



How digitization can push economic growth and impact of digitalization on the Indian economy

Vinay Kumar Punia

Research Scholar, Department of Rural Management, School for Management Sciences,
Babasaheb Bhimrao Ambedkar University, Lucknow, Uttar Pradesh, India

Abstract

India is the fastest growing economy in the world. The Indian economy is the seventh largest economy in the world measured by GDP and third largest by purchasing power parity (PPP) after US and china. The Indian Economy has seen a lot of change's from being self-reliant to opening its door for global trading by allowing LPG(Liberalization, Privatization and Globalization) in 1991 under the then Finance Minister Mr. Manmohan Singh. Digital India the Dream that drives the push for digitization and e- governance in India is a long and winding road. But it is one which if handled properly could bring about real and tangible changes in the Indian economic structure. Digitization is a process of converting format. The Digitization has a proven impact on economy and society by reducing unemployment improving quality of life and boasting access to knowledge and other public service. The process of digitization is marked by cost effectiveness to cut the cost that incurred in various knowledge practices related to the problem. Digitization is depending upon the long term economic growth. A number of measures are taking in the field all over the world and in India, to conserve and preserve the knowledge of the past and present for the upcoming generation. Digitization will have far reaching implications for the corporate, household and public, this will allowed formal lenders to assess cash flows of smaller borrowers and hence price, loans better. The paper highlight's the concept of digitization along with the social economic and ecological benefits of digitation of knowledge and information.

Keywords: digitization, economic structure, unemployment, economic growth

Introduction

1st July, 2015 is day when an initiative was being taken by our honorable Prime Minister Narendra Modi towards "Making India Digital". The campaign aimed to connect rural areas with high speed internet network and improve the digital literacy. Indian Economy is growing at a fast pace that requires the people to be financial literate to take judicious decisions.

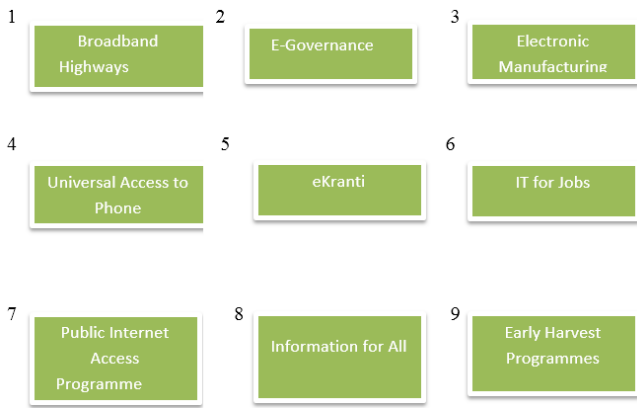
The 1990s also saw the entrance of technology in India and people were introduced with the use of personal computers and gradually the automation took every sector by storm and now we can see the virtual world that exists and anything can happen in it. The Luddites of the early 19th century resisted and tried to destroy machines that rendered their weaving skills obsolete, even though the machine ushered in new skills and jobs. Such disruption occurs precisely because the new technology is so flexible and pervasive. Uber is Taxi Company using digital technology to deliver a better service. An important component of a disruptive technology is that it must first be widely adopted before society adapts to it. Electricity delivery depended on generators. The current technological revolution depends on computers, the technical backbone of the internet, search engine and digital platforms. Because of the lags involved in adapting to new processes, such as replacing traditional printing with online publishing, it takes time before output growth accelerates.

For example while James Watt marketed a relatively efficient engine in 1774 it took until 1812 for the first commercially successful steam locomotive to appear. And it was not until the 1830s that British output per capita clearly accelerated. Perhaps it is no wondering that the digital revolution does not show up in the productivity statistics quite yet – after all the

personal computer emerged only about 40 years ago. E commerce sites are applying their data skills to finance. Meanwhile anonymous cryptocurrencies such as bitcoin are posing challenges to efforts o combat money laundering and other illicit activities. But what makes these assets appealing also makes them potentially dangerous. Cryptocurrencies can be used to trade in illegal drugs, firearms hacking tools and toxic chemicals. On the other hand the underlying technology behind these currencies will likely revolutionize computer. One clear difference between the digital revolution and steam and electricity revolution is the speed at which the technology is being diffused across countries. While the digital revolution is global, the pace adaption and policy reaction will – rightly or wrongly- be largely national or regional, reflecting different economic structure and social preference. The revolution will clearly affect economies that are financial hubs. With digital India you will have the facility of digital locker where you 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 cab digitally sign your document through Aadhaar e-KYC service. Now these solutions are just about the problems discussed above.

