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DIGITAL TRANSFORMATION IN INDIAN RURAL SOCIETY- A CONCEPTUAL STUDY ON SOCIO-ECONOMIC DEVELOPMENT

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ABSTRACT

Digitalization is the manifold sociotechnical phenomena and processes of adopting and using digital technologies in broader individual, organizational, and digital transformation of society and the economy. Since inception Traditional Trade Era to Relationship Era, it has undergone through various stages of evolution termed as 'Digital Eras'. Which revolutionaries the power shift from Individual to Social groups. Digital India is a programme to transform India into digital empowered society and knowledge economy. The Digital India is transformational in nature to ensure that Government services are available to citizens electronically. The vision is centered on three key areas - digital infrastructure as a utility to every citizen, governance and services on demand, and digital empowerment of citizens.

The nine support beams of digital India program include: broadband highway, universal accessibility, public Internet connection, e-Governance, e-Kranti, information for all, electronics manufacturing, IT for jobs and early harvest program. Rural population comprises a good portion of the total population of a farming-based economy like India. The life of people in villages is also tougher compared to their city counterparts. There is a dire need to work towards the progress of the villages along with improving the life in cities. There are certain ideas in digitalization that can be directly implemented in certain sectors like agriculture, weather and irrigation, Smart farming, Smart Dairy, Smart Healthcare, Smart Education, Smart Surveillance system, cattle/livestock rearing etc which need some improvised ideas for smart working. Consumer behavior play a vital role in the success or failure of any project. With the advancement of technology, Consumer today are aware and more informed than in earlier times. The principles that worked earlier are no longer valid today.

People are no longer restricted to local and national media; communication channels are open through satellite television and the internet. Moreover, with globalization, and the world trending to become a global community, there has been a change in the socio-economic and cultural environment.

Keywords: Digitalization, Transformation, Society, E-governance, Rural, Economy, Development, Citizens, Behavior, Sustainability

INTRODUCTION

On 1 July 2015, India embarked on a master-plan named Digital India to transform itself to “digitally empowered society and knowledge economy,” with three things in focus. These were digital infrastructure, digital services and digital empowerment of citizens. Various policy and investment measures have been undertaken with notable accomplishments.

As major developing economies, India is facing enormous social inequities. Country moving rapidly towards digitalization, a new dimension of inequality - manifested by long-standing socio-economic gaps can be seen developing across the urban and rural populations. It is likely that the situation will continue for some time; given the immigration influx to urban areas and lack of digitalization process in the rural areas. It is both an expensive and difficult proposition because of structural, geographical and cultural constraints.

Addressing social grievances among the rural population and low-income urban residents is possible to a greater impact only when there is effective digitalization process and its implementation. India needs to pay attention to this ongoing scenario. Drawing applicable lessons from countries who are fore-runner in Digitalization practice worldwide like first USA and second China.

Rural India contributes a substantial part of the total net value added in many sectors, with an overall 46% contribution to our national income. The Indian economy is predominantly rural with over two-thirds of its population and workforce residing in rural areas. With a population of 833 million people (which incidentally is larger than rural China) residing in 640,867 villages, it is projected that, by 2050, more than half of India’s population will still be rural, despite rising urbanization. Thus, the growth and development of the rural economy is imperative for inclusive development and overall growth of the country. Digitalization is creating tremendous opportunities for economies across the globe, and India is an example of a country that not only understands this opportunity but has embraced it.

As per IMD World Digital Competitiveness Ranking 2019 (WDCR), India advanced four places to 44th position in 2019, with the biggest improvement in the technology sub-factor level, holding first position in telecommunications investment. To evaluate an economy, WDCR examines three factors: Knowledge, the capacity to understand and learn the new technologies; technology, the competence to develop new digital innovations; and future readiness, the preparedness for the coming developments.

India rose from 48th place in 2018 to 44th rank in 2019 as the country has improved overall in all factors - knowledge, technology and future readiness.

The US was ranked as the world's most digitally competitive economy, followed by Singapore in the second place. Sweden was ranked third on the list, followed by Denmark and Switzerland in the 4th and 5th place, respectively. Others in the list of top-10 most digitally competitive economy include Netherlands in the (6th) place, Finland (7th), Hong Kong (8th), Norway (9th) and Korea (10th).

Several Asian economies advanced significantly in the ranking compared to 2018. Hong Kong SAR (8th) and the Republic of Korea (10th) entered the top-10 for the first time, while Taiwan and China moved up to 13th and 22nd place, respectively. India and Indonesia jumped four and six positions, respectively, supported by positive results in talent, training and education as well as the enhancement

of technological infrastructure.

