# THE VISION OF MAKING DIGITAL INDIA: A CHALLENGE

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*Abstract:* This article has laid emphasis on how digitization has changed everything in the current scenario. It is the process in which every information is converted into a digital format. Digitising information makes it easier to preserve and access the data within a lesser period of time. After 1991, as India entered into the global market, information technology progressively changed India's image in world market. It made the software sector one of the high value added industries and created an unimaginable demand of information technology. The vision of making digital India is wide. It includes digital learning, mobile healthcare, making financial transactions electronic and cashless and many other ideas and thoughts. Though India has developed in software sector, still it is comparatively lower than many other developing countries. So it is very much necessary that our country should be digitally empowered. In this context, the steps taken by government of India to transform our country into a digitally empowered knowledge economy are highly appreciative. If the plans are executed properly, with the help of talent and technology, India will gain a lot in the coming decade.

Keywords: Digitization, Globalization, Vision, Transformation.

# 1. INTRODUCTION

After starting globalization in 1991, India slowly entered into the global market. As a result information technology has progressively changed India's image in world market as a high-tech giant. Now there are almost hundreds of Indians working in the key executive positions in almost every hi-tech company worldwide and this change has led to digital empowerment to the country. The IT magic after globalisation has not only made the software sector one of the high value added and money earning industries, but has also created a magic in the history of Indian stock exchange. This digital empowerment has created an unimaginable demand of information technology. Technology has made the teaching-learning process very easy and fast. Instead of drawing an electronic cell on the blackboard, it can be easily understood by showing a 3D model of the cell and its functions on a smart board. It is giving better clarity of understanding among the children. Now more than 12,000 schools across 560 districts in India have adopted smart class, and the number is growing rapidly. So just like blackboard a digital class room is now become a minimum requirement for every school. So making a digital India is not a dream, but a necessity in whole. It is just a programme to transform India into a digitally empowered society and knowledge economy.

# 2. VISIONS OF MAKING DIGITAL INDIA

The visions of making digital India are as follows:-

- 1- Infrastructure as utility to every citizen, that means-
- (a) High speed internet as a core utility shall be made available in all villages and Gram panchayats.
- (b) Mobile phone and bank account would enable participation in digital and financial space at individual level.
- (c) There should be easy access to a common service centre within the desired locality.
- (d) Safe and secure cyber-space should be there in the country.

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2- Government services should digitally transformed for improving better quality of work and making financial transactions electronic and cashless.

3- All citizens should digitally empower, that means there should be universal digital literacy.

The vision also includes broad banding villages, participative e- governance, digital learning, mobile healthcare etc. So the programme waves together a large number of ideas and thoughts into a single comprehensive vision, so that each of them is seen as part of a larger goal. This makes the mission transformative. This programme is being co-ordinated by the Department of Electronics and Information Technology in 2014 and will be implemented within 4 years till 2018. Actually its foundation was laid in 2006. It is not a short term vision. It requires considerable investments in terms of man-power, technological up gradation, digital literacy and skill.

Even though India is known as a great powerhouse of software, the availability of electronic government services to the citizens is still comparatively lower than other developing countries. The national e-Governance plan approved in 2006 has made a slow and steady progress, but greater thrust is required to ensure effective progress in electronic manufacturing and e-Governance in the country. So the digital India mission provides the intensified impetus for further momentum and would promote inclusive growth which covers electronic services, products, devices and job opportunities. The digital India programme aims to transform India into a digitally empowered society and knowledge economy by empowering IT as a growth engine.

# 3. NEED OF MAKING DIGITAL INDIA

Before discussing about digital India, first we should know what the need of making digital India is. Mainly it is needed to drive technological revolution across the country. It aims at building such a country, where internet can be widely accessed, digital literacy is prevalent and solutions to the problems that are relevant for the diverse lifestyles, cultures and values across India are easily available. So in total it is a programme to transform India into a digitally empowered knowledge economy. This is an ambitious programme of government of India projected at Rs. 1,13,000 Crores.<sup>(1)</sup> This project will prepare India for the knowledge based transformation and delivering good governance to citizens by synchronised and coordinated engagement with both central and state government.

In this regard, India's Prime Minister Narendra Modi's role of making digital India is very crucial. He describes it as a force which would change the face of democracy. He visited Silicon Valley for that purpose. It is the place where almost all big companies located. Not only big companies, it is the place where technology has combined with liberal arts and humanities. That's why no competitor can recreate another Silicon Valley. Another thing which sustains Silicon Valley is easier for India to replicate is the eco-system. Germany, Canada and many other countries have tried to emulate its entrepreneurial eco-system.

Modi's step of visiting Silicon Valley has made a tremendous change for his vision of a 'Digital India'.

Some major steps are taken and some more steps in this regard are expected.

- Microsoft has announced that it will be a partner with New Delhi to bring low cost broadband connectivity to 500,000 villages in India.
- Google has said it will also help in India to set up free Wi-Fi at 500 railway stations.
- Chipmaker Qualcom has pledged to invest \$ 150 million in Indian start-ups in the mobile and internet of everything (IoE) ecosystem.<sup>(2)</sup>
- It has also announced that the cloud computing systems from data centres in India is a big milestone.

