DIGITALIZATION: STANDARDIZATION OF INDIAN ECONOMY

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Abstract: ***India is also leading the world in payment system evolution. Enablers like Jan Dhan, Aadhaar, mobile penetration, and more recently, demonetization have created favorable conditions for large scale adoption of digital payment systems in India. With mass adoption of digital and biometric systems by 2020, the country is expected to leapfrog plastic payment systems and have the most advanced financial systems in the world. Digital India was formally launched by the Honourable Prime Minister of India on 1st of July, 2015. Digital economy refers to an economy that is based on digital computing technologies. The digital economy is also sometimes called the Internet Economy, the New Economy, or Web Economy .With campaigns like Make in India and Digital India, our country is, certainly, on the right track. Huge job opportunities are to be created in the IT sector with Tata group already announcing 60,000 jobs.***
This paper evaluates the impact of digitalization on Indian economy and it is found that digitalization of Indian economy enhanced the status of Indian economy and it is beneficial for long term. India, with its 65% population below 35 is a very young country, and thus, should modify itself into a potential hub for manufacturing and services sector. Digital networking and communication infrastructures provide a global platform over which people and organizations devise strategies, interact, communicate, collaborate and search for information but new applications are blurring these boundaries and adding complexity; for example, social media and Internet search.

Keywords: Indian Economy, Digital India, Digital Economy, Impact of digitalization on Indian Economy.

Background

Digital economy" is intertwined with the traditional economy making a clear delineation harder."The term 'Digital Economy' was first mentioned in Japan by a Japanese professor and research economist in the midst of Japan's recession of the 1990s. The Digital Economy was among the first books to consider how the Internet would change the way we did business. Three main components of the 'Digital Economy' concept can be identified: E-business infrastructure (hardware, software, telecoms, networks, human capital, etc.), E-business (how business is conducted, any process that an organization conducts over computer-mediated networks), E-commerce (transfer of goods, for example when a book is sold online).

The Digital Economy is worth three trillion dollars today. This is about 30% of the S&P 500, six times the U.S.' annual trade deficit or more than the GDP of the United Kingdom. This entire value has been generated in the past 20 years since the launch of the Internet .It is widely accepted that the growth of the digital economy has widespread impact on the whole economy. Various attempts at categorizing the size of the impact on traditional sectors have been made.

The Boston Consulting Group discussed "four waves of change sweeping over consumer goods and retail", for instance. In 2012, Deloitte ranked six industry sectors as having a "short fuse" and to experience a "big bang" as a result of the digital economy. Telstra, a leading Australian telecommunications provider, describes how competition will become more global and more intense as a result of the digital economy. Given its expected broad impact, traditional firms are actively assessing how to respond to the changes brought about by the digital economy. For corporations, the timing of their response is of the essence. Banks are trying to innovate and use digital tools to improve their traditional business. Governments are investing in infrastructure. In 2013, the Australian National Broadband Network, for instance, aimed to provide a 1 GB/sec download speed fiber-based broadband to 93% of the population over ten years.

The Digital Economy uses a tenth of the world's electricity. The move to the cloud has also caused the rise in electricity use and carbon emissions by the digital economy. A server room at a data center can use, on average, enough electricity to power 180,000 homes. The Digital Economy can be used for mining Bitcoin which, according to Digiconomist, uses an average of 70.69 TWh of electricity per year. The number of households that can be powered using the amount of power that bitcoin mining uses is around 6.5 million in the US. "

Objectives

With a clear vision, the present government is pushing ahead the Digital India initiative to transform the country into a digitally empowered society and a knowledge economy. With the launch of this initiative, the government aims to reach out to citizens in the remotest of locations and make them a part of India's growth story. Since technology is a key driver in causing disruptive change, digital tools will empower citizens and prove to be a game-changer.

1-Building a Digitally Empowered Society-

India is adding almost 110 million smartphone users every year, and is on the verge of launching Aadhaar-compliant devices with biometric authentication built into phones and tablets. The power of the JAM trinity will come into full force when transactions are enabled using Aadhaar and biometric authentication, creating a system that is not only cashless but cardless. Already, a new entrant into telecommunications service in India has succeeded in using the India Stack to enroll 108 million consumers in 170 days with a totally paperless, mobile-centric manner — in the process achieving customer acquisition costs of less than $1 (USD) per customer, compared with the prior industry standard of $25.

2-Creating job opportunities-

Digitalization has played a vital role in flourishing the Indian economy. The biggest example is the job opportunities created in the country for youth. In addition to above, "make in India" drive has given an immense push to youngsters to start new startups and think of creative ideas to contribute to digitalization of India.

3- Go cashless economy-

The government on its end is pushing and encouraging Indian public to go cashless and reduce reliance on cash transactions. The purpose is to make us adopt digital payments. Digital transactions make us follow a legal path which is helpful to flourish the economy. Use of plastic money gives freedom as well as security to citizens of the country because it works on technical grounds.

