Digital World – Power to Empower

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Prelude

In the recent decade we are captivated in a digitally empowered world, in which digital technology has taken a revolutionary step forward to transform almost every aspect of human life. Our personal space to professional domain- the entire existence is being encircled by digital network and digital communications. We dream to have digital devices to survive in a better way; our status symbol is our I-phones, our high configuration computers, our highly configured and high profile featured cell phones etc. From the workplace to entertainment world, travel, banking, shopping etc. are surrounded by digital mechanisms and data, especially big data. Virtual environment composed and developed by Internet and digital devices surrounds us, connects us with each other and with the world as a whole. Digital technology is allowing access to all type of information and communication, leading to enhancement of knowledge, giving us a comfort zone to strive for a better life. The world cannot even think to remain active and alive without websites, smart phones, digital televisions, video streaming, e-books, digital music, geolocation, without blogs, social media and so on and consequently computers, printers, self scanning devices, digital cameras, ATMs, robotics, drones and guided missiles. We buy and sell online, we read and write digitally and we even may start thinking and dreaming digitally very soon. Artificial intelligence is involved in all these and this has increased the threat to loss of privacy in an undemocratic way. Use of personal information to intrude in private sphere raises a bone of contention regarding power of the people vs. speed of marketing politics, market economy and commoditized society.

Digital Society: 'Power to Empower'

The term "digital" has become extremely popular connotation in this digitally driven world. Its implication cannot be simplified by explaining merely the terminology and epistemology of the

science and techniques of 'information dissemination' and 'networking'. Since the term has some performance potential, the world leaders are now inclined to think about a new perspective of the information revolution; new technical directions are coming up and more radical thoughts for future are taking place of the conventional ones. Digitization of different domains of human activities and human life and society has become a target and at the same time has become a process, leading to initiation of new set of policies with new terminology, renewed elaboration and with intelligent ambience. New vocabulary has emerged to address the issues of the digital world and to lay foundation of scientific and public discourses. Communications among ICT's inventors, policy-makers, businesses, citizens and their organizations regarding digital constructs, digitally tenable visions, strategies and their societal acceptance and implementation have become far more frequent. Some ICT experts prefer to use the term "digital" as a term specifying a higher level of technology and in a more metaphoric way; a qualitative change due to increased use of technological applications in many domains and spheres of human activities is in their projections. But some prefer to utter the term 'digital' in a simplified form, so as to touch the hearts of the mass, which is increasingly getting highlighted in the policy diaries of the world political and economic leaders. In all forms, the discussions and acts on the possibilities and prospect of digitization have become the stimulus of its development, more so in the pandemic era due to lockdowns, increasing health budget, shut down of educational hubs etc. Digitization, a process of conversion of technologies from analogue to digital form, resulting in a better quality of communication, network, transmission and storage has raised new possibilities of linking files.

Digital Environment: Indian Experience

In India the virtual environment that has been constructed and developed through computers and empowered by the internet allows processing and storing of digitalized data like that in the other parts of the globe. In 1987, Prime Minister Rajiv Gandhi, entrusted Sam Pitroda to lead six technology driven missions associated with telecommunications, water, literacy, immunization, dairy and oil seeds. He founded India's Telecom Commission and became its first chairman. Government of India launched Digital India campaign on July 1, 2015. Keeping in mind the need for digitization Government of India had come out with innovative ideas and practical solutions to initiate the vision of digital India with the aspirations to promote its motto of "Power to Empower". The vision was to transform our nation into 'digital India and to create opportunities for all citizens to access all the amenities of civic life by harnessing digital technologies. The major objectives of this initiative were to supply high-speed internet altogether gram panchayats, to supply quick access to Common Service Centre (CSC) within the entire locality etc. It sought to restructure many existing schemes and to implement them in a synchronized manner. The vision was to empower every citizen with knowledge and information about digital services, enabling them to have better access to digital services, knowledge and information. Drives were taken for creation of more digital infrastructure, digital delivery of services, and digital literacy. Policies and best practices had been taken from the inspirations around the world to make this vision of a digital India a reality. At the initial phase this effort included the following

- 1. Broadband Highways
- 2. Universal Access to Mobile Connectivity
- 3. Public Internet Access Programme
- 4. e-Governance
- 5. e-Kranti
- 6. Information for All
- 7. Electronics Manufacturing
- 8. IT for Jobs
- 9. Early Harvest Programmes

The Government of India's entity Bharat Broadband Network Limited (BBNL), executer of the Bharat Net project was entrusted the responsibility as the custodian of Digital India (DI) project. Some of the facilities proposed to be provided through this initiative were Bharat net, digital locker, e-education, e-health, e-sign, e-shopping and national scholarship portal. As part of Digital India, Government of India planned to launch Botnet cleaning centers. National e-Governance Plan aimed at bringing all the front-end government services online to be in tune with the vision of Digital India.