If all these things will work, then the vision of social transformation will be possible through technology and science. Technology will become a tool that bridge the distance between hope and opportunity. A small farmer will become more confident about his land holding and getting better market price while a young professional in San Francisco can Skype daily to comfort his sick grandmother in India. So through digitization, if we can change India, we can change the world as well.

Now India is going to play a big part in driving technology forward in near future. It will become the next hot bed of innovation and entrepreneurship. The kind of scale India needs will be possible through technology only.

# 4. ADVANTAGES OF DIGITAL INDIA

On 20<sup>th</sup> August 2014, the digital India programme was accepted by the union cabinet under the management of our Prime Minister Sri Narendra Modi. This programme has been imagined by the Division of Electronic and Information Technology (DeitY) and contains all the current schemes being run by the Telecommunication Division, Rural Growth Ministry and DeitY. Digital India has many benefits in different sectors.

#### 1- Educational sector

Information technology has reformed each sector it has grasped and now it is in the promising phase of changing the education sector. Digitization in education sector has totally changed the teaching-learning process to a great extent. Technology has made imparting education stress free for both students and teachers. Schools are gradually implementing digital teaching solutions to involve with a generation of learners familiar with the likes of play stations and iPods and trying to make the classroom atmosphere more acceptable. Currently students are living in such a world that is constantly linked and alive outside the classroom, so that traditional method will not work now. So the true revolution in education can only be possible via digitization of education. All are ready to accept the wave of digitization but more efforts still needed. Apple, Amazon, HP, Microsoft and many other companies are contributing a lot in the digitization of education by their tablets, iPods and notebooks etc. Digital programme platforms in schools, colleges and universities are some of the new trends in digitization of education. Educomp Solutions' Smart class is one of the first Indian companies for taking smart classes. Smart class is basically a digital content library of mapped curriculum, multimedia and 3D content. It also facilitates lecturers to speedily judge how much of a particular lesson a student is adapted during the class. Digitization is promoting higher education also as never before. As online education has been adapted by many universities, it has made approachable and shorten the gap between a student and his dreams. 'Coursera' is an educational technology company which works with universities to make some of their courses available online. E-learning or computer based training includes all forms of electronically supported learning and teaching.

Though digital education has enormous advantages, there are some disadvantages also. Classrooms are not remaining like classroom, as they are becoming like movie hall with audiovisual contents and there is no communication between students and teachers. So the ancient tradition or relation of "guru-sisya" is hampering. Students are becoming technology oriented and gadget oriented instead of books and magazines. So in order to get positive result we have to properly utilize digital education with reading and writing simultaneously. We cannot just ignore the role of digital education, as every workplace is becoming increasingly digitized now-a-days. In order to face these students should be familiar with the technology as well, whether it is working with Microsoft office, understanding the operating systems or even the simple use of a mouse and keyboard, it is vital for the students to be ready to roll when sit down in front of a digital device. In today's scenario, gaining digital knowledge is as important as reading and writing.

### 2- Health sector

Now technology has been reached across industries and the healthcare industry is not an exception. Advanced technologies are changing the doctor's care for patient as well. There is a huge transformation and advancement in healthcare industries including record keeping, testing and treatment. Technology has been embraced by doctors, hospitals, specialists and patients also.

- Technology is making it easier and accurate for keeping records and preparing lab reports. It gives better outcome than the traditional way.
- Telehealth is another term which consists remote monitoring of everything which has numerous other benefits also.
- Home monitoring devices track the patient's vital signs like heart rate, blood pressure, blood sugar and some other complications also and provide an accurate report through which one can be alert and treat himself timely.

In recent years there have been massive advances in healthcare technology. Digitization in healthcare has made improvements in efficiency, patient safety and more accuracy in everything. Ultimately, interconnections between technology and medicine are inevitable, that's why digitization in healthcare plays a central role.

#### 3- Job sector

Now-a days, the mass adoption of connected digital services by consumers, enterprises and governments have emerged as a major driver of socio-economic benefits. Despite an unfavourable global economic condition, which is growing

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gradually, digitization plays a very crucial role in assisting policymakers to ensure economic growth and development. Across the globe, digitization improves productivity. Emerging markets tend to gain more from digitization's effect on employment. Throughout the world, information technology continues to proliferate at an incredible speed and their effects are uneven across the globe. According to Bahjat El Darwiche, a partner with Booz & Company, "the critical question is how policymakers maximize their adoption, utilization and impact. Policymakers need to actively build digital markets." <sup>(3)</sup> It means that the proper benefit of digitization will come only after properly implemented otherwise it may be a curse to all. The countries have to increase the digitization level to realise gain in economies and job sector. The more advanced a country becomes in terms of digitization, the greater the benefits will be.