India, a union of states, is a Sovereign Socialist Democratic republic with a parliamentary system of government. It is one of the largest democracies in the world and seventh largest country in area. It is well separated from the rest of Asia by mountains, and the sea which gives it a distinct identity. With a population of 1.3 billion, it ranks second to China among the world's most populous countries. Its people are culturally diverse. In India language and dialect change after every 20-25 kilometers, eighteen major languages and more than 1,000 minor languages and dialects are spoken here. This possess a major challenge to roll out common digitalization programmes

Today, provision of digital identity through 123 crore Aadhaar is helping the poor receive the benefits directly into their bank account and has led to a saving of Rs 1.1 lakh crore. A vast network of more than 3.10 lakh of digital services delivery centres, spread across 2.10 lakh Gram Panchayats, across the country has been created to provide access to more than 300 digital services including insurance, banking, pension and payments, especially in rural areas at an affordable cost. Over, 1.45 crore people have been imparted training under the world's largest Digital Literacy programme- PMGDISHA. More than 120 BPO units have come up in about 100 small towns of India across 20 States and 2 Union Territories. From 2 units in 2014, Now (2019) India has 268 units manufacturing mobile handset and components. Promotion of Hardware Manufacturing in the country has created more than 4.5 lakh jobs opportunities (direct & indirect). Around 3.12 lakh CSCs are providing doorstep delivery of services, UMANG and DigiLocker provide easy access to Government services, GEM provides more than 1 lakh businesses access to government procurement. Over the past four years, digital payment transactions have grown multifold. National Scholarship Portal has 1.4 crore students registered and scholarships worth Rs 5,295 crore disbursed in the last three years. JeevanPramaan has improved the ease of verification of pensioners using Aadhaar. 2.48 Crore Digital Life Certificates have been submitted since 2014.

DigiLocker provides access to over 349 crore certificates in digital format on a single platform. These are just a few illustrative examples of how ICT is being leveraged for the benefit of the citizens. Under Pradhan Mantri Gramin Digital Saksharta Abhiyan (PMGDISHA), the Government is implementing the world's largest digital literacy programme under which 1.96 crore people in rural backward areas have already been imparted training to become digitally literate and a total of 6 crore will be trained, thus, bridging the digital divide and helping people access benefits of the digital world.

The BPO movement for smaller towns aims to create employment opportunities and secure a balanced regional growth by promoting local entrepreneurs, employment to women and differently abled persons. It has the potential to generate around 1.5 lakh employment opportunities. 53,300 seats are allocated to 184 companies, resulting in setting up of 268 units distributed across 110 locations of 26 States & 2 UTs. BPOs have started operation at several locations, including, Bhubaneswar, Bhubaneswar, Bhubaneswar, Jammu, Sopore and Srinagar in Jammu and Kashmir, Guwahati, Kohima, Imphal in North-Eastern region, Baddi and Shimla in Himachal Pradesh, Patna and Muzzaffarpur in Bihar, Jaleswar in Odisha

The Government is promoting Electronics Manufacturing to accelerate the movement towards Make in India and Make for the World. Towards making India a manufacturing hub for electronics and mobile devices, 268 unique mobile and mobile component manufacturing units have been set up in last 4 years, providing direct and indirect employment opportunities to 6.7 lakh citizens.

To create an inclusive, safe and secure cyber space for sustainable development, the Cyber Swachhta Kendra (Botnet Clearing and malware analysis centre) has been setup to provide alerts to users for preventing losses of financial and other data. All these have laid a robust foundation for India to become one of the leaders in digital transformation. Having built a strong foundation of digital infrastructure and expanded digital access and outreach, India is poised to accelerate towards a trillion-dollar digital economy.

There is no doubt that Digital is going to be the growth engine of our economy. The power of Digital lies in its ability to enable inclusive growth, thus leading transformation of an unprecedented scale.

Research Methodology:

The Secondary data is collected from various published sources such as books, journals, newspapers, websites etc. to analyze and study the Socio-economic Development in Rural India. In this paper author are not using as such typical methodology. This paper is framed by using some secondary data from authentic sources.

LITERATURE REVIEW

At present, digital technologies are transforming the relations between economic catalyst in energy, e-governance, construction, banking, transportation, retail trade, education, healthcare, the media and security etc.