How Digital India will be realized: Pillars of Digital India

Digital India programme is an all-inclusive programme of government of India that covers various ministry and departments of the government. The programme has to implement with coordination and cooperation among these department.



1. **Broadband Highways** - All the three of broadband for all – Rural, Broadband for all – Urban and national information infrastructure are covered in this.
2. **E-Governance** – Government process Re-engineering and restricting by using technical and it tools, so that efficiency and transparency can be improved in governance.
3. **Electronics Manufacturing**- In India, the existing structure needs strengthening in order to boost electronic manufacturing; the target being ‘NET ZERO Imports’ in this domain in the days to come. This would be an ambitious goal which would require coordinated action on many fronts like taxation, incentives, economies of scale, and eliminate cost disadvantages.
4. **Universal access to mobile connectivity** – Providing access to all through penetration of networks and filling all the gap existing in connectivity structure.
5. **eKranti** - Development of technology for farmers would result into real- time price information, online ordering of inputs(e.g.-fertilizers) and online cash, loans, payments along with development of mobile banking.
6. **IT for jobs** – the objectives of this pillar is to train people in smaller towns and villages for IT sector jobs, setting up of BPO in each of the north-East state in order to foster ICT enabled.
7. **Public Internet Access Programme** - Post offices would be converted into multiservice centers, implemented through department posts, it intends to cover 150000 post offices with a span of two years.
8. **Information to All** – the platform ‘MyGov.in’ would foster 2 way communication between citizens and government. Also it would enable sending online messages to citizens on special occasions/ programs.
9. **Early Harvest Programmes** – Technological improvements such as Government greeting would now be e greetings, implementation of biometric attendance in all government offices, Wi-Fi in all universities, school Books to be eBook’s.

Agriculture Sector

India is an agriculture dominated country approximately 49% is engage in agriculture and allied activities. The agriculture and allies activities output accounted for approximately 14% in 2014-15 and its jump 5(%) in food grains output, according to the fourth Advanced Estimate for 2017-18(July-June)

Impact on economic growth

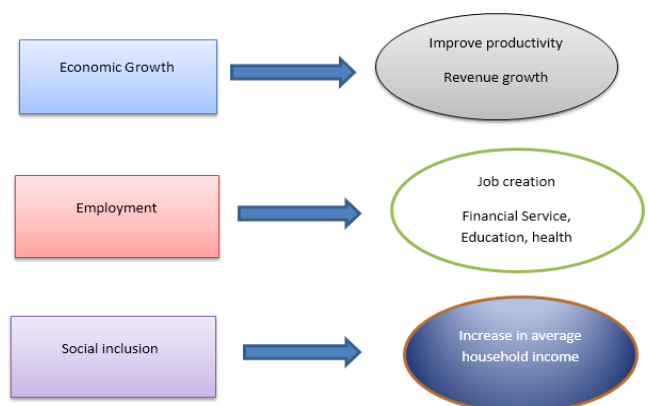
At the highest level computing broadband and mobile telephony networks have been instrumental in relaxing scalability constraints thereby allowing traditional sectors of

the economy to grow more rapidly. it is common to observe that many traditional sectors of the economy are growth constrained by limited access to resources such as raw materials or distribution channels. In the context digitization based on mature technologies has provided a way to allow business to scale further, addressing additional final demand and thereby creating increased need for factors inputs, namely labor.

- Improved productivity as a result of the introduction of more efficient business processes supported by ICTs and marketing of excess inventories and supply chain optimization. (Atkinson *et al.* 2009).
- Revenues growth resulting from extended market coverage (Varian *et al.*, 2002, Gillett *et al.*, 2006, and Josher and Tyler, 1982).
- Impact on the composition and development of industrial value chains. First wave digital technologies can attract jobs from other regions as a result of the ability to process information and provide service remotely. The service most greatly impacted is outsourcing and the development of virtual customer care centers.

