FUTURE SCOPE OF ED-TECH INDUSTRY IN INDIA

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ABSTRACT

Technology is a bliss in the field of education. It boosts up the Ed-tech industry and leaves back ample of opportunity to learn. It can be used as powerful tool to bridge down the long widening gap in learning process, reinvent our aspect towards learning and teaching. The rigid and conventional system of learning can be improved by collaborating the conventional system with latest technology, it can not only improve educator and student relation but also polish up the skills of an educator. educators and institutes should lead in the line to set up Ed-tech learning. The main concept that has been taken in this research paper is the Ed-tech scenario in India, its roots from where did it grow, the future market growth in different segments of market, merits of innovation in education and its limitations.

KEYWORDS*: Ed-tech Industry, Technology, Ed-tech Learning, Education, Market Growth.*
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Introduction

Ed-tech comprises of two words education means knowledge and technology that is specialised software and media, Ed-tech is a form of blended learning that means getting knowledge in an interactive form through facilitation of technology. Ed-tech is concerned with fulfilling the objective of improving the rigid human learning process with the help of developing technologies and systems to facilitate learning.

Ed tech is a process of innovative learning with the help of IT tools to create interesting and involving content to engage the students in the classroom. It should not be mistaken from the learning computer as a subject, rather it is opting of tablets in hand for regular education that was earlier taught in institute and personal tutoring.

Earlier Ed-tech was misconnected with teaching through audio-visual mode i.e. power point presentations videos, pictures etc. then came a digital revolution of learning in India which removed this misconception and widens the scope of technological education in India, now there are individualised material and special material for each category of student which can fulfil the needs alone without tutoring.

It is a sector which has seen an immense growth and development in last few years and covid-19 which made each industry stagnant and paused flourished this industry and there was seen an immense growth in this sector with significant number of new start-ups, improved customer base and new innovative system to learning for students. And it's expected to grow at higher level both nationally and globally.

Objective of Study

- To understand the concept of Ed-tech industry, its evolution.
- To take a glance at its framework and top players in Indianmarket.
- To analyse market growth of k-12 segment and post k-12 segment.
- To study Major accession in Ed tech industry, advantages of technological education.

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Research Methodology

Research design used is **Descriptive research**. This type of study contains collecting data that refer to events and then classifies, organizes, portrays, and defines the data collection. It often uses graphic aids such as charts to help the reader in accepting the data scattering. Secondary database resources are being used in this report. These are following: annual reports of company, research report of KPMG, Omidyar Network India Report on Ed-tech in India. Some journals and articles from industry.

Review of Literature

Technology plays a vital role in taking education to next level. And also creating opportunity in the field of education, it helps to build up the bond between teachers and learners to enhance the delivery of knowledge that is given in the learning process. But it should be taken with utmost care that technology should be used efficiently and effectively, keeping the stakeholders as the main aim for benefit. The developers and providers should be backed up with all the responsibility for efficient use and development of learners. Innovations and inventions are the key aspect that will take education to growth. Educator's should put in the efforts of practical practice that would lead to development in urban and rural areas of country. Overall the country Ed-tech and start-up's will grow to great extent and would develop the students.

Sharma, Ca Vinod. (2020). A Study of Innovative Ed-Tech Start-Ups & Businesses in the Emerging Markets and Economies

At times we get to hear the news of problems faced by government schools their management, teachers and the old system that is used. In this situation only one hope that can be seen by the government over the problem is evolving Ed-tech industry that is providing good material, free lectures and mentoring sessions. The increasing internet penetration in India has boost up the industry further. Huge investment is made by the government in Ed-tech start-ups and also partnering to launch their own technology was worked upon which came as a saviour in covid-19 time. Overall the article studies how effectively the start-ups are growing and how teachers use this technology.

Millan, Neha & Burch, Patricia. (2018). Educational Technology in India: The Field and Teacher's Sense making. Contemporary Education Dialogue. 16. 097318491880318. 10.1177/0973184918803184.

