

Digitalization and its Impact on Indian Economy

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Abstract: *This study discusses the digitalization and its impact on various sectors of Indian Economy, On July 1st, 2015 under the leadership of honorable Prime Minister Narendra Modi took the very first and crucial step towards “Making India Digital”. This is aimed to connect the rural parts of the India with Internet Connection and make them digitally literate to understand the development happening in their own sector and to inculcate them. India is one of the fastest developing nations with a very high young population accounting to (~65%) whose age is less than 35 years. Impact of Digitalization can be clearly observed only when the Individuals are capable of understanding and adopt them, for that every individual have to be financially literate which makes them capable of making judicious decisions, post digitalization financial transactions have to be taken through internet keeping that in view digital financial literacy has become the essential knowledge,through digitalization we can change a business model and provide new revenue and value producing opportunities. This paper focusses on how Digitalization has impacted the MSME and service sectors and how implementation of industry 4.0 has not done in larger scale. Why digitalization is so important and what are the sectors got impacted and how can we as emerge 3rd largest economy in the near future and how digitalization helped in bringing the transparency in the financial transactions and raise of usage of E Wallets.*

Problem:

India being a developing nation and facing many financial issues with roughly 70% of the population residing the rural parts of India it is slightly difficult to educate them with the Digitalization and the impacts of it. India is developing on many aspects like usage of internet etc but making them use in the right direction, which can help them in increasing their productivity and adds value to the economic front and making them financially literate is the main challenges ahead.

Introduction:

Digitisation& Digitalization are different but still either directly or indirectly impacts the “Digital India Initiative”.Digitisation is the process of converting our data into bits formats and basically related to digital data, whereas digitalization is the process of using different technologies/methods to change the business prospects and to achieve the efficiency goals.

Post demonetization was the time where in recent times people started understanding the importance of digital transactions, because of the cash crunch usage of digital money has increased significantly bringing the transparency and the helped in elimination the parallel

economy. Now it is very important to make every citizen of India to become financially literate as it directly impacts the economic growth of the country because it helps citizens to rightly plan their financial decisions, “It is the ability to understand the basic financial concepts and the possession of knowledge and skills required to make informed and effective financial planning, decisions using the available financial resources. It is about knowing how to generate, spend, invest and save money. It is the ability to manage your finances well by making the optimum use of the available financial products and resources to give you maximum benefit” in a way it will also make the job of the government easy.

But the figures are worrying the global study tells that in India 76% of the Indian adults are financially illiterate. So the growth of the country is vested in the hands of citizens to make them acquaintance with the financial terms and government also should take necessary measures to educate them. Financial literacy, financial inclusion and financial stability are the top three aspects of a growing and efficient economy.

Literature Review:

How can the digitalization and making the citizens financially literate change the face of the developing nation like India, being digitalized will make the future transactions to happen through internet for that each and every individual must be financially literate to make the judicious decisions and implementation of various programs to make it possible (Kaul ,2017).

The readiness of the industries in changing the gears from the traditional system to the digitalized system and knowing the difference between the Digitization & Digitalization in their industries (Rymarczyk ,2019).

Impact on the technological advancements like industry 4.0 in the manufacturing sector and its potential to change the phase of economy and the hurdles faced in the course of implementation (Pranjali,2017).

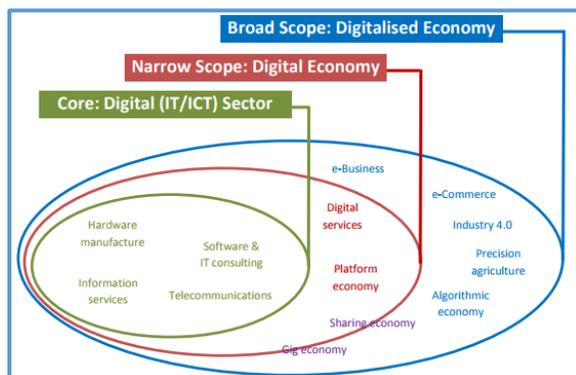
Impact of the digitalization on MSME(Micro Small and Medium Enterprises), able to see a good future growth but still facing many challenges due to the access to finance and the abrupt change in technology and not able to catch the current trend (Maiti ,2017).

