Webreview: The Evolution of Algerian E-Journals
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Abstract
Scientific journals have always been an important tool in scientific research, and the advent of new technologies has fostered their development into e-journals that has brought about new editorial techniques and methods. Thus, e-journals have become the easiest and fastest means to meet the needs of researchers in their research works as the Internet and its services represent a tremendous opportunity for communication, edition and information retrieval. The Algerian ‘savoir-faire’ in this field has led to the setting up of an e-journals repository with a double experience that has paved the way to using the open source editorial system SPIP. This paper deals with the Algerian experience starting from 1999 by creating a national database for scientific journals that had to be accessible online for the researchers’ community. Even if it was relatively underestimated, it encouraged our team to go ahead and look for new tools to enhance the data base, its content and also the web site. After many tests on a few electronic publishing software such as LODEL and GREENSTONE, SPIP appeared to be the best one to meet our needs especially that it includes Arabic. Furthermore, we are keen to start the process of adhering to interoperability international standards in order to make our contents more accessible. In addition, a study has been initiated on the archiving and long term preservation issue, particularly with an XML solution.

Keywords: open source; electronic journals; electronic edition

Since its creation in the mid 1980’s, CERIST’s main task has been to promote a national information system as well as to foster the development of scientific and technical information nationwide. Our experience started as far as 1999, when the idea of launching a data base that contains virtually all the national scientific journals in every scientific field sparkled. In the beginning our ambition had been to facilitate access to scientific research works and results at a national scale and to encourage editors and authors to commence the online journals initiative because there was a palpable need for researchers to attain their peers’ recent works. So we ended up by creating the WEBREVIEW system which consists of setting up a national repository that gathers local written scientific production.

From Paper to Online Access: The first step had been to develop a method (an editorial line) and a system to processing scientific journals and a portal web site to allow an online access to users. The main technological ground at the time had been ASP and HTML languages for the web site and Ms Access data base to handle data in Windows Operating system. This first version offered some services like a discussion forum, an online ordering module (to order issues online) which was not quite operational, and a search engine with both a simple and advanced search, i.e., by title, key words, author, scientific domain and by date in addition to many journals adhering to the system (around 16 in 2003).

Figure 1: Documents’ processing from acquisition to dissemination (the editorial line)
The Open Source Reformation: The year 2004 was a turning point in the history of WEBREVIEW, even though the editorial process and the documents’ processing ought not to be changed basically. Obviously, the final purpose was to enhance the system and also to ascertain awareness among all the actors to get involved in the action. So we selected four ‘open source’ publishing systems which are SPIP, GREENSTONE, DSPACE and LODEL and put them to the test. This step reinforced our long term objective concerning authors and publishers to participate fully in the process. Our compared study was based on evaluating the criteria of each system by the members of the WEBREVIEW team keeping in mind that the final beneficiary will be the user and that Arabic language is widely used. The outcome of the study had been unquestionably SPIP, a publishing system, for the following reasons: Simplicity of use, it manages the hierarchical structure, it is accessible in several languages including Arabic (in both the private and public areas), it also offers the possibility of creating a multilingual site as we can change the language of articles and sections individually, it can be used without having to know programming languages.

Preservation and Archiving: Being of uttermost importance, preserving the content and the metadata has been our great concern from the start. Consequently, a study for an XML archiving was initiated and was destined to publishers. Two DTDs have been compared, ISO 12083 DTD and DocBook DTD. The first one has been selected and reviewed. Then we tested one article with a satisfying result, but have not proposed this solution to publishers yet. We are also experiencing the free office suite Open Office.org as a primary format used by authors to facilitate the conversion to a simplified XML format before using the DTD.

Copyright: From a legal point of view, two conventions have been instituted to deal with copyright aspect. The first one is a restrictive and licences a limited access to papers and specifies that the publisher should only give the permission to put online abstracts and key words as accessible data for users. However, the second convention authorises a full access to papers.

Figure 2: Online journals by category (total number of journals is 30)

The future holds many new opportunities for our system like joining the OAI community. Currently, there is no definite plan concerning OAI protocol, but we are planning to accomplish it in the near future. Our second objective is to set a training cycle for authors and publishers to get acquainted with the tools and planning as it can be valuable in our strategy to develop a national scientific system via WEBREVIEW repository.