

The Downfall of the Indian EdTech Market

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Abstract

The outbreak of COVID-19 caused some of the most significant socio-economic structural changes that the world has seen in a very long time. One of the most impacted industries in light of these changes was the global education industry. With the restrictive ability to commute and interact with others, the majority of the population started to rely on the digital delivery of education as a replacement for the traditional modes. This created great potential for what is known as the EdTech industry wherein software and hardware for the digital delivery of educative material are designed. This paper aims to analyse the factors that enabled the impressive growth of the Indian EdTech market during the years 2020 and 2021. The latter half of the paper evaluates the current scenario of this market which has reportedly started to face a downfall, contrary to what was expected of it and predicted for it. All the aforementioned is facilitated by the application of appropriate business and economics theories and concepts.

Introduction

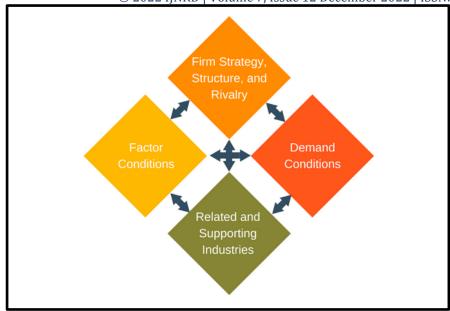
EdTech or education technology is a field involved in the design of both hardware and software that aims to enhance teacher-led learning in classrooms and improve the educational outcomes of students. Some common examples of EdTech include the integration of interactive projection screens and whiteboards in classrooms as well as the creation of platforms that focus on online content delivery (Frankenfield, 2022). Although EdTech is still recognized as a field which is developing, there have been many instances in recent times that have driven the growth of this industry. For instance, it has been noted in previous research that the SARS outbreak in China in 2003 and the H1N1 pandemic in Mexico in 2009 both increased the demand for EdTech in the respective countries (Pommerening, 2021). As a most recent example, the world faced the COVID-19 pandemic - this was different in the sense that it had a global impact and became a major catalyst for many changes i.e. accelerating the build of many things that were under progress whilst also uncovering many problems in the existing structures.

The above being considered, whilst the COVID-19 pandemic significantly altered many aspects of daily life, the requirement and strict restrictions imposed to ensure social distancing with our peers and family members and the inability for services to operate as they once did took a great toll on the education industry (Haleem, Javaid and Vaishya, 2020). There was suddenly an evident need to increase access to technology, and create more borderless distribution models as well as personalised products that could adapt to the changing needs of the population - all fantastic opportunities for EdTech companies to strive and as per the data, they most definitely did. A report published by Rootstrap (2020), for example, found that in 2020 Small EdTech companies (classified as having 2019 revenue figures ranging from \$0-10M) saw an increase in organic traffic and engagement at 297.79% and 328.35% respectively. Mid-size EdTech companies (classified as having 2019 revenue figures ranging from \$10-50M) saw the greatest jump in sign-ups and revenue at 306.99% and 274.41% respectively.

It was undeniable that the numbers and the growth of EdTech companies in light of the pandemic were fantastic. Many researchers had concluded that this industry was one of the main 'winners' of the COVID-19 pandemic. It, thus, seemed highly likely that the success of the EdTech industry as well as the individual companies operating in it was here to stay and would only continue to increase in the years to come. In a twist of events, however, around halfway through 2022, the world witnessed a flurry of news articles and industry reports reporting the downfall of the EdTech industry with many theories of what may have gone wrong. This research paper aims to discover the reason for the burst in the EdTech bubble with a specific focus on analysing the regional industry of India.

An analysis of the Indian EdTech Market (2020-2021)

The EdTech market in India was growing even prior to the COVID-19 pandemic. For example, the EdTech user base in India was estimated to be 45 million in 2019. However, come 2020, the user base had doubled to 90 million - therefore, the pandemic was a massive catalyst for the growth of this market (K and Kumar, 2022). There were many factors that contributed towards the success and international competitiveness of the Indian EdTech market during 2020 and 2021. In order to understand these better, the Porter Diamond Theory of National Advantage can be applied. This model discovers four main factors i.e. demand conditions, firm strategy, structure and rivalry, factor conditions and related supporting industries which the theorist proposed are interlinked and when in favour of an industry, can provide the specific country in question a competitive advantage. Within this framework, Porter also acknowledges that the government's role is vital as they may act like catalysts many times (Chappelow, 2019).