Impact of the Information technology (IT) and the IT enabled services on the various sectors mainly on the MSME & service sectors which has the potential to grow and lead the economy in the front line which has a major impact on the Indian Trade (Kumar, 2019).

Impact of Digitization on Indian economy and the changes needed to adopt to make relevant in the current world and how the GDP, unemployment, FDI etc are impacted (Aftab,2015).

ICT (Information and Communication Technologies) have revolutionized the each and every sector and how digitization helps the industries to operate in the cost effective manner and Socio Economic and ecological benefits of digitizing the information(Khan ,2019) .

Model:



Framework:

With the digital economy growing at the rapid pace in the developing and the developed nation, the model tells about the size and the source of digital economy in Indian Economy. The widest scope of using the ICT technologies in their respective field can produce the most benefit.

Why Digitalization:

India’s sudden rise in the digital technology is mainly in the side of consumers, these are the factors which made the rise in the upsurge.

India has risen as the biggest and developing market for the digital consumers, comprising 560 million consumers second just to China, anticipated growth of 650 million users by 2023. On an average each individual consume 12GB of information every month, surpassing the China’s Usage of 5.5GB. The Mobile & related application usage has been rampant in India, which is the positive sign to implement any technology related activities.

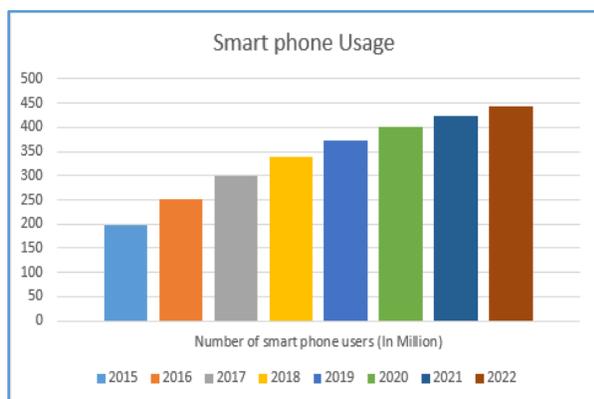


Figure 1: Smart Phone Usage in India

[Sources:<https://www.digit.in/news/mobile-phones/over-a-billion-smartphones-will-be-sold-in-india-by-2025-counterpoint-research-43923.html>]

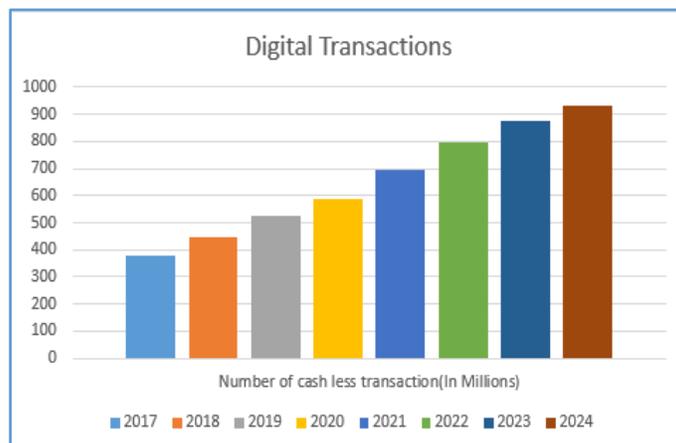


Figure2: Number of Digital Transactions in India.

[Sources:<https://www.rbi.org.in/Scripts/PublicationsView.aspx?id=19417>]

Impact of Digitalization:

Service Sector

India is one of the major economies, who exports services to the other countries and services sector contributes roughly to 55% of the Indian GDP. It is also attracted the significant amount of foreign investments and contributed in the exports as well as one of the largest employment providing sector.

- 31.45% of the India's utilized populace is working under services sector
- India's service sector GVA grew at 6.96% to 1356.5 Billion USD in year 2019 from 846.54 Billion USD in 2012.
- Services area is the biggest beneficiary of foreign investments in India with investments of USD 80.67 billion from 2000 to 2019.
- We can observe the sharp jump in the ease of doing business to 24 in 2018 comparing to 137 in 2014 because of steps taken by the government.
- GOI is keen on making the "Make In India" successful as a part of that introduced National Broadband Mission with a mean to give broadband access to all the towns by 2022
- Indian management facilities market is projected to grow at staggering rate of 17% (CAGR) from 2015 to 2020, with the help of expanding real estate, retail and hospitality sector and cross the 17 billion USD mark.
- Health sector is expected to reach 132 Billion USD by 2023, with the advent of many new technologies in the field of medical sciences.
- India's Digital economy is expected to reach 1 trillion USD by 2025 and IT sector being the major contributor with the growth rate of 8% and expected to reach 14.3 billion USD by 2023.

