Challenges and Opportunities for Online Education in India
by

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Abstract

Considering the rapid change in technology, inevitable changes in education sector are going to happen. A lot or research is taking place to understand the pros and cons of online education in comparison to face to face education. In India, there are a lot of challenges and opportunities for online education. With a comprehensive literature review, in this paper, we have identified key factors which will boost online education in India. We have identified internet penetration; low cost of online education, ease of doing course, initiative by government, employer's recognition and bridging gap are the key factors the growth of online education. There are certain factors which are creating a hindrance in the growth which include insufficient digital infrastructure, credibility and language used in online education. With the increase in number of internet users in India, the paper also looks into what opportunities are there in future in education sector.

Keywords: Online education; Face to face education; Challenges and opportunities; Digital infrastructure

Introduction

The growth of technology has brought tremendous change in the almost every sphere of life. Technology has also impacted the process of education. The face to face education has experienced a remarkable change in the last 10 years. Although face to face education is still considered the norm, but acceptance of online courses is increasing in the field of management and engineering. Some of the reasons for the exponential growth of online education is that it is instant, online, anywhere accessible, self-driven and on the go.

The major reason for the phenomenal growth in online education is MOOCs (Massive Open online courses). According to Kaplan, Andreas M.; Haenlein, Michael (2016), MOOCs are online courses which are aimed at unlimited participation and offer open access through the web. MOOCs have gained lot of popularity since the time of its development in 2008. Over 800 universities around the world have launched at least one MOOC till date. According to report by Class Central, there were 83 million students who had registered for MOOCs by December, 2017.The list of top five MOOC provider by registered users include Coursera, edX, XuetangX, Udacity and FutureLearn.

The government is supporting online education in India because of its potential to improve education quality and reach through the Digital India initiative. Government of India in

Association with Ministry of HRD has initiated a programme named SWAYAM (Study Webs of Active –Learning for Young Aspiring Minds) that is designed to achieve the three fundamental objectives of Education Policy i.e., access, equity and quality. The main objectives of this effort are to take the quality teaching learning resources to all, including those who cannot afford. This program SWAYAM seeks to provide education to those students who are not yet aware of the digital revolution taking place and are still not able to join the mainstream of the knowledge economy. Nearly 2000 online courses are offered through Swayam and approximately 150 million students across the globe are enrolled in different courses.

Review of Literature

There are many definitions of online learning. Khan (1997) has defined online learning as the delivery of instruction to a remote audience using the web as an intermediary. Elaine Allen, Jeff Seaman (2011) have defined Online courses as those in which minimum 80 percent of the course content is delivered online and Face-to-face instruction are those courses in which less than 30 percent of the content is delivered online.

According to Stack, Steven Dr. (2015), online education has proliferated in the last decade. His research has not found any major difference in the scores of the students taking online course and face to face classes.

Another research done by Dr. Fahad N. Al-FAHAD investigates the students' attitudes and perceptions of 186 University Student's from different colleges towards effectiveness of mobile learning in their studies. Their research findings indicate that students perceive Mobile technologies as an effective tool in improving their communication and learning.

Herman, T., & Banister, S. had done a research on comparison of cost and learning outcomes of traditional and Online coursework. Their findings shows that online course engages students in the learning process, supports strong student learning outcomes, and saves cost for the university also.

According to a report by Google and KPMG, the online education market in India at the end of December, 2016 was $247 million and it will reach $1.96 billion by 2021. Also India's online education market is the second largest market after US. The findings of the report also states that the paid user base for online education services will also grow at least by six times i.e. approximately 9.6 million users by 2021.

