**‘How is India’s edtech economy looking to shape in the coming years?’**

**Abstract**

An ed-tech company's on line platform connects tutors, college students, and possibilities. The platform seeks to create a situation in which absolutely everyone benefits. The founder arrives first, making all the first investments and doing advertising to draw customers to the ed-tech platform of the enterprise. considering that COVID-19 started, the ed-tech quarter in India has grown notably. In 2016, the sector become nevertheless active, however not increasing as quick as it must have. but the entirety has altered drastically. on-line training is a big source of revenue for ed-tech companies in India thanks to the net and other modern-day improvements. The price chain, business version, and growth of Indian instructional generation are highlighted on this chapter.

**Introduction**

EBEF analysis estimates that India's EdTech market was worth $750 million in 2020 and is projected to grow by $4 billion by 2025 at a CAGR of 397.7 percent.

This increase was influenced by a number of variables, but one of the main drivers was the country's widespread access to internet and mobile devices at a reasonable cost. This availability is expected to continue into the future, fueling the continued expansion of the edtech sector.

**The Support of Government Policies**

Increased government attention to the edtech sector has improved the business climate for edtech firms. This will encourage the expansion and development of the industry.

In addition to investing in edtech businesses and issuing regulations to encourage the use of online learning platforms and digital learning resources, it actively promotes digital education. The National Education Policy (NEP) 2020 is the most significant of all (Rohit Kumar Nag, 2022).

The focus on technology in education under the National Education Policy (NEP) 2020 is expected to increase the demand for edtech goods and services. It offers an opportunity for new businesses to enter the market and for established businesses to grow to create cutting-edge solutions that respond to the changing needs of the education industry.

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It invests in edtech and actively supports digital education. With its laws allowing 100% foreign direct investment (FDI) in the education sector under automatic approval, the government also offers huge opportunities for foreign investors. This policy facilitates international cooperation and exchange of ideas by streamlining and simplifying the procedure, which can further promote the development and effectiveness of educational technology in the country.

**Hybrid Learning Solutions**

As the pandemic draws to a close, the edtech market will need to adopt a mixed strategy.

The term "hybrid approach" describes the application of both online and traditional classroom teaching strategies. This strategy combines the flexibility and convenience of online learning with the framework and support of conventional classroom learning.

By combining the benefits of both approaches, edtech companies can improve learning outcomes and experiences while fostering greater user loyalty.

**Online community education**

Online community-based learning has the potential to encourage collaborative and participatory learning among students given the widespread availability of the Internet, the rise of remote work, and distance education programs.

Online community learning involves students learning from each other and interacting with each other on a virtual platform, often with a moderator.

Online communities that bring people together to share resources and experiences can be found by students on social networking sites, forums, and other online locations. This can help children develop soft skills such as teamwork, communication and empathy, as well as a sense of community and peer support.Community-based learning might become a more common method of developing these abilities as their significance is more widely acknowledged.

With increasing use of technology in rural and small towns across the country, the future of edtech in India is bright and promising. By making rules that encourage the use of technology in education, the government is also helping the development of edtech in India. Future ed-tech experiences will continue to be incredibly important for integrating hybrid learning approaches and online communities. These methods give students the chance to gain invaluable knowledge and skills that can help their personal and professional development.

In general, as the education industry evolves, it is inevitable that we will see the creation of cutting-edge technologies, platforms and learning techniques aimed at increasing the effectiveness and efficiency of education.

**Edtech Market**

The dynamic Edtech market and its many stakeholders, including vendors, technology platform providers, content developers, teachers, students, institutions such as consumers, investors, regulators and governments, have made the sector more complex. With big firms like Byju's and small start-ups trying their luck in India, the Edtech sector is diversified. The need is constantly supported by the availability of low-cost Internet connections with adequate bandwidth through digital platforms. These Edtech companies claimed to provide high-quality education with easy access at a fraction of the cost of a typical classroom setting. While the COVID-19 epidemic has wreaked havoc on people's lives, it has also laid the foundation for a digital learning model in education.

The importance of these Edtech businesses is expanding daily, especially due to the COVID-19 pandemic, in the ever-expanding digital sphere in the education sector. Governments and their regulators have long been waiting for large-scale technical breakthroughs through educational technology to increase outreach and increase the Gross Enrollment Ratio (GER) in schools, colleges and universities. In order to value the investments made in the education sector, they want to adjust the teaching and learning process in this sector. Stakeholders have faced a number of difficulties as a result of the unexpected boost in edtech following COVID-19.

Admissions, access to tangible books, face-to-face interactions with faculty and peers are just some of the ways students, educators, administrators, governments, and companies are getting involved. But Edtech firms were quick to jump in at the start of distance education. They offered online solutions in collaboration with schools to provide digital content, protected exams and online entrance tests.