In 2011, East Asia, Western Europe and Latin America received the greatest total GDP per capita impact from digitization surpassing North America. The impact of digitization improvements in East Asia and Latin America was higher than that in North America and Western Europe, even though those regions have lower GDP impacts coefficients. This is because the economies in East Asia and Latin America are still at the transitional stage and were able to achieve the biggest digitization leap. Eastern Europe and Africa benefited the least from their digitization gains in terms of their impact on GDP.

Digitization had the greatest employment effect in constrained and emerging digitized economies. East Asia, South Asia and Latin America received the most employment growth of all regions, with more than 4 million jobs created<sup>(4)</sup> as a result of digital improvements. Conversely digitization provided little employment growth in North America and Western Europe. Actually has digitization created various job opportunities or reduced it is a matter of concern! Because some people think that as digitization increases, the productivity increases, so that some job get replaced by technology and the low cost job remains. As we know, the small businesses and retailers are closing because of online shopping. On the other hand, advanced digitization actually creates new markets and new employment opportunities in another dimension.

Policymakers should shape the impact of digitization by becoming digital market makers. They must have needed to do more that implementing policy and regulations. In particular, they will need to find a consistent way to measure digitization and its impact, so that they can be accountable for their policies and demonstrate the benefits of digitization in various sectors. Digitization has the potential to boost productivity, create new jobs and enhance quality of life at large. But in order to achieve the positive results proper planning and policies should be implemented.

Now we are in such a state that we could not properly know that whether digitization is a blessings or curse. In spite of getting benefits, many bad things also happen. In education, people are less interested to read and write instead they prefer cell phones or iPods. While there is no answer to this question, this trend has caused many to question the impact of digitization upon future generations.

Digital world has given some profound and unparalleled opportunities which cannot be ignored. For example, many hospitals allow people to connect with doctors and others through the internet outside business hours. The National Voices Project similarly has been exploring ways to provide mental health services via Skype to those who would otherwise unable to access such resources. On personal level also, we have been able to remain in constant contact with family and friends all over the world. We have accessed many practices directly through different applications. None of these would possible without digitization. So it is up to the people that how they will utilize it.

Not only digitization, everything has two aspects, negative and positive. While it is negative to somebody, at the same time it works wonder for a few. Those who are gainer, for them it is blessings and for losers it is a curse. So it is an ongoing debate.

The digital India initiative created to transform governance, citizenship and entrepreneurship in our country. It is a long term and existing vision to create an unimaginable advantage for India. But in one and half years, there is no such progress in the execution and implementation of the mission. Sometimes question arises, whether it will be fruitful or not?

It has taken about \$100 billion of investment over the last 21 years to get 900 million Indians behind a mobile phone and an estimated \$80 billion is required to get 600 million Indians connected to internet.<sup>(4)</sup> So there is a question mark, that whether the planning will be properly implemented or not? Here raises more questions than answers. Mainly, government's much delayed policymaking in this area is a big deal, hampering the future of digital India.

# 5. CONCLUSION

Digital India can transform the country, but not the way it is being implemented now. To make real the Digital India vision successful via internet, Trai, Do T and DeitY have to be transformed with the specialized capacity required to deal with the technology policy making and proper ruleand regulation. Government needs to do the work with no error and smart leadership. Our Prime Minister Mr. Narendra Modi has a great vision for India in terms of driving key initiatives to push India to the next level. It is a great initiative. Digital India is all about mobile and internet connectivity. Whether it is the memory card in our phones or a drive in PC or a memory in data centres all are needed to make digital India a successful initiative. So there is a strong need to create opportunities for more storage, more data and high speed internet. A lot of people believe that, spectrum is highly expensive for telecom operator to go out there and make meaningful infrastructure. In order to drive the 'Digital India' campaign successfully we need to set up our infrastructure properly with proper ecosystem. It has the capacity to change the world.

60 years ago, South Korea decided to change itself in a simple manner and the transformational change has been a result of next Generation Corporation adopting technology and staying invested in innovations across the spectrum. Technology has been the foundation of this growth. From being the poorest country among all UN members in 1961 with a per capita income of \$79, South Korea has grown into a developed nation with a per capita income of \$33, 629.35. <sup>(5)</sup> So digital India has the potential to make a similar miracle in our country too. Only time will give the right answer that what will happen. Smart cities are rising up across the globe. If we will not adopt that we will remain backward. It is the need of the hour. Just like roads, railways and power lines, digital network is now a strong necessity. If Indian companies could focus on technology and products that could help building digital India, then the manufacturing strategies could have greater relevance to change the nation. Technology in education and health sector has already benefited many people. So it is time to work hand-in-hand for the win-win situation and all should have one motive to make our country a knowledgeable power economy in front of the world.

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#### REFERENCES

- [1] Digital India; www.cmai.asia/digitalindia; dt-22.07.15
- [2] Silicon valley logs in to Digital India; The Times of India; dt-28.09.15
- [3] The varying effects of digitization on economic growth and job creation; www.strategyand.pwc.com; dt-29.10.15
- [4] Strolled in Mid stride; The Times of India; dt-26.10.15
- [5] How success of Digital India programme can benefit the world; blogs.economictimes.indiatimes.com; dt-28.10.15