Digital payments will be helpful to the global world. Since cash is the primary mode of transactions in money laundering and terrorism funding, a digital society would discourage such laundering and terrorism.

4-E-Solutions through E- Governance-

It's providing e-solutions through e-governance to everything. It is a flagship program of Government of India which aims to provide connection between all government run institutes and people. Its main motive is to ensure that all the work is done electronically and we go completely paperless in the coming years. The Government of India has set a deadline of 2019 for completion of this mammoth task.

The launch of Digital India by the Prime Minister Narendra Modi, with the objective of connecting rural areas with high-speed Internet networks and improving digital literacy, digital revolution has already started happening in India. This vision of the digital India programme presented by the central government has resulted in inclusive growth in areas of electronic services, products, manufacturing, and job opportunities.

Impact

- With nearly 46 Million internet users and a growth rate of 7-8 per cent, India represents a digital economy, which has biggest market potential for global players. This digital revolution, also known as 'the Internet economy', is expected to generate new market growth opportunities, jobs and become the biggest business opportunity for businesses in the next 30 to 40 years.
- Digital infrastructure's backbone is the availability of high-speed internet. With the introduction of better and faster mobile internet connections, the services through Digitalization have been delivered in an efficient way to the citizens of the country. In addition to above, the government is taking initiatives like "Aadhar Card" or Digital identification for every citizen. This move is expected to give unique and authentic identification to every citizen. This step will mean faster subsidy distribution, reduction of corruption and some other impacts on our economy.
- Digital India has made mobile banking easy. Next important step taken by Government is the introduction of a Common Service Centre. A secure public cloud to share information. Digitization is helping businesses streamline their processes by slowly taking away dependency away from paperwork. Banks are the biggest beneficiary of digitalization. Since they now have processes where less staff can do more work.
- Digital India has empowered its citizen by giving them digital power like during the journey you don't have to carry any physical documents. We can show a soft copy of the ticket and identity card which fulfills the purpose.
- Government is pushing Digitalization in the country by promoting e-services to every citizen.
- Key areas that have been positively impacted ensuring growth of the digital economy include: Digital Infrastructure as a utility to every citizen, Governance and services on demand, Digital empowerment of citizens.

Successes of Digital India

- The Ministry of Human Resource Development introduced the e-Pathshala programme to promote 'learning on the go' among students, teachers and parents. Through this initiative, free access to NCERT books is available to students of classes 1 to 12. These books are available in both Hindi and English.
- The initiative, driven by the Department of Industrial Policy and Promotion (DIPP), seeks to provide comprehensive Government-to-Business (G2B) services to business entities with transparency, speed, and certainty. The aim is to reduce several levels of points of contact between business entities and government agencies, establish single-window services and reduce the burden of compliances.
- This is a platform for citizens to exchange ideas and suggestions with the government. Through this initiative, the government receives feedback, inputs and ideas from people regarding policy decisions and new initiatives like Digital India, Swachh Bharat, Make in India, among others.
- The Jeevan Praman programme enables pensioners to conveniently submit their life certificates online through this portal. The certificates are stored in the Life Certificate Repository and available to pensioners and Pension Disbursing agencies.
- Digital Locker is a key initiative under Digital India. This programme is targeted at paperless governance and is a platform for issuance and verification of documents and certificates digitally. A dedicated cloud storage space is given to all those who register for the Digital Locker account. To make it an easy process, this storage is linked to their Aadhar (UIDAI) number. Organizations that are registered with Digital Locker can push electronic copies of documents and certificates (e.g. driving license, Voter ID, School certificates) directly into the citizens' lockers. As per the official website, there are 39, 64, 008 registered users and 50, 47,204 uploaded documents.
- Digital India has been introduced to ensure smooth implementation of e – governance in the country and transform the entire ecosystem of public services through the use of information technology. There is no better way to promote inclusive growth other than through the empowerment of citizens.

Challenges

1- The biggest challenge faced by digital evolution in India is the slow/delayed infrastructure development. Spectrum availability in Indian metros is about a tenth of the same in cities in developed countries. This might be proved to be a major roadblock in providing high speed data services. This digital divide also needs to be addressed to improve reach in rural areas. PPP models should be explored to enable sustainable development of digital infrastructure. Also government should incentivize startups for providing last mile connectivity.

2- Improving IT literacy is a huge task which is extremely necessary for the digital services to catch up among the masses.

3- Security of data, especially financial data, is a big concern. Digital medium is still relatively unsafe with data vulnerability and phishing attacks are a big issue in commercial and financial transactions and this need to be addressed through advanced fin-tech technologies.

4- The process of digital disruption-whether led by government or not -creates numerous significant social challenges. Rather than seeking to slow that process to reduce those challenges, India has taken the opposite approach: to not only embrace but accelerate digital disruption, to ensure its full potential for economic and social inclusion is realized.

