MADDLAIN

Identifying Needs to Modernize Access to Digital Data in Libraries and Archives

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<th>DURATION</th>
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<td>1/01/2015 - 31/03/2017</td>
<td>448,418 €</td>
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PROJECT DESCRIPTION

Context
Since the mid-nineties, cultural institutions have unquestionably entered the digital age. The technological progress in scanners, user interfaces, storage media and internet connections offered them new opportunities for the management and promotion of their collections. Today, thousands of documents have been scanned and digital technologies are involved at every stage of the production of knowledge: from the analysis of the documents to the promotion of the results and the data organisation.

The adoption of digital technologies has an impact on the users in general, and especially on the practices and working methods related to human sciences due to the emergence of the digital humanities. Institutions must therefore be able to identify new needs and new expectations of their audiences, not only to respond to new thinking, but to stimulate it as well.

General objectives
MADDLAIN aims to analyse the behaviour and the needs of different audiences with regard to access to the digital information offered by the documentation institutions of the Federal Science Policy (CegeSoma, Royal Library of Belgium and State Archives of Belgium).

The project consists of three components. One study concerns the general access to digital information while another regards the use of e-learning by university students who are studying humanities subjects. A third study focusses on the use of Virtual Research Environments by researchers in the humanities.

The three federal institutions will employ the knowledge gained through MADDLAIN to improve their existing platforms and to promote new interactive structures for the dissemination of knowledge (through the use of e-learning) and for scientific collaboration (by creating Virtual Research Environments).

Methodology

Data
The MADDLAIN project will make use of both existing data and new data. The generation of new data is at the heart of the project because the analysis of the behaviour of various groups of users to access the digital information asks the development of specific methods and tools that the institutions presently do not have.

Collection of the data
From a methodological point of view, the principle is to collect data both automatically and with a proactive approach. Two types of data will be collected: structured and unstructured/semi-structured data. The structured data will be obtained from databases and websites belonging to the three institutions. The unstructured/semi-structured data will be collected by means of questionnaires and interviews. These will be conducted with the general public, university students and researchers.

Existing data will be extracted from account and document management systems, various databases, websites and virtual exhibitions of the three institutions. Also scientific literature concerning digital libraries, e-learning and Virtual Research Environments will be analysed. New data to be analysed will consist of interviews with the staff of the institutions, interviews with users, data of web analytics and data about the use of the document management systems of the institutions.
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**The choice of the sample**
In order to be able to study the three issues (general access to digital information, e-learning and Virtual Research Environments), different kinds of samples will be used. A large sample of the general public of the three institutions (journalists, researchers, students, citizens etc.) will be used to treat the question of general access to digital information. To explore the use of digital information in the context of e-learning a specific sample of university students will be analysed. A sample consisting of researchers will be used to study the use of Virtual Research Environments.

Depending on the samples, different approaches with tools and survey questionnaires can be developed. In a final stage the quantitative data and the qualitative data will merge into a single dataset open to a mixed analysis.

**Nature of the interdisciplinarity**
MADDLAIN offers an interdisciplinary approach at different levels. The various partners offer a multiplicity of skills: humanities and collection management for the promoters of the three scientific establishments, digital humanities for MaStIC ULB and IT for iMinds-MMLab. There is also variety in the chosen methodological approach: automated as well as manual collection of data and quantitative as well as qualitative analysis.

The project addresses three different topics (access to digital information in general, e-learning and Virtual Research Environments) and the digital information provided by the three institutions affects many areas (literature in the humanities, public archives, private archives, papers, photographs, audio files etc.). Additionally, the Scientific Committee consists of social science researchers, technicians, experts in digital humanities and heads of libraries.

**Potential impact of the research on science, society and/or decision making**
The impact on the academic world is double. MADDLAIN will not only enrich scientific research on user behaviour regarding the access to digital information in the field of digital humanities but it will also assist the academic and scientific world in the search for information by offering technological solutions with regard to the development of Virtual Research Environments and a better general access to digital information sources.

In a society where access to information forms a major challenge, MADDLAIN is essential in order to understand the behaviours prevailing in the approach to digital information and to thus be able to offer tools that not only offer better access to this information but also give the public the opportunity to examine it critically. In addressing the issue of e-learning, this project also aims to bring new perspectives to the field of education and training.

Since MADDLAIN takes as research object three federal scientific institutions and studies the uses and needs of their audiences, it presents itself as a wonderful tool to valorise the work of Belspo. The results should not only allow the Science Policy Office to gain visibility and efficiency but also to advance the development of a common platform of promotion.

**Description of finished products of research**
The project website will initially be used to introduce the project and to disseminate the surveys, and later on to publish the results. At the end of the second year a colloquium will be held, the objective of which will be to compare the results with other realities observed, especially outside of Belgium. At the end of the project a publication will be created. It will include the reports of all the partners concerning their research results, including the analysis of the data and the methodology used to get them. This report will address the research issue concerning the practices and needs of the users in accessing digital information of the CegeSoma, the Royal Library and the State Archives. Additionally, interviews will be conducted with the staff of the three institutions to present the results and to start discussions concerning how they can be built upon and used in practice in the future.