. Also digital India would ensure efficient working of the Gov. Organizations, faster delivery of services as services will be done digitally and thus improve ease of doing business.
12. It can also help in providing digital health solutions by connecting patients with doctors digitally
13. Recommending the Corporate Social Responsibility programmes to be in focus of digital literacy and towards building digital infrastructure
14. Connect people with the world -people connection with the government, people and with the world will help them in their work, make them more advanced and even can be a source of livelihoods.
15. Will increase transparency-as people interrelatedness will increase the accountability and transparency of the government,

they can get advice about their business, agriculture, can sell their product to other persons and secure a means of livelihoods.

16. Surge in e-Commerce reveals that e-transactions are preferred to real time transaction.
17. Increased Financial Inclusion through Jan Dhan accounts and Aadhar card. This will boost digital payments once Aadhar based payments is launched
18. Increase in GDP-it has been found that an increase in 10%user of broadband will increase the GDP by 1. 5%.
19. Increasing connectivity of villages to broadband will make them potential candidates for e-services like telemedicine.

Hence government should initiate more schemes for its proliferation, training camp should be arranged, and make the use of the Internet free or reliable so that it's potential can be harnessed.

Digital India is meant to increase access to the internet thereby facilitating the shift of services to the web (potentially increasing access). DI necessarily requires digital literacy to succeed.

However, digital literacy is not all that it needs.

First, infrastructure needs to be in place. The pace of implementation of NOF is significantly behind our DI aspirations. Without infrastructure, no DI would be possible.

Two, simultaneously, we need to develop our institutional framework. Privacy laws and data protection regimes need to be put in place. The IT Act does not sufficiently cater to these requirements.

Three, cyber security needs to be enhanced. Unauthorized access to personal information or manipulation of data should be prevented. New protocols may be developed in this regard. The formation of the NCIIPC is crucial in this regard.

Four, devices able to act as interface DI needs to be developed and they need to be linguistically sensitive. These devices can come with tutorials in local language (both voice and visual tutorials) pre-loaded for all the basic services.

Five, DI should not focus on a ' captive market'. It should be more than just for consuming services. It should provide a platform for collaboration, information gathering and discovery. The government may need to regulate this aspect.

While DI is laudable, its ambitions currently outstrip capabilities.

However, if we do not dream big, we can't achieve big. As such, having articulated DI, we have to move towards achieving it incrementally and sensitively.

India has lot of potential and is on the way to achieve its full potential as a digital economy. The above challenges need to be addressed through steps like increasing digital awareness, PPP partnership to secure data from hackers etc. to unleash the true potential of a digital India.

The push towards digitization in India is coming not only from the government, through e-governance, Digital India, demonetization and so on but also from private sector , through e-commerce, private

banking applications etc. Gradually digitization is expanding to cover all spheres of life such as governance, goods and service delivery, education, business, finance and so on.

In all, the digitization has immense potential for improving the standard of living of people by providing new opportunities. The challenges needs to be overcome by involving various stakeholders in public as well as private sphere, creating a strong institutional framework to counter cyber-attacks , providing training to security agencies and police to provide a single -window redressal system for aggrieved citizens ..

Digitization OF INDIAN AGRICULTURAL SECTOR

1) Internet- Farmers are using the Internet of Things and smart sensors to get access to valuable information like soil moisture, nutrient levels, temperature of produce in storage and status of farming equipment. The sector is also ripe for the use of big data analytics and artificial intelligence, technologies that have been deployed successfully in various sectors across the globe.

2) Penetration & Quick Accessibility – with NOFN program i. e. to connect all panchayats by 2019, this means that work will penetrate to hinterland and the remotest area than one think of.

3) Inclusive knowledge-from selection of crops to technology applied and experience based on that from different region can be applied by other farmers as well. Further plantation timing, seeding and

fertilization rates, international standards can be used to maximize yield and profit.

4) Misc.- will help in tracking the production, reduce wastage, improved food technology to help detect the pathogens and allergens, price issue related to buyer and seller(National Agriculture Market online trading portal) using e-Nam, also vagaries of climate can be address through satellite connection and hence cost saving.

So there is need of the hour for digitization of land records, digital literacy (schemes like Disha) and going for Digital green and online virtual agriculture markets to achieve 2022 goal.