The study controlled for various such as firm size industrial sector, foreign ownership, firm performance, Level of domestic competition, international trade organization affiliation, progress in privatization and telecommunications infrastructure. The author found that in the manufacturing sector firms with internet access enabled by broadband generated 6 % more foreign sales than the rest. This particular effect has been well researched in the microeconomics literature. The opportunity provided by broadband to increase market reach and seek out the highest possible selling price in open economics is essential in the development of a vibrant manufacturing sector. Manufacturing and service industries, broadband improves export performance by facilities the communication with buyer’s, improving information on Indian markets, consumers and standards and by ultimately linking the enterprise to consumer and by allowing bidding for contracts or participating in business - to -business platform.

Social and Economic Effects of the first Wave of digitization



Highlights of agriculture sector

1. World’s largest producer of milk, jute and pulse.
2. Comes 2nd in producing rice wheat, sugarcane, cotton and groundnuts.
3. Largest exporter of cashew kernels and cashew nut shell liquid in the world.

Digital India Major Challenges

Many people in rural areas have no internet connection and also the content in regional language is not sufficient to keep the readers engaged. Only 15 % of the household can access the internet and few people can access mobile broadband. This scenario is despite the increasing affordability of ICT environment in the country.

India and other South Asian countries are now on the radar of cyber attackers. The government and corporate world need to procure state-of-the-art, new age security solutions to their plans. It is not only a technology question but also deals with the question of privacy and security. The biggest challenges faced by 'Digital India' are the slow and delayed infrastructure development.

Obstacles in the process of Digitalization

Objective of the Study

1. To understand the difficulties in the path of digitalization and the economic growth.
2. To understand the requirement of financial literacy.
3. The findings of the study will identify the role of digitization can push economic growth and how these policies can be executed in the Indian economy.

Research Methodology

The study is exploratory and quantitative in nature. The secondary information is used for the analysis of the problem. Sources for the secondary data are originated from the various sources like special reports like report, newspaper and Reserve bank of India. Consider the research objective descriptive research design.

Conclusion

A digitally connected India can help in improving 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 overall growth and development can be realized through supporting and enhancing elements such as literacy, basic infrastructure, overall business environment, and regulatory environment. Digitalization improves effectiveness and efficiency of work being done. Digitization of governance activities, enhance quality of life of its citizenry by increased transparency in government department and easing service delivery. It increase speed and reduce time duration requirements for performing various activities and function. Cutting of costs and increased market area enhance profit margins. Public-private partnership models must be explored for sustainable development of digital infrastructure, as has been case for civic infrastructure projects like roads and metro. The government should try to make extra efforts for service providers. More over startup need to be incentivized and localized services and applications. The existing government infrastructure like post office and other building should be further leveraged for the provision of digital services. In rural and remote areas, private sector players should be incentivized. India is becoming digital due to faster adoption of technology. The digital India and it is an area of serious concern to address it effectively.

References

1. BCG & IAMAI. India Digital Bharat. Creating a \$200 Billion Internet Economy Mumbai: The Boston Consulting Group, 2015.
2. BCG. The Connected World. The Internet Economy in the G20. The \$ 4.2 Trillion Growth Opportunity. Boston: The Boston Consulting Group, 2012.
3. Blili S, Raymond L. Information Technology: Threats & Opportunities for Small and Medium sized Enterprises. International Journal of Information. 1993; 13:439-448.
4. (PDF) Role of Digitization and E-commerce in Indian Economic Growth: An Employment Generation Perspective. Available from: https://www.researchgate.net/publication/291349502_Role_of_Digitization_and_E-commerce_in_Indian_Economic_Growth_An_Employment_Generation_Perspective
5. WWW.dihtalinida.gov.in
6. www.deity.gov.in
7. www.scientificamerican.com
8. <https://ecoworldnmims.wordpress.com/2015/09/04/digital-india-impact-on-indian-economy/>
9. [9] https://isif.asia/wp-content/uploads/2016/02/FES_EoT_Essa.pdf
10. https://economics.ucsc.edu/research/downloads/Singh_Paper_IGIDR25th_2014.pdf
11. <https://www.rajeshmane.com/the-nine-pillars-of-digital-india/>
12. https://www.business-standard.com/article/economy-policy/india-s-gross-value-added-in-allied-activities-agriculture-surges-to-5-3-118090100036_1.html