# A Study Of E-Learning Market In India And Impact Of Covid-19 On Education Sector

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**Abstract-** Education is a way through which we can learn or acquire knowledge, skills, and habits. It is a basic human right and a powerful tool for development and reducing poverty. E-learning has widened the horizon of the education industry. It provides a new way of learning for students to enhance their knowledge and skills. In this paper, we intended to study the current situation of e-learning in India and the impact of covid19. We will also consider the factors influencing the rise of e-learning, its barriers. In this paper, we have analyzed e-learning as an effective way to educate people. The purpose of this paper is to understand the concept of e-learning and analyze the covid19 pandemic impact on the education sector.

Keywords: E-learning, education, Covid 19 Impact, Swot, Blended e-learning.

# I. Introduction

E-learning refers to acquiring skills and knowledge through an electronic medium. It can be called "technology-enabled learning" It engages learners from different places in an online course.

E-learning platform: The softwarethat provides the virtual infrastructure to conduct e-learning activities.

There can be different elements of an elearning program: audio and video lectures, e-books, presentations, MCQs, quizzes, etc. There are two main categories of e-learning: synchronous and asynchronous.

**Synchronouse-learning**means real-time learning. It is a virtual classroom learning where teachers and students are online and interacting at the same time from different locations. Classes conduct on meet call, zoom call, or other digital platforms that offer features like screen presenting, chatbox, etc. Participants can interact with each other and share their ideas during the session.



**Figure1: E-learning** 

Asynchronous e-learning means self-paced learning; learners are taking the course by themselves. In this type, teachers and students are not online at the same time. These programs may include pre-recorded audio or video lectures, quizzes, assessments, or other materials. Learners can learn at any time at their convenience. The teaching process became a lot easier with the emergence of e-learning. Students are getting more practical knowledge and exposure.

# **1.1 E-learning Market in India**

India has the second-largest e-learning market. This sector got a boost after the Digital India Initiative. With the increase in internet access and awareness about elearning, the online education sector is growing and able to reach large parts of the population.

The online education market value is expected to reach INR 360.3 billion by 2024.

The Growth of the e-learning market has been influenced by the ease of learning, a range of courses, flexibility, and various types of study material. To improve the learning experience this industry is adopting various innovative technologies like Big Data Analytics, artificial intelligence, and others.

### Segments of online education

- Primary and secondary supplemental education: It provides supplements to school-going students. Now a day's students are focusing more on detailed learning that drives the growth of this segment.
- **Higher education:** It provides an alternative to the conventional education system. The Traditional education system is not sufficient for the growing population. Students are

switching to online mode for their higher education.

- **Test preparation**: Online programs designed for providing coaching to students for competitive exams. This segment is expected to be the fastest-growing segment because of enhanced online infrastructure, increased internet access, career-focused population, and ease of learning.
- **Reskilling and certification:** Courses are designed for skill enhancement. Businesses are growing and adopting new technologies that widened the skill gap among employees. So, to fill that gap employees are taking up these Reskilling courses that enhance their knowledge and also provide certificates to them.
- Language and Casual learning:Courses are designed for nonacademic subjects.Hobby courses like cooking, painting, and playing guitar. Languages like French, German, and Punjabi.

### **1.2 Benefits of E-learning**

There are plentiful benefits of using elearning technologies:



#### Figure 2: Benefits of e-learning

- **Cost-Effective:** E-learning is costeffective compared to traditional learning. Students can cut down the cost of physical instructor fees, accommodation, and travel expenses.
- Self-paced: Students can grab things at their speed. They can plan their schedules for learning as per their convenience. Self-paced learning reduces stress and leads to increased satisfaction among learners.
- Flexibility: Online learning caters to everyone's needs. Courses can be taken by office goers, housewives as well at the time that suits them. They can choose to learn on weekends, evenings, or on specific days of the week.

#### • No age limits

E-learning is accessible to all age groups. Anyone who wants to learn something new can enroll themselves in these courses irrespective of their age.

# • Lectures can be taken multiple times

In online learning, we can access the lectures an unlimited number of times. In traditional teaching, you have to attend the lecture at the same time when it is happening and if you miss out on the lecture then you have to do that topic on your own; but in e-learning, you can attend the lecture whenever you want.