The pandemic and lockdown in India has left each and every sector in very abrupt platform, where making and regularly amending policies would be the only way to sustain. The education sector is also hit by the countrywide shut and it has affected the education for almost 2 months were learning process was completely stopped.The management and ministry of education planned and came out for effective solution so that internet is not the only medium for education. TV channels were started for school education. Where internet could not reach this medium worked well. Ed tech industry played a key role for continuing the learning process and for everyone the perception was different someone find it convenient with online platform while some faced difficulty due to low internet connection. This article cleared what policies could make new normal even better according to student's view.

T. Muthuprasad, S. Aiswarya, K.S. Aditya, Girish K. Jha: Students' perception and preference for online education in India during COVID -19 pandemic, Social Sciences & Humanities Open, Volume 3, Issue 1, 2021, 100101, ISSN 2590-2911, https://doi.org/10.1016/j.ssaho.2020.100101.

Evolution of Ed-Tech Industry

The concept of online education and foundation of use of technology in education started back in mid-80's and was highlighted by mid-90's the concept of WWW world wide web and email was familiar to everyone. In later 90s, it was misunderstood by the computer subject based learning that was usually started in high convent schools in this mode it was computer rooted education, the learning from computer. And today what Ed- tech what actually meant was computer mediated communication, in which the instructor and student used computer as medium for teaching.

The 2000s marked the emergence of mobile phone and specialised technologies which favoured the concept of learning in context. In this period web services gained popularity. By 2010 MOOCs and online study and test material became popular and gained importance. It was starting of start-ups of Ed- tech to enter in this industry Byju Raveendran never thought think and learn would grow

to such height by coronavirus period. In 2015 application of new start-ups and online lectures and tutoring was accessible to each student. A decade ago Ed-tech industry didn't exist. getting accessible and affordable education was challenge as well as opportunity for leaders and that was grabbed and worked upon and now the Ed- tech industry is worth $1.96 billion by 2021.

Framework of Ed Tech in India

The Ed-tech framework in India is divided into three parts namely, educational learning and additional resource learning. Which further has sub categories of groups according to education.

It is illustrated as:

FRAMEWORK OF ED TECH IN INDIA
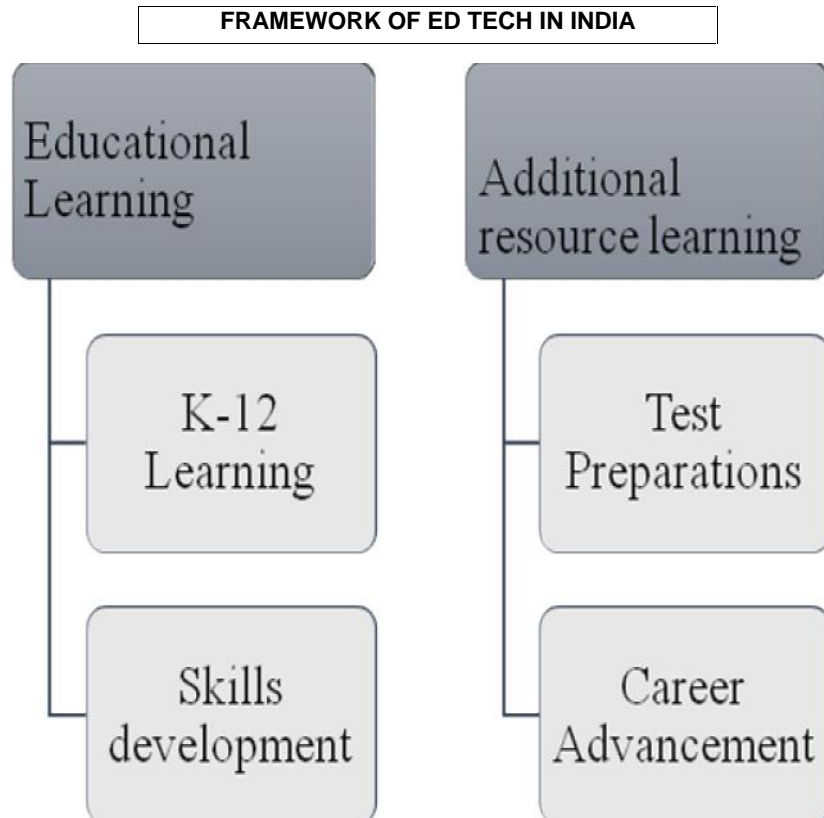
Educational Learning

