

Opening up! How to take full advantage of Open Educational Resources (OER) for Management Education

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Abstract: General awareness and availability of Open educational resources (OER) have increased in recent years. Some institutions have already started incorporating OER in their strategies. However, compared to other educational fields, OER in Management and Business education have shown rather slow growth. This article discusses the incentives and barriers for the use of OER in Management and Business education. It reviews some useful accomplishments in the field, presents recommendations from various stakeholders and introduces the OpenScout initiative aimed at gathering OER and related tools for Management education.

What are Open Educational Resources?

The UNESCO defines OER as “technology-enabled, open provision of educational resources for consultation, use and adaptation by a community of users for non-commercial purposes” (UNESCO, 2002). However, the motivations for OER are not only altruistic or non-commercial in nature. (Bitter-Rijkema and de Langen, 2011) In principle, OER refers to the fact that digital materials (texts, html, multimedia files etc.) are freely accessible and re-usable for educational purposes under different licensing conditions. (Pirkkalainen and Pawlowski, 2010)

The OER movement experienced a swift development, fuelled by highly visible initiatives, such as the decision of the Massachusetts Institute of Technology (MIT) to allow free online access to its course materials. Other initiatives have followed and users can now access more than 350 million OER, ranging from short articles to full courses; including videos, course slides and case studies. (Vladoiu, 2011)

However, a quick look at the domain shows an extreme fragmentation of the offer of OER. Everybody is aware of the MIT initiative that shows very impressive figures (1 million visits every month, from virtually all countries in the world, 95 million visitors in total). The reality also covers a myriad of much smaller initiatives, with local and regional institutions deciding to join force to allow access to some of their courses, materials and resources. Over the past few years, though, the biggest area of growth for OER came from individuals sharing items they produced. The rise of this type of sharing coincided with the emergence and growing pervasiveness of social networking platforms that facilitate the exchange of educational content, e.g. SlideShare, YouTube, etc.

What are the incentives to use OER?

For *institutions*, the motivation to give away their learning content for free is not only to share and disseminate knowledge; it also brings increased visibility and international recognition. Additionally, establishing open practice and open policies in an institution supports the internal quality assurance of teaching through more transparency of the production process.

Potential *users* of OER may be students, informal learners or professionals who wish to improve their knowledge and competences in Management and Business, but lack the time or ability to participate in traditional executive education. There are many advantages for using OER, including flexible access to a huge variety of free or low-cost materials, instant availability and personally chosen resources to suit their needs and constraints.

OER can on the one hand be used as an exclusive source of learning, for example when users do not have access to traditional education providers (for geographical, financial or regulatory reasons). In particular, recent researches (Bitter-Rijkema and de Langen, 2011) looking at the users of the OpenCourseWare (OCW) at MIT and Tufts University, pointed out an important proportion of self-learners. In the majority of cases, however, the recourse to OER is intended as a complement to the traditional models of education. As such OER does/can not provide any formal recognition of these informal studies. This policy of “no credit, no instructor, no charge” is always clearly stated by the providers, as for example by the OCW (<http://ocw.mit.edu/about/>). Recently, we observe the emergence of change with the next step in MIT’s initiative providing MITx, “a certificate of completion” for students who demonstrated their mastery (<http://mitx.mit.edu/mitx-overview.html>).

For the *content providers*, such as instructors or lecturers in Management, allowing access to their material is often motivated by an altruistic desire to disseminate the knowledge they created, making it

accessible to a much wider audience. It also grants them a place in a vibrant community of peers sharing information and innovations. This networking can also help establishing or improving their reputation in their field.

What are the barriers of using OER in Business and Management education?

However, compared with other educational fields, OER in Management and Business studies has shown rather slow growth. Large international consortia such as OpenCourseWare Consortium (<http://www.ocwconsortium.org>) have been launched, but only a minority of the members are active in Management education. Similarly, the MIT initiative, definitely one of the most visible of the field, gives access to more than 2000 courses, freely available, but only a small proportion of resources, the ones provided by the Sloan School of Management, are dealing with business education.