Drivers of online education growth in India

Acceptability of online education in India is growing at an exponential rate because of the following factors:
1. Internet penetration in India

According to a report by IAMAI and Kantar IMRB, there were 481 million users of internet in India and this is growing at the rate of 11.34%. Also internet penetration in urban India was 64.84% while in rural India it was 20.26% till December, 2017. The main reason for the growth of internet users in India is the increase in number of smart phone users. According to a report by eMarketer, the US-based market research firm, there were nearly 291.6 million smart phone users in India by the December, 2017. They are expecting that this number will grow by 15.6% to reach 337 million by the end of 2018. The key factors behind this growth are the upsurge in smart phone usage and availability of more affordable smart phones. Availability of internet at fast speed and at very affordable price is the reason for growth in mobile internet user. Because of internet, world class education becomes easily accessible to urban and rural population.

2. Online education saves money and time

As online education is through internet, so it can be easily accessed anywhere, anytime. You can access the content early morning, late evening, at home, in cafeteria, or on the train. As the content is generally preloaded, so you can download the lectures / videos and watch them at your convenience time and again. Also cost of online education is very low in comparison to face to face education. Also there is a great savings on hostel and transportation fees. Since all the content is available online, so you need not buy books also.

3. Ease of doing courses for working professionals

Online education offers great opportunity for working professionals as they cannot leave their jobs to pursue higher education. Online education offers them a variety of courses to choose from and this can help in finding new career options for them. This is also supported by the report from Google and KPMG which states that reskilling and online certification is the biggest sector in online education. Another online platform 'upgrad' is offering online courses on Big Data and are also providing jobs in this area.

4. Initiative by Government of India

Government of India is also taking initiatives to promote online education. They have started Swayam through which they are offering free education and certification courses to all. Main objective of this initiative is to provide quality education for which they have tied up with IITs, IIMs and NPTEL. They are also tying up with universities by which student can earn credit though online courses. In order to establish digital infrastructure in India, the government has also launched National Optical Fiber Network. The main objective of this initiative is to increase broadband connectivity and create a fast network. Government has started online National Digital Library in which 17 million digital books & journals are available. There are 32 lakhs registered users are accessing NDL free of cost. Government has provided Wi-Fi facility to all the central universities.

5. Gaining recognition among employers

Today most of the universities in US are offering at least one online course. In India also many of the prestigious institutions are offering online courses where otherwise admission is very difficult and costly. Online courses done from well respected universities/ institutions are accepted by employers. Employers also understand that online education requires self-discipline, drive and other skills that they are looking for in a candidate. So proper care should be taken in selecting the university from where you are doing course. Also there are hundreds of options to

choose from. Right selection from right educational institute can help you make right career growth.

6. Bridge the gap between education level and industry expectations

According to a report in The World Employment and Social Outlook – Trends, there were 18.3 million Indians unemployed in 2017 and it is projected to increase by 18.9 million by the year 2019. According to a report, India's working age population is increasing and is expected to reach 64% of the population by 2021. Do you think it is because of sufficient job opportunities are not available in India? Nascom says 6 million people will be required in cyber security by 2022. According to Tech Mahindra CEO C P Gurnani, 94% of IT graduates are not fit for hiring. According to opinion given by Sanjay Bansal, 58% of unemployed graduates and majority of the unemployed post-graduates (62%) states that jobs matching their skill and education are not available and this is the primary reason for their unemployment. So online education is one of the alternatives to bridge the gap between what industries expect and what the educational institutes are delivering. Online education offers an opportunity to enhance skills through advance courses available in different domains.

Challenges in Online education

There are a lot of challenges faced by people in online education in India. Some of these challenges which need to be overcome are:

1. Insufficient digital infrastructure

Although Government of India is taking initiative to develop digital infrastructure but a lot need to be done in this direction. High speed internet and stable power supply are the biggest problem. India stands 89th worldwide on internet speed and stability. According to the report of World Economic Forum, only 15 percent of the households have access to the Internet, and mobile broadband remains accessible to very few i.e. only 5.5 subscriptions for every 100 people. Further, currently reach of broadband is just about 600 corridors, largely in and around the top 50 to 100 Indian cities, leaving rural areas with poor connectivity. 5G networks technology is the requirement of today's which will increase the speed of downloading the data.

