



WAVE OF DIGITIZATION IN INDIA

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ABSTRACT:

Sparks of technology seems to make true the dreams of Digital India. Indian government's constant endeavour towards digitisation appears to change the scenario. Its flagship programme initiated in the year 2015 with the intent to transform the country into digitally empowered society. Digitization is being considered as boom in today's world, expecting many to fulfil their dreams through it. The Government is striving hard to transform the country into fully digital enabled country. It leads to many initiatives like starting cyber security and digitization related programmes at schools and colleges, set up of Excellence in AI Centres, start-ups (specially in Tier 2 and 3 cities) etc.

The present paper exhibits the role of digitization in boosting economy and its implementation in sectors, including entrepreneurship, agriculture, finance, health, manufacturing and education. It further enlightens about the gains, which society is deriving through digitization. It also provides how this tool can be utilized further to move ahead.

Keywords: *Digitization, Economy, Agriculture, Government, Entrepreneur.*

INTRODUCTION :

History of Digitization

No process or system develops in a day or month. It takes time to be on the desired shape for which it is intended to develop. In simple words, digitization is the process of converting analog information into a digital format. Even when someone scans a physical document in pdf form, it also represents the form of digitization. Such practice is not new for many of us, since adaption of new technology.

History dates back seeds of digitization in 1679, when binary number system was developed by Gottfried Wilhelm Leibniz. Significantly progressing in binary arithmetic (1755), Boolean Algebra (1847), PCM (1938), EDVAC (1945), UNIVAC (1954), RAMAC(1956), IDS (1963), Moore's Law (1965), MARC (1968), CCD (1969), First electronic digital watch-Pulsar (1972), First digital Camera (1975), first ATM by Citibank (1977), COSMOS (1979), first commercial CD (1982), WELL (1985), 2G cellular (1991), Digital library (1995), E-Gold(1996) etc and since 2000 the world has started utilizing these technologies gradually for the society where

most of the digital services started surpassing the old technologies. It is the time when bitcoin, kindle books, digital books, e-documents, skype, twitter, youtube, whatsapp, Netflix etc has started contributing. Today we are ready to mould our economy into digital economy and to explore the world of metaverse.

Wave of Digitization in India

India steps over to the second decade of Digital India Movement, which started on 1st July, 2015 with the basic intent is build a digitally empowered society. Digitisation include e-governance service which leads to transformation of various government organisations to adapt the new technology for bring fruits to the society. Nine pillars have been identified as thrust areas which include e-governance, e-kranti, broadband highways, mobile connectivity access for all, information technology for jobs, early harvest programmes and information for all. All pillars project to build digitally competent country. The government has set phase-wise targets to lead

towards the overall development. Educational institutions have come forward to introduce courses on cyber security and cyber awareness etc. Rather it encompasses multi fold targets to achieve right from inception, like raise in number of supercomputers, encourage more individuals to go for IT profession courses, specialized training for ISEA programme, services on UMANG etc. In order to encourage the communication in local language, tools like Bhashini are proposed to turn out in more languages. Digilocker which has been a vital tool to store authenticate records and certificates in digital form have immensely been developed. NKN has played a lead role in this direction.

Digitization in various sectors

Indian Government strive to make use of digitization in every sector which could benefit the society. Review of roles and functions of many of the segments has been done with the intent to digitize the activities. The paper projects on few of the sectors where digitization has significantly been done by the Government. However, it is observed that in most of the sectors, the government has successfully taken lead to transform the society into digitally enabled society.

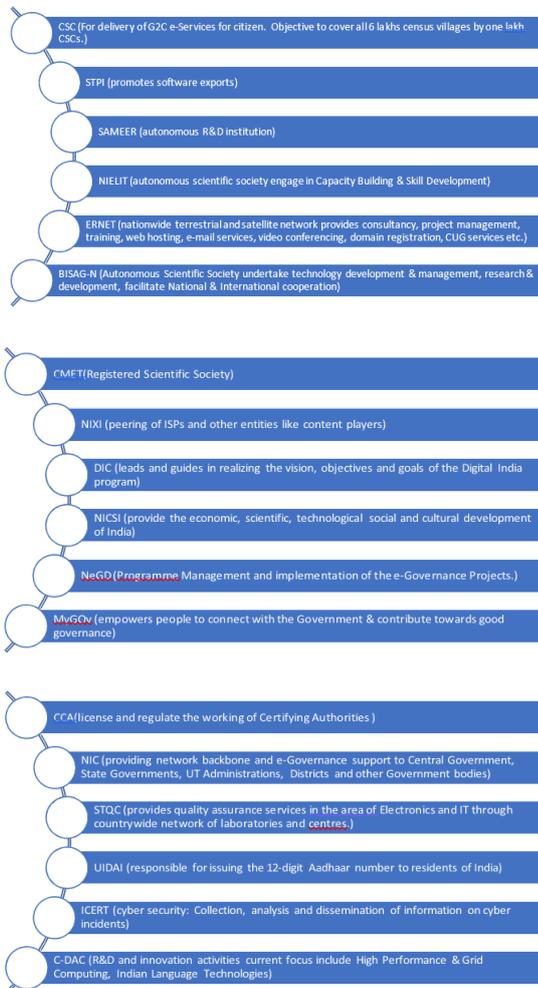
Agricultural sector is considered as cornerstone of Indian economy. Waves of digitisation endeavours to digitize the agriculture sector and it leads to initiation of many programmes and projects. DIC starts project of m4agri in NER emphasising on fisheries and livestock. It has also started mobile application to resolve farmer's query. SATHI is another such initiative taken up with the help of NIC to supervise seed production and distribution chain system. PM Kisan is one more initiative taken up by the Government which act as a Central Sector Scheme to provide annual support of Rs. 6000 to farmers. It further has taken up initiatives to transform functions of government organizations.