- 'My Gov. in' was thought to be a platform to share inputs and ideas on matters of policy and governance and to ensure citizens' engagement in governance, through a "Discuss", "Do" and "Disseminate" approach.
- UMANG (Unified Mobile Application for New-age Governance) was conceived as a unified secure multi-channel multi-platform multi-lingual multi-service freeware mobile app of Government of India for accessing over 1,200 central and state government services in diverse Indian languages, including services such as AADHAAR, DigiLocker, Bharat Bill Payment System, PAN, Income Tax, GST, information regarding higher education institutions through AISHE, NIRF, UCCHASIKSHA PORTAL, vaccination data, Arogya Setu and fee or utility bill payments, education, students' enrolment, job search, health, agriculture, travel, Indian flight/railway tickets bookings, birth and death certificates, e-District, e-Panchayat, police clearance, passport, e-Sign framework, e-Hospital application, digital attendance and other utility services from private companies and far more.

Initiatives were taken for 'Back-end digitization'. Union budget of 2016 announced eleven technology driven initiatives including the utilization of knowledge analytics to trace tax evaders, creating a considerable opportunity for IT companies, Digital Literacy mission designed to cover six crore rural households, connecting 550 farmer markets in the country through the use of technology etc.. The government had planned to create huge seats of BPOs in various states and set up at least one Common Service Centre in each of the gram panchayats in the state to encourage BPOs and to boast up employability. E-Sampark Vernacular email service was launched to connect rural India with Digital India; the Government of India impelled giant email services provider giants including Gmail, office, and Rediff to provide the email address in regional languages. Digital India Mission is an initiative

that encompasses plans to attach the agricultural areas of the country with high-speed internet networks, like connecting post office branches in the rural areas electronically or promoting electronic transactions related to e-governance.

Challenges of Digital India

There are several challenges faced by this flagship mission:

- 1. Low internet speed, as well as the Wi-Fi hotspots, are slow as compared to other developed nations
- 2. Hurdles for small and medium scale industry to struggle for adapting to the modern digital technology
- 3. Limited capability of entry-level smart phones for smooth internet access
- 4. Inadequacy of technically equipped manpower in the field of digital technology
- 5. The growing menace of digital crime
- 6. Lack of user education
- 7. Digital illiteracy
- 8. Digital divide
- 9. Poor infrastructure
- 10. Lack of coordination among various departments
- 11. Issue pertaining to higher slab of taxation
- 12. Political micro-targeting and trespassing into private sphere of the individuals for vested political or business interests.

Government of India has taken a strong initiative, known as Digital India initiative to ensure smooth access of government services to citizens of world's largest democracy through electronic mode; to reach the people, even in remote areas, steps have been taken to improve digital infrastructure and to increase Internet connectivity. Thus digital revolution in India began as a part of dream project of the Government of India to take nation forward digitally and economically. But this initiative has lots of roadblocks in the way of its successful implementation. These challenges need to be addressed and a lot of efforts and dedication from all segments are to be taken in order to extract the full potential of this programme, so that various new opportunities get open for the citizens of the country.

Government of India should take steps to make Indian society digitally empowered. Digital literacy should be incorporated in syllabus. Digital protection laws must be more effective to prevent crime. Awareness programmes are to be organized, especially in rural and remote areas, for digital education and information. Benefits and cautions regarding internet services are to be highlighted in the campaigns for digital India to increase the growth of internet usage, as well as prevent the occurrence of cyber crime. Digital divide needs to be addressed by strengthening the infrastructure and for this public-private partnership (PPP) might be potentially helpful. PPP models must be explored, licensing policies must be made easy and lucid and favorable taxation policies must be initiated for sustainable and steady development of digital infrastructure. Maximizing connectivity and minimizing cyber security risks by maintaining the database with utmost protection should be taken as a mission.