### • Large target audience

E-learning creates a large target audience base on a single platform. There can be n number of learners who can access the content of elearning platforms.

#### Better Retention

E-learning leads to better retention because of interactive content. We can retain more when we watch a video or listen to something instead of reading books. If we enjoy the learning process, we can recall the information & will be able to apply the same in our life.

#### • Eco-Friendly

It is a paperless way of learning thus protects the environment. There is no need to cut the trees for obtaining a paper.

#### **1.3 E-learning platforms**

An e-learning platform is an integrated set of online services that provides information, study material, and resources to trainers, learners, and other people involved in education. It provides support to learners and enhances the delivery of education.

These platforms are the substitutes for the traditional classroom. They provide a place where e-learning programs are hosted and allow people to connect and learn.

Types of e-learning platforms:

- Learning management systems
- Social media
- Conferencing Software

Usually, a mixture of all three is used by schools and corporate for their online courses.

A Learning management system is a software application designed to plan, manage, track, and deliver e-learning content. It is the most preferred option because of its various features. LMS allows us to share audios, videos, PDF files, slideshows, etc. It consists of two elements: a server and a user interface.

It allows an instructor to create and deliver the content, evaluate student performance, and monitor their participation. It also gives students the ability to use various features like video conferencing, discussion forums, etc.

**Social media** platforms offer chat rooms and provide support to online learning communities. A group can be created on Facebook or Whatsapp, where instructors and learners can interact with each other. The Instructor assigns tasks and learners provide a solution to it and can ask questions in case of any query. For these platforms, learning can be done anytime and on any device. In this mode, there is no way to track and analyze the effectiveness of the program.

The Web Conferencing Software allows online conference calls, video conferences, live chats, webinars, and classes. The teaching is done in real-time that means teacher and students need to be online at the same time. This is suitable for small group training.

# II. Drivers of the e-learning market

E-learning is a rapidly growing market owing to the following factors [1]:

#### 1. Growth in Internet access

The number of internet users is increasing rapidly. Many new users are emerging from rural areas. India had the second-largest online market with over 636 million internet users in 2019. The internet penetration rate was around 50%, which means half of the Indians had access to the internet in 2019. In 2020, it has reached nearly 700 million users. It is expected to reach over 974 million internet users by 2025. [2](Figure 3)

The rise in internet access offers huge accessibility to enroll in digital courses for young people in the age bracket of 15-40 years. They are also the most active users of smartphones. They can take up online courses to fulfill their educational requirements without stepping out of their home. Online courses also offer a wide range of choices of courses, degrees, and certifications.

#### 2.Cost of education

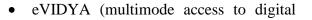
Education is a powerful tool that makes a person's future bright. All the parents want the best education for their children, but as it gets expensive every year, it becomes difficult to do so. For providing secondary education to children in government schools for 6 years, parents are spending Rs. 30,600 and Rs. 3,96,000 in private schools. The graduation and post-graduation degrees in private universities are usually very expensive.

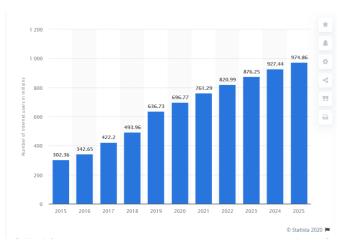
The cost of online education is low, as they can provide the courses to the masses without any setup of physical infrastructure or incurring various costs like stationery, books, etc. Therefore, these cost savings also benefits users.

#### **3.Digital-friendly government policies**

The government of India has taken various initiatives like 'Digital India' and 'Skill India' to spread digital literacy and create a knowledge-based society.

- SWAYAM (Provides courses from class 9 till post-graduation)
- e-Basta (digital school bag)
- e-education (connected schools with broadband and wifi and develop MOOCs)
- India Skill Online (skill training portal)
- DIKSHA (provides learning material)





#### Figure 3: Number of Internet users in India from 2015-2020 with a forecast until 2025 (in millions)

#### education)

The government has also launched the National optical Fibre Network to establish digital infrastructure.

#### 4. A Rise in demand among job-seekers

We are living in a technology advancement era, where new technology can come up at any time. Demand for online courses is increasing to learn new things and secure their jobs.

It was found out that 58% of unemployed graduates and 62% of unemployed postgraduates said that the primary reason for their unemployment is the non-availability of jobs matching their education and skill set.

