MOOCs: searching for a viable Business Model

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Agenda

- MOOC or not MOOC?
- The real cost of a MOOC
- Cost efficiency of teaching: why to invest in a MOOC?
- MOOCs in universities
- Conclusion
- MOOCs providers
MOOCs: the alternative?

- The cost of Higher Education is becoming higher and higher and all countries are looking for new models.
- The European and US models cannot be expanded anymore.
- In less developed countries not enough resources are available to build a full HE system.
MOOCs: the alternative?

Three alternatives:

- Increasing the level of tuition fees and leaving the burden to the students and their families.
  - Example of England but not accepted anywhere

- Decreasing the cost of education, which is mainly manpower, i.e. teachers salaries.
  - Increasing the ratio students/teacher
MOOCs: the alternative?

- Shortening Higher Education studies:

- See Tibor Navracsics (EU Commissioner for Education, Culture, Youth and Sport) declaration Brussels, December 2014
A digital approach as the solution?

- Increasing the Higher Education efficiency:
  - Decreasing the labor costs
  - Possibility to sell and reuse the courses
  - Possibility to use less qualified teachers
  - Increasing the students/teachers ratio
  - Increasing the « teaching » efficiency
  - Flipped learning approach
The real cost of a MOOC
Human resources

MOOC contents:
- Teachers
- Community managers

MOOC development:
- Video specialists
- Web integrator and graphic artist
- Pedagogic instructor
- Project manager

A MOOC is a project with many people, which needs a project manager
Workload to build a MOOC

Example: 6-8 weeks course:

- Course with Math equations, graphics and pictures
- Course being used 3 times
- Three categories of human resources: teachers, academic and technical support
## Teachers work

<table>
<thead>
<tr>
<th>Mission</th>
<th>Course 1</th>
<th>Course 2</th>
<th>Course 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preparation</td>
<td>40</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>Writing docs</td>
<td>90</td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td>Writing assessments</td>
<td>40</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Video recording</td>
<td>32</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Project organization</td>
<td>30</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Animation</td>
<td>48</td>
<td>48</td>
<td>48</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>520</strong></td>
<td></td>
<td><strong>520</strong></td>
</tr>
</tbody>
</table>

**520 hours**
## Pedagogic support

<table>
<thead>
<tr>
<th>Mission</th>
<th>Course 1</th>
<th>Course 2</th>
<th>Course 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pedagogy engineer</td>
<td>40</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>Project manager</td>
<td>60</td>
<td>12</td>
<td>12</td>
</tr>
<tr>
<td>Tests</td>
<td>60</td>
<td>12</td>
<td>12</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>225 hours</strong></td>
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</table>
# Technical support

<table>
<thead>
<tr>
<th>Mission</th>
<th>Course 1</th>
<th>Course 2</th>
<th>Course 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Video</td>
<td>32</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Video</td>
<td>180-240</td>
<td>36-50</td>
<td>36-50</td>
</tr>
<tr>
<td>Texts</td>
<td>10</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Iconography</td>
<td>35</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>Integration</td>
<td>15</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Meetings</td>
<td>10</td>
<td>2</td>
<td>2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th>Recording</th>
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</thead>
<tbody>
<tr>
<td>Video</td>
<td>180-240</td>
<td>36-50</td>
<td>Editing</td>
</tr>
<tr>
<td>Texts</td>
<td>10</td>
<td>2</td>
<td>Formatting</td>
</tr>
<tr>
<td>Iconography</td>
<td>35</td>
<td>7</td>
<td>Variable</td>
</tr>
<tr>
<td>Integration</td>
<td>15</td>
<td>3</td>
<td>Platform</td>
</tr>
<tr>
<td>Meetings</td>
<td>10</td>
<td>2</td>
<td></td>
</tr>
</tbody>
</table>

**Total** 480 hours

Pomerol, Epelboin & Thoury  MOOCs, Design, Use and Business Models, Wiley 2015
Financial cost