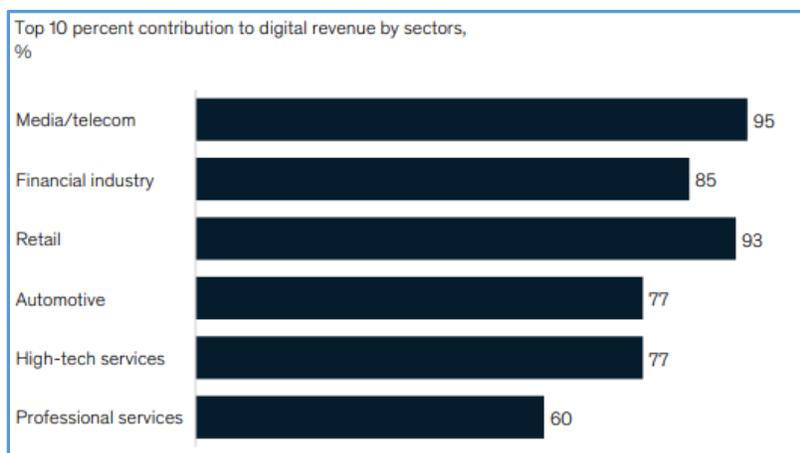


Figure 3. Contribution of different sectors to Digital economy.
[Sources:<https://www.mckinsey.com/mgi/overview>]

Key impacts of Digitalization on service Sector:

- Moving from Personal service to automation and self-service there by reducing the burden on the organizations.
- The ease of accessible services is increasing like able to provide the solutions at the lowest cost possible across the globe.
- Increase in the customer data, resulting in the customized marketing there by increasing the chance of gaining the customer attention.
- Digitalization helps in increasing the efficiency and brings innovation and timeliness of the offerings.
- GST has huge impact on the service sector, which helped in decreasing tax burden and also in reduction of cost in the future with the GST input credit facility.

Agriculture & Allied Industries.

India's 70 % of the populations resides in villages, for more than 58% of the Indian population it is the primary source of occupation. GVA of the agriculture and its allied industries is set to reach 18.55 lakh crores in 2019, and estimated to grow at 2.1% for the year 2020.

- Total Agricultural exports are expected to grow at significant CAGR of 14.61% over years 2010 to 2019 and to reach \$38.54 billion by 2019.
- With the advent of technology, organic sector has seen the unprecedented growth of CAGR of 10% from (2016-21) and to reach 75,000 crores by 2025 from 2,700 crores in 2015.
- India has seen a significant rise in the FDI equity inflow of \$9.78 billion between 2000 and December 2019, which is highest in the field of agriculture and its allied industries.

- Digitalization has changed the face of the Agrifood startups, as they are witnessing the funding of \$1.66 billion from (2013 to 2017) in 558 deals.
- Government backed this industries in all possible ways and to make the farmers aware of the emerging technologies and to increase the output.