This segment offers education in the form of lessons, tutoring, lectures and courses for students.

- K-12 Learning- Under this category, students in schools are undertaken, lessons and education are given to students from kindergarten to high school education class 12th and main focus is school syllabus from making up the basics to matching accounts debit credit side every chapter is covered in this category some of the top players in this category are BYJUs and Doubtnut.

- Skills development- Under this category, students pursuing undergraduate courses or post-graduation courses are targeted, the main motive for this category is to upskill the old skills or take up new skills that could help them in corporate world or to be more competitive in the market and to stand aside in the crowd. Coursera and Unacademy are top players of this category. New players which emerged in COVID-19 period targeted school students for keeping their front foot in programming.

Additional Resource Learning

Platform in this sections are aimed to provide supplementary education to the main education pursued by students.

- **Test Preparations:** Every year in India more than 15 lakh students register for NEET and other entrance exam. Figures are evident to show how much growth can be seen in this category. This category focus on preparation for competitive exams for students that are given after high school like NEET, JEE, CAT, UPSC, IBPS, SBI, etc. major players ruling this category are Topprs and Unacademy.
- **Career Advancement:** Career counselling and direction is what all students need to go ahead in their future. This segment focuses on giving personal counselling and guidance for students in various field to accomplish all their dreams. Major player of this fields are Career360 and Shiksha.com.

Many Ed-tech companies are operating in more than one category, because of the facts that each category is expecting their own growth and trends and there can been a surge of new start-up's entering various niche.

Top Players in the Industry

Indian ed tech initiated back in 2004 with the concept of smart classroom. By 2010 players like extra marks and khan academy came and made their place in market. From 2015 till now the game is completely changed over 125 million of funding was raised for more than 1000 start-ups. And it is expected to grow till 1.96billion by 2022 according to KPMG survey. till now many have entered this industry BYJUs hold a unicorn position in the market. Some of the top players are:

- **BYJUs:** it was an Ed-tech start up started back in 2011 by Byju Raveendran. It's a Bangalore based start-up and marked as unicorn in Indianmarket. it offers tablet education test preparation and regular test and analysis of those for students from 6 to 12th and other competitive exams like NEET, JEE CAT and other exams. Its total worth is 5.4billion and won many award for its fastest growth achieved.
- **Unacademy:** this start-up was also based from Bangalore it all started from a YouTube channel back then which was converted into a business model by Heemash Singh, Gaurav Munjal and Sachin Gupta. Till now it has delivered classes to more than 3 million students. Its aim is to give free education and runs on the model of plus subscription on site.
- **Upgrad-** this Ed-tech platform provides higher education courses in a very effective and well-built manner that it has captured a good market share. It was started back in 2015 by Ronnie Screwvala. It's a Mumbai based Ed- tech start-up and is ruling its own niche. It has a good expertise of industry experts and programmes framed by experts of IIT, which are actually effective for students.
- **Toppr:** It's a Mumbai based start-ups which focuses on exam preparation for school students it focuses on K-12 segment and exams like NEET, JEE.SAT, etc. it has paid subscription of test series and doubt clearing sessions for test, it also gives free access to last year question papers. It helps medical and engineering students and help to prepare for Olympiads. It was founded by Zishaan Hayath in 2013.

