ISSN (Online): 2583-5203

JOURNAL OF ACADEMIC ADVANCEMENT

June, 2023
Vol. 2 | Issue No. 01

Kolkata Bidhannagar
Society for Academic Advancement

A Registered Society under the Societies Registration Act (West Bengal Act XXVI) of 1961.

Visit our website: kbsaa.org/journal/

JOURNAL OF ACADEMIC ADVANCEMENT

(Bi-Annual Peer Reviewed Refereed and Indexed Journal)
ISSN (Online): 2583-5203 | Volume: 2| No. 01| June, 2023

EDITORIAL BOARD

Editor

Editorial Advisory / Reviewers Board

Journal of Academic Advancement
(Bi-Annual Peer Reviewed Refereed and Indexed Journal)
ISSN (Online): 2583-5203 | Volume: 2 | No. 01 | June, 2023
https://doi.org/10.58574/jaa.2023.v2.i1.10

Research Article: 10

A Study on the Impact of COVID-19 on the EDTECH Industry

Abstract

According to statistics, in spite of massive disruption caused by COVID-19 to various sectors, EdTech managed to survive and accelerate its growth because of the sectoral lockdown imposed. As WHO announced it as a pandemic outbreak, the whole education system went upside down and compelled educators as well as students to shift to online based learning immediately. Studies have revealed that a commendable 26% increase in user visits have been seen in the overall sector. Moreover, some firms have even recorded a 100% month-on-month growth in paid users and growth in traffic by 50% during the global pandemic.

The present study aims at measuring and analyzing the impact of COVID-19 on the Indian EdTech industry specially with reference to K-12 and higher education in terms of traffic share, enrolment, job creation, revenue generation, affordability, accessibility, funding, introduction of new product lines and other variables, with the hypothesis that as the pandemic has disrupted traditional methods of education, the Online learning industry would see an unprecedented growth. The tech solutions kept flowing knowledge to over 300 million students in the country. It also provides an elaborate discussion about the challenges the industry is facing and its future scope in India.

Keywords: *EdTech Industry, Online Learning, COVID-19, User Engagement.*

Jatin Poddar
Former Student - B.Com (H)
Dept. of Commerce
St. Xavier's College (Autonomous)
Kolkata, INDIA
jatinpoddar.quizzy@gmail.com

Dr. Madhu Agnihotri
(Corresponding Author)
Assistant Professor
Dept. of Commerce
(Information Technology)
St. Xavier's College (Autonomous)
Kolkata, INDIA
madhu.cal@sxccal.edu

1. INTRODUCTION

'EdTech' or 'Educational Technology' is a fast growing industry since the past 10-15 years in India. In the first phase, online learning just supplemented offline learning with engaging multimedia content. In the second phase, it started offering a complete learning experience by introducing several features. In the third phase, that is the current phase, technology is being used to overtake traditional learning methods by interactive classes, online assessments, structured e-learning and scaling education in unimaginable ways. Now, quality education is being accessed by everycorner of the country, from metro cities to Tier - II, Tier - III locations and rural areas. Inspite of the massive disruption caused by COVID-19 to various sectors, EdTech Industry managed to survive and accelerate its growth.

Several studies have revealed that a commendable 26% increase in user visits was observed in the overall sector. Moreover, some firms have even recorded a 100% month-on-month increase in paid users and growth in traffic by 50% during the period of global pandemic.

2. LITERATURE REVIEW

As per the observations by *Kim Campbell et al (2012-13)*, Large number of entrepreneurs, businesses and immersive ideas are coming together with full force to turn EdTech into a reality, reality that no one can escape. There is an abundance of market opportunities available and India is seizing them quite well. *Maya Escueta et al, (2017)* explored that Social networking sites have been favourably associated with increased student participation in higher education, according to earlier studies in the field of EdTech. Technology in education has experienced a rebirth as a result of advancements in fields like new devices, mobile phones, and the internet. *Tienken (2017)* determined that the widespread adoption of technology, internet networking, and interactive 3D models to enhance student learning experiences is still in its infancy or has not yet occurred. *A Study by KPMG in India and Google (2017)* that primary and secondary education has the largest user base, while reskilling, certification and test preparation courses are likely to grow the fastest. Top reasons for choosing online courses are reduced travel time, convenience and better concentration in homely environment. They found out that in their study that marketing is not the key tool for awareness, but peer influence is, followed by Internet searches.

