A study of teachers and researchers practices with digital documents - grey or not

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Abstract
Large-scale consumers of information such as lecturers and researchers have nowadays widely adopted the digital document. These professionals cannot suffice with disaggregate data but instead need full text documents. These documents include the research production of their colleagues and the teaching resources designed both within and outside their institution – be they commercially published or not. The main source of information for these professionals is the Internet, which has become a victim of its own success. If lecturers and researchers claim to have gained better information accessibility, thanks to the Web, they still must account for the time needed to examine the results obtained. Moreover, many of these net-users still camp with difficulties in information retrieval, where all too often their results are unsuccessful or unsatisfactory.

This paper is based on a survey that examines the use of and performance with digital documents by university lecturers and researchers at an Engineering College in Nantes on the West coast of France. The study was conducted during the year 2003 with about 70 persons from various fields and disciplines including physics, computer science, sociology, etc. This study looks at the lecturer-researcher in the capacity of information seeker and reveals a rather sedentary and autonomous figure, one who first relies on the resources offered by his/her own computer. Even though they are partly unsatisfied, they claim no time to waste on improving their information search skills. New tools bringing relevant, rich, and reliable scientific information and documentation are of interest to them. Certainly, if this would help them capture that which would otherwise have been neglected when only classical search techniques are applied. However, these tools must be simple to use, fast, and available where and when needed.

This study is part of a user-centered design approach in the construction of an open archive platform, planned to create institutional repositories that will be managed by librarians in their respective institutions. Using this tool, the authors would be able to store, convert (XML), fully index, perpetuate, valorize, and distribute their digital documents.

For those using, managing and/or developing such platforms, the results of this study could be used in understanding lecturers and researchers behavior and expectations. Likewise, through the use of statistics derived from this study, it is a first step in weighing our convictions and formulating questions on future digital library users.

Introduction
A digital library platform, CASTOR (CApitalization & STORage) [1] has been developed since three years. Our work takes place in a user centered design approach to build an open-archive platform, planned to create institutional repositories, managed by librarians in their respective institutions. With this system, the authors are able to store, convert (XML), fully index, manage, perpetuate, valorize and distribute their digital documents. As we can't find any experimented users with this type of system in our institutions, the user centered design approach has focused on a study of users information environment. Even if we have a strong literacy on digital library use [2] [3], including local (French) studies [4][5], we need in a platform development cycle to capture the practices and the vision of future users, reflecting the local knowledge. The main objectives of the survey was to:

- Understand the documentary practice of lecturers and researchers (for a better usability)
- Take a census of users needs (for adapted services)
- Evaluate the future users ability to adopt the digital library system (to perform a better information and formation on this new service)

This survey has involved all the people researching and/or teaching at the Ecole Des Mines de Nantes: professors, associate professors, but also PhD students, research engineers, etc. These lecturers and researchers are divided into 5 departments: Automatic control and industrial engineering, Energetic and environmental engineering, Computer science, Subatomic physics and associated technologies, Human and social sciences.

Data were collected through an interview in order to agree with the interviewed person on the meaning of the concepts used. This was all the more useful as the interviewed sample badly knew the vocabulary used by librarians: the meaning of words, nowadays frequently used, remains unappreciated (for example: ICT), the meaning of a word can be different according to the interlocutor (for example: digital