Modern scientific literature defines digitalization as an integral component of the modern global economy which contributes to a more rational resource management (Antikainen et al., 2018), optimization of business management models (Rachinger et al., 2018) and structural changes (Heavin & Power, 2018). It also makes technological processes more complicated, accelerates innovation cycles (Latos et al., 2018) and improves supply chain management (Srai & Lorentz, 2019). Digitalization leads to the internationalization of industries and startups (Neubert, 2018) as well as the creation of production ecosystems (Alcacer & Cruz-Machado, 2019). In banking, the speed of digitalization is unprecedented. This implies revolutionary changes in information processing systems of banks, qualification requirements and financial services (Carbo-Valverde, 2017). In the banking system model, operating cost is reduced and increased the productivity of financial services.

A concept for the introduction of digital technologies ((Chircu et al., 2017)) has been developed for high-tech industries like pharmaceutical industry. However, digitalization of an individual industry is not possible, since digitalization is a complex process combining public procurement of medicines, control of production, supply to pharmacies and hospitals, drug inventory. Digitalization of healthcare directly affects the commercialization of high technology in this area and effect the society.

Digitalization has penetrated the socio-cultural sphere. There are two development scenarios for the music industry in the digital age (Bourreau et al., 2008): getting profit through selling content, which requires direct or indirect protection of music files, or through (almost) free distribution of content and sale of additional goods or services. We can say that digitalization negatively affects the music, publishing and cinema industry in connection with piracy and ignoring copyright on books, music, radio, television and cinema (Waldfogel et al., 2017). On the other hand, digital technologies helped this sphere to reach new target groups. Thus, it expanded the audience of its consumers and reduced costs for introducing new products to the market of music, films, books and television.

As study in social inclusion project: struggles in involving children in digital technology development (Netta Livari, Marianne Kinnula, 2016) mentioned that the children of today were born into a world where smartphones, tablets, and the internet are ordinary things. They learned to use digital technology as toddlers, and their adult lives will be full of digital technology. However, some children are better equipped for a future merged with digital technology than others (Livingstone & Helsper, 2007).

As study has been carried out to know the impact of 'Digital India' in 'Make in India' program (Ashutosh D. Gaur and Jasmin Padiya, 2017) to investigate program in IT & BPM sector. They have stated that cities are becoming smart cities and governance is moving towards e governance. Digital literacy is an initiative for digital transformation. Government of India has announced its vision of zero import of IT hardware by 2020 of IT hardware with the increase in cashless transactions, we might see

a surge in buying of IT hardware by consumers. This paper evaluates different trend and challenges for digital transformation in building blocks of digital India vision area : Infrastructure (High speed Internet, Digital Identity, Mobile and Bank linking, Cloud Storage, Safe Access) , Demand Based (Credential Cloud Based, Real Time Access, Integration, Business Ease, Secure Payments) and Empowerment (Digital Literacy, Digital Resources, Indian Languages, Digital Platform, Cloud Based) and a summarization of Nine Pillars of Digital India.

A Study of New-Age e-Entrepreneurship in India (Arjuna Kumar Sahu¹, 2015) Arjuna Kumar explore Digital India and other initiative like National Digital Literacy Mission (NDLM) penetration of mobile phone and broadband has raised in significant number and pattern of users has changed.

A research has been conducted on 'Entrepreneurial urbanization' in Dholera smart city, Gujarat (Datta, 2015), Datta has explored in depth critical analysis on Dholera smart city to suggested how state attempt to attract global capital and enhance economic growth through construction of new town ships.

An Empirical Study (Sarin, 2016) on Developing Smart Cities using Internet of Things, Sarin explained Digital India program, which aims at setting up e- infrastructure in the nation will enable faster establishment of the IoT industry.

A study conducted (Suresh, 2016) Development of Smart Cities in India: Dream to reality Suresh explores strategies for planned urbanization, guideline for smart city development and explain thoughts to transform urban India.

A finding on Indian Banking Sector-Challenges and Opportunities (Singh, 2016) analyzed and review the challenges and opportunities in it. And also mentioned that Indian Government needs bigger banks to finance, its social projects, infrastructure funds like Digital India, Bullet Train etc.

A Review on Digitization in Health Care Services in India: (Joshi, 2016) Joshi an attempt to understand conceptual understanding and overview with the present trend in digital health care in India and world. This study also addresses issues and challenges in digitization of health care services in India.

