E-theses and the Nordic E-theses Initiative. The Impact of the Joint Work on the Role of the Library

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ABSTRACT

The concept of collaborative development and cooperation within libraries when it comes to the development of technical solutions, policies and practices supporting electronic publishing is becoming more common today. There are numbers of possible approaches how to proceed. I will share the experience based on working with other libraries within a consortium. My intention is to contribute to understanding the advantages of a community system development and the necessary organizational framework being set up to support it. I'll introduce the DiVA project and the DiVA publishing system developed by the Electronic Publishing Centre at Uppsala University Library. DiVA provides a good example of how electronic publishing is possible to carry out within a university library organisation and how a strategy of collaborative development between a numbers of institutions can work in practice.

INTRODUCTION

There is a long tradition in Sweden, as well as in many other Nordic countries, to print and disseminate theses before their public defence. At Uppsala University goes this tradition back to the beginning of 17th century when the first theses were defended. For example between the years 1600-1855 over 13,000 doctoral theses were published. Today the average production of doctoral theses only at Uppsala University is about 450 yearly.

In the nineties, when internet based services have been developed, the advantage of fast and world-wide dissemination of theses by electronic services was broadly recognized. Some of the universities and libraries in Sweden have been pioneers in this area and have used internet for dissemination of bibliographic information and abstracts for at least the last 10 years. At the same time printed copies were still produced.

However at Uppsala University, those efforts were very labour and cost intensive and there was a clear articulated need from the university to make the process of publishing of theses more smooth and cost-effective. In 2000, after a careful investigation, a special unit - the Electronic Publishing Centre (EPC) - was founded as a part of the Uppsala University Library. The assignment of the EPC is to support researchers and students of the university with user-friendly and effective tools and to help them publish their research results, and also to provide access and disseminate published materials now and in the future. To achieve EPC's mission a publishing and repository system (DiVA) has been developed and put into operation.

DIVA-SYSTEM

The DiVA publishing system was developed with a focus on how to achieve rational and convenient workflows for both authors and administrative staff working in the publishing process and simultaneously increase efficiency and reduce production costs. The resulting workflows are based on the reuse, in many different contexts, of the structured data originally created by authors. The DiVA system has been in full operation since January 2003 and it is used by many Scandinavian universities. These universities formed a consortium in 2002 and today it consists of 16 members and a couple of new universities are planning to join. Furthermore a close relationship with the National Library of Sweden in relevant issues such as long term access and preservation has been also established.

The system is based on open standards and recommendations and is implemented using Java and XML technologies. From a system architecture point of view, DiVA is built using a component-based design methodology which enables flexibility and offers the potential for collaborative system development. The metadata are stored in the DiVA Document Format, a rich, locally developed and XML based schema. The transformation of this schema enables the provision of various metadata services, such as harvesting via OAI-PMH, or the automatic generation of catalogue records for local and national catalogues.

CO-OPERATION

The idea behind the consortium is to share products and technical solutions developed within the DiVA project, to allow the exchange of experiences between people working with individual implementations of the system and electronic publishing in general. A very important aspect is to share costs. EPC offers also a possibility to host the system for the consortia members. It is an option the consortia members have and it makes it possible even for small universities with no technical expertise to join and take advantage of the work done by the consortium.

LESSONS LEARNED

The collaborative model makes it possible to pool resources such as personnel, equipment or money. However, the common vision, shared priorities and goals seems to me to be important components as well. Moreover, understanding the mutual benefits of working together allows the project move on faster. Through working together we can draw on expertise from different institutions to contribute knowledge and skills and work on developing not only technical solutions, but also discuss for example institutional policies and practices. It also allows others within the network to learn and develop new skills and expertise.

There is no doubt about the potential of collaborative development, though not all collaborative projects will succeed. Based on experiences from the DiVA project I have identified a number of conditions which can ensure success and sustainability of a collaborative system development. These are:

- clear terms of participation

- an effective project management role

- good communication among participants

In my opinion, the success is also, to a great extent, due to the fact that the project started as a local enterprise with a focus on the local issues and was funded by local sources. That means both the Uppsala University and the University Library - the stakeholders - have a shared interest in the success of the tools and workflows developed by the project. Moreover, they gave the project the support which was needed.

In addition, the DiVA project was met with positive interest from the local research community and this helped to bring the library community and researchers from other relevant fields together. The project benefited greatly from this. Once this winning model had been introduced at one university, the adoption by other universities was relatively straightforward.

WHO PAYS FOR WHAT?

The participation within the project is open for all universities and publicly financed research institutions and is based on a written agreement between the Uppsala University and each participating organization. This agreement states conditions for participation and for regulating costs, staffing and equipment at each institution. A major principle in the project is that all economic resources which institutions initially bring to the project are used for further development of the system and its sub-systems. Additionally, where there is a lack of resources, the requested new development costs will be shared by all the participants. This lack of dependency on external funding guarantees sustainability and the possibility to enhance the system with new functionalities according to demands raised by the community. The decisions on priorities are made after consulting all participants. This approach results in more rational development planning and at same time makes it possible also to focus on research and experimentations.

However, in my opinion, if the consortium will keep pace and will expand, there will be need for more formal organization. This will probably affect all parts of decision making process. The interesting question is how large the consortium could be without to risk to become too heavy operable.

CONCLUSIONS

The collaborative development approach as implemented by the DiVA project can be a practical strategy used to develop solutions and projects in the area of scholarly communication, especially when it is integrated into the library

environment. Libraries are used to collaborating wherever possible. The understanding that a collaborative model approach is not only sharing, but also accepting and respecting the fact that other perspectives can add value to our own, is an important concept. Also, the collaboration around the development of an electronic publishing system and services is not so different from other types of collaboration. It has the necessary pre-requisites - the shared goals and a common vision that all parties have something to win. The possibility to pool resources, skills and equipment helps to develop high quality solutions and at the same time it helps to minimize risks and guarantee sustainability.

RELATED ARTICLES

Müller, Eva: "DiVA – Academic Archive Online". DigiCULT.Info, (November 2004)9, 22-25, http://www.digicult.info/downloads/digicult_info_9_xs.pdf

Müller, Eva, Uwe Klosa, Stefan Andersson and Peter Hansson: "The DiVA Project – Development of an Electronic Publishing System". D-Lib Magazine, 9(2003)11.http://www.dlib.org/dlib/november03/muller/11muller.html

WEB SITES REFERED TO IN THE TEXT

DiVA - the Academic Archive online. http://www.diva-portal.org/

EPC - Electronic Publishing Centre, Uppsala University Library. http://epc.ub.uu.se/

OAI-PMH - Open Archives Initiative-Protocol for Metadata Harvesting. http://www.openarchives.org/pmh/