Due to this factor, job-seekers need to enhance their skills through these courses. These courses will work as an add-on to their skills and increase the chances of having better jobs and packages. Online courses are affordable, flexible, and time-saving.

#### Value-added services

Online education providers are encouraging user engagement on their platforms through Gamification, simulation of concepts, and incentive-based learning. Many online learning players are offering value-added services along with their courses like internships, live projects, counseling sessions to enhance users' experience.

### III. Barriers to e-learning[3]

#### 1. Technology Issues

It is necessary to have an electronic device for e-learning. Before taking the course, students need to ensure that they are having the appropriate device on which they can study. Many students do not have the proper or strong access to the internet connection required for online courses.

### 2. Limited Tech Experience

Some people are not taking up online courses because they don't have confidence in working with computers or other electronic devices. They have limited or no tech experience. They thought there is a need for advanced computer skills to study digitally. To overcome this hurdle many course providers are offering online tutorials and arranging webinars to make them familiar with the e-learning environment.

### 3. Lack of Motivation

Learners are not motivated to study in online mode. There can be several factors that lead to lack of motivation such as distractions while studying at home, less interaction, the advantage of anytime study often leads to delays and eventually lose interest in studies. To overcome these hurdles course providers came with the concept of Gamification.

#### 4. Past Experience

Some learners are not enrolling themselves inonline courses because of their bad past experiences. They have made up their minds that online courses are not for them. They will not be benefitted from these courses at all.

#### 5. Inadequate Support

Some learners may go through the elearning program by themselves and don't need anyone for guidance. But others need regular guidance throughout the course. They are not comfortable using this mode of learning. E-learning providers should always have support assistance regardless of their learners need it or not.

# IV. Covid 19 impact on education sector

The virus has mostly spread through personto-person contact. Coronaviruses are a group of viruses that can cause disease in both animals and humans. (Nandaletal, 2020) The sudden outbreak of the Covid19 pandemic has resulted in the closure of schools, colleges, and universities in over 185 countries. This has affected almost 1.38 billion students. This pandemic has completely transformed our education system from traditional learning to digital learning. It has both positive as well as negative impacts on education. [4, 5]

#### A. Negative Impacts

#### 1. No movement of students

Universities in UK, Australia, and Canada are highly dependent on the movement of students from India and China. But due to this pandemic parents are not sending their children abroad for higher education.

#### 2. Passive learning

The sudden shift to digital mode without any proper plan can create disturbance in the learning process. There is a risk of students becoming passive learners and also lose their interest in studying.

Many students will not be able to gain knowledge because they do not have access to the internet.

### 3. Unprepared teachers

Many teachers are not prepared for online teaching.They have to prepare the new materials accordingly and thinking of ways to engage students. Now, teachers are conducting online sessions on Zoom calls and meet calls.

#### 4. No access to the digital world

Many students cannot afford a computer, laptop, or other digital devices at home. There is no proper internet connection in rural areas, so this can create a digital divide among students. This pandemic has badly affected the education of poor students as most of them are not able to explore online learning.

#### **B.** Positive Impacts

#### 1. Rise in Blended learning

The Covid19 pandemic has accelerated the growth of digital technologies in the field of education. Online learning will become an essential part of our education system. Universities will shift their traditional model of learning to blend learning where both online and offline learning takes place.

#### 2. Learning Material – Improvement

Universities and colleges can improve the study material used for teaching. Blended learning will help in finding new ways of design and deliver the content. It also brings more transparency and openness in academics.

### **3. Demand for LMS**

Online education has created a demand for learning management systems. It opened a great opportunity for LMS provider companies. Companies can develop and strengthen their LMS for use by universities and colleges.

### 4. Enhanced Digital Literacy

In the covid19 period, we all are forced to learn or work via digital technologies and resulted in the enhancement of digital literacy.

### 5. World Wide Exposure

This pandemic gives instructors and learners a great opportunity to learn and interact with people around the world. Due to this online mode, many students can get certifications from foreign universities.

#### C. Growth of Edtech Companies

E-learning platforms have seen massive growth in the COVID 19 period. Since the lockdown time spent on educational apps has been increased by 30%. In this period many companies are reducing their workforce or cut down their salaries, on the contrary, Edtech companies are creating new jobs and hiring people.