E-Governance-Reforming Government through Technology: (Raghavendra Kulkarni, 2016) Raghavendra Kulkarni explains and analysis the characteristic, advantages and challenges in the implementation of E-Governance the two mainadvantages of E Governance are increased transparency and fast public service delivery.

E-Governance and Digital India Empowering Indian Citizens through Technology: (Deloitte, ASSOCHAM, 2015) Deloitte offers a complete assessment of the Digital India initiative finds gaps and challenges and focus for closing the gaps have been discussed.

An investigation on characteristics of digital sustainability (Matthias Stuermer,2014) explain the concept of digital sustainability and six characteristics that define the digital sustainability such as Intergenerational justice, Regenerative capacity, Economic use of resources, Risk reduction, Absorptive capacity, Ecological and economic added value.

Verkijika and Wet (2018) climate the merit of e-government as a powerful tool for any sort of government and semi government bodies of any discipline of organisation and institution to improve the capacity of administration.

Andrea ko, Peter Feher& Zoltan Szabo (2019) conducted a research on Digital Transformation – A Hungarian overview. The research aims to provide an overview of digital transformation in Hungarian companies from the dimensions of strategy, technology and digital innovation capabilities. Theydiscussed the objectives of digital transformation and the role of IT departments in digital transformation. The research is part of an ongoing research, in which IT-related practice of Hungarian organizations is explored on a yearly basis, starting in 2009. As their survey results revealed, there is a

moderate strong demand for digital transformation, but the consciousness and perception of how technology will change the nature of business varies among industries.

There are several researches targeting the overview, the maturity level and the decisive factors of digital transformation (Kane et al., 2016; Erjavec et al., 2018; Chaniyas et al., 2016).

Evans (2017) identifies four key pillars of digital transformation:

- (1) Strategy and Vision: (Digital Strategy , Digital Focus, Investment)
- (2) People and Culture: (Digital Skills, leadership, Culture)
- (3) Process and Governance: (Digital innovation, Change Management, Governance)
- (4) Technology and Capabilities: (Disruptive Technology Enablers, Business Models, Digital Service)

Evans (2017) draws attention by claiming that digital transformation is not the “final destination” of the companies, as there is a need for an agile attitude, namely rapid response to change and continuous innovation. The strategy and vision pillar focus on maintaining the customer-centric (outside-in) perspective and cover digital transformation strategy, digital transformation focus and investments.

RESULTS & DISCUSSION

IMPACT OF DIGITALIZATION

We have unknowingly been a part of Digitization for last so many years; marking a year since 1990s. We have all been a part of the Digital World where we have touched the Digitalised business processes by using in our day to day life. We can think of activities such as making railway reservation online, buying Air tickets, bus tickets online or making payments by credit card, debit card, etc.

For years, promoting Digitalization has been a Governmental initiative to give all services to every citizen on their web portals or electronically, to make the transactions transparent and smooth.

E-Choupal was set up by the Agribusiness division of ITC in June 2000 to provide to farmers information about (i) farming practices and training (ii) market prices of crops (iii) weather conditions; and most importantly (iv) platform to sell their produce directly to buyers through internet networks. E-choupal centres were first set up in Madhya Pradesh.

In July 2015, digitalization project gains a new momentum under the leadership of our Prime Minister Narendra Modi. The success of the digital transformation and Impact is based on IT+IT=IT (India Talent + Information Technology = India Tomorrow).

To make it successful Digital India Programme, which is aimed at transforming India into a knowledge-based economy and a digitally empowered society by ensuring digital access, digital inclusion, digital empowerment and bridging the digital divide.

Consumer behaviour play vital role in the success or failure of any programme in rural and urban areas. Consumer behaviour is very fragile and dynamic to get influenced by external environmental factors as well as internal factors. Consumer behaviour and perception with reference to digitalization is significant because of its mass coverage, numerous applications and huge cost involved which is impacting the development of a nation and mankind.

The most important impact of Digitalization has been observed:

- To reduce Corruption.
- To increase speed of public sector services rendered to citizens of the country.
- To decrease documentation.
- To provide an easy to manage online storage to store all documents.

- To provide simple and easy to use cloud space on the internet.