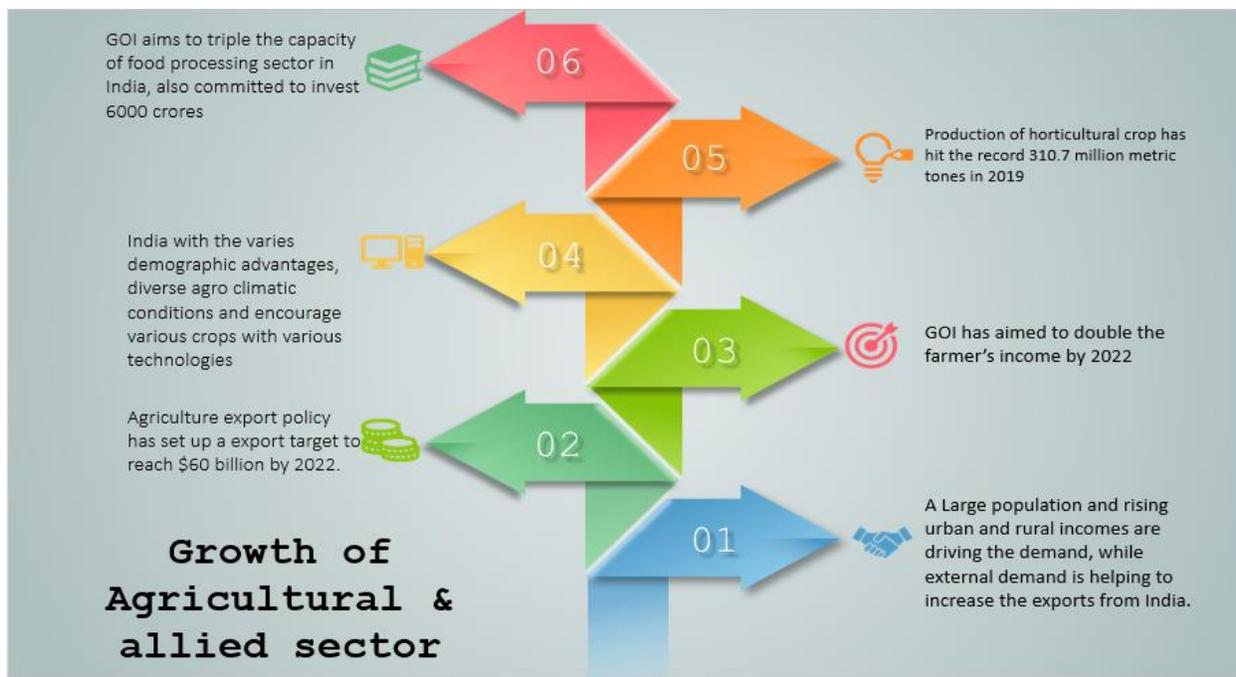


Figure 4: Initiatives for the growth of agricultural & allied sectors
[Sources:<https://www.ibef.org/industry/agriculture-india.aspx>]

MSME

Micro, Small & Medium enterprises contributes to about 8% of GDP, it also plays a key role in developing the economy by providing employment to 80 million people and contributing majorly for about 45% in manufacturing & 40% in the exports. MSME plays a major role in the socio economic development by accelerating the industrialization in nontraditional and economically backward sectors.

MSME are an industries till now have seen a significant growth because of the low cost structure regimes and possess the various benefits of not paying provident fund, gratuity fund and excise duty(for the industries having turnover less than 1.5 crores) these helped them to cost their products accordingly and gain some competitive advantage over the other established companies by maintaining profit margins. In the process of digitalization GOI has bought the major reform in the name of GST, which increased the compliance costs by making them to follow registration and returns for GST and has put the additional burden on MSME's and slowing their growth.

Considering the challenges they are facing it is critical to build the digital literacy in MSME sector that they make the optimal use of the technology, knowing the potential of the MSME sector, digital transformation could be the best possible solution to help them. Digitalization

through cloud computing for ICT domain sector, Machine learning, Data mining &IoT could definitely change the phase of the MSME sector and can give the competition to the big players in the industry.

Digitalization could help the MSMEs in the following ways

- Access to knowledge and International best practices
- Operational excellence across all over the world with the real time insights and the demands.
- Financial knowledge, taking the correct decisions and risk mitigation and another compliance issues.
- Proper understanding of the STP (Segmentation, Targeting and Positioning)
- Efficient provisioning of products & services.

MSMEs upfront in the world of digital transformation faces few challenges in the name of investment in technology inefficient supply chain management, increasing global competition, uncertain market scenario and lacking the business the benefits that digitalization could bring and skilled manpower to make the proper functioning of technologies implemented.

Manufacturing.

Digitalization in the field of Manufacturing has the enormous effect on the development of the Indian Economy. Manufacturing segment has developed as one of the high development areas in India post Digitalization. GOI with the mean to make India a worldwide Manufacturing center has propelled a program called "MAKE IN INDIA", with this it is normal that India will turn into the fifth biggest Manufacturing nation in the world by end of 2020. Government needs to accomplish 25% of the GDP offer and 100 million occupations from this area by 2022.

