Indirect Revenue Models for E-Learning at Universities – The Case of Learn@WU

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The notorious under-funding of some universities in Central Europe has triggered discussions about new revenue sources in order to cover expenses of e-learning projects [DoSi03]. However, it is difficult to draw conclusions from diverse statements in literature on when e-learning can become financially successful. This paper aims to contribute some evidence to the discussion whether there is a revenue potential [cf. e.g. HoBr04] or not [cf. e.g. Schn02] and if e-learning provides for content provision at low costs [cf. e.g. HoBr04] or high investment have to be made [Seuf01]. In this paper we present empirical cost structure of the Learn@WU e-learning system developed at our department and we discuss potential indirect revenue models that might be appropriate to this system. There are some indications that students are not willing to pay extra for e-learning services [BeHu02], therefore we only consider indirect revenue generation. In particular we analyse the cases of an advertising, a sponsoring, and a content selling revenue model. Furthermore, we discuss research related to business models and e-learning.

Learn@WU (https://learn.wu-wien.ac.at) is an e-learning application developed at the Vienna University of Economics and Business Administration (WU for "Wirtschaftsuniversität"). It acts as a full service provider to first year students offering course material, online self-tests, and collaboration opportunities [Albe+03]. The Learn@WU project has been aligned to achieve higher student satisfaction through better preparation for exams, higher faculty satisfaction due to efficient courses administration, standardization of knowledge level of students entering the second part of their studies, and a modern image of the university while reducing teaching costs.

In order to achieve these goals, Learn@WU has become integral part of the curriculum and the teaching strategy of first year courses. As a consequence, Learn@WU is a heavily used system. It holds 19,638 learning resources ranging from online-text books over glossary terms to online exercises at the time of writing. More than 11,800 users have been registered, which makes Learn@WU assumed to be one of the most active learning environments in operation at universities worldwide [Albe+03]. At the same time Learn@WU is one of

Austria's most heavily used websites with web traffic similar to the online portal of the Austrian newspaper Presse.at.

The total cost of the Learn@WU system can be subdivided into the following categories: technical server infrastructure, personnel, office infrastructure, and additional costs. We calculated the costs with actual empirical figures from the Learn@WU project documentation and interrogations and supplemented missing values by reasonable estimations derived from secondary document research like e.g. [Paul03]. Personnel cost is the major cost block of the Learn@WU system counting for about 90% of total cost which is about € 1,3m.

Advertising is frequently considered as a revenue model for e-learning [cf. e.g. HoBr04]. In order not to disturb the basic learning process we consider only static ad banners in the standard size of 468 x 60. Based on empirical page impressions and current thousand contact prices for Austrian websites, we calculated a revenue potential of about € 500,000 per year. On the other hand there are investments to be made to implement the revenue model including technical infrastructure, personnel, and further costs summing up to about € 140,000 per year. Given the current thousand contact price, we calculate a break-even number of page impressions for this revenue model.

Sponsoring can also be regarded as an attractive revenue model for e-learning systems at universities. The mentioning of a sponsor on a website can be very similar from a user's point of view. Yet, a sponsorship has very different financial characteristics from an advertising revenue model. On the one hand, increase of traffic does not increase revenue, on the other hand there are much more less costs involved. Given current market parameters, we calculate a break-even as well.

Content selling is a further opportunity for revenue generation. Throughout the last couple of years, teachers have gathered up to 1000 online questions for each undergraduate course. This material is potentially interesting for different kinds of academic and non-academic institutions that want to provide additional services to their related learners. We illustrate the revenue potential of this revenue model building on current market parameters.

The case of Learn@WU allows the following conclusions: First, the stated revenue potential from e-learning systems of universities does exist. Yet, there is a huge block of costs that can be covered by neither the advertising revenue model the sponsoring revenue model, not the content selling revenue model alone. Furthermore, the break-even analysis reveals that an advertising revenue is not always appropriate, but only in cases where there is enough traffic. This amount of traffic may be beyond the traffic generated by a lot of e-learning systems.

For universities this implies that an e-learning system is not always a potential revenue source. The e-learning strategy needs to be carefully aligned with the overall strategy of the university. Integration with the curriculum for example can grant a certain amount of traffic on the system which correlates positive with

revenue potential. On the other hand, there have to be considerable savings due to the implementation of the e-learning system in terms of reduced number of courses, reduced number of class halls, or reduced number of lecturers that contribute to the overall cost-benefit calculation of the system. Such an integrated e-learning strategy is essential to arrive at sustainability of an e-learning system.

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