# Edtech Companies that have seen Exponential Growth: [6]

#### 1. BYJU's

It is an educational content provider for class  $1^{st}$  to  $12^{th}$  and competitive exams. Its foundation was laidby Byju Raveendran in 2011.

In a lockdown, it offered free access to its content. Byju's user base has been increased bymany folds. Over 20 million new users joined its platform.

Byju's revenue got increased from Rs. 1,430 crores in FY18-19 to Rs. 2,800 crores in FY 19-20.

### 2. Great Learning

It is a Gurugram-based start-up. It was founded by Mohan Lakhamraju in 2013. Covid19 boosted the demand for up-skilling courses like Machine learning, cloud computing, digital business, etc. Its annual revenue increased by 150%. It records revenue of Rs. 325 crores in FY20. It had over 25,000 users on its platform in its PG programs.

#### 3. Vedantu

Vedantu is a live online tutoring platform founded in 2011 by Vamsi Krishna, Pulkit Jain, Anand Prakash, and Saurabh Saxena. Its user base has been increased by **6.5 new learners** on its platform during the lockdown. Its revenue increased by 80% in May over the previous month.

#### 4. Board Infinity

It was founded by Sumesh Nair and Abhay Gupta in 2017. It provides career guidance and skilling to students and professionals. Its revenue increased by 400% in FY20. It has recorded the highest growth in April and May 2020.

#### 5. Unacademy

Unacademy is founded by Gaurav Munjal, Roman Saini, and Hemesh Singh in 2015. The company had massive growth in the lockdown period.

In April 2020, its revenue is increased by 82% and it was ten times higher than the same period of last year.

### 6. Toppr

It is a Mumbai-based start-up founded by Zishaan Hayath and Hemanth Goteti in

2013. It provides practice tests, question answers, and videos to its students and also provides material to prepare for competitive exams.

It has witnessed a growth of 150% in paid users. Its revenue growth is 2.5 times. Growth in free user engagement is 100%.

### V. SWOT ANALYSIS [7,8]

#### **Strengths**

#### • Flexibility

E-learning platforms provide flexibility to access the course content anytime and

anywhere. We can learn at our own pace and will. There is no restriction on how many times we access the same content.

#### • Increase in Internet connectivity

Internet users are rapidly increasing. Many new users are emerging from rural areas. In 2019, the internet penetration rate was around 50%, which means half of the Indians had access to the internet.

#### • Cost-effective

E-learning is cost-effective compared to traditional learning. Students can cut down the cost of physical instructor fees, accommodation, and travel expenses.

#### • Favorable government policies

The government of India has taken various initiatives like 'Digital India' and 'Skill India' to spread digital literacy and create a knowledge-based society.

#### Weaknesses

#### • Low awareness

Awareness about e-learning among rural people is very low. There is a disparity in the usage of online resources among different backgrounds of people.

#### • Absence of Interaction

One of the major drawbacks of e-learning is other than real-time online classes there is very less or no interaction between teachers and learners. So, teachers cannot provide appropriate feedback as they don't know how the learners took the assessments.

#### • Slow Internet Connection

Many places are facing the problem of low bandwidth and slow internet connection. They face difficulty in attending online sessions and training.

#### **Opportunities**

#### • Development of education sector

E-learning is regarded as an efficient tool to reach the unreached rural people and motivate them to pursue higher education. This will lead to the development of the education sector.

• Bridge the gap of demand and supply

Universities have only a limited number of seats, resources, time, and subjects, so they cannot cater to everyone's needs. Besides, there can be learners who cannot attend physical classes. So, e-learning can be used to bridge the gap between the demand and supply of educational institutions.

#### • Maintain work-life along with studies

E-learning provides an opportunity to balance work life. Through this learners can pursue their studies while doing the job. As it provides flexibility to learn anytime. Online courses can be completed in less time compared to traditional courses.

### **Threats**

# • Lack of Infrastructure and technology

To study through e-learning, there is a mandatory requirement of computer and internet access but in many parts of the country especially rural areas this facility is not fully available yet. The bandwidth available is also low as compared to developed countries.

#### • Lack of computer knowledge

Due to a lack of knowledge about what the Edtech companies are offering, this method has not widely spread. Some people are not taking up online courses because they don't have confidence in working with computers or other electronic devices.

