MOOCs: Indian Scenario

Bhushan W. Ambekar

Librarian, Karmaveer Dadasaheb Deotale Mahavidyalaya, Chamorshi. Dist. Gadchroli.

Abstract:

In some few years the enrolment is increased tremendously in MOOCs in India. After US India is dominating growth in enrolment. To fulfill the requirements of enrolments of Indian learner Govt. of India had taken some initiatives providing platform like NPTEL, mooKIT, IITBX, and SWAYAM. Implementing MOOCs in India there are some challenges which are discuss in this paper. With the launch of SWAYAM, some of these issues and challenges are addressed.

Keywords: *MOOCs, MOOC in India, NPTEL, MooKIT, SWAYAM.*

Introduction

There is tremendous change in the learning processes of learner due to advent of Information and communication technology and World Wide Web (WWW). First difference occurs when distance education which brought changes in delivery model of higher education by making possible for user to learn without attending classes with using specific course material delivered them. Now a days e-learning come into existence. Due to emergence of web 2.0 and Internet online learning is very popular and spreads all over rapidly in online education system. In year 2012 we saw a new model of delivery of higher education with world most prestigious institutions and Universities known as "Massive Open Online Courses" i.e., MOOCs, which gives emergence as one of the interesting platforms which has gaining popularity in all disciplines in very short time span with depth impact on online education system in Higher Education With the boon of Digital age learning is converted into e-learning. MOOC is nothing but Massive Open Online Courses which is made available to global learner crossing the barrier of Space, language, money. "The term MOOC was coined in 2008 by Dave Cormier to describe the Connectivism and Connective Knowledge (CCK08) course led by George Siemens and Stephen Downes" (Massive open online course, n.d.).[1]

Some Definition of MOOCS is:

"A course of study made available over the Internet without charge to a very large number of people anyone who decides to take a MOOC simply logs on to the website and signs up" Definition from Oxford Press." [2]

"MOOCs are courses designed for large numbers of participants that can be accessed by anyone anywhere as long as they have an internet connection, are open to everyone without entry qualifications, and offer a full/complete course experience online for free." [3]

"A MOOC is an online e-course with the option of free registration, a publicly shared curriculum, and open ended outcomes.

MOOCs integrate social networking, accessible online resources, and are facilitated by leading practitioners in the field of study. Most significantly, MOOCs build on the engagement of learners who self-organize their participation according to learning goals, knowledge, skills, and common interests." [4]

So, we can say that MOOC as massive open online courses made available to masses for free (can charged for certificate) in online distance mode. One of the most important things of these courses is that being offered online also for free of any fees learner can follow them at anytime, anywhere and get necessary education and skills with a certificate of a reputed Institution/University which otherwise the learner even could not dream due to fee, time, distance or other constraints of getting admission to reputed Universities or Institution.

Some of Common feature of MOOCs:

To satisfy Label of Massive: According to Wikipedia definition there may be unlimited number of participants in MOOCs course. It is fact that for smooth conduct of the course we have to set maximum limit of participants and that is depend upon the resources and technology available with us. For admission of the course, we have to set some criteria like "First come, first served" since it is open course.

To satisfy the Label Open: It describes the fact that it is open for all without discrimination except for any special requirement for specialized course. Course can be accessed by anyone and any whereas long as they have an internet connection.

To satisfy the label course: MOOCs offers different level of courses with time limit and structure of the course like certificate, degree or diploma.

Types of MOOCs:

MOOCs are usually classified into CMOOCs and XMOOCs.

CMOOCs — these are based on connectivism. cMOOCs is based on a network platform and when the learner decided to learn he or she can used social media platform. There is no teacher or tutor and defined syllabus. As well as there no formal assessment is possible hence the learner have to themselves judge what and how they have learned. It is a creation for emphasizing connecting learners called as connectivist MOOC and build upon the idea and platform originally visualized by George Siemens.

XMOOCs — They have their background in the evolution of open courseware and open educational resources. XMOOCs are generally offered by universities in collaboration with a commercial organization/company whose aim is to gain profit. XMOOCs are online versions of traditional learning formats (lecture, instruction, discussion, etc.) on proprietary specialist software platforms owned by independent firms.

MOOCs Potentials in India:

We have seen in recent years there is tremendous hike in the enrolment by Indian students in MOOCs all over the world. Our country is the leading country among the world in terms of enrolment of courses offered by many MOOCs provider including edX, Coursera and Udacity.

After United States India is second largest user of the edX, form the class central the growth of the learner is increased in 2019. The total number of learners on edX grew to 24 million, up from 18 million last year. Before that, edX was gaining 4 million

learners a year.[5] Same from Udacity and Coursera grew up there learner.

