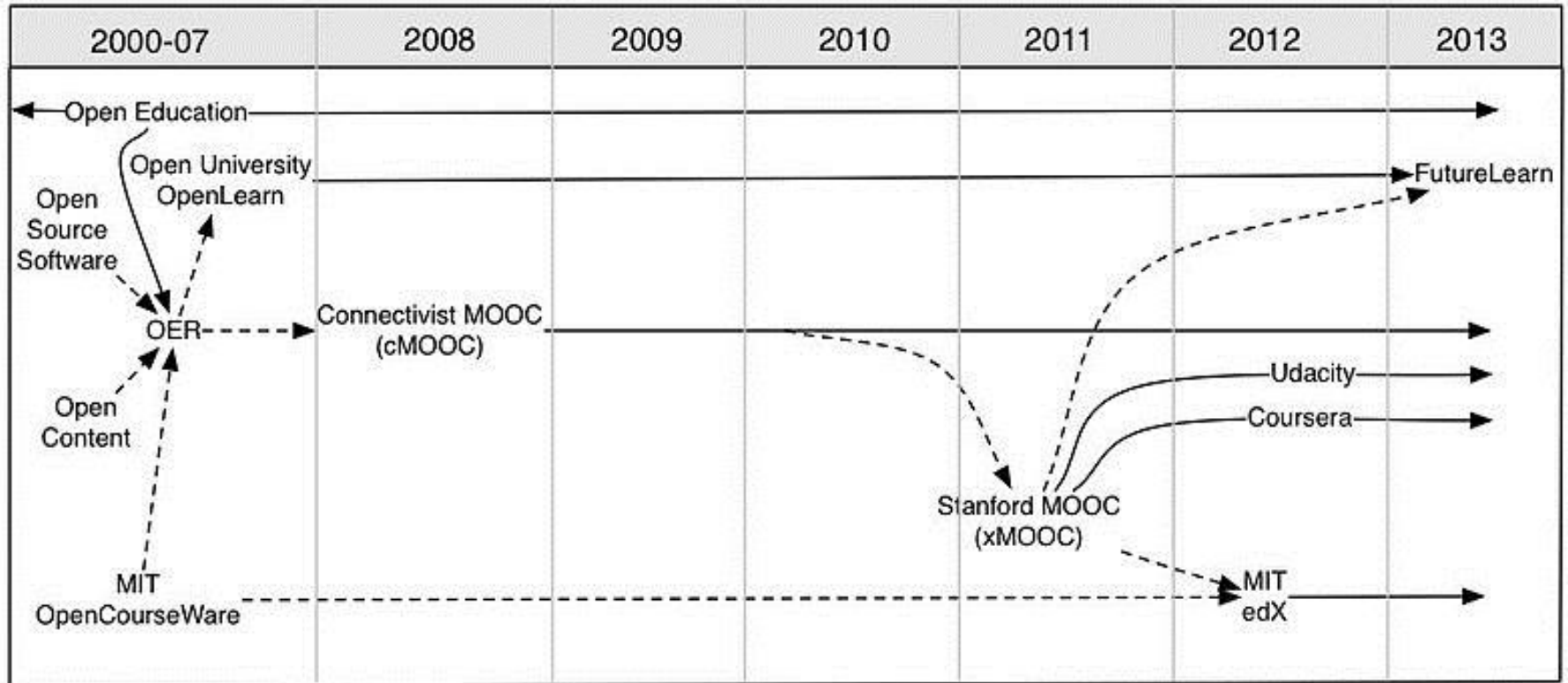


MASSIVE OPEN ONLINE COURSES AS DISRUPTIVE INNOVATION: POSSIBILITY TO HELP EDUCATIONAL CHALLENGES IN CURRENT TIMES?

New Delhi 3
October, 2015

Self - learning in Digital Era

MOOC : history in a chart



-----> An influence
—————> Directly related

Source: Yuan and Powel (2013)

Disruptive innovation theory



Christensen (2003) defined two types of innovation:

- Sustaining – improving the existing system
- Disruptive – creates an entirely new market

MOOC : facts worth mentioning

- **cMOOC** ('c' = connectivist; blogs, learning communities, social media, etc.)
- represent nature of MOOCs - involve groups of people learning together, promote interaction
- all participants are considered teachers and learners
- **xMOOC** (edX, Coursera, and Udacity provide xMOOCs)
- S. Downes (co-founder of one of the first MOOCs) significantly broaden the number of students who can be exposed to university-level courses
 - critics argue that xMOOCs are inferior to the university courses because they eliminate teacher-student interactions and involve limited student-student interactions

MOOC : facts worth mentioning

Table: Attributes of major MOOC providers

Initiatives	For profit	Free to access	Certification fee	Institutional credits
EdX	No	Yes	Yes	No
Coursera	Yes	Yes	Yes	Partial
Udacity	Yes	No	Yes	Partial
Udemy	Yes	Partial	Yes	Partial
P2PU	No	Yes	No	No

Source: Yuan and Powel, 2013

MOOC : Statistics (Coursera, 2013)

STUDENT EMPLOYMENT STATUS



Top 10 countries by user base

1. United States, 31.7%
2. India, 8.4%
3. United Kingdom, 4.3%
4. Brazil, 3.8%
5. Canada, 3.5%
6. Spain, 3.1%
7. China, 2.9%
8. Mexico, 2.2%
9. Australia, 2.0%
10. Russia, 2.0%