<table>
<thead>
<tr>
<th>Mission</th>
<th>Course 1</th>
<th>Course 2</th>
<th>Course 3</th>
<th>Total Euros</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teachers</td>
<td>15 000</td>
<td>5 200</td>
<td>5 200</td>
<td>25 400</td>
</tr>
<tr>
<td>Pedagogic support</td>
<td>6 000</td>
<td>1 200</td>
<td>1 200</td>
<td>8 400</td>
</tr>
<tr>
<td>Technical support</td>
<td>10 000</td>
<td>2 000</td>
<td>2 000</td>
<td>14 000</td>
</tr>
<tr>
<td>Salaries ≈</td>
<td></td>
<td></td>
<td></td>
<td>48 000 €</td>
</tr>
</tbody>
</table>

Pomerol, Epelboin & Thoury  MOOCs, Design, Use and Business Models, Wiley 2015

Base:
Teachers: 75 k€/y, support teachers: 60 k€/y, tech: 47 k€/y
Cost efficiency

![Graph showing cost efficiency for Classic, MOOC, and SPOC models. The y-axis represents costs in €, and the x-axis represents students. The Classic model has the highest cost, followed by MOOC, and then SPOC. The cost for each model increases as the number of students increases.]
Digital business models

- A pure MOOC is the less expensive solution:
  - Above 200 – 300 students versus a classic approach
  - Interaction between teachers and students fully reduced.

- A blended approach (MOOC + face-to-face ≅ SPOC) is valid only above 600-700 students
Decreasing the cost of teaching

- Using or reusing MOOCs to amortize the cost of development of digital media
- A balance between face-to-face interaction and personal work
MOOCs and universities
Financial facts

- 1 ECTS = 1 MOOC (30 hours of work)
- One year ≃ 60 MOOCs!

In universities MOOCs are used as SPOCs:
- Approach of financial interest if more than 600-700 students are using the course (in 3 years).
- Never valid for classes < 200 – 250 students => cost sharing among many universities
Possible Business plans

- Savings
  - Large classes (mainly L1)
  - Sharing costs: federation of universities for smaller classes, mainly Masters or reusing courses developed by others

- Manpower savings are more doubtful in Research universities where academic are not full time teachers.
Possible business plans

- Saving through MOOCs and SPOCs are doubtful in Higher Education, unless universities unite.
- Justification in using and developing MOOCs and SPOCs must be found elsewhere
Case # 1

EPFL (Switzerland) MOOCs@Africa

- Free access to MOOCs
- Certification: 30 €/ECTS, full cursus 8-12 ECTS followed by a personal work (6-10 ECTS, 90€/ECTS)
- Exams in a partner center
- Partners: Coursera and edX
Case # 2

Gestion de Projets (Ecole Centrale Lille)

- Free MOOC
- Second part with one or two ECTS by payment (50 – 150 €) with different levels of examinations and options
- Various options for continuous education (490-690 €)

http://mooc.gestiondeprojet.pm/
MOOCs in Europe

- Decreasing the cost of education cannot justify MOOCs & SPOCs
- ECTS exchange among universities remains very limited thus aggregating universities to assemble enough universities remains an exception (Ex: the Bavarian Virtual University)
## MOOCs in Europe

<table>
<thead>
<tr>
<th>Objective</th>
<th>MOOC</th>
<th>SPOC</th>
<th>Level</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Educational transformation</td>
<td>option</td>
<td>yes</td>
<td>Bachelor Minors</td>
<td>All B levels. Priority larges groups</td>
</tr>
<tr>
<td>2 Remediation</td>
<td>option</td>
<td>yes</td>
<td>Bachelor</td>
<td>Failed modules</td>
</tr>
<tr>
<td>3 Entrance in university</td>
<td>yes</td>
<td>no</td>
<td>High School</td>
<td>Self evaluation and initiation courses</td>
</tr>
<tr>
<td>4 Life long learning</td>
<td>yes</td>
<td>yes</td>
<td>All levels</td>
<td></td>
</tr>
</tbody>
</table>
### MOOCs in Europe