Future of K-12 and Post K-12 in Near Future

Till now education from classroom to virtual interaction has changed a lot, keeping aside the coronavirus crisis which lead to great development and growth of Ed-tech industry. It has gained a much popularity in past 10 years physical tutoring is being replaced by online video lectures and live classes. Still there is a large untapped market of Ed-tech industry which can receive immense growth due to the factors like increasing internet penetration in the country, move towards digitized content and increasing awareness among students. These factors can lead to a major growth in the industry and can even led to flourish of new start-ups in the country. The growth which can be seen is evident in both sectors k12 and postk12. The figures can be explained as:

- **The K12 Market Growth:** The growth in K12 Ed- tech market is expected to be $1.75billion by 2022. That's six time increased by $265million in 2019. The candidates getting enrolled up for the courses is expected to grow by 8% by 2022. And the most jubilant growth that can be seen is in the segment of 1-5 grade students.

Ed-Tech market growth K-12

(2019 (265MN); 2022 F(1700 MN))
Legend: Grade 1-5, Grade 6-8, Grade 9-12
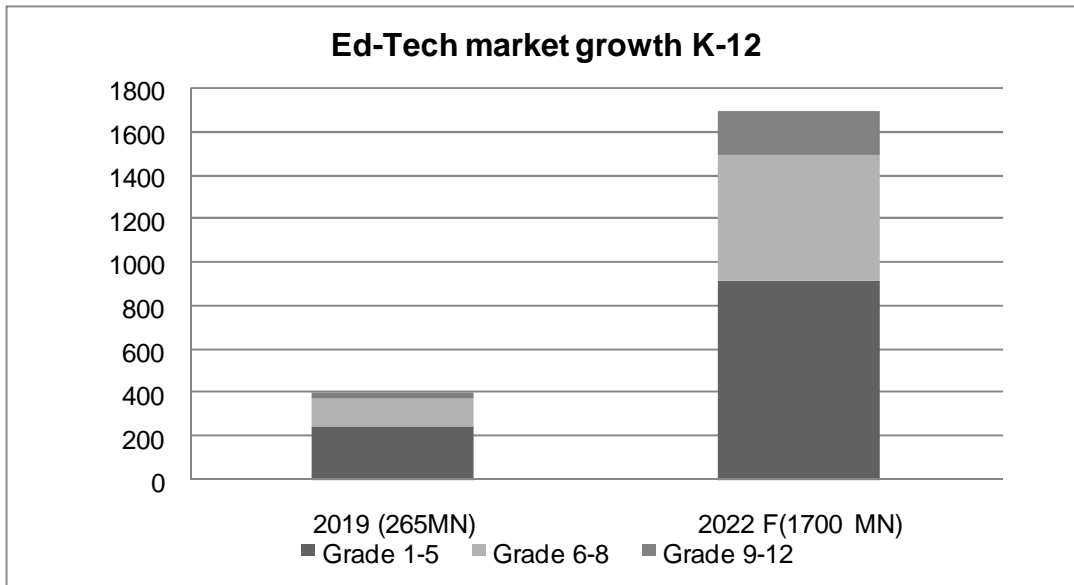
Source: EdTech-Report-Omidyar-V6 (20200527)

- **Post K12 Ed-tech Industry:** Post K12 industry is categorised into four segments which helps students to fulfil different needs of education: test preparation, career advancement, higher education and technical skills. There is a great opportunity for expansion in this sector and it is expected to grow till $1.75billion in sales by 2022 and major part of this market value is contributed from higher education sector.