"There is a lot of talent in India, but often there are not enough slots for qualified students in colleges, and not enough financial aid... EdX changes all of that..." Anant Agarwal CEO edX[6] edX has more than 6 million students from all over the world and more than 19 million course the students are enrolled. This is because of commitment of MOOCs provider to provide online education and desire to give the best to the student. Till MOOCs is emerging field and many more have to do. According to edX CEO Anant Agrawal India is the bigger market for MOOCs than US.

Facts about online Education in India:[6]

Indian online Education market was $ 247 million in 2016 and expected to grow $ 1.96 billion in 2021. The compound annual growth rate is 52%.

The students enrolled for various courses for eLearning is about 1.6 Million in 2016, which expected to grow about 9.6 Million in 2021.

Near about 48% of population in India is about 1540 age group which is high acceptability in e- learning student group. Hence the there is good market for e-learning.

Due to cost effectiveness of e-learning, e-learning is more preferred than classroom teaching since classroom teaching will expected to grow 175% increase.

MOOCs Platforms in INDIA:

The Indian Government has taken many initiatives to provide and increasing support to the concept of open e-learning. The Indian govt. initially decided to provide open resources like repositories, libraries, e-books and made educational environment. These efforts made in terms of establishment of National Digital Repository of IGNOU, Sakshant giving e-content and VidyaVaheni integrating IT into the curriculum of rural schools by giving interactive training and development for communication. All the efforts made by Govt. to established these department reachable to many more learner. Some initiatives like Education and Research Network (ERNET) connecting various schools and colleges. The satellite launched for education in India i.e., EDUSAT, For dissemination of educational knowledge consortium of Educational Communication (CEC), For connecting University Libraries Information and Library Network Centre (INFLIBNET) These are the few examples for initiatives towards open education but till education with information technology was out of their reach. In 2013, ePG Pathshala run especially for postgraduate course launched by govt. and it is manage by INFLIBNET of UGC. Also, some more course providers are Bijus, eSaral, Vadantu, Apna Course and myBskool.com, these are run in India. But these are being run for profit and clearly, providing open education is not among their motives. Thus govt. wants to set to develop some online courses on their own platforms. Now a day in India some Universities and Institution have the facilities to start or support such initiative, some of these organizations are given below.

National Programme on Technology Enhanced Learning (NPTEL)

It is started in 2003 by seven Indian institutes of technologies along with Indian instituted of Science Bangalore. Its uses the open source technology for offering courses. These courses are powered by Course Builder which is open source

platform of Google that runs on App Engine and Compute Engine. This programme offers postgraduate and undergraduate courses of engineering. In its first phase 235 courses are develop in web/video format are developed. In the second phase (20092014) another 600 web and video courses are developed by NPTEL. On NPTEL website it is largest online repository in the world of courses in engineering, basic Science, humanities and Social Sciences subjects.[7]

Indian regulatory Educational bodies like UGC and AICTE are continually encouraging the faculty member of colleges and Educational bodies like Universities to adopt online course for credit transfer. Now a day's Students are using this programme to prepare for GATE exam and higher studies also.

mooKIT:

It is open source MOOC management software developed and designed by IIT Kanpur in 2014. It is build up in such a way that its highly customizable and cost effective at any scale.[8]

Main features of mooKIT is

- Adaptable to varying bandwidth: This feature is very helpful to rural area students where internet connectivity is low which is main constrain in India.
- Discussion: Forums for in depth discussion, quick and real time interactions.
- Internationalization: No barrier of language
- Assessments: for evaluation
- Certification
- Customizable: Can be customized according to local needs.
- Cost effective

- Progressive app
- Digital Certification

IITBombayX:

It is nonprofit MOOC platform developed by IIT Bombay using the open source platform in 2014 with funding from National Mission on Education through Information and Communication technology and Ministry of Human Resource Development, Govt. of India.[9]

IITBombayX is operated in the basic version of the blended learning MOOC with cooperation with edX organization. Blended learning is nothing but it is combination of face-to-face classroom teaching and online education method. This model is also known as "Blended Learning – MOOC Model of IIT Bombay (BLMM)". In this learning course completion is compulsory not optional.

IITBombayX offer different types of MOOCs for various types of learning needs

- EduMOOCs
- SkillMOOCs
- TechMOOCs
- LifeMOOCs

Goals of IITBombayX:

- Wherever there is internet access there is quality education should spread.
- Quality education for learner in remote area.
- To improve quality education in campus and online.
- To updated and advance teaching and learning with help of research work.

Principles of IIT Bombay X:

- It is nonprofit organization.
- It uses opensource platform

- Collaborative efforts are taken

SWAYAM:

SWAYAM is a Hindi language acronym that stands for "Study Webs of Active Learning for Young Aspiring Minds". SWAYAM programme was developed by Government of India to gate quality education accessible to all as describer in Indian Education policy. The main aim of Swayam to access, equality and quality. It is developed by Ministry of Human Resources and All Indian Council of Technical Education (AICTE) with the help of IIT Madras with the help of Google Inc. and Persistent Systems Ltd. to achieve their cardinal Principles of Education policy. All the courses available on this platform are interactive, made by the best teachers in the country and available to any learner. More than 1,000 specially chosen faculty and teachers from across the country have hard work for preparing these courses. This platform is competent of hosting 2000 courses and 80000 hours of learning with covering School, Undergraduate, postgraduate, engineering, law and other professional courses.