<table>
<thead>
<tr>
<th>Objective</th>
<th>MOOC</th>
<th>SPOC</th>
<th>Level</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foreign students</td>
<td>yes</td>
<td>option</td>
<td>All levels</td>
<td></td>
</tr>
<tr>
<td>Knowledge sharing</td>
<td>yes</td>
<td>option</td>
<td>All levels</td>
<td>Excellence</td>
</tr>
<tr>
<td>Recruiting students</td>
<td>yes</td>
<td>option</td>
<td>All levels</td>
<td></td>
</tr>
</tbody>
</table>

Business plans must be justified by a political willingness to change the pedagogy and communication.
MOOCs in US

Tuition fees at an unacceptable level:

- Up to 10,000 $ in public universities
- 40,000 – 60,000 $ in private universities
Case # 1

Arizona State University (ASU)

- Universities consortium
- First year through MOOCs for less than 6000$
- Payment at the end
- Participation of edX
Case # 2

Urbana Champaign university

еча eMBA for 20 000$

1. First, selected Coursera specializations
2. Agreement of curriculum by Urbana
3. Finish as official MBA degree

Pay if success only!
Case # 3 The MIT Model

Free MOOCs can only be a by-product of SPOCs and blended learning.

First semester of Master Supply chain as MOOC with EdX, second semester on campus.
Case #4: University of Illinois

« An accredited Masters program at an accessible cost

Start by enrolling in any course or Specialization in the sequence, and upgrade to the full accredited program whenever you’re ready to apply. At $600 per credit-hour, the MCS-DS only costs $19,200 in tuition for the complete 32 credit-hour degree. »

With Coursera

EUNIS 2016 8-10 June 2016
Continuous education

The only field, with distance learning, where teaching is being fully revolutionized.

☒ Use and reuse of the same courses for massive numbers of students
☒ Optimization of absences for studies
☒ Possibilities to charge for education

Will the universities participate in this transformation?
MOOCs in Europe

http://openeducationeuropa.eu/es/open_education_scoreboard
In Europe

- No real models for the « big » providers
  - Futurelearn: charity?
  - FUN: funding by universities and state?
  - MiriadaX: South America Market?
  - Iversity: ECTS broker?

- EU in Brussels: only a hub
Europe: continuous education

- Numerous start-ups with models similar to Udacity
- Revolutionizing the business of continuous education
- Oriented towards courses directly linked to employment

- Universities?
  - Really involved in continuous education?
  - No general rules for ECTS exchange.
A possible direction

- Freemium: minimum services for free
- With payment: payment for each additional service
  - Exercises and assessments (Coursera)
  - Group tutoring
  - Individual tutoring or small groups, videoconferencing…
Summary
An emerging business model

- Free access to documents (similar to Coursera) or for a low fee (freemium)
- Different levels of services for increasing fees
  - Quizzes and home work
  - Group tutoring
  - Personal tutoring and video exchanges
- Universities?
Searching for a business model

- Not yet established for HE institutions
  - Slow movement to introduce MOOCs in curricula
  - No real thread for universities, at least at Master and Doctorate levels.

- Fast transformation of continuous education
  - A possible source of revenues for HE
  - A big market for a new generation of entrepreneurs
Discussion
Two providers categories

- MOOCs Editors: act as the editors of books written by authors:
  - Coursera and EdX in the US
  - Futurelearn, FUN, Iversity in Europe

- MOOCs developers and providers:
  - Ex: Udacity, Udemy (US), MiriadaX (Spain), OpenClassrooms (France)…
Coursera

- A partnership with universities
- Blurring the distinction between university grades and free MOOCs
  - Courses developed by universities
  - Certificates and bundles payed to Coursera
  - Additional fees to transform courses into grades
Coursera: an evolving BM

- Revenues generated through selling different levels of certifications
- Free access now limited to documents for most MOOCs
- Certifications between from 10 – 100 $
- Specializations 250-500 $
Udacity BM

- S. Thrun: "No money to make with universities"
- Thought for continuous education
- Courses on demand for companies
- Courses for self development and employment