The real changes because of Digitalization are becoming visible today because of the push by government. which is expected to usher in a new era (like how computerisation did in public as well as private sector almost two decades back). Things like paper currency notes will soon be a thing of past. Slowly we are moving towards Digitalization of Indian Economy with new steps and initiatives. For the development of nation and mankind, digitization is the need of the hour:

Corruption today is the biggest problem in developing countries. In fact, corruption is a problem we have faced for ages. It is said, a parallel economy flourishes side by side to our main economy. This economy is run by those who avoid paying taxes to the Govt. One of the prominent reasons for the parallel economy is the dependency on cash-based businesses. The culprits running the parallel economy don't feel like having bank accounts and other business books which simply means no tax payment to Govt.

With Digitalization Initiatives like Taxation being brought online and steps like Demonetisation, the govt is trying to weed out corruption from our system which is expected to lead to a positive impact on Indian Economy. Digitalization has great impact on three levels: Society, Economy and People. Which has advantages and disadvantages such as:

Advantages of digitalization on consumer:

- Digital presence
- New contact channels with customers.
- The customer at the heart of the Universe.
- Improves working conditions and better decision-making
- It improves efficiency and productivity
- It encourages innovation
- It makes communication and teamwork easier

Disadvantages of digitalization on consumer:

- Data Security
- Crime and Terrorism
- Privacy Concerns and Complexity
- Social Disconnect
- Digital Media Manipulation
- Job Insecurity
- Plagiarism and Copyright
- Anonymity and Fake Personas
- Over-reliance on Gadgets
- Addiction
- Organization and Storage
- Depersonalized Warfare
- Social Depersonalization

Digitalization improved social and economic condition of people through development of non-agricultural economic activities apart from providing access to education, health and financial services. However, ICT alone cannot directly lead to overall development of the nation. The overall growth and development can be realized through supporting and enhancing elements such as literacy, basic infrastructure, overall business environment, regulatory environment and political stability etc. Digitization has the potential for dramatic economic, social, and political improvements. Anecdotal evidence abounds: water utilities have installed sensors that reduce leakage, saving water and money;

healthcare organizations send text messages to pregnant women with advice on prenatal care, creating a healthier new generation before children are even born; fleets of trucks use digital GPS devices that direct them to shorter routes, cutting down on their greenhouse gas emissions. Numerous organizations, including the World Economic Forum with its evolution of the Networked Readiness Index, are taking steps in that direction.

Today consumer can have universal phone connection, High speed internet, Digital Inclusion, e-Services, e-Governance, digitally motivated people, National Scholarships Portal, Digital Lockers System, e- education, e-health and improve the work efficiency and effectiveness.

E- Government and E-Governance

E-Government is a system whereas e-Governance is a functionality. Government means the application of ICT in government operations, as a tool to make better government. E-Governance is a part of e-Government. E-Governance is dealing with all regulations and policies to control the services provided by the e-Government. However, thee-Government is an electronic government, which refers to the utilization of information and communication technology (ICT) for providing government services, disseminating information, communication operations with the general public. It implies the use of ICT in transforming and supporting functions and structures of the system. Indian government has launched many e-governance initiatives, including a portal for public grievance, MCA21 Mission Mode Projected-Filing of income tax, e-gazette, Project Nemmadi, and their overall digital India policy Which is revolve around People, Process, Technology and Resources.

Generally, the e-Government concept brings four domains:

- **e-Administration:** Improving government processes by using ICTs and government process management. No paperwork, each and every process need to be done via the use of ICT.
- **e-Government services:** Delivering government services electronically to citizens, businesses, and government employees. Example application for citizenship through the online system.
- **e-Democracy:** Improving transparency and democratic decision making, as well as citizens' participation in public decisions. e-Voting is a perfect example here.
- **e-Governance:** It is a development, deployment, and enforcement of the policies, laws, and regulations necessary for developing cooperation, networking and partnerships between government units, citizens and the business. Citizen will get government services using technology

Making a strong e-Government and its implementation for effective e-Governance is not a one-way tariff. Both this should work together to make the effective government.

There are several merits of effective e-Governance. It results in decreased corruption, increased trust of level towards the government, it shows the transparency in government activities, citizen engagement and increase help from the citizen. Moreover, it helps to growth in GDP, expansion in government reach and so on.

Every citizen has a vital role to make the government more responsible. And the government must be accessible for every citizen in the country. Hence e-Government is the best and tested system all around the globe to become responsible and easily accessible to the citizen.

