



# **In The Name of God**







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## Pseudo-Interdisciplinary Research

As the editor of this journal, I receive many submissions reporting LIS thesis. Many of such theses are on highly specialized topics. One such topic, for example, was a study of workplace ergonomics and physical injuries in libraries. I have seen other theses that have tackled specialized managerial and psychological issues. The problem is that neither the student nor the supervisor and co-supervisor of many such theses are experts in the relevant fields. It looks that no one has felt the need to use the advice of experts from outside to assure the quality of the work; apparently, on the basis that the work has been carried out in the library and information service setting. I have also witnessed the desperation

of students in handling topics that neither them nor their supervisors have specialized knowledge.

It is true that boundaries between disciplines are fading, and in cases disappearing, however, in order to do a piece of research of interdisciplinary nature effectively, a considerable level of expertise is required. It is a gross mistake to assume that because LIS is an interdisciplinary field, LIS professionals are qualified to conduct every kind study without help from outside.

Sadly, there are reports of instances where the student has recognized the need for a co-supervisor from a relevant field the faculty has denied them access.

Interdisciplinary research, if carried out appropriately, will undoubtedly enrich our field. In contrast, theoretically

and methodologically weak research is unlikely to contribute anything worth of value to the professional community.

**Fariborz Khosravi**





## *Using Neural Network Approach in Textual Information Retrieval*

**By:** Sara Koleini

**Abstract:** As information grows in volume and technologies advance, conventional algorithms prove insufficient and slow for data retrieval; therefore, new developments are required to speed up information retrieval. In traditional methods, data processing is usually sequential, whereas in new methods, not only speed, but also assimilation of the content and retrieval of the relevant document is very important. Application of AI has proved to be very successful in fast retrieval of documents. Using neural networks as part of AI is an appropriate way of increasing speed in retrieving voluminous data. Neural networks are appropriate representations of knowledge applied in information retrieval. Neural network nodes indicate relevant elements in documents, such as keywords, authors, etc. Network links are used to transmit inputs from one layer to another, ending up with the network output which is the retrieved document. This article focuses on application of Self Organizing Map (SOM) approach in data clustering for retrieval of textual data. A self

organizing map is introduced and employed in data retrieval in a dataset taken from Medline database.

**Keywords:** Neural network, information retrieval, textual data, Self-Organizing Neural Network, clustering algorithm, SOM network

## *A Survey of Information Seeking Behavior of Ahvaz special librarians in Using the Internet*

**By:** Amir Reza Asnafi

Faramarz Soheili

Amir Hossein Abdolmajid

**Abstract:** Introduction of modern information technologies, especially the Internet to special libraries has brought about drastic developments and changes in their systems and services. In the modern age, it is required that special librarians not to be bound to the closed framework of their libraries if they are to meet the needs of their users easily and quickly. Rather, they should keep pace and grip with developments of the new information and communication technologies. Special librarians, provided they are skillful in information retrieval and access up-to-date information on the Internet, would be able to provide quality services to their users. To find out about the present conditions of Ahvaz special libraries, the present study is to identify the information seeking behavior of special librarians in this city. The study used the descriptive survey method, and data were collected by means of a researcher made questionnaire. The research population consisted of librarians of 30 special libraries in Ahvaz. Data analysis was performed using SPSS 11.5 and MS Excel 2003. Results of the survey revealed that Ahvazi special librarians show different behavior in seeking information from the Internet. Variables such as work experience, study background (librarianship or other), degree, and language and computer skills are among important factors affecting such behavior.

**Keywords:** Special libraries, librarians, information seeking behavior, Internet, Ahvaz

## *Survey of Information Needs of the Academic Staff at Agricultural Research and Education Organization*

**By:** Javad Bashiri

**Abstract:** The present study aimed at measurement and evaluation of information needs of the academic members of the Agricultural Research and Education Organization. Survey method was used and data was collected by means of a questionnaire. The study focused on subject specialty of researchers, type, language, and format of the information, as well as on application, access methods, and the channels of information communication. According to the survey results, special journals were the most important sources of information for Agricultural researchers with 93.5% of usage. Internet comes next with 93.1% and books with 67.7%. In terms of application, results of the study revealed that 97.3% of the respondents use information for their studies and investigations, 82.8% for conducting a research, and 66.8% for updating self information. Among different information sources, 35.5% use full-text, 28.9% use abstracts, and 21.2% use statistics. Also, 98% of the academic members of the AERO indicated that English sources make their primary sources of information.

**Keywords:** Information needs, information needs assessment, information application, academic staff, information seeking behavior, Agricultural Research and Education Organization, AERO

## *XML Databases and Their Application in Digital Libraries*

**By:** Mehdi Alipour Hafezi

**Abstract:** XML is a descriptive language which is supported by the World Wide Web Consortium and was introduced to the users in 1996. It is the limited form of SGML which has been developed to disseminate, save and transfer structured data on the Internet and intranets. It allows designers to use its tags. Saving data in XML format in databases, its application in data interchange among incompatible software, and publication of information on

the Web are among current issues in the current decade. The present article is trying to elaborate on these issues for experts, researchers and librarians who are interested in this area.