#### • High dropouts

Performance and attendance can be affected by the freedom provided in e-learning. There is no monitoring on learners in this system that can create indiscipline among them which might turn into high dropout rates.

# VI. CONCLUSION

As per my analysis,India encompasses a tonof potential in education due to its demographic advantage of a large young population. India has the largest population in the age bracket of 5-24 years, about 500 million.The Government of India has allowed 100% FDI in the education sector. Presently India has the second-largest elearning market.

The Growth of the e-learning market has been influenced by rapid growth in internet access. India had the second-largest online market with over 636 million internet users in 2019. In 2020, it has reached nearly 700 million users and is expected to reach over 974 million internet users by 2025.

The sudden outbreak of the Covid19 pandemic has resulted in the closure of schools, colleges, and universities in over 185 countries. This has affected almost 1.38 billion students. This pandemic has forced us to change our traditional way of learning. **Shift: Traditional learning to Digital learning.**Many schools and universities have adopted digital modes for teaching. They are conducting regular online classes; teachers are delivering lectures over meet calls, zoom calls, or other virtual class options to keep the learning process going.

Rural people are facing difficulties in Covid 19 as they do not have the proper device to take online sessions and many places are facing the problem of low bandwidth and slow internet connection.

# VII. REFERENCES

- 1) Bansal, S. (2017). How India's ed-tech sector can grow and the challenges it must overcome.
- 2) Keelery, S., (2020). Total internet users in India | Statista.
- Pappas, C. (2016). Top 8 eLearning Barriers That Inhibit Online Learners Engagement With eLearning Content.
- 4) Misra, K. (2020). Covid-19: 4 negative impacts and four opportunities created for education.
- Jena, Pravat Kumar, "Impact of Pandemic COVID-19 on Education in India" (July 30, 2020). International Journal of Current Research, Vol-12, Issue-7, Page-12582-12586 (2020).
- Medhi, T. (2020). Meet the sixed-tech start-ups that have seen record growth amid COVID-19 lockdown.
- 7) Murugan, V. "E-Learning Trends in India a Strategic Perspective." Shanlax

International Journal of Commerce, vol. 6, no. S1, 2018, pp. 120–128.

- Venera-Mihaela, Cojocariu & Iuliana, Lazar & Nedeff, V. & Lazar, Gabriel. (2013). SWOT Analysis of E-learning Educational Services from the Perspective of their Beneficiaries.
- 9) ArtiVaish, Anand Sharma and Anshu Sharma, Review Reports on User Authentication Methods in Cyber Security, WSEAS TRANSACTIONS on COMMUNICATIONS 19 (Volume 19, 2020), 150-154.
- 10) Sourabh Gupta and Arti Vaish, Review Report on Bitcoin: Emerging Global Financial Challenge" Proceedings of International Conference on Competitive Strategies in Emerging Markets (ICSEM 2018), jointly organized by SMS, Ansal University, Gurgaon, India and CoB, Valparaiso University, Indiana, USA held on 6-7 March 2018 at Ansal University, Gurgaon.
- 11) Amit Grewal and Arti Vaish, Review Report on Mobile Technologies 3G, 4G and 5G, INTERNATIONAL CONFERENCE on SUSTAINABLE MANAGEMENT PRACTICES in VUCA WORLD

(Volatility, Uncertainty, Complexity &AmbiguitySushant School of Business, Ansal University & Warwick University, UK ) [25th & 26th April,2019].

- 12) Om Rana and Arti Vaish, Prisoners of our own Devices, INTERNATIONAL CONFERENCE on SUSTAINABLE MANAGEMENT PRACTICES in VUCA WORLD (Volatility, Uncertainty, Complexity & Ambiguity) Sushant School of Business, Ansal University & Warwick University, UK ) [25th & 26th April,2019].
- 13) Nandal, N. (2020). Coronavirus and Its Impact On Stock Market International Journal of Disaster Recovery and Business Continuity, 11(1), 943-948.
- 14) Abhishek Dimri and ArtiVaish, Introduction of Wearable in World of sustainable Fitness/ Business, INTERNATIONAL CONFERENCE on SUSTAINABLE MANAGEMENT PRACTICES in VUCA WORLD (Volatility, Uncertainty, Complexity & Ambiguity) Sushant School of Business, Ansal University & Warwick University, UK) [25th & 26th April,2019].