Digital Polarization

The big tech companies, political parties, interest groups etc. buy, sell and use data for activation of digital market, digital polity and digital society. These entities create a sociopsychographic profile of citizens/individuals to target their potential buyers/voters. Digital disinformation. mechanism promotes microtargeting, leading to polarization, and misinformation. Digital polarization shapes market or voting behavior of an individual in a way to give maximum benefit to the capitalists and the existing ruling community in their desired way. Donald Trump's deterrence project is one of the biggest examples of digital polarization; Donald Trump's deterrence project not only led to controversial election results but also promoted racial discrimination by the use of digital models and algorithms. Digital America deterred black Americans from voting in the 46th Presidential election, though the process started before Obama's reign. Digital society thus helps nurturing this kind of algorithmic bias which promotes and adheres social discrimination on the basis of race, color, religion, national origin, sex, marital status, age, and the like. Leave campaign in the UK, leading to Brexit is another example of digital polarisation. Twitter, Instagram, Facebook and other social media platforms

often promote polarization and help spreading misinformation and disinformation. This threatens democracy.

It does not lead one to say that advent of digital society is a curse. It is not possible to either eliminate algorithmic bias or it is not worthwhile to stop the expansion of digital world, which is a mark of this era of technological revolution. There must be some regulations imposed by the governments on securing individuals privacy so as to ensure justice, equality and fraternity in the society and to promote ethical expansion of digital society, digital economy and digital polity.

In United States of America Equal Credit Opportunity Act of USA has been enacted which has made it illegal for a company to use a biased algorithm producing and nurturing discrimination on the basis of race, color, religion, national origin, sex, marital status, age; this law has been designed to create a fair digital world. There are General Data Protection Regulation (GDPR) regulation in European Union for data protection and protection of privacy in the European Union and the European Economic Area aiming to promote a digital world for progress of human civilisation. All the countries should enact such laws to ensure their citizen's privacy and democratic existence. In the name of transparency of algorithms and other public centric policies, citizens' private domain must not be jeopardised. Digital world has come with big challenges. Ethical administration of digital world can give leverage good social causes.

REFERENCES

- Issenberg, Sasha, 'How Obama's Team Used Big Data to Rally Voters', MIT Technology Review, December, 19,2012
- Rani Suman(2016) .Digital India: Unleashing Prosperity . Indian Journal of Applied Research, volume-6, Issue 4, pp187-189 Retrieved from <u>https://www.worldwidejournals.com/indian-journal-of-applied...</u>

- Midha Rahul (2016). Digital India: Barriers and Remedies . International Conference on Recent Innovations in Sciences, Management , Education and Technology. Retrieved from http:// data. Conference world .in/ICISMET/P256-261. Pdf.
- Gupta Neeru and Arora Kirandeep (2015). Digital India: A Roadmap for the development of Rural India. International Journal of Business Management ,vol(2)2, pp1333-1342. Retrieved from www. ijbm. Co .in
- 5. Digital India Programme : Importance and Impact .Retrieved from <u>http://iasscore.in/national-issues/digital-indiaprogramme-importance-and-impact</u>
- Digital India. Unlocking the trillion Dollar Opportunity: ASSOCHAM –Deloitte report, November 2016.Retrieved from <u>www.assocham.org</u>.
- Kadam Avinash (2015). Why cyber security is important for digital India. Retrieved from <u>http://www.firstpost.com/business/why-cyber-security-is-important-for-digital-india-</u> <u>2424380.html</u>
- 8. Digital India Retrieved from <u>http://www.indiacelebrating.com/government/digital-india/</u>
- 9. www.digitalindia.gov.in
- 10. <u>http://www.nextgenias.com/2015/09/essay-on-digital-india-programme-for-upsc-ias-preparation</u>.
- 11. <u>https://www.theguardian.com/technology/2021/oct/22/twitter-admits-bias-in-algorithm-for-rightwing-politicians-and-news-outlets</u>

- 12. <u>https://www.channel4.com/news/revealed-trump-campaign-strategy-to-deter-millions-of-black-americans-from-voting-in-2016</u>
- 13. <u>https://www.theguardian.com/us-news/2020/sep/28/trump-2016-campaign-targeted-35m-black-americans-to-deter-them-from-voting</u>
- 14. https://www.brookings.edu/research/algorithmic-bias-detection-and-mitigation-best-practices-and-policies-to-reduce-consumer-harms/