3. OBJECTIVE OF THE STUDY

The objective of the present study is to examine the development of EdTech Industry during COVID-19 Pandemic in India.

4. RESEARCH METHODOLOGY

The present study comprises mainly of secondary data available collected from annual reports of leading firms in the industry (Byju's, Coursera, Unacademy, Vedantu etc.) for the FY2020-21 and 2021-22 and several reliable articles, repute journals and related websites.

5. RESEARCH GAP

Since EDTECH Industries have not been established to its fullest potential in India therefore limited data is available over the internet. Along with that, Considering the gradual shift from traditional teaching methods to digital methods, higher institutions are gradually adopting the online mode of teaching.

The Question now arises from the study of Literature Review that how should the Universities adopt this online technique of teaching and how should it be balanced with the traditional techniques of teaching which prevailed from the Pre-COVID Era.

6. IMPACT OF COVID-19 ON THE EDTECH INDUSTRY

- **Market Size of the Industry:**

Web based learning services for Classes 1 to 12 increased by 6.3X times in 2022, making it a $1.7 billion market, while the post-K12 market increased by 3.7X times, achieving $1.8 billion, making it a total of $3.5 billion worth market. With the increase in adaptability of EdTech and a changed perspective towards education post covid, bigger numbers may be expected.

- **Funding Surge**

Nearly 5X growth in funding can be seen in H12020 in comparison to H12019. $1.6 bn funding was generated in Jan- Sept 2020 alone with K12 segments and online test preparation leading the way. This figure is already 2 times the total funding in the year 2019. BYJU's has proved to be the behemoth of this sector by attracting 43% of the funding raised by the whole sector.

- **Rise in Traffic**

EdTech Companies like Udemy, Coursera, Byju's, and Doubtnut experienced a terrific spike in traffic share consistently for months during lockdown. Brainly, a global online learning platform for students recorded the greatest site traffic in April with roughly 25.05 million visits which comprises 4.19 percent of the Indian ed-tech traffic. It also registered an increase in its Indian user base to 25 million.

- **Watch Time Statistics**

The total amount of time spent watching internet content is known as Watch Time. Unacademy made a notable development in April 2020, shattering all previous records for video views, viewing time, etc. (Your Story, 2020). It is interesting to note that Vedantu has on its platform a watch

season of one billion minutes.

A Study by BARC India and Nielsen found that since the lockdown, time spent on instructional mobile applications has increased by 30%. For instance, during the lockdown, users of the Byju program spent 91 minutes instead of the hour they had before.

- **Job Creation**

As per the data collated by The Economic Times, Leading EdTech startups - Byju's, Up Grad, Udemy, Unacademy, Talent edge, Simplilearn, and Scaler - doubled their total headcount in 2021 to keep their pace with the increase in user engagement rates. Vedantu currently employs 6000 employees and plansto expand to 8500 in the next three months, to dive its way into smaller cities and towns.

Unlike most companies where there has been a halt in recruitment activities owing to the pandemic, EdTech platforms began hiring in large number of people. Platforms such as UpGrad, Dronstudy, Vedantu and Simplilearn, got on board a minimum of 3,000 or more workforce in 2020. Toppr hired across senior leadership and entry level positions in large numbers.