**Funding of Edtech Start-ups eco system:**

India is constantly moving up the food chain of the innovation and startup ecosystem. India's modern Edtech start-up ecosystem uses cutting-edge technology to attract the interest of investors, large corporations, governments and the sector. Prototypes are used by several of them to raise funds. They have been able to attract large investments, fueling the continued expansion of the industry, especially during and after the Covid 19 pandemic. The edtech industry provides opportunities for angel and corporate investors to make significant financial gains while advancing national educational goals. The demand for Edtech services has created a number of listed equity and venture capital (VC) investment opportunities.

The conundrum of Covid-19 persists and occasionally reappears in a new form. Investments will accelerate in this scenario. According to data recently collected by Tracxn Technology Limited, a Bangalore-based company that helps investors discover startups, there are as many as 8,768 EdTech startups already operating in India (Tracxn, 2021). Four of them have now reached unicorn status: UpGrad ($1.2 billion), Byju's ($16.5 billion), Unacademy ($3.4 billion) and Eruditus ($3.2 billion) (Business Insider India, 2021) . Under Indian company laws, Edtech businesses can enter the country through one or more combinations of (a) joint ventures, (b) partnerships, (c) franchises and (d) subsidiaries. Of the top 10 firms that have received investment ranging from, according to industry disclosures

Starting in 2022, HolonIQ will publish a study analyzing global education venture capital financing for 2021, which will show that Chinese investment in EdTech is declining, while investment in the US and Europe is increasing dramatically. India's Edtech startups, which started with $1 billion in 2014, reached $3.8 billion in 2021, ranking second only to the United States ($8.3 billion). The next two most popular locations are China ($2.7 billion) and Europe ($3.0 billion).

Investment from China started at $0.6 billion in 2014, grew to $10.2 billion in 2020, and then suddenly decreased to $2.7 billion in 2021. In the US, the amount is increasing dramatically from $2.5 billion in 2020 to $8.3 billion.

In 2020, Indian Edtech startups raised USD 4.7 billion in 165 deals, becoming the third most preferred funded sector. The top two most preferred funded sectors are e-commerce ($10.7 billion) and Fintech ($8 billion). India's top Edtech startup Bjyu's alone attracted $1.9 billion in funding in 2020. Edtech is expected to continue to flourish due to the extended lockdown due to the spread of new variants of the coronavirus around the world. In 2021, India became the most preferred country for Edtech funding. In early 2022, Bjyu's acquires 10 Edtech start-ups to gain first-to-market advantage in an industry costing over 4 billion. These ten Edtech start-ups belong to different segment viz. exam-preparation-2; K-12-2; On-demand tutoring -

3; reading platform -1; and computer vision/Augmented Reality (AR)-1.

**Edtech Revenue Model:**

According to the KPMG report, in the current ecosystem, edtech companies charge students according to any one or a combination of the five kinds shown in Figure 1 above for access to their platform for online services. Edtech businesses use a distinct revenue-sharing model, with the tutor marketplace deducting a portion of payments throughout the platform payment process.

Figure 1: Schematic Revenue models in Edtech companies



Source: KPMG India, May 2017

**EdTech Value Chain:**

The Edtech Value chain is consisting of five components viz. (a) Course contents; (b) Technology and

devices; (c) app based aggregators; (d) assessment and testing; and Institutional management

Figure 2: Edtech Value Chain



Source: PwC and CII Report, July 2021

According to industry forecasting firm Edtech, the sector is expected to grow at a CAGR of 15% between 2019 and 2025 and may reach $400 billion. Educational technology (Edtech) has the potential to impact billions of people and is a growth-oriented industry in South Asia, especially in the Indian environment (Credit Suisse, 2020). In India, the K-12 education market was worth $1.16 billion and the Edtech industry as a whole was worth $2.8 billion. The education technology market is projected to reach $10.4 billion by 2025. The K-12 and Test-Preparation category, followed by online certification, will continue to dominate in the future due to the lack of diversity in the Indian Edtech sector. Size

 The K-12 market is expected to grow from a current value of $1.6 billion in 2020 to $4.3 billion by 2025. The test preparation market, currently valued at $0.8 billion, is expected to to reach USD 3.99 billion by 2025. With supply-side expansion and government programs and activities that support digital technology and transformation in the education sector, the demand for Edtech will continue to rise. It would strengthen the K-12 and test preparation sectors. The business sector consistently expresses the need for measures that contribute to qualification and retraining.

**SWOC Analysis of Edtech Companies:**

A Strengths, Weaknesses, Opportunities and Challenges (SWOC) analysis was conducted based on literature review and trends in the edtech startup ecosystem. The same is shown in Figure 3 below. India is currently on a growth path in the schools and higher education sector.

The K-12 market was valued at $1.6 billion in 2020 and is projected to reach $4.3 billion by 2025. Similarly, the test preparation market is currently valued at $800 million and is expected to reach $3.99 billion by 2025. Demand for edtech will continue due to government initiatives and programs to promote digital technology, changes in the education sector and growth on the supply side. As a result, K-12 departments and test preparation will gain momentum. In the corporate sector, demand for aspects of reskilling and upskilling remains constant.

