

# Digital India: Scope and Challenges

S. Krishnaprabu

Assistant Professor, Department of Agronomy, Faculty of Agriculture, Annamalai University, Annamalainagar  
– 608 002, Tamil Nadu.

## Abstract

*In the era of digitalization and technological advancement, technology has become an integral part of our life. Technology is a major factor in shaping the new global economy and producing rapid changes in society. In the past decade, new technology has fundamentally changed the way people communicate and work. It is a well-known fact that digital India is the outcome of many innovations and technological advancements. These transform the lives of people in many ways and will empower the society in a better manner. The 'Digital India' programme, an initiative of honorable Prime Minister Mr. Narendra Modi, will emerge new progressions in every sector and generates innovative endeavors for genet. The motive behind the concept is to build participative, transparent and responsive system. The Digital India drive is a dream project of the Indian Government to remodel India into a knowledgeable economy and digitally empowered society, with good governance for citizens by bringing synchronization and co-ordination in public accountability, digitally connecting and delivering the government programs and services to mobilize the capability of information technology across government departments. Today, every nation wants to be fully digitalized and this programme strives to provide equal benefit to the user and service provider. Hence, an attempt has been made in this paper to understand Digital India – as a campaign where technologies and connectivity will come together to make an impact on all aspects of governance and improve the quality of life of citizens. The aim of the research is to study digital India Programme and it also tries to explore its advantages, scope and challenges in the digitalization. This study highlights the necessity for developing positive attitude towards the digital India among the people so that they can keep themselves abreast of the latest technologies and adopt it as a positive step for development.*

**Keywords** - Digital India, e-governance, Digital education, Embedding innovation, e-learning

## I. INTRODUCTION

India is an emerging country in the field of digitalization. Digitalization and technology become part of each and everyone's life. In the field of education digitalization and technology is also plays very vital role. The programme contains tasks that target to make sure that govt. services are available to people digitally and people get advantage of the

newest information and connections technological innovation. Gandhi ji felt that 'India resides in its villages,' and technology will help the villages to grow and prosper. Digital libraries, online magazines, e-books can be made available for free which will further help in knowledge sharing. PM Modi rightly said in his speech in San Jose, "I see technology as a means to empower and as a tool that bridges the distance between hope and opportunity. Social media is reducing social barriers. It connects people on the strength of human values, not identities." Technology is a bridge indeed, a bridge that connects the hope that

India's villages will be educated and aware to the opportunity of internet and access to information from across the world. 'Digital India' is not just an initiative but a need for this country, where majority of population still does not have access to the world of internet. The Digital India initiative seeks to lay emphasis on e-Governance and transform India into a digitally empowered society. It is to ensure that government services are available to citizens electronically. Digital India also aims to transform ease of doing business in the country. The Department of Electronics and Information Technology (deitY) anticipates that this program will have a huge impact on the Ministry of Communication and IT. The program is projected at Rs. 1,

13,000 crore which will prepare the country for knowledgebased transformation. It will focus on providing high speed internet services to its citizens and make services available in real time for both online and mobile platform. Modi's government is focusing on providing broadband services in all villages of the country, tele-medicine and mobile healthcare services and making the governance more participative.

The growth of new technologies has transformed the teaching and learning of subjects. The doors have been opened to innovative and stimulating ways of working with ICTs (Information and Communications Technologies) to make teaching and learning more varied and engaging today. The problem of education is far beyond technology. As per the researches done earlier Indian schools are focusing more on K-12 learning and creating a collaborative knowledge creation culture of learning. With internet facility being enjoyed in each sector, education industry is no behind.

E-learning plays an important role in handling the

issues and problem of teaching today. With hi-tech network and multimedia, the education sector has emerged

to be one of the fast emerging fields. Technological advancement has enabled our Indian classroom to be tech savvy. With the use of technology in education sector, there is a major change in the teaching and learning methods, styles, and content across many schools in India. Today, cloud technology is being investigated by students, wherein they can easily give in and review their assignment regularly. With the inclusion of these facilities in a digital learning environment, the classroom becomes much more comfortable and welcoming to students. The Y-Generation

of today is much smart in using all the technological gadgets like computers, laptops, iPads and mobiles, so by adopting technology into the classrooms makes them

feel easy and conversant. Now it's necessary for a teacher to have knowledge about all the latest technology which can be used in classroom instructions. Moreover this only having the knowledge of technologies is not sufficient. A teacher need to know, How to operate & integrate the tools effectively and when to use a particular tool/technology in teaching learning process to increase the outcomes of learning. Effective teachers can widen the potential of the technology to develop student's

understanding and encourage their interest to improve subject proficiency. Technology can be used in such a ways to provide better access for learning and concept. To ensure the good technologies knowledge of a teacher it is necessary to provide them a good quality teacher education in all the teacher education institutions.

