



Maintaining a sustainable Future for IT in Higher Education

Friday 17th June 2011

Time: 09:30 - 10:00

Selection of Integrated Campus Management Systems: The Case of AlmaWeb

ABSTRACT

Due to the Bologna Process German universities increasingly consider the implementation of integrated application systems to improve the performance of their administrative processes. While universities have already embarked on supporting internal processes with IT for some time, the application landscape is still heterogeneous and fragmented in nature (cf. [Schilbach et al, 2009]). Based on the notion of a student lifecycle (SLC) and established concepts of Enterprise Resource Planning (ERP) software a specific class of integrated application systems for process management in higher education has emerged. These systems are known as Student Information Systems and have also been referred to as Campus Management Systems (CMS). There are three characteristics for CMS: (1) a CMS follows the principles of integrated application systems as ERP systems, (2) a CMS is specifically designed as standard software and (3) a CMS covers all operational as well as all business intelligence functionalities for institutions in higher education (cf. [Alt/Auth, 2010]).

In the business sector, many examples have shown that implementing integrated application systems is a complex undertaking. Failure in selecting suitable software solutions as well as project partners may result in severe difficulties. The appropriate selection of a software solution is an important element in the whole implementation process (c.f. [Scheer/Habermann, 2000] and [Umble et al, 2003]). Several methods exist for the selection of ERP systems, such as the selection framework of Stefanou (2000), the data envelopment analysis by Lall and Teyarachakul (2006) or the Systematic Help for ERP Acquisition by Illa et al. (2000). An important element within selection and procurement processes in the public sector is the RFP procedure (cf. [Munkwitz-Smith, 1998]).

This presentation reports the findings from early steps of a CMS project at a major university in Germany. The AlmaWeb project at University of Leipzig (UL) was initiated in October 2009 and will finish in June 2013. As one of the first universities in Germany, the UL decided to pursue a process-oriented approach based on the SLC. Furthermore, UL used the competitive dialogue for the

selection of the CMS. The project has shown important advantages and disadvantages of this award procedure.

In principle, the selection process of CMS systems comprises similar steps as required in the ERP domain, but there are also important differences. Universities are public organizations which feature specific requirements. Universities should adapt elements from ERP methodologies resulting in a top-down approach with decentralized elements (cf. [Schilbach et al, 2009]). Furthermore, universities should use a participative approach to select the suitable CMS for a successful implementation. The key challenge is to find the best mix of both central and local organizational elements.

REFERENCES:

- ❖ Alt, R., Auth, G. (2010). *Campus Management System*, Business & Information Systems Engineering, 3/2010, pp. 187-190.
- ❖ Illa, X.B., Franch, X., Pastor, J. A. (2000). *Formalising ERP Selection Criteria*. Proceedings of the Tenth IWSSD, 2000.
- ❖ Lall, V., Teyarachakul, S. (2006). *Enterprise Resource Planning (ERP) System Selection: A Data Envelopment Analysis (DEA) Approach*. Journal of Computer Information Systems, Fall 2006, pp. 123-127.
- ❖ Munkwitz-Smith, J. (1998). *Approaches to RFPs for Student Information Systems*. Computer and University Computer Users Association Conference, 1998.
- ❖ Scheer, A.-W., Habermann, F. (2000). *Making ERP a Success*. Communications of the ACM, Vol. 43, No. 4, pp. 57-61.
- ❖ Schilbach, H., Schönbrunn, K., Strahringer, S. (2009). *Off-the-Shelf Applications in Higher Education: A Survey on Systems Deployed in Germany*. In: Abramowicz, W. (Hrsg.): Business Information Systems, Springer, Heidelberg, 2009, pp. 242-253.
- ❖ Stefanou, C. J. (2000). *The Selection Process of Enterprise Resource Planning (ERP) Systems*, AMCIS 2000 Proceedings, Paper 418, from <http://aisel.aisnet.org/amcis2000/418>.
- ❖ Umble, E. J., Haft, R. R., Umble, M. M. (2003). *Enterprise resource planning: Implementation procedures and critical success factors*. European Journal of Operational Research (146), pp. 241-257