Many reasons can explain a slower than expected development in the field. Recent research (Humbert et al., 2008) identified obstacles and reluctance from the main stakeholders, whether institutions (business schools, training centres and universities), providers (professors) or users (students and learners).

As regards *institutions*, Management education is a very specific domain, with a tradition of paid-for education that does not push for a free-access policy. Many institutions are private or semi-private and compete against each other. Some of them may consider their educational material as competitive assets and are reluctant to grant free access. Some institutions may even fear that OER may cannibalise their executive education offering, and deprive them of very profitable activities.

Eventually, developing OER comes at a price and the price tag may be very high. It consists first of all of the cost of the infrastructures for offering and maintaining the online access to the resources. There is also a psychological cost, as the philosophy and the strategy of the institutions need adjustments to accommodate any new OER offered. It eventually necessitates training for the content producers and recognition for their commitment and mobilisation. Recent research showed that no generally accepted business models have yet been developed. (Bitter-Rijkema and de Langen, 2011)

Many institutions may find these costs intimidating, especially since the benefits in terms of visibility, reputation and brand are essentially immaterial, will arrive in the mid-term and are difficult to estimate or measure. This explains that most of the business schools have been taking a very cautious approach in the development of OER, and that in Europe none of them has yet decided to fully embrace the OER commitment and to follow the MIT example.

For the *content providers* and in particular the Management professors, the main issue remains the intellectual property. The traditional “all rights reserved” copyright does not offer sufficient flexibility for the OER initiatives. Important progress has been made with the development of more adaptive licensing schemes, such as the Creative Commons set of licenses (<http://creativecommons.org/>), but some reluctance still remains. Also, as many institutions do not yet define their policy to go open, professors and lecturers often have no incentive or recognition to develop or share OER. Besides, in the absence of institutional support, the authors need to solve by themselves the issue of the access to their resources. Where to store them for public access, how to publicise them, where to have them referenced for easy access?

Users, whether students, professors or managers, may find the search for OER very time consuming. This issue is even more stringent for self-learners who are less aware of the academic codes and practices. Many OER initiatives are scattered and quality resources are often difficult to localise. This results in tedious searches for the users to scan websites of individual institutions in order to access their materials. Generalist search engines return an abundance of resources that do not differentiate between OER and other (web) resources. It is left to the user to evaluate the millions of results, which can be rather daunting, as the users often don't have the capabilities or simply the time to sort through the results to assess the quality of the resources. This creates an important trust issue.

The experience of the established OER initiatives shows that the vast majority of users is composed of students or self-learners. These populations are also the ones for whom the access to pertinent materials of proven quality is most important.

What could stimulate students and professors to use OER in Management?

So far, the move towards OER has logically come from the suppliers, launching new initiatives, without always taking into account the needs of the users and individual providers.

A recent initiative, the EU-funded OpenScout project (learn.openscout.net), aims to facilitate the search for OER in Management and build a community of stakeholders. The project investigates the needs and expectations of providers and users of OER in Management and develops a portal providing a specialised search engine, in combination with sharing, publishing and community functionalities.

Two main categories of users, students and providers, have been extensively surveyed through individual in-depth interviews, focus groups, experimentations and questionnaires to qualify their needs in terms of OER and their experiences when using them. (Botha et al., 2012) As such, it provides a very interesting

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feedback on the actual perceptions and needs of the users but also the way they take advantage of the OER development. The findings are summarised in Table 1.

Table 1: Use of OER – Expectations and Barriers.