E-governance seems to progress a lot with many digital tools like BAS – introduction of biometric attendance system in officers, PFMS – a web enabled financial management application to facilitate end-to-end digital payments, collection of receipts and financial reporting. Soon after, the Government has introduced e-bill processing system through PFMS in order to deal all bills through the electronic mode. eOffice has been introduced to perform all official correspondence through electronic mode. It also facilitates inter-organization and intra-organization also. eHRMS has been introduced to perform all services of employees like pay, leave, tour etc. iGOTKarmayogi is another initiative to provide a number of courses specially for the Government personnel on various areas. Collabfiles is another platform to facilitate creation, management and collaboration of office documents of government and public sectors.

In order to facilitate a transparent, reliable and quick procurement of goods and services, the Government introduced GeM services through its portal. ICEGATE is a centralized hub for electronic interactions between Indian customs and traders, offering e-filing, duty payment, and IGST refund processing. eSampada has been an online transparent portal to facilitate accommodation services to the Government organisations and PSUs in the form of quarters and holiday homes. For finance, it provides NACH, GST e-invoice system and for healthcare, the significant initiatives include AIH, ORS, DigiDrishti etc. Other significant digitisation initiatives include MANAS, LokOS, E-Counselling, CollabCAD, CollabGEO, FASTAG, Gatishakti, Marine etc.

Digitization expects a lot from entrepreneurs to take lead in order to overall development of the country. MietY Startup Hub and Startup India are two of the great initiatives of Indian Government which intent to foster robust ecosystem for innovation and entrepreneurship.

In digitization process, role of MeitY organisations can never be underestimated. The following is the comprehensive list of various MeitY organizations which are proven very significant in the development process of digitization in India:



CONCLUSION:

Today the world is in dynamic phase, ever changing. With continual advent of technologies, digitization has replaced many existing modes of

business transactions also. It necessitates entrepreneurs to update themselves to be in ever changing environment. Technology is everywhere; one can't deny its influence in any of the sectors. Consequent effect is the only key. Therefore, the time demands entrepreneurs today to be not only tech savvy but also well versed in the technology.

Technological upgradation seems to be endless process. Mobile technology has become very handy and accessible. At such, digitization has been very fruitful for the society. The Government of India has achieved many milestones in this regard and is striving hard to move ahead for its various sectors, women empowerment, robust agriculture system, e-governance, cashless transactions, seamless business processes, prompt health services are few of them. The process is ongoing and has visionary target to achieve the mission of Viksit Bharat 2047.

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Table 1 :**Abbreviations used:**

NKN	National Knowledge Network
UMANG	Unified Mobile Application for New-age Governance
ISEA	Information Security Education and Awareness
SATHI	Seed Traceability, Authentication and Holistic Inventory
CSC	Common Services Centres
STPI	Software Technology Parks of India
SAMEER	Society for Applied Microwave Electronics Engineering and Research
NIELIT	National Institute of Electronics and Information Technology
ERNET	Education & Research in Computer Networking
BISAG-N	Bhaskaracharya National Institute for Space Applications and Geo-informatics
C-DAC	Centre for Development of Advanced Computing
C-MET	Centre for Materials for Electronics Technology
NIXI	National Internet Exchange of India
DIC	Digital India Corporation
NICSI	National Informatics Centre Services Inc.
NeGD	National e-Governance Division
MyGov	MyGov
UIDAI	Unique Identification Authority of India
ICERT	Indian Computer Emergency Response Team
CCA	Controller of Certifying Authorities
NIC	National Informatics Centre
STQC	Standardisation, Testing and Quality Certification
m4agri	Mobile Based Agro Advisory Services
NIC	National Informatics Centre
GeM	Government eMarketing
ICEGATE	Indian Customs Electronic Gateway
PFMS	Public Finance Management System
eHRMS	Electronic Human Resource Management System
BAS	Biometric Information System