5- Barriers to Internet Adoption', almost 1 billion people in India are without an internet connection which comprises of 25% of the similar world population. Also, 26% of Indian population or almost 30 crore people are illiterate, that too when the condition to be counted as a literate is so lenient. India has some of the cheapest mobile internet plans; but this fact goes for a toss when it comes to country's average income of just INR 7378/month. The troubles are further manifested when we take into account the poor condition of telecom network infrastructure in India.

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Findings

- Digital India generates jobs in IT sector first of all, and then it would create further jobs in manufacturing sector because of rapid infrastructure growth. This would need to the rise of skilled labour in India which is currently at a mere 2%. When all this is taking place we can safely assume that the average income of a common person would increase. So the lower class would shift towards middle class and middle class will tend to rise towards upper class, thus setting the wheel into motion.
- In India, as we all know that two-third of the population is directly or indirectly dependent or agriculture which comprises of just 14% of GDP. Isn't that poor use of such vast human resource? The problem that arises now is that all these people cannot be directly shifted to the tertiary sector in a short span of time; they will have to move to manufacturing sector first. This is precisely where Digital India as a campaign would help in providing manufacturing sector jobs. All these things, combined, will lead to a push to rotate the giant wheel of Indian Economy and once set into motion India would never see growth rate of less than 10% for years to come.
- Broadly speaking, Digital India is all set to build a robust, secure and strong infrastructure, a customizable ecosystem to help the citizens and development of skills and technology. With billions of dollar flowing in India will have a stronger Foreign Direct Investment, helping in stronger foreign exchange reserves, which in turn would make the country more stable.
- With Digital India, you will have the facility of Digital Locker, where we can save all your documents and it can be accessed through any place via internet. So, in short, it avoids your difficult task and saves your precious time. The second problem can be solved through e-signature. As the name suggests, you can digitally sign your document through Aadhaar e-KYC service.
- There are many more things such as broadband highways which will include laying down of optical fibre network in all the 2.5 lakh gram panchayats of this country and enabling them to connect to each and every part of the world with high speed internet, mobile phones to everybody which aims at connecting all the 44,000 remaining villages to mobile connection by 2018, public internet access program to provide common service centre in 1.5 lakh villages, e-Governance which aims at reforming government through technology, e-Kranti which provides with electronic delivery of services, information for all through data available on social media and site like mygov.in, electronics for manufacturing such as mobiles and set top boxes, IT training for 1 crore people from villages and towns and, at last, early harvest program which aims at biometric attendance system at all central government offices.
- A major tracker of economy: Gross Domestic Property. In developing countries, according to the World Bank report, a 10% increase in mobile penetration increases the per capita GDP by 0.81% and the same increase in broadband penetration increases the per capita GDP by 1.38%. Digital India project is expected to increase the broadband penetration across India by 50% (which is currently at 7%) and mobile penetration in rural India by 30% (which is currently 45%) in next 2 years, the corresponding increase in GDP could be 9% i.e. approximately $180 billion.

Recommendations-

1- To build on to its legendary past and to maintain its leadership in IT, it's important that digital technologies are used to improve public services, develop efficient trade mechanisms and deliver financial inclusion through advanced fin-tech technologies. All this can be achieved by leveraging the strong IT competencies of Indian technology companies and highly skilled Indian personnel having extensive experience with global corporations. The intent should be to deliver advanced digital solutions for the most intriguing problems of the country that make a difference to the economy.

2- In order to build the digital economy, India will need to determine a fit-for-purpose regulation especially in privacy, consumer protection, intellectual property and financial regulation. The big push needs to be from the top, ensuring governments at all levels – national, state and local — go digital and consider the delivery of services through digital technologies.

3- India also needs to look at data and its flow in terms of its socio-economic sustainable development goals, anchored in its inclusive "Sabka saath, Sabka vikas" policy.

Conclusion-

India is moving into the future at an unprecedented rate. And the path it is taking to get there is digital. The idea of digitalization as this is one step which will gradually turn us into an economic powerhouse by cutting down paperwork. To see the immediate impact of digitization, all we must do is look at how income tax filing and income tax return processes have been streamlined. In India, the digital economy is expected to contribute $550bn-$1tr in GDP by 2025, and add 1.5-2 million jobs by 2018 through its Digital India initiative. Time is not far when Digitization will change the phase of Indian economy. Let us hope that India is able to fight all the odds and reclaim its lost title of a Golden Bird. In this age of information and technology, what else could be better than a vision which encapsulates the masses and connect them to this world. Let us all work together in the direction of Digital India. Platforms like UPI-integration and products like the BHIM app is a commendable step in this direction. As each sector - be it education, healthcare, infrastructure and more - benefits from being associated with a rising digital economy, let's hope that the overall economy of India will benefit from the digital revolution.

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