Indian copyright law and patent office have long waiting periods for obtaining copyright. The certification process usually takes 3-4 months to complete. Educational institutions are not adequately prepared for the digital age. Most of these institutions are supported by government agencies such as the University Grants Commission at the federal level and the Department of Schools or Higher Education at the state government level. The development of edtech companies in India is further hampered by lack of reliable IT and connectivity/broadband, especially in rural, underdeveloped and mountainous areas. The Indian edtech market is very crowded, very competitive and operates in a small geographical area.

Of the 4,500 edtech companies currently active in the market, only a handful have been able to grow and achieve positive earnings before interest, taxes, depreciation and amortization (EBITDA) margins. Higher education regulators do not encourage edtech companies to partner with higher education institutions to enter the online degree program market.

Since India is a multilingual country, companies may face increased costs and competition from local companies. Most companies focus solely on the K-12 and test prep markets, excluding competition in higher education. BeccaIn an effort to achieve the required level of growth, businesses spend 200 to 400 percent more of their operational income on online advertising and promotions.

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When they reach their target scale, they cut their marketing costs by 40 to 50 percent. Due to social pressure to score well on competitive exams in order to enroll in higher education, the Indian educational system is still exam-focused. It can take more time for schools and HEIs to adopt new digital cultures. With a few exceptions, specialist or generalist venture capital funds make up the majority of investors in the EdTech sector. Many of the larger venture capital-funded companies are now at the stage where these investors are beginning to search for an exit. An increase in IPOs (Initial Public Offerings)

Initial Public Offerings (IPOs) are being listed by venture capitalists (VCs) or rejected by their corporate owners in greater numbers.

Therefore, the edtech industry needs public funding. In India, the public sector is the driving force behind digital transformation in all imaginable forms, and the government is investing heavily in a number of such projects. All governments and researchers have recently invested significantly in education. It helps in the growth of edtech businesses, in a sense. During the Covid-19 era, app-based learning was used by millions of users. Young adults and school children are more interested in adaptive and personalized learning.

These technologies have been used in a number of urban schools, and young teachers are stepping up to support the teaching and learning process.

According to data released by the Government of India's Invest India Project, India will have the most significant and rapidly expanding digital economy in 2020, with a large consumer base. India reached the milestone of 2018 billion app installs, or 14% of all app installs worldwide.

The University Grants Commission and the All India Council for Technical Education recently issued guidelines to all universities and technical institutes to ensure no outsourcing to edtech corporations while providing online degree programmes. Such partnerships between private institutions and edtech firms, in the eyes of the UGC and AICTE, would amount to franchising and would go beyond the terms of approval for awarding or offering such online degree programs. While the government is promoting digital education in every sector, the regulatory bodies in the higher education sector have a duty to prevent the commodification of education.

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**Strengths**

(a) Cost efficient;

(b) Flexible learning;

(c) Effective learning;

(d) Personalized learning;

(e) Accessibility to an inaccessible markets;

(f) Scale and integrity;

(g) Industry-academia interaction;

(h) Skill development;

(i) Brings better coordination and governance; and

(j) Easy to collect feedback and analysis

**Weaknesses**

(a) Edtech cannot be a substitute to traditional

education;

(b) Commodification of education;

(c) Distraction by students and they always tempted to

use devices for procrastination;

(d) lack of critical inputs from teachers and less

transparency;

(e) Students are not intrinsically motivated and no proper

feedback mechanism;

(f) Possible dilution in quality of offering;

(g) Privacy and security of data issues;

(h) Cultural mindset-Indian education system is

continued to be an examination oriented; and

(i) Customer mindsets- Clients are looking for value

addition to the existing services;

**Opportunities**

(a) Digital Communication;

(b) Adaptive Learning;

(c) Personalized Learning;

(d) Content hungry Urban population: Improved internet

connectivity;

(e) Job opportunities to tech savvy people and gig or

freelance jobs;

(f) Government support for digital transformation in

education sector; and

(g) Corporate Training Programmes and Management

Development Programmes:

**Challenges**

a) IPR issues;

b) Digital readiness and Non availability of robust IT

and connectivity/bandwidth in non-urban areas;

c) Facing Stiff competition;

d) Less profit margin;

e) Regulatory bodies in the higher education sector are

not supportive for collaboration with universities;

f) Misalignment in approach- Global vs local;

g) Crowded Edtech landscape: focusing only on K-12

of Test-Preparation segments;

h) Lack of differentiation and retaining the customers;

i) High acquisition cost of customers- spending more

money on advertisement and marketing; and

j) Investment landscape: Investors are specialist or

generalist venture capitalist

CONCLUSION AND SUGGESTIONS:

Four factors contribute to India's Edtech eco-system's growth: (a) a young population; (b) parents with more discretionary income; (c) cheaper internet data; and (d) inexpensive portable devices for learning. The number of smartphone users is predicted to increase from 500 million in 2020 to 1 billion by 2025.Although the Edtech startups have undoubtedly affected the coaching and test-preparation industries, they haven't yet reached the fundamental value chain of education.

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