Digital Sustainability model is based on five major principles, on which the different economies are assessed:

- A high-quality regulatory and business environment is critical in order to fully leverage ICTs and generate impact
- ICT readiness as measured by ICT affordability, skills, and infrastructure is a pre-condition for generating impact
- Fully leveraging ICTs requires a society-wide effort: the government, the business sector, and

the population at large each have a critical role to play;

- ICT use should not be an end in itself. The impact that ICTs have on the economy and society is what ultimately matters;
- The set of drivers the environment, readiness, and usage interact, co-evolve, and reinforce each other to form a virtuous cycle

Mere formation of new projects and plans is not enough but a grassroot level implementation along with periodic follow-up is needed. Most importantly, economic and social sustainability of these project is today's requirement and tomorrow's reality, But on the other side this is a good initiative which is formed to overcome the defects of National e-Governance Plan.

DIGITAL TRANSFORMATION TRENDS IN COVID -19 PANDEMIC

The Coronavirus pandemic has changed the way we all work, live, communicate, shop, and more. In fact, there isn't a single aspect of life that hasn't been affected by it. COVID-19 is responsible for spawning or accelerating a whole host of **Digital Transformation Trends**.

Instead of coffee catch-ups, we now have (Google) Hangouts. Instead of exchanging business cards at a conference, we connect at a virtual summit. And instead of head-to-toe corporate attire, we just dress the bits that are visible on net meeting. By 2021, it's unlikely there'll be any digital luddites remaining in the corporate world.

At present, 6 main digital transformation trends that have risen to the force as a result of the 2020 global pandemic.

- Working from Home, e- learning
- 5G Services for the fast internet for social connectivity and IOT
- Everything-as-a-Service, moving from traditional business to modern era
- E-commerce Rebirth to boost digital sales from traditional bricks and mortar retailers
- Contactless delivery and contactless digital payment
- Adoption of AI in business of all shapes and size for the Survival

CONSUMER BEHAVIOUR IN DIGITAL AGE

Consumer behavior is highly complex and multidimensional, with the consumer being surrounded by a host of environmental forces that impact the entire mechanism of digital India initiatives / programmes. And explanation to behavior relates to economics, psychology, sociology and anthropology. Since people's behavior are influenced both by psychological and sociological factors, consumer behavior must be analyzed both at the micro and macro levels. The factors affects its performance which are close to the demographic, socio-economic, political, technology, culture and natural factors etc can be analyzed by SWOT analysis method to design the effective digitalization strategy in rural area.

DIGITALIZATION CHALLENGES IN RURAL AREAS

Rural areas are still underserved in terms of ICTs infrastructure and capacity building. As a result, ICTs have not been able to play their expected role in the development of rural areas. Some of the challenges are:

Continuous Supply of Electricity: The limited supply of electricity restrains rural areas to fully utilize ICTs applications especially at village level.

Low level of Digital Literacy: Literacy rate is considerably low in rural areas as compare to urban areas. The condition is more unsatisfactory when we talk about the Digital Literacy.

Shortage of ICTs Personnel: Few digitally literate professionals are available at village level.

Lack of Access of Telecommunications and Internet Services: The ICTs based applications need uninterrupted services of telecommunication and internet. Presently, there are some patches in rural areas where reach of mobile telephony along with internet is still not upto the mark.

Unavailability of Web Content in Local Language: The content part plays a dominant role as far as rural area is concerned especially rural farmers, artisans and poor beneficiaries.

Acceptance in Rural People: It is often taken for granted that any technology transfer to the rural areas would be accepted but we have to consider their own established cultural and traditional ways of doing things.

Unethical Use of ICTs: In the era of digital world, personal privacy, data security, copyright infringement, computer crimes, cyber-crime etc are also coming in front as major concerns. Further, unethical use of social media is also posing problems.

Digitalization has great potential for the communities residing in rural areas. The policies, schemes etc. should be equipped with the ICTs enabled plan to avail the benefits of latest technologies. To formulise the concept of Digital India for rural sector, we should have a clear cut e-plan or e-policy that guides the government priorities to adopt ICTs for rural development. It demands proper understanding of the social and development priorities of the rural areas.

It also requires a vision and leadership of highest levels of the government along with political will. It requires rationalizing how every ICT objective needs to be carried out both in terms of responsibilities assigned to government agencies as well as the continuous financial support.

Today, Societies are transforming to information-societies by adopting cashless economy, social network and other communication mechanism. Recognizing the present needs of promoting ICTs applications and cashless economy, rural people should be empowered by capacity building programmes. The premier institutes like National Institute of Rural Development and Panchayati Raj (NIRD&PR) and all State Institute of Rural Development (SIRDs) should play vital role to meet out the capacity building needs of the rural people.