Use of OER	Expectation	Barriers
Preparing lectures/courses and accessing pedagogical materials	<ul style="list-style-type: none"> ▪ Interest for a one-stop shop to quickly identify relevant materials ▪ Interest for a specialised website with relevant knowledge and information ▪ Interest for high quality, specialised materials not found on generalist sites ▪ Need for various formats available (documents, video, slides, etc.) ▪ Need for commented and rated material to ensure relevance, usability and quality 	<ul style="list-style-type: none"> ▪ Need for critical mass of documents and actualisation of the materials ▪ Resource supply is scattered and resources are difficult to search and identify ▪ Lack of familiarity with the technology and need for an easy and intuitive search engine ▪ Need of advanced search possibilities, not found on generalist search engines
Posting materials on line / reuse the materials	<ul style="list-style-type: none"> ▪ Recognition and acknowledgement among colleagues and peers ▪ Initiating collaborations ▪ Visibility of the author or of his/her institution 	<ul style="list-style-type: none"> ▪ Copyright issues ▪ Lack of familiarity with Web 2.0 instruments ▪ Complicated process, time required is dissuasive
Interacting with colleagues and peers	<ul style="list-style-type: none"> ▪ Getting feedback and input from colleagues ▪ Getting recommendations on materials to ease selection or materials and lower risk 	<ul style="list-style-type: none"> ▪ Need for critical mass of users in the community to allow fruitful exchanges
Getting updates on their domain of specialisation	<ul style="list-style-type: none"> ▪ Getting information on what has been added recently ▪ Getting update on comments and ratings on their contributions ▪ Suggestions for interesting materials 	<ul style="list-style-type: none"> ▪ Overall scepticism about relevance of categories and newly added materials

How to access Management OER? – Insights from the OpenScout initiative

The OpenScout portal (<http://learn.openscout.net>) is a collection of digital repositories for open Management content. Through OpenScout, users can easily access OER from a single website. The OpenScout portal is free and can be used not only by learners and students directly, but also by teachers and lecturers to enhance their courses with free materials, by librarians and documentation experts, who identify, search and localise relevant information and who provide this service to teachers, lecturers and students. (Ha et al., 2011)

Providing an easy access to OER, OpenScout brings together accessible, high-quality resources in a multi-cultural, multi-lingual and cross-disciplinary environment. More resources are constantly added in order to achieve significant coverage of open educational content in Management and Business. More than 20 repositories have already been integrated. For content providers and educational institutions, OpenScout offers an interface that automatically collects and displays their content in the OpenScout portal. Individual educators or learners can share or upload their resources directly through a publishing form. With this, OpenScout expects to become a trusted, central and unique point of access to open learning materials in Management and Business. The portal adds extra value to content by organising and implementing a consistent classification system (metadata) across all resources accessed. In this way materials originating from different digital repositories have a uniform appearance. They can also be rated, tagged and commented by end-users to ease the selection of high-quality materials.

By building on this consistent metadata system, OpenScout provides a comprehensive search facility designed around the needs of educators and learners at school or at work. This comprises a simple search where users can search by entering keywords. Additionally, advanced search functions allow users to narrow down the returned results according to various criteria such as language, domain of study, competence, type and format of the material, etc. The competence related services provided by OpenScout are particularly useful to support competence-based approaches in education. These approaches offer opportunities to develop flexible programmes tailored to the needs of learners, trainers and potential employers. Competence-based learning

addresses directly the need of individuals to upgrade their knowledge, skills and competences in a particular discipline throughout their lives.

Lowering the technological barriers, the OpenScout portal also offers to users a collection of tools to create, adapt and re-publish OER. (Schwertel et al., 2011) Users can collaborate in creating learning objects and interact (via social networks) or provide feedback to each other.

Finally, OpenScout aims to foster a community that advocates, among other things, the sustainable use of OER in the field of Management education and training.

Conclusion

The results of this research and of the OpenScout experimentation show that the development of OER can take place if a suitable environment is created. The quality of the resources is not enough to attract users; the resources also need to be easily accessible. More importantly, this series of surveys show that OER are differently perceived from traditional resources. While the consumption of traditional resources is considered as an individual behaviour, OER are considered as cooperative materials, and their adoption will depend on the possibilities of interaction. Eventually, efforts should be made to lower technological barriers to allow users an easy access to OER and intuitive tools for adapting and reusing the materials, including the provision of adaptation guidelines such as (OpenScout, 2011). Progress in this direction is demonstrated by the OpenScout initiative. In our ever more connected environment, it is easy to forget that some user groups still may find the techniques daunting and have difficulties to use appropriate tools.

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