Zukunft Bau

STRUCTURE

Title

"Knowledge Transfer of Building: Open Access Repository - Services for Construction Research and Practice"

Background

The increasing number of publications related to construction research and the EU's Open Access strategy are generating a constantly growing amount of construction research results. Due to the heterogeneous and decentralized structure of the German construction research environment with a wide variety of researchers and funding bodies, these results are only insufficiently implemented into the construction and planning industry.

Objective

The objective of the project was to improve access to the often decentrally organized available publications and results from building research. This was implemented with an innovative open publication and knowledge platform based on the Open Access principle. This subject-specific "Open Access building repository" collects the results of all publicly funded projects from all fields of building research, checks their quality, prepares them and makes them available free of charge for subsequent use. The assignment of clear identification options for the contents also ensures their long-term use. In terms of content, the platform bundles all types of free accessible publications, such as research reports, journal articles, conference contributions, studies, white papers, etc., in one place. In the future, the publication of all other research data, such as measurement series, which are generated within the framework of public research projects, will also be required. These data will also be collected on the platform for subsequent use. In addition, the "Open Access Building Repository" enables barrier-free secondary publication of publications linked to licensing costs and thus supports the early transfer of innovation into practice.
The project has created the necessary infrastructure to achieve the greatest possible multiplier effect of building research results. This transparency on the one hand eliminates the perceived information deficit of the users and on the other hand facilitates the avoidance of double research in the sense of resource efficiency.
The project was carried out with the support of the Chamber of Architects of North Rhine-Westphalia, the Building Centre of the City of Munich, the Federation of the German Construction Industry, the Association of German Engineers VDI and Opus 3 GmbH. An interdisciplinary team of civil engineers, IT specialists, librarians and documentaries as well as experts from information science worked out the basic principles, the systematics of the platform as well as the software-technical implementation of this systematics in 3 essential work steps. Basic requirements of different users for the platform were collected in an online survey, workshops with planners as well as in guided expert interviews with sponsors and researchers. These requirements were transformed into a system consisting of a data capture process and a delivery form of the contents, taking into account all general conditions. The final implementation of the system was carried out in cooperation with a specialized IT expert on the basis of open source software. The collected requirements, the hierarchical content structure of the data sets, the identified relevant document types and the developed organizational concept were incorporated into a user-friendly layout of the web application "BAUFO open", which is available to all user groups at www.baufo-open.de.

Conclusion

With BAUFO open, the prototype of a repository for German and English speaking construction research was created. At the end of the project, a fully usable Open Access database is available. In a comprehensive basic investigation, requirements for a construction research repository were collected together with various user groups and analysed and classified with experts. By involving users and experts, it was possible to develop an optimal platform for the preparation and dissemination of construction research results and findings. BAUFO open offers all stakeholders of construction research the possibility to centrally organize, document and archive research results and data. The operation by a non-commercial provider guarantees an independent, neutral and ad-free source of information.
The web application is available at: www.baufo-open.de.

Key Figures

Short title: Knowledge Transfer of Building: Open Access Repository

Researcher: Dipl.-Ing. Klaus Probst; Fabian Brodbeck M.Sc.; Dipl.-Ing. Sabine Erdmann

Total cost: 219.850,87 € €

Federal grant: 153.895,54 €

Project duration: 24 month

Images

Image 1: Principle BAUFO open (Source: Own figure)

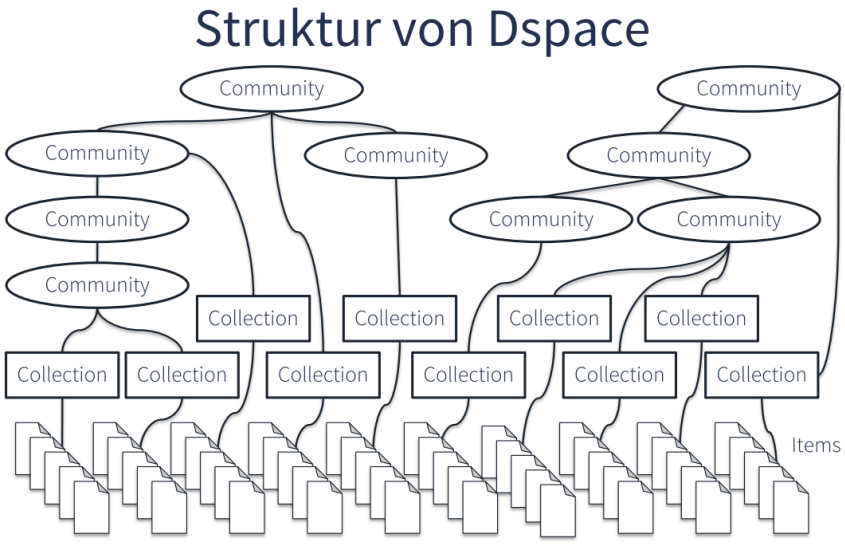

Image 2: Community-Collection-Structure in DSpace (Source: The Library Code)