7. INNOVATIVE TRENDS IN THE SPACE OF EDTECH

The EdTech startups are tapping technology with education, expanding the horizons of creative features and adding more users daily. Some of the most innovative and current trends in the market are –

Artificial Intelligence

Technology has changed the education landscape, but with the advent of AI, it has transformed the experience to an altogether new level. AI has helped in totally automating the experience, making the content more engaging than ever. Teachers can now automate grading of fill in the blanks and multiple choice questions. Also, AI tutors can be helpful when teachers are unable to answer students' queries and can also provide helpful feedback. Machine Learning and AI together offer much enhanced and exciting learning experience for users, thereby attracting more traffic.

Virtual and Augmented Reality

The integration of VR and AR adds advanced audio-visual factors to the learning experience which makes it more understandable and fun to watch. VR provides a constructed reality whereas AR provides an enhanced real image view. Some concepts may be not clear with a plain image or hands-on lab experiment. VR creates visuals which helps students experience real world problems in a low-risk environment. For example, Play Shifu, founded in 2016, is a Bengaluru based startup which uses engaging and immersive AR experiences to help children master STEM abilities i.e., science, innovation, designing, techno and math since the beginning.

Mobile Based Learning Management System

In India, mobile phones (with internet connections) can be found with a greater number of people than a desktop / laptop with a broadband connection. Hence arises the need for mobile learning systems. In order to provide mobile based courses, content needs to be customized accordingly for a smaller screen, slower internet and lower computing power. Investing in this technology will yield benefits significantly as there's a large population of students who prefer using a smartphone for courses, not because this option is better but due to lack of proper equipped gadgets. Several Indian startups have picked up this opportunity rightly.

8. INITIATIVE UNDERTAKEN BY THE GOVERNMENT IN THE EDTECH INDUSTRY

With social inequity in online learning coming to the front because of the pandemic, Government proposed certain measures to bridge the gap and make learning accessible by every child in the country. Some of the Initiatives undertaken by Government are:

- **Swayam Programme**

It intends to accomplish the three standards of the Education policy - *Access, Quality and Equity*. It is national online education platform which hosts around 1900 quality courses for classes IX to XII as well as for Undergraduate and Post-Graduate courses, in all subjects ranging from law, engineering, social sciences, humanities and management courses. All the courses are freely accessible by any learner in the country. The courses are designed by the best of teachers and are immersive and interactive. The lockdown period witnessed a hike in engagement rate by three times on SWAYAM.

- **Diksha**

It is the nation's digital infrastructure for school education. It was much more strengthened during the pandemic to ensure accessibility. It is very much useful as it provides material pertinent to the recommended school educational program. Teachers, students and parents can largely benefit from this. It showcases content in multiple Indian languages, hosting over 80,000 content items for Classes 1 to 12. Lockdown has helped in increasing the accessibility to around 250 million times during that period. 'One nation, One digital platform' was the motive of this scheme.

9. MAJOR CHALLENGES FACED BY THE EDTECH INDUSTRY

i) Complicated Web of Regulations Governing the Industry

Education in India is represented by numerous regulations, for example, the Right to Education Act and the University Grants Commission Act. But there is no single body

formed for governance of EdTech industry in India and this poses challenge for educational institutions who wish to tie up with EdTech firms, as there is no separate legislation for the same. While The Right to Education Act has allowed States to form their State specific rules and guidelines for online education, if they wish to form so, States have not yet began working on it at the frontline.

ii) Lack of Proper Technological Infrastructure

It is electricity as well as internet which necessities to arrive at wherever in the 21st century. Accessibility of good internet, access to PCs or tech with ideal screen size, means to buy gadgets for the family are only a couple of these issues. Network latency in India is excessively high when contrasted with US and China. Patchy internet network in country parts, where a heft of populace lives is as yet a significant issue.

iii) Issue in Optimising Revenue

Another challenge is to retain the increasing user base in order to monetise. Users are indeed welcoming the industry, but for how long do they stick to it, is the main concern. New segment of users downloads educational apps, access the free lessons and videos and bid adieu when it comes to pay for the same. Some firms struggle to engage and retain users for more than a month. They often have to invest considerably in marketing, pitch customers and work hard in building long term relations with them. Indians do not spend much on education apps as much they would spend on online shopping or gaming.