Ed-Tech market growth K-12

(2019 (470MN); 2022 (1765MN))
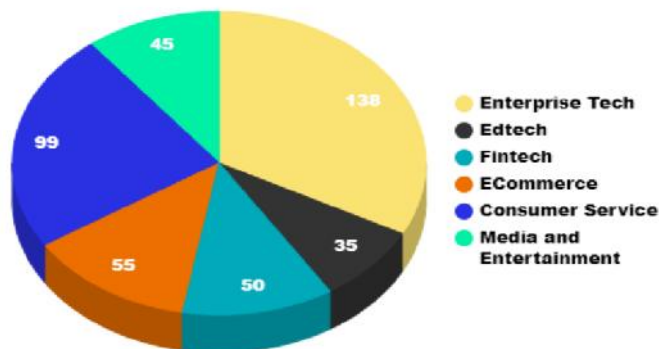Legend: Higher education, Technical Skilling, Test prepration
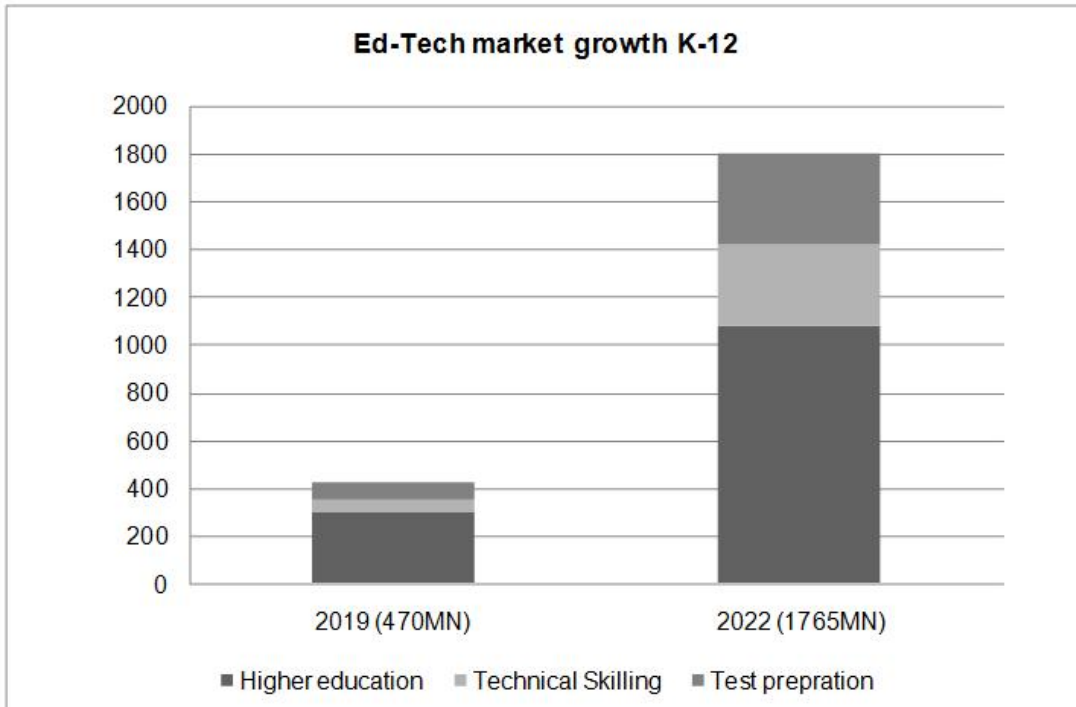
Source: Ed-Tech-Report-Omidyar-V6 (20200527)

By 2022 Indian Ed- tech start-ups industry will see evident growth and a total of 6.3 times growth in K12 segment and 3.7 times growth in POST K12 segment. Which will surely flourish the overall Indian economy and development of people.

Major Accession in Ed- Tech Industry

Initial public offering was also evident in IndianEd- tech ecosystem. Merger and acquisition was considered one of the strategy to exit from this market. Merger and acquisitions are usually practised to either get a growing customer base of a new company, or to take over a unique selling proposition of a start-ups which is readily accepted in the market. As per the reports of datalabs 35Ed-tech start-ups underwent Merger and acquisitions. And most of them were under top players of the Indian market BYJUs. The report further explains that from initial Ed- tech innovation till now there are 4450 Ed- tech start-up's that are still operating in the industry.