Challenges for MOOCs in INDIA:

India is very big market for MOOCs provider. Some of the major constraints regarding the implementation of MOOCs in India are, Digital divide and low rate of digital literacy and lack of power supply, lack of technological infrastructure, huge amount of investment, diverse population, Difference in educational status between MOOCs and traditional mode of formal education, Centralized mostly within the renowned and well- developed universities, Lack of quality teachers.

- **Digital Divide and low rate of digital literacy and power supply:** National Sample Survey Organization (2018), among the poorest 20 percent households, only 2.7 percent have access to a computer and 8.9 percent to internet facilities. In the case of the top 20 percent households, the proportions are 27.6 percent and 50.5 percent, respectively. These figures make it obvious that while moving classrooms online might ensure transferring information and guidance, they cannot be effective in ensuring social interaction unless the existing inequities are addressed. In 2018, The Telecom Regulatory Authority of India, internet density in India stood at about 49% of which 25% live in rural areas and 98% in urban area. A nationwide survey of villages in India by the Ministry of Rural Development in 201718, showed that 16 percent of India's households received one to eight hours of electricity daily, 33 percent got 912 hours and only 47 percent received more than 12 hours of power supply daily. [10]

- **Lack of technological infrastructure:** High speed internet connection is required for accessing the content delivered by provider in their courses. Developing country like India, computer and Internet comes under luxury. Till now a date GST on Internet and computer is 18% charged by Govt. of India. And also, this availability mainly in urban areas only.

- India is widely diversified country with different languages are spoken. MOOCs can be accepted on a common language like English. On another hand English is one of the languages which is difficult to

understand many more student in India. So, language is one of the barriers for promotion of MOOCs.

- **Quality:** In India there is lack of quality of teacher and the technical staff. There are also huge vacancies of the teacher and technical staff among the higher education.

Conclusion:

MOOCs is an effective tool to offer quality education in a diversified and open way and also is a major rising power to compete with the traditional form of regular education in schools, colleges, and universities. MOOC platforms are offering online course worldwide and India is no exception. There are various platforms that are being used in India for offering the MOOC courses, such as, NPTEL, mooKIT, IITBX, and SWAYAM. SWAYAM is launched very in recent times. Therefore, to set up a ground for understanding including theoretical and technical aspects, a discussion is provided about each of these platforms with their features. Indian learner should develop technical skill among themselves to acquire science and technology education accessible to masses. The MOOCs is rapidly increasing among Indians and they have opted MOOCs for making global classrooms a reality. For Indians learner, who has a desire for quality based western education, MOOCs are proved outstanding in this direction.

References

1. Retrieve on 28 September 2020 at 3.28AM from https://en.wikipedia.org/wiki/Massive_open_online_course.
2. Retrieve on 28 September 2020 at 3.36 AM from https://www.google.com/search?q=definition+of+ moocs&oq=dafination+of+MOOC &aqs=chrome.1.69i57j0l7.14507j1j7&sourceid=chrome&ie=UTF8
3. Retrieve on 28 Sep 2020 at 3.42AM from https://www.openuped.eu/images/docs/Definition_Massive_Open_Online_Courses.pdf
4. Retrieve on 2nd Oct 2020 at 5.23AM from https://plexuss.com/news/article/benefitsofmoocs
5. Retrieve on 12th Oct 2020 at 4.28AM from https://www.classcentral.com/report/edx2019yearre view/
6. Retrieve on 12th Oct 2020 at 4.39AM from https://www.huffingtonpost.in/dipindamodharan/ourmissionistodemocra_b_8607538.html
7. Retrieve on 12th Oct 2020 at 5.39AM from https://eduxpert.in/onlineeducationindia/
8. Retrieve 4th Oct 2020 at 3.24PM from https://nptel.ac.in/about_nptel.html
9. Retrieve 13th Oct 2020 at 4.37 AM from https://www.mookit.in/
10. Retrive 13th Oct 2020 at 5.11 AM from https://www.iitbombayx.in/about
11. Retrieve 15th Oct 2020 at 4.35 AM from https://www.indialegallive.com/specialstory/indias digitaldivide/
12. Fizul, Nisha and Santhil, V **Article** *in* DESIDOC Journal of Library & Information Technology · April 2015, MOOCs: Changing Trend Towards Open Distance Learning with Special Reference to India

13. Chaunhan, Jyoti, International Journal of Computer Trends and Technology (IJCTT) – Volume 49 Issue 2 July 2017, An overview of MOOCs in INDIA.