iv) Resistance to Change in India

While EdTech is being adopted well in India, there are still a chunk of people comfortable with conventional methods of learning, with a piece of chalk in their hand. Teachers are trying to cope up with the changing dynamics but some are still reluctant to change. Some consider these technologies as a threat to their position and fear that they will be replaced soon. The only solution to this is to accept the change - One has to adapt and accustom himself / herself with the new techniques coming up and one would still be a player if he / she remains in the game, rather than quitting it completely.

10. KEY RECOMMENDATIONS

1. *Startups should focus on what the students and teachers need* - One should not just create a product that is already provided by thousands of competitors. Understanding the actual modern class requirement and trying to solve that problem by introducing unique productcan work well in the industry.

2. *Edtech firms should choose the right revenue model for themselves* - Many firms are embracing freemium model as it attracts users very quickly. But it may not always workas to sustain in the market, revenue flow is important. One must understand how and

when to charge money for their services from users without losing them.

3. *Firms should curate applications not just for present, but for future as well* - As technology is constantly changing and education is evolving too, need for updatedtechniques will arise and present methods will slowly bypass.

CONCLUSION

Learning is a continuous and ever learning process and the pandemic has changed the dynamics of Education completely. The adoption of digitalised learning will accelerate like it has never before.

The fundamental explanation of such unbelievable development are the new companies which are continually improving and sending off new services and products on the lookout, each attempting to stand out and compete.

REFERENCES (Web Links)

- https://nasscom.in/knowledge-center/publications/EdTech-advent-digital-education
- https://government.economictimes.indiatimes.com/news/education/covid-19-pandemic- impact-and-strategies-for-education-sector-in-india/75173099
- https://yourstory.com/2020/07/edtech-hockey-stick-curve-2020-funding-deals-consolidation
- https://theprint.in/opinion/online-learning-is-the-future-education-ministry-and-ugc-must-not-hold-india-back-anymore/605503/
- https://community.nasscom.in/communities/product-startups/the-edtech-story-3-edtech-in-india-pre-covid-vs-during-covid.html
- https://community.nasscom.in/index.php/communities/digital-transformation/edtech-technology-enabled-learning-transformation
- https://www.researchgate.net/publication/357824376_The_Impact_of_Technology_On_Teaching_and_Learning_In_Higher_Institutions_A_Literature_Review
- https://dera.ioe.ac.uk/24843/1/00489224.pdf

ISSN (Online): 2583-5203 June, 2023 | Vol. 2 | Issue No. 01

Kolkata Bidhannagar Society for Academic Advancement

KOLKATA BIDHANNAGAR SOCIETY FOR ACADEMIC ADVANCEMENT (hereinafter referred to as the 'KBSAA') established in the year 2022 as a registered Society under the West Bengal Societies Registration Act (West Bengal Act XXVI) of 1961 bearing registration No. S0025851 of 2021-2022.

KBSAA is a Non-Profit seeking Society for Promotion and Advancement of Learning and Research in the field of Social Sciences and other allied areas.

The main objectives of the KBSAA are as follows –

1. To promote and develop the Academic Advancement of Learning in the field of Research and Academics.
2. To publish Research Journals, Books, Newsletters, Periodicals, Magazines, Brochure etc. with an objective of furthering academic research, information and knowledge.
3. To organize and participate in Conferences, Seminars, Webinars and Workshops in collaboration with other Societies, Corporates and other Organizations / Associations / Foundations etc. for the promotion and development of research in the field of Social Sciences and other allied areas.

Visit our website: kbsaa.org/journal/

Published by Pema Lama , Secretary and Editor on behalf of
Kolkata Bidhannagar Society for Academic Advancement, West Bengal, INDIA