## II. DIGITAL EDUCATION

With the development of technology such as computer, laptop, internet, tablets, mobiles phones, modern devises, making world more and more digitalized. Education also has the influence of digitalization. It is an effective system, which is completely making the traditional educational system digitize. Digital Education refers to an education which is given with the help of digital equipment's. Digital education is that in which new technology are used to make teaching learning system effective. It is the use of new techniques in the classroom and also in the organization. In India, the education system is also becoming digital. This digital education not only used in urban areas but also in the rural areas. The organizations, institutes and the educational system are upgrade with digital education system. Other countries are also making great efforts to promote digital education in Indian educational setup and changing the traditional system of education

## III. AIM OF DIGITAL INDIA

Run by the government of India, Digital India is a campaign launched to empower the country digitally. The motive of this campaign is to strengthen the electronic services of government services; it is done by reducing the paperwork. It is a very fruitful technique as it takes off the weight of investing time over paperwork and devotes man labor in the various field, it is highly efficient and effective. Started on 1st July 2015, it is to link the rural people with the high-speed internet network to gain any information needed. Improving digital infrastructure, digitally delivering

services and digital literacy are the three major aspects of digital India campaign. By digital infrastructure here we mean, creating a space where all the registered citizens will have a digital identity, which will help in getting easy and fast government services. All the government services like managing a bank account, financial management, safe and secure cyberspace, education, distance learning etc. Will now be made much easier to use.

Digitally delivering services will facilitate all the people connected to this system and will get benefits of government plans and policies as soon as they are launched and as when it is needed. It will also promote online business as it makes the financial transaction easy by electrification and classless transaction. It helps in globalization as it connect one individual to the whole world through their phone or computer screen, it will avoid maintaining of documents at paper length as all will be saved and delivered through the internet at all level like school, colleges, offices, or any other institution A program to facilitate both, the customer and service provider, this project is targeted to end by 2019. Chaired by the ministry of communication and IT, a group of the advisory body looks after the working and implementation of the project. This project focuses on making a road between the government and the public which will not be any difficulty to travel; here government services will reach the doorstep of the public just by a click.

## IV. ADVANTAGES OF DIGITAL INDIA

### A. No physical boundaries

Digital Learning has no locational and time restrictions. In case of face-to-face learning, the location limits the group of learners to those who have the ability to participate in the area. But this is not the case in digital learning. In digital leaning, there is no physical restriction and the learner can attend the sessions anytime, anywhere according to his/her comfort.

### B. More engagement

Digital learning is a more engaging experience as compared to traditional learning. Through digital learning, a course can be designed in

a way that makes it interactive and fun through the use of multimedia. Even, the more recently developed methods of gamification can be used to enhance the engagement factor.

### C. Cost effective

Digital learning is cost effective way of education as compared to traditional learning. This is directed towards both learners and teachers. In digital learning, here is a good chance that you don't have to pay exorbitant amounts of money to acquire textbooks for school or college. As textbooks often become obsolete after a certain period of time, e-learning is definitely a cost effective way of learning because of the reduced cost.

### D. Comfort zone

Comfort zone can be established in digital learning as you can study at the time that suits you. In case of traditional learning where all the students have to present in the class when the teacher is teaching. The same is not the case which digital education. In digital education, the students can do study according to their comfort.

### E. Scope of digitalization

Digital education is gaining a lot of popularity with the increasing demand of education and wide spread use of net. With the evolution of technologies like the data centers, cloud and virtualizations, there is a large potential of technology to be integrated with education system. It is like a win-win situation for all. They are cost effective and easily accessible. Students see this as a flexible option for them as they can learn as per their schedules and teachers also can better use of technology for preparing their lessons and handing over to students. Teachers can make lots of multimedia slides, audio visual aids and creative videos for their lessons. It's a fun way of learning and especially very interesting for the children and also helps in boosting their cognitive skills. Digital education is new way of teaching and learning system. It is one of the great achievements in the field of education. Hence there are many scope of digital education:

- Helpful For Organizations
- Helpful for professionals
- Helpful for society
- Easy transaction
- Helpful in banking system
- It will make people more technology friendly.
- It will develop their scientific and technological attitude towards digitalization.
- It helps in improving professional development and management.
- Technological advancement
- Digital education will be very much helpful in making the each and every person

technology friendly that they can make it more excess able.

### F. Challenges of digital India

The digital technologies are creating changes in what students learn due to high uptake, as a result of the change in how they learn. They afford new opportunities and provide different learning experiences resulting in high quality learning outcomes. Much has been written about what makes a difference to student learning outcomes. It is clear that there is no single factor, but rather a system that influences quality learning outcomes.

- Less Social Acceptability in rural area
- Technology phobic
- Not willing to experiment in the traditional setup-
- Irrational concepts for the technology
- Lack of facilities in the rural area
- No proper training of using technology
- Time consuming
- Negative aspects of digital components- There are also some concepts with digital technology that it is the reason for distraction or unethical behaviour; physical health concerns; and data privacy issues.
- Frequent changes- Due to changes and advancement in the device models/technologies/functionality etc. teachers endure uncomfortable.
- Expensive-It is very expensive. That is why we see that most International schools and schools that have digital education are far more expensive than the regular schools.
- It's quite problematic at times for individual to express their correct motive or demonstrate the set of skills they have got in a digital medium rather than orally.
- The overarching challenge is to maintain privacy
- Many of us have this irrational fear of towards technology and are not able to accept digital education. But if a teacher mitigates these challenges he/she can make his classroom teaching interesting.