If we observe any industrial revolution manufacturing industry plays a key role in the development. All around the globe manufacturing industry has picked up and helped in increasing the productivity, this is yet to happen in India on large scale this is chiefly because of the slow progress of automation and digitization. If this gap has been addressed, manufacturing industry has very bright future in India because of the huge man power and show the significant growth in employment as compared to other sectors and help in boosting the domestic revenue and great impact on Indian Economy.

Terms like Industry 4.0, smart manufacturing and IoT are the evolution in the digital era.

Indian companies should try to understand the implications of their adoption in the industry like

- Help in reducing the down time and Increase the productivity
- Tracking resources, material and people
- Wise use of the data generated through IoT applications can change the phase of the industry through effective marketing etc.
- The main huddle most of the Manufacturing industries facing is the CapEx (Capital expenditure) In this way we need billions of dollars of CapEx to drive the manufacturing GDP development. Development of manufacturing industry will help in creating the

millions of job opportunities and enhance the living conditions and offer direct advantages for skill enhancement training and many more.

- Digitalization will significantly impact the “Efficiency” criteria and can change significantly.

How can India become the 3rd largest economy?

There are so many factors which are favoring the aim of the India to cross the GDP of 5\$ trillion USD and become the fastest developing nation in the world and all the predictions are supporting and showing the positive sign.

- Consumer market alone predicted to grow and reach \$3.6 trillion by 2025 from \$1.9 trillion in 2019.
- We have shown significant increase the Ease of doing business index.
- Saw the surge in the FDI investments.

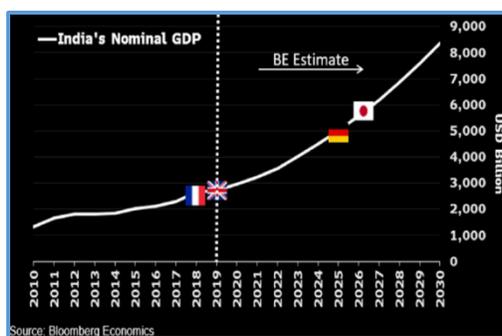


Figure 5: Projection of GDP growth of India.

[<https://www.bloomberg.com/professional/blog/india-insight-10-trillion-gdp-by-2030-not-quite-but-almost/>]

India could become the 3rd largest economy by 2026, behind US & China.

- Bloomberg projection tells that India’s Gross Domestic Product will grow from \$2.7 trillion in 2019 to \$5 trillion in 2025 and \$8.4 trillion by 2030, which requires 8% annual growth though it’s not a smooth ride, India has all the resources and capabilities to reach the target.
- Coronavirus pandemic has influenced foreign firms to shift their operation out of China, India must raise to the occasion to take the advantage of the situation, with the help of digitalization India is already making its inroads into the global economy. The main aim through this is to make India financial literate.
- All the projections could be taken for a toss, if it encounters any small disruptive forces in the middle like climate change, labor laws and present Covid 19 pandemic.

Despite many economic hurdles facing by the country, 2nd term BJP government under the leadership of Modi, the economic outlook looks positive and expected to grow at 7% annually

from 2019-2023. But the present situation due to Covid 19 pandemic effecting the economy globally, the projections and growth will have to be reconsidered once the world is out of the global economic distress.

Reforms announced by the government should be targeted to increase the purchasing power of the individuals to increase the demand and bring back the economy on track.

Conclusion:

Paper discusses about the Digitalization and its impact on Economy particularly in the fields of Agriculture, MSME, Manufacturing and Service Sectors and government has taken considerable steps to help those sectors. MSME is very key to the Indian Economy is facing the issue of financial access and the shift in the technology and able to cope up with them. Manufacturing sector is facing the Capex issue in the world of Industry 4.0 and the shift towards the entire digitalization. Agriculture sector has been one of the sector which was able to implement the going changes accordingly and able to reflect them in the growth. How the shift in the usage of smart phones has impacted the digital transactions and bringing transparency and accountability to the financial system. Importance of Financial literacy that can change the phase of the emerging economies like India. Proper implementation of Digitalization can change the phase of the Indian Economy and emerge as the 3rd largest economy in the future.

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