When analysing the factor of *firm strategy, structure and rivalry*, it is important to consider the barriers to entry i.e. how easy or difficult it is for firms to enter an industry. One of the most common barriers that many companies wanting to enter the majority of industries face is that of raising sufficient capital. With regard to the EdTech industry, it has been found that the capital required could truly range from a couple of hundred dollars up to millions. Ultimately, the required capital depends on the intended complexity of the product as well as the location in which it is developed. Luckily, India has many *factor conditions* which allow the cost of developing EdTech products, applications and platforms relatively cheap. Examples of such factor conditions include cheaper labour as well as the country being one of the largest hubs of technological innovation. A paper by Sharma (2022), for example, highlights how the cost of a developer in India could be anywhere between \$20-\$45 per hour, whereas in a country like Poland or Austria the same could cost \$30-\$65 per hour.

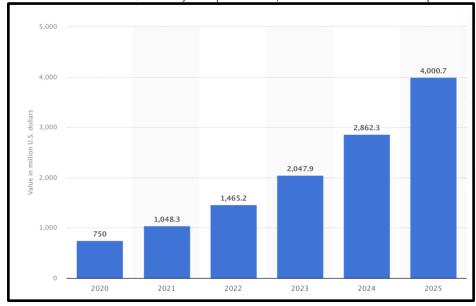
The aforementioned may decrease the barrier to entry for companies wanting to enter the Indian EdTech market explaining why as of the first half of 2020 there were more than 4,500 EdTech startups in the country (Inc42 Plus, 2020). The problem with this, however, is that there is a great level of competition and thus a requirement for extensive further investment to be made in order for a company to stand out. The money for these investments is normally fundraised through sources including venture capitalists, angel investors and private equity firms. Research suggests that of these different fundraising methods, venture capital proves to be one of the most popular as it can raise a substantial amount of money when successful. It is, however, not very easy to receive such funding explaining why out of the many EdTech startups, only 219 had received venture capital investment between 2014 and mid-2020 totalling around \$2.2 billion across 346 funding deals (Inc42 Plus, 2020). That being said, the COVID-19 pandemic led to a surprising increase in the level of investment received by EdTech startups in India as investors saw great potential in the industry. According to data from analytics firm Tracxn, for instance, between January and August 2021 alone, Indian EdTech players attracted an astounding \$3.81

billion in funding. Of this, BYJU's - known as India's largest EdTech company - attracted the lion's share i.e. around \$1.7 billion in investments, followed by Eruditus which received funding worth \$650 million and upGrad, which got funding of \$185 million (Ghosh, 2021).

Of course, there were also quite a few *government* initiatives which helped the companies operating in the Indian EdTech market succeed. For instance, "The National Education Policy 2020 emphasised the importance of leveraging technology in education solutions and supported the creation of learning content in regional languages, calling it a high priority" (IBEF, 2021). What is interesting, however, is that the EdTech market benefited even more indirectly as a result of the government support shown to what can be considered the related and supporting industries. Since technology is a crucial aspect of EdTech, the acceptance and provision of online infrastructure in a country are incredibly important. For the longest time, India suffered from a prominent digital divide i.e. a gap between individuals who are able to access modern information and communication technology and those who lack access to the same. Luckily, however, the government has taken quite a few steps to improve and integrate a greater level of digitization into the Indian economy. For example, in 2015, the government launched Digital India - an initiative aiming to 'improve online infrastructure and increase internet accessibility among citizens (for example, linking rural areas to high-speed internet networks); thereby, empowering the country to become more digitally advanced' (IBEF, 2022). Though there is still more work to be done to reduce the overarching digital divide specifically between urban and rural India, there is no doubt that progress has been made. The aforementioned also has a positive implication for the growth of EdTech companies in the country as they can access a wider population if the correct infrastructure is provisioned.

The burst of the Indian EdTech bubble

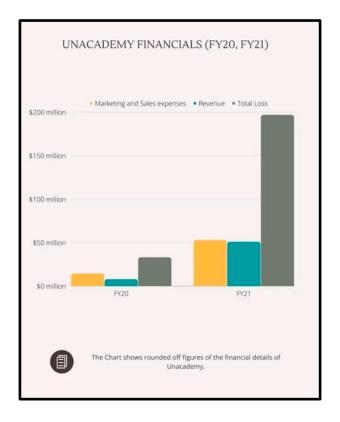
On the whole, it is evident from the analysis of the Indian EdTech market, within the context of Porter's Diamond, the reasons for the boom the industry faced during 2020-2021. In fact, it can be seen in the graph below that it was further predicted that the market which was valued at \$750 million in 2020 would reach a valuation of \$4 billion by 2025 at a CAGR of 39.77% (as per data published on Statista by Kanwal (2022)).