Although, India is on the right direction in terms of ICTs implementation for rural development but the significance of ICT revolution lies in the fact that it should surely help in delivering basic services in the rural areas in more innovative ways to uplift the quality of life in rural areas.

DIGITAL ROLE IN RURAL DEVELOPMENT

Various initiatives taken up by the government and concerned authorities to ensure digital inclusion in the rural areas of India. Numerous facets of Digital Kranti such as e-commerce, e-banking, e-governance, e-learning along with Gyandoot, Bhoomi, e-Choupal, e-Post, e-Panchayats, Drishtee, Akashganga, LokMitra, etc., the especially fabricated projects for rural transformation have been dealt with in detail.

“The soul of India resides in Villages”, statement of Mahatma Gandhi is the essence representing the relevance of rural part for our country. India is a nation of villages. Numerous facets of Digital Kranti are being used to reach out to rural population under different programme and initiatives.

GYANDOOT : Gyandoot is a project for the benefit of rural folk, launched on 1st January,2000 in Dhar district of Madhya Pradesh. Initially, 21 soochnalayas were set up with computers, to cover the population from 20,000 to 30,000. From the concerned village a digitally literate youth is selected as soochak on honorary basis. Soochaks operate kiosks and charge for the services they provide.

BHOOMI: It is an initiative meant for regular online updating of land records. First of all Karnataka started this project and records of 6.7 million farmers having 20 million cases in the entire state have been computerized. Revenue department along with National Informatics Centre (NIC) implemented

this computerization of land records. The previous manual system of record keeping constituted the piles of registers which were practically unmanageable and not very legible. Therefore, the digitalization emerged as a solution. Now the record kiosks generate the required documents demanded by farmers with the data saved in. Actually, it is a wonderful project leading to anti-corruption and transparency.

E-CHOUPAL: This is the largest e-market initiative undertaken by any corporation in India. The concept of e-Choupal was introduced in June 2000 by ITC to link directly with farmers for procurement of their crops. The e-Choupals are operated by a Sanchalak (operator), who also doubles up as an ITC salesman. A farmer can visit the kiosk and show a sample of his produce to the sanchalak, who gives him a quote. If the farmer finds the quote attractive, he can take the produce to an ITC collection centre and receive payment within two hours. The e-Choupal also provides other relevant information to the farmers including latest scientific farming techniques.

E-POST : On 30th January 2004 (Mahatma Gandhi's Martyrdom Day) the Department of Posts launched this service to send the messages across India. A person with a message. approaches the nearest post office; the official scans the message document and sends it via e-mail to the destination post office.

E-PANCHAYAT: Panchayat is the basic unit of governance at village level. Therefore, e-Panchayats were initiated to empower the Panchayati Raj Institutions (PRIs). NIC developed first e-Panchayat for Hyderabad (Andhra Pradesh). This e-Panchayat comprised of 30 modules and 150 sub-modules. These modules were to provide information to the villagers on various products like agriculture, fisheries, poultries, etc. and also on other problems relating to industries, housing, water, etc. It also dealt with services like property tax, registration and issuance of birth and death certificates, disbursement of old age, widow and disabled pensions, etc.

RURAL ACCESS TO SERVICES THRU INTERNET (RASI): The first sustainable Access in Rural India (SARI), now renamed as RASI, provides internet and voice connectivity to the villages of Madurai district in Tamil Nadu. The project embraces over 100 villages. Each kiosk is connected to the website containing information akin to revenue, registration, rural development, education, health, agriculture and animal husbandry. This play an important role in expanding digital literacy among children.

KISHAN CALL CENTERS (KCC): KCC is the initiative mainly to respond to the issues raised by farmers in their vernacular languages on a 24 X 7 basis.

TATA KISHAN KENDRA (TKK): Tata Chemicals Ltd. came out with TKK to help farmers in states of Uttar Pradesh, Haryana and Punjab. TKK identifies the relevant factors so that the meaningful data can be gathered on soil, ground water and weather on a real-time basis with the help of Geographic Information Systems (GIS). The software provides spatial information about administrative, socio-economic and physical setup. Satellite image processing facilitates in detecting unproductive farming practices, tracking the progress of insect attacks across states and getting yield estimates.

LOK MITRA: The project of Lok Mitra has been developed by NIC for Himachal Pradesh, to provide easy access at remote areas and to redress complaints. The client systems are used by the officials from concerned departments for answering the complaints and queries received and for updating with information.