(By percentage of the user base)

Countries with university partner

Australia
Canada
China
Denmark
France
Germany
Israel
Italy
Japan
Mexico

Netherlands
Russia
Singapore
South Korea
Spain
Switzerland
Taiwan
Turkey
United Kingdom
United States

TOTAL COURSE ENROLLMENTS



19.1 Million

BREAKDOWN OF COURSES

Top 5 most popular course subjects

- | | |
|-------------------------------|-----------|
| 1. Computer Science | 9,428,982 |
| 2. Humanities | 3,861,497 |
| 3. Business & Management | 3,578,064 |
| 4. Economics & Finance | 3,302,253 |
| 5. Information, Tech & Design | 2,399,790 |

(By total number of enrollees)



NUMBER OF QUIZZES SUBMITTED



27,354,590

MOOC : drivers and trends

- Globalisation in higher education (HE);
- Worldwide growth and increasing demand for access to HE;
- Emergence of the learning sciences and their application to educational practice;
- Movement toward competency-based education;
- Changing learner demographics, experience and demands of the rapidly increasing numbers of lifelong learners;
- Highly increased access to personal technology and social media;
- The need for changes in costs, affordability and economic models for higher education;
- New business models that effectively combine instructional quality, lower cost, and increased access through unlimited scalability.

MOOC : challenges and barriers

- ❑ Excellent signup rates, but very low completion rates;
- ❑ High possibility to cheat;
- ❑ Inaccessibility in developing countries, due to the lack of infrastructure;
- ❑ Lack time to study, due to various reasons (work, family, leisure);
- ❑ Lack of faculty support, lack of face-to-face interaction with teachers and other students, and lack of access to laboratories, research facilities and other resources.
- ❑ Lack of advanced study skills, digital literacy and a high level of self-discipline.

MOOC : confusing or exciting times?

- **Mission:** what role can MOOCs play in communicating knowledge and expertise, and raising the profile of your institution and its departments around the world?
- **Innovation:** what role can online models of delivery play in improving the quality and value of online and traditional courses for students, employers and society?
- **Sustainability:** what are the costs of developing and running MOOCs and what are the wider implications of a shift towards free course content for existing business and pedagogical models?
- **Pedagogy:** how can an institution add value to the educational experience of students beyond the standard MOOC platform experience, and facilitate access to a variety of social and professional networks?



Top 10 Growth Rates By Country

Growth rate shows how each country adopts eLearning and is a significant indicator since it can reveal revenue opportunities.

The growth rate of self-paced eLearning by country is:⁽³⁾



Potential impact on education structures

- with the expansion of xMOOC platforms connected to different university networks
 - ✓ like Coursera, Udacity, edX, or European Futurelearn – a central question is:

What is their role in the education system?




- field of HE will see massive and constant change in the near future, and MOOCs will continue to play a major role in its rapid evolution

How will WE play a part in the revolution of learning?

MOOC and beyond

The opportunity that MOOCs offer for massification of courses has generated significant interest from governments, institutions and commercial organisations.

- pedagogy and quality of current MOOC courses
- viable financing model for its sustainability

			
DATE FOUNDED	2012	April 2012	Feb 2012
FOUNDED BY	Andrew Ng (Stanford) Daphne Koller (Stanford)	Anant Agarwal MIT and Harvard President (MIT)	Sebastian Thrun Mike Sokolsky David Stavens (Stanford)
WHY FOUNDED	Enable the best professors to teach tens or hundreds of thousands of students. To serve students who were not enrolled on a traditional campus.	Bring education to the masses & research how students learn and how technology can transform learning.	Expanded after huge popularity of initial experimental AI course.



Coursera

edX

U
UDACITY

**REVENUE
MODEL**

For-Profit.

Revenue through
Amazon affiliate
program.

Signature Track:
\$30-100 for course
credit.

\$60-90 proctored
exams.

Coursera Career
Services.

Non-Profit.

Revenue through
retail partners like
textbook suppliers.

For-Profit.

Revenue through retail
partners like textbook
suppliers.

Udacity Career
Placement Program.

The Coursera logo is displayed in green text on a white rectangular background, which is part of a larger green building graphic.

PROFIT SHARING

Partner universities get 6-15% of gross revenue, plus 20% of profits generated by "aggregate set of courses provided by the university".

The edX logo is displayed in blue text on a white rectangular background, which is part of a larger blue building graphic.

University Produced: edX collects first \$50k generated by course, \$10k for recurring courses. University gets 50% of all further revenue.

edX Produced: Costs \$250k for each new course, \$50k for additional terms. University gets 70% of revenue.

The Udacity logo features a large orange 'U' above the word 'UDACITY' in orange text, all contained within a white rectangular box on top of an orange building graphic.

Courses produced in-house independent of universities.

The Coursera logo is displayed in a white box with a green border, positioned above a green building graphic.The edX logo is displayed in a white box with a blue border, positioned above a blue building graphic.The Udacity logo, featuring a large 'U' and the word 'UDACITY', is displayed in a white box with an orange border, positioned above an orange building graphic.

CREDIT MODEL

Identity verified, "Signature Track" courses offer accredited completion certificate.

Universities accept credit after completion of certificate & final.

REACH

62 Colleges and Universities.
2.8 Million Registered Users.
337 courses.

675,000 Registered Users.
12 Universities.
24 Classes.

400,000 Users.
22 active courses.

Limits of Self-learning