Unfortunately, as 2022 has progressed, the Indian EdTech market has seen a great extent of instability. The main evidence of this was seen when within the first six months of the year, around 1,400 teaching and nonteaching staff were laid off by edtech companies. For example, in May, Vedantu, one of the four edtech unicorns churned in India during 2019-2021, reportedly laid off 425 employees i.e. 7% of its total workforce. Moreover, in February, Lido, a company responsible for providing online classes to school students, shut down and subsequently let go of its 1,200 employees (Bhat, 2022). This created a great deal of speculation among many researchers and analysts who started to worry that the market was in a mere bubble and that the success seen over the previous two years would fade away in the post-pandemic world. The remainder of this section aims to uncover some of the most commonly cited reasons for this burst as per existing research and studies.

Firstly and most obviously is the impact of the reopening of schools. It is no new news that the EdTech market saw a great deal of success because parents around the country were left with no other choice than to rely on online modes of learning for their children - whether it served as the main source or as an additional one. When schools re-opened, however, and things were back to normal, it became evident that, on the whole, offline/traditional modes of education are still more appreciated than online ones. This is summarized quite well by Pearl Agarwal, founder and managing director of Eximius Ventures, who says that "In 2020, suddenly overnight, parents didn't know what to do with the kids who were at home. Their education was getting impacted and lockdowns were getting extended every month. This meant they had no other option but to move to online education for all the different segments. However, parents realized that children were zoning out faster in online classes and were looking forward to offline classes. So, edtech was a short-term phenomenon" (Shanthi, 2022). Furthermore, many schools, colleges and learning centres have now returned with a new perspective and have become more progressive with their adoption of technology - even if they were once averse to it. Platforms such as Zoom, Teams, Google Meets etc. are being used country-wide to deliver some content and manage administrative tasks even in the offline education environment.

Secondly, many industry experts have suggested that the business model followed by the Indian EdTech companies is very flawed. Out of the many factors, it has been repeatedly highlighted that companies in this market face incredibly high customer acquisition cost i.e. the amount of money spent by a company to gain new customers. For instance, as per a report by Brighteye Ventures (2019), EdTech companies were spending around 25 percent of their revenue on marketing their products in comparison to the 11.5% average that start-ups were spending in 2019. The expenditure on marketing only became more aggressive once the EdTech market gained popularity post-2020. Unacademy, for example, spent around \$53 million on marketing and sales in FY21 - this figure represented around 104% of its revenue - whilst recording a total loss of \$197 million (as seen in the image below (Kour, 2022)).



Lastly, another factor leading to the potential burst of the Indian EdTech market is one that is outside of the control of the companies and relates to the actual state of the economy. As per Joshi from Unicorn India Ventures, "countries at large are facing a downturn and economic slowdown and India is no different. While India is a developing economy and some of the fundamental is still allowing the economy to fair better compared to other countries, in this downturn most of the industries are impacted" (Shanthi, 2022). The one way in which the EdTech companies have been hit by this economic downturn is its effect on the availability of funding. In 2021, funding in EdTech startups stood at \$5.82 billion. By August 2022, this number had fallen to \$2 billion. The lack of accessible funding has led to a great degree of concern in the market with many companies optimizing and cost-cutting. This is also one of the primary reasons for the several layoffs which were seen earlier in the year (Upadhyay and Pathak, 2022).

Conclusion

All in all, it is inarguable that the Indian EdTech market saw a boom as a result of the pandemic. As discovered in this paper, there were many factors that contributed to the aforementioned success including the demand conditions, government initiatives and factor conditions. Of these factor conditions, the availability of funding prove to be one of the biggest drivers for the success of EdTech companies, allowing them to reach heights which were not witnessed before.

However, it may also remain true that companies in the Indian EdTech market witnessed what may be considered unsustainable growth. This was evidenced by the burst in the bubble that started to take place at the beginning of 2022. Whilst there are many reasons for this, the main ones can be boiled down to the reopening of schools and return to the pre-pandemic world, the business model of the companies and the state of the economy.

Overall, Eldho Mathews, deputy advisor at a research-focused university in New Delhi, summarises the future of the market best by saying that the "Edtech industry will grow as a support mechanism. But it cannot be a replacement for classrooms" (Bhat, 2022).

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