Chapter XVII
A Business Model for the Exchange of E-Learning Courses in an International Network

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ABSTRACT

In three projects funded by the European Commission (EC), European and Latin-American project partners have developed, improved, and successfully tested an e-learning business model for the exchange of e-learning courses. Typically, high-quality e-learning is expensive and many ambitious e-learning projects have been discontinued after the end of the funding period. The mission of the three EC projects was to ameliorate this problem by creating an organisational model for exchanging e-learning courses with limited resources. The design of this model rests on two pillars: firstly the re-use of existing resources and secondly the sharing of resources in an international network. Each university in the consortium develops one e-learning course, which is based on an existing course and teaching materials. This is then provided, including teaching, to the students of the partner institutions. In return, each partner university receives two or more courses on a non-fee basis. As a result, the business model was validated. After the end of the project, eduGI, the project partners have continued with the model, exchanging e-learning courses without the need for further funding and with even lower costs and higher benefits than providing the courses as regular face-to-face classes. Although this business model was developed by institutions specifically in the context of Geoinformatics, the exact field is irrelevant; teachers and decision makers of all scientific fields can apply this business model.
INTRODUCTION

The Institute for Geoinformatics (IFGI) at the University of Münster began exploring e-learning five years ago by attending educational conferences and listening to presentations of many e-learning initiatives which, at this time, were funded largely by European and national programmes. Interestingly, while much success was reported in papers and conference presentations, discussions afterwards revealed many obstacles (Brox et al., 2006). Therefore, along with success stories from e-learning projects, the hurdles to be overcome need also to be considered in the design and introduction of e-learning at the Institute for Geoinformatics. Major concerns and considerations for introducing e-learning at an institute are:

- e-learning initiatives with substantial funding often disappear as soon as the backing has dried up (Boezerooy & Gorissen, 2004). Projects receiving funding from the European Commission’s programmes very rarely turned into sustainable initiatives (Salajan, 2007).
- Due to the problem of the importance of funding it is even more important to consider costs: “e-learning production by universities will be accompanied with a relative high investment in ICT infrastructure and digital applications, as well as in methodological issues (course designs, didactic materials, etc.) and labour adjustments at the university level” (Castillo-Merino & Sjoberg, 2008).
- How high the expense for an e-learning course is directly related to the quality of that course; it is obvious that the development of interactive teaching materials cost more than simply providing online text. Costs are saved, however, since e-learning material often does not require teachers; e-learning, especially in the training sector, is often designed for self-learning. For example, a cost comparison of Caterpillar University’s instructor-led courses versus e-learning courses reveals a cost savings of 40–78% (Wallicker, 2005). It is therefore important for each institute interested in using e-learning to analyse its requirements and weigh the costs and benefits in regards to expense versus quality.
- Is e-learning better than face-to-face instruction? Empirical studies support both answers: “campus students tend to perform better compared to online students” as well as “online students perform significantly better compared to their peers who take the campus version of the same course” (Lundberg et al., 2008). There is also tendency for pure online-learning to blended learning (Simonis, 2004). Each institute has to make a strategic decision where to place itself in the spectrum from traditional classroom learning to a purely virtual university (Seufert, 2001).
- Each institute has to decide what it wants or can do on own resources. Among commercial e-learning vendors, there is a trend towards outsourcing; alliances among vendors of complementary technologies or services are an increasingly common business strategy (Barron, 2002). There is no reason why educational institutions should not consider alliances and networks among universities as well.

In summary, an institute needs to develop a consistent business model for setting up an e-learning environment as well as for assuring mid-to-long-term sustainability. According to the holistic business model by Hoppe and Breitner, three interdependent partial models have to be designed and defined (2004):

- **Activity model**: defines the activities of the business (manufacturing, marketing, after sales and support activities);