### G. Suggestions

As we all know in the education system teachers are the main pillars for our betterment of education process. If our teachers don't have accurate knowledge and trained about the technology they will not give their best in the field. So our organizations, institutions should concentrate in the giving the technological knowledge to our pre service teachers and in-service teachers. There are some

### H. Technical support

Teachers must have adequate access to functioning computers, smart class; digital equipment's and is provided with sufficient technical support. There should be a technical expert in the

organisation for the technical problems and support. The institutes must provide each and every class digital facilities so that time can be utilized properly within the classroom.

**I. Availability of technical equipment's**

It should be made mandatory that a teacher education institution should have a demonstration school which should have certain facilities such as laboratories, resource room, libraries and other important audio-visual equipment's. There must be adequate facilities of smart class, laboratory, computers, technical equipment's so that digitalization can be make possible in traditional educational system.

**J. Adequate time**

Student educator must be allowed for the development of new skills, explore their integration into their existing teaching practices and curriculum, and undertake necessary additional lesson planning, if digital equipment's are to be used effectively they can make appropriate environment in the classroom. This will also help them to development student's interest in the class.

**K. Community digital education programme**

Government should evolve and spread strategies to engage and support the whole community in digital education, including information, programs and support for parents to obtain digital skills to better assist their children's education. There must be some support for students to engage in digital education outside school and support for cultural organisations, artists, authors, scientists, not-for-profits, industry and universities to work with schools.

**L. Nature of schooling**

After remaining largely unchanged for more than 60-70 years, the nature of schooling in India has only recently begun to be transformed. Under the industrial model of schooling, students should be enrolled in a formal system in which they:

- Engage with a curriculum determined by state (and more recently national) authorities
- Are taught by a single teacher who was the major source of the content of learning and who had the professional freedom to determine how best to organise learning.
- Learn an age-appropriate curriculum divided into discrete subjects.

**M. Embedding innovation in learning**

Innovation is a defining characteristic of a knowledge society and a digital economy. It is therefore key to high quality educational delivery. India needs to generate a culture within schools and the community in which innovation is understood as an important component of continuous teaching and learning improvement.

Further, innovation must come to be seen as linked to engagement and success for all students and as a way of developing new paradigms for student learning.

**V. CONCLUSION**

The 21<sup>st</sup> century poses new challenges and requirements to the education system in general, and to the teacher training system in particular. As a result many countries, invest a great deal of resources and effort to upgrade their education systems in order to meet the demands of the era of digitalization and globalization. Technological advancements that allow fast communications and information processing are supporting new social patterns. Digital education is emerging as one of the solutions to the challenges faced by education. It is an environment made up of collaboration, choice, and an array of technological resources that supports a successful online learning experience. However, to overcome the e-learning challenges we need best support and solutions to make learning environment successful for learners. With a variety of tools and resources are always available in education system. Digital education is a powerful tool if it is used wisely. The educational process will become more flexible and will fulfill to the needs of lifelong learning. Digital education can also assure good educational opportunities for rural area learner to gaining new knowledge, skills and experience. So, digital education has its pros and cons. So, teachers, students and our educational system need to be properly guided to use the technology.

**REFERENCES**

[1] Aggarwal JC. Essentials of Educational Technology, Vikas Publishing House, New Delhi, 1996.  
 [2] Chetna Bajwa and Sonal Chabra. System and Issues in Indian Education, Balaji Publications, 2010.  
 [3] Gajpal Singh. Emerging Trends and Innovations in Teacher Education Indian Journal of Applied Research, ISSN. 2014; 4(5):2249-555X  
 [4] Matzen NJ, Edmunds JA. Technology as a catalyst for change: The role of Professional development. Journal of Research in Technology in Education. 2007; 39(4):417-430.  
 [5] Sharma G. ICTs' in Teacher Education, Review of Research. 2012; 1(10):1-4.

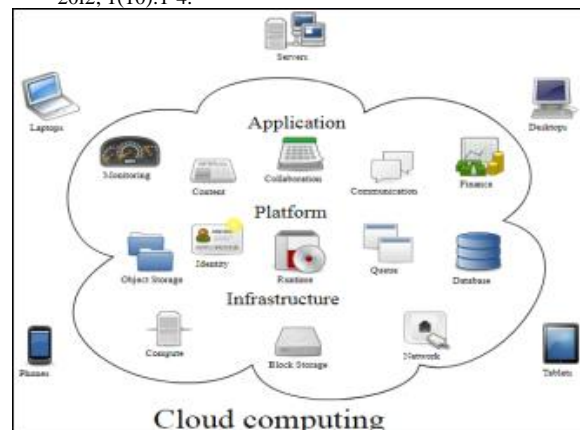


Fig. 1