N-LOUNGE: N-Logue provides telecom and internet services in small towns and rural areas of our country. On operational grounds N-Logue has divided the entire nation into service zones corresponding approximately to a taluka (tehsil). Around 85 percent of taluka headquarters in India have optical fiber today acting as the backbone for telecom and internet connectivity. The kiosks provide information on markets, climate, and soil to the farmers, in addition to handling public grievance.

DRISHTEE: Drishtee is a distribution and promotional network for consumer goods and basic services. Information is provided to the users in the form of services via internet. A village entrepreneur is trained to handle the softwares and hardwares including web server, kiosks and dialups. Soochnalayas or centers have been established for surrounding villages and their Gram Panchayats.

AKASHGANGA: It is the project to facilitate rural milk producers by integrating all the operations of rural co-operative society right from milk procurement to accounting. This process of milk collection enhances the productivity and quality and also saves the milk producers from the clutches of middlemen.

DD KISHAN CHANNEL: Kishan Channel was launched on 26th May 2015 under the purview of Doordarshan. It is an effort totally devoted to farmers of the country, so that the vital information on weather forecasts, crop safety, irrigation techniques, soil up-gradation methods, logistics and warehousing facilities available and current wholesale market prices of commodities at different centers nationwide, MandiBhaav / Price, can be brought to their notice as early as possible

TELEMEDICINE: Through the project, Apollo Hospitals provide super specialty healthcare to millions of rural Indians. Telemedicine is the use of ICT to facilitate healthcare when patients and doctors are separated by distance. Using the software Med-Integra, patients and specialists can interact visually.

LOKVANI: The project is a public-private partnership program that was implemented within the Sitapur district (88% rural population and 39% literacy rate) of Uttar Pradesh state. The objective is to “connect” rural citizens to the strategy makers in a seamless way. The project incorporates “right to information” policy and offers services, such as grievances and petitions, land records, tender services, employment services, and information related to government schemes.

SUMMARY

Digital Transformation is the process of using digital technologies to create new or modify existing business processes, culture, and customer experiences to meet changing business and market requirements. Which requires new capabilities and skills. These include capabilities related to disruptive technology enablers, platform architectures and business models, digital services mastery, and digital innovation. The people and culture pillar include digital skills, leadership and culture. Change management has a key role in this rapidly changing environment; where companies must adopt business processes and new governance methods as well. The technology and capabilities pillar's components are disruptive technology enablers, platform architectures, business models and digital service mastery.

From the aspect of governance and processes, digital innovation is also a key pillar of digitalization. The reasons to deal with digital transformation is to improve customer experience and engagement, increase efficiency, increase innovation, improve business decision making and fundamentally transform business process and business models.

For the successful digital transformation, we need to focus on six pillars beyond technology; this change is only possible if we build the right kind of ecosystem to embrace what's possible. The six pillars of digital transformation are experiences, people, change, innovation, leadership, and culture.

Mostly Digital Transformation has been observed in four areas:

1. **A strategic focus** that aligns the digital transformation effort with overall strategy
2. **A customer focus** that a consumer experience that is consistent and modern
3. **A culture focus** user's attitudes, behaviour to accommodate transformations
4. **A data focus** that data and analytics to enhance business processes, and more

A digitally empowered India can mend social and economic condition of people through development of non-agricultural economic activities apart from providing access to education, health and financial services. However, it is important to note that ICT alone cannot directly lead to overall development of the nation. The inclusive growth and development can be realised by supporting and augmenting elements like literacy, basic infrastructure, overall business environment, regulatory environment, etc

It is becoming vital to understand the cause and relevance of the programme / initiatives of digital India. An analysis of consumer characteristics and specific traits can enable organization to segment consumers and design targeting digital India strategy appropriately in rural areas.

Conclusion

Research is very important and play significant role to improve the efficiency, effectiveness and also to get the proper feedback to adopt a new strategy for the Social, Economic, Technology Development. The role of research in several fields of applied economics, whether related to business, industry, trade, commerce, services or to the economy, has greatly increased in modern times.

A conceptual study has been carried out to understand the significant aspects of rural Indians, emphasise on Government Policies, Allocation of National Resource, Investigation of Economy Structure, Social Welfare and progress, Solution of Operational and Planning problems of Business and industry, Acquiring New Knowledge and Organisational and Social Control, Global Market and Trends, Rural Area participation, Rural Area Development and Awareness related to digitalization, challenges of the digitalization programme, consumer trait pre and post digitalization, Concern regarding Business Environment and Predication

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