2. Limited Social interaction

Since online education can be accessed at home or any other convenient place, there is very limited direct interaction with the teacher and other people doing the course. According to Dhirendra Kumar (2010), especially those courses which are self paced, there is very less discussion among the peers. Most of the discussion takes place through e mail, chat room or discussion groups. There isn't any campus atmosphere to improve social interaction. So you are not able to develop any social links which do help in the career growth.

3. Questionable credibility of degrees

Although industry has started recognizing online degrees, there are still a lot of fraudulent and non-accredited degrees being offered online. The number of scam operators is rising who are offering fake certificated which does not have any credentials. These scams not only losses the credibility of the online certificates but also the faith of prospective employer in online programs.

4. Motivation

Some students need the push to get to the class. In case of self paced online programmes, student may procrastinate. The dropout rate in online education is very high. Self motivation and discipline is required to complete the assignments and upload them timely. If you have difficulty working independently, staying organized and meeting deadlines, you might struggle in an online program.

5. Language of the Course

India is a multi-linguistic country, and a vast majority of the population comes from rural areas. The content offered by most of the online courses is in English. Hence, those students who are not able to speak English struggle with the availability of language content. Hence, it is the duty of computer professionals, educators, administrators, language content creators, and content disseminators, to sit together and give a viable framework and standard solution to the learners knowing only Indian languages.

Opportunities in Online Education

Change in technology is offering many opportunities for all stakeholders in the online education sector which includes entrepreneurs, education providers and learners. Some of the factors offering different opportunities in this domain include:

1. Mobile Learning

According to a report in Stastia (2018), in the year 2017 there were 320.57 million people who accessed the internet through their mobile phone. This figure is projected to increase to 462.26 million by the year 2021. The surge in users is credited to availability of 4G internet and smart phones at very low price. Going forward, IAMAI hopes that the National Telecom Policy (NTP) 2018, which is focusing on new technologies like 5G, will promote better quality data services at more affordable prices and help address the digital divides that will promote internet penetration in the rural areas through mobile internet. According to report by Zenith, mobile devices will account for 73 per cent of time spent using the internet in 2018. So the vast majority of students in future will have access to e-learning through mobile phones.

2. Investor's Interest

A large number of entrepreneurs are venturing into online education as this is expected to see an uptrend in the next 5 years thanks to the Digital India campaign, the cultural importance given to education and falling mobile data prices. The Chang Zuckerberg Initiative has invested $50 million in Byju's, Bertelsmann India has invested $8.2 million in Eruditus, and Kaizen Management Advisors and DeVry Inc. have put in $10 million in EduPristine. Khan Academy is a non profit organization which receives financial support from philanthropic organizations like The Bill and Melinda Gates Foundation, Google and Netflix founder Reed Hastings. Online learning platform Unacademy also raised $11.5 million of funding led by Sequoia India and SAIF Partners; and Eruditus Executive Education, a provider of executive education programmes, had raised $8 million funding from Bertelsmann India Investments. So, the online

education sector will continue to spark more interest among entrepreneurs, investors and attract more funding.

3. Blended Model

There will be convergence of the offline education and online education in future. This concept of blended learning combines online digital media with traditional classroom methods. It requires the physical presence of both teacher and student, but student has some control over time, place, path, or pace. This model will take advantage of both face-to-face classroom practices combined with computer-mediated activities. In future, there will be virtual classrooms where face to face offline pedagogy will be aided by digital courses on practical knowledge and soft skills.

4. New Courses

Today the most popular courses in online education are related to IT which includes subjects like big data, cloud computing, and digital marketing. But in future demand for different types of courses in unexpected subjects such as culinary management, photography, personality development, forensic science, cyber law, etc. will increase.

Conclusion

Online education can change the whole future scenario in education if it can be implemented in joint collaboration with industry, universities and government. Drastic changes in course curriculum are required to bridge the gap so that students are industry ready after passing out. Education process needs to be changed by making it more practical with the use of technology. Also course should be designed in different language to increase their reach and more opportunities for youth of rural India. Innovations are required to design ways to increase the social skills of online learners.

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