Mergers and Acqusitions in Ed Tech

Legend:
- Enterprise Tech — 138
- Edtech — 35
- Fintech — 50
- ECommerce — 55
- Consumer Service — 99
- Media and Entertainment — 45

Source: The Future of indias $2bBN ed tech opportunity report 2020

Advantages

Technology has always been a bliss for learners. It has given new ways and methods of learning for each and every student from beginner to trained. The large use of mobile and increased internet penetration in India has made Ed- tech to grow more finely. Some of the advantages of Ed- tech are:

- **Save of Energy and Time:** Its well-known to everyone that "Smart work is better than Hard work". Use of technology has made everything easy to handle and keep it in organised manner. When a person is well known and has knowledge to use technology in right way the work can be completed in very less time. The task which was done through pen and paper was tedious and it took a lot of effort to do the same task. Hence its evident that use of technology can help complete much more task than usual process.

- **Evolution of Stagnant System:** Changes are very essential in life; may it be the life or a system or technology if a person doesn't move with time he is left behind from the crowd. The Indian education system experienced a great lag when coronavirus hit the country, and educational institute were shut for more than 6 months, by the time online classes could start. That's why the change the revolution of education system towards online mode was very important. The system has benefitted the whole country and learners to get knowledge without physical education and just by the user friendly technology and devices.

- **Continued Learning Cycle:** Learning is an ongoing process. Even if a person is settled with his job the zeal of learning never stops. There is no age to acquire education. The educational technology has made it even easier to get knowledge. Anyone can learn anything sitting anywhere in the world from any institute. Ed- tech industry provides high quality learning and assessment that are certified and can be used for different purposes.

Limitation of Ed Tech

When technology is a bliss if its misused it becomes boon for learners. Ed- tech is technology based learning that targets different group of people from peers to teenagers and undergraduate students. It takes a second to click on another tab and misuse of technology is very easy. Some of the limitation of technology are:

- **Misuse of Technology**: Smart phones, tablets, computer and technologies are often used for fun and enjoyment purposes and not learning. It can be evidently said that text books are only best friend for learners. This may not be in all the cases but this fact cannot be ignored that misuse can happen of technology. When social media notification continuously beeps in between the class, it becomes difficult to focus on online lectures.

- **Instructional Challenges:** "Untrained person takes up to six time longer to perform than a trained person." Teachers also need regular training to teach and give knowledge to the students. It's evident that from a long time the education system of India is working on same methods and stagnant process are used. This never lead to train the teachers with new technology. Teachers find it difficult to deliver lectures through technology.

When teaching and learning are kept on the same thing, it has both advantages and disadvantages. But if it's used in a right way it can be fruitful to learners.

Conclusion

Education and technology are going hand in hand in this era. Most of the classes are adopting new technologies to revamp their education system. The children are readily accepting these technologies in their daily routine so that it becomes part of normal learning procedure.

The application of technology in education is very essential and to handle such tedious task and hassle among the daily work technology is required to do not the hard work but the smarter one. The Ed tech industry is not only making the work easy, but it also helps to continue learning process. Effective assessment system, giving solution to problems and also solving doubts of students for higher studies.

There are many benefits for technology but if the base is not strong the building cannot hold for long, the teachers need to get trained before being introduced to new way of technology, lack of research and content, misuse of technology are some of the disadvantages that can be curbed up with proper knowledge and bit of guidance.

There are 270MN students enrolled for K12 segment of Ed- tech in India if its separate it could constitute 5th most populated country in the world. These are served by government schools, private schools and institutions, this will further grow because of increasing literacy rate, internet penetration in India and electrification in rural areas. There are already established players in the market with huge market share but the industry is on growth stage and there are ample of opportunities for start-ups to enter the industry and seize the opportunity to grow.

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