**Keywords:** XML, databases, digital libraries

### *Citation Analysis of Articles in Library Journals (1380-1383)*

**By:** Roya Maghsoodi Derye

**Abstract:** The present research is studying the citation behavior of authors in 5 Iranian library journals published in Library and Information Science, so as to be able to demonstrate how researchers use scientific sources. 5854 citations were identified in a 4-year period in the same journals. Results of the study revealed that *Faslname-ye Ketab* and *Journal of the American Society for Information Science* were the 2 most highly cited local and foreign journals in this area. Also, 55% of citations went to foreign sources and 45% to local sources. Books received the majority of citations (2249 citations); journals come next with 2049 citations. Results of the study also revealed that authors tended to publish single-authored works. Also, 78% of the works studied were original authored works (not translated). The majority of authors (50%) were academic staff, and librarians had the highest share in writing the cited articles.

**Keywords:** Citation, citation analysis, Library and Information Science, Journals

### *Link Analysis of Nano Technology Organizations Websites: A Webometrics Study*

**By:** Faramarz Soheili

Farideh Osareh, Ph.D

**Abstract:** Significance of Nano Technology appeals to identify the websites of organizations dealing with this branch of study and study them using

webometric methods. A total of 127 such websites were identified by using Yahoo directory within one month from 15<sup>th</sup> Ordibehesht to 15<sup>th</sup> Khordad 1385, and were downloaded to a personal computer. Visibility of the websites in the web environment, their collaboration at national and international levels and their impact factor were calculated and analysed. Clustering and multidimensional scale were used to analyse data. Results of the study revealed that Txstate (<http://www.txstate.edu/>), Foresight (<http://www.foresight.org>), and Sri (<http://www.sri.com>) have the highest visibility. Also, 6 main clusters were identified in the whole website population (One international, 2 national and 3 continental). In other words, the scale map shows 4 collaboration clusters (one international, 2 continental and 1 national). In terms of impact factor, Crnano (<http://www.crnano.org/>), Nanoethics (<http://www.nanoethics.com>), and Nanoned (<http://www.nanoned.org>) enjoyed the highest Web Impact Factor.

**Keywords:** Webometrics, Web Impact Factor, Nano technology Websites, visibility

### *An Investigation into the Capability of the Internet Search Tools with Farsi Search Interface*

**By:** Farideh Afnani

**Abstract:** The present research is trying to survey and compare the present state of the Internet search engines with Farsi tools. Its purpose is to help Farsi speaking users to select an appropriate and efficient search tool and assist the search engine designers in developing a search tool according to current standards. A checklist with 47 items was used in the survey to study the search engines with Farsi tools. These kinds of search engines amounted to 22. Results of the survey revealed that Parsi Google ranked 1<sup>st</sup> in terms of search tools, retrieval and display. Farsi Fehrestyar search tool ranked 1<sup>st</sup> in terms of its search interface. More than 90% of the surveyed search engines were weak in terms of their search tools and data retrieval. Less than 5% of the search tools were evaluated satisfactory in terms of their display

format. Also, less than 5% were evaluated satisfactory in terms of their search interface.

**Keywords:** Internet, Internet search tools, search engines, subject directories, Farsi search interface, information retrieval

### ***Real, Automated, Electronic, Digital and Virtual Libraries: Which one is Real, Which one is not?***

**By:** Mortaza Kokabi

**Abstract:** Recently different terms such as electronic library, digital library and virtual library or their equivalents are seen in Farsi literature. The same literature also witnesses some efforts that have been made to explain their differences and similarities. What will follow in this article is trying to answer the question whether there are differences between the concepts of the traditional library (real), and “automated”, “electronic”, “digital” and “virtual” library (or library without walls). A terminological and conceptual approach is used in this study, i.e., in the first place, it is tried to give a description of meanings of the terms automated, electronic, digital and virtual on the bases of special dictionaries. Then, I will present a conceptual discussion on the bases of the meanings. In the end there will be two suggestions. In the first suggestion it is suggested that if there is a need for categorization of libraries, considering the role of networks in identification of other collections, and then, in provision of documents, also, the fact that libraries have not gone through a leap or mutation in the process of their evolution, it is better to have a new categorization for libraries. The next logical suggestion is that the responsible authorities in Iran, such as the National Library and Archives of the I. R. Iran, and Iranian Library and Information Science Association, adopt a consistent system of terms for library types, so as to prevent confusions of the kind that is explained in this article.

**Keyword:** Traditional library, real library, automated library, digital library, virtual library, library without walls

## *Knowledge Management: A New Challenge in Organizations*

**By:** Alireza Entehae

**Abstract:** Knowledge Management is a new solution to systematic management of knowledge and its relevant processes, i.e., knowledge production, consumption and utilization in digital environment, using modern information and communication technologies. Knowledge is considered in two ways. One is “tacit knowledge” which consists of individuals’ knowledge and their expertise and specializations. The other is “explicit knowledge” which is documented, structured and recorded. The present article deals with foundations of knowledge management and describes requirements of success in knowledge management programs in organizations.

**Keywords:** Knowledge management, organizations, information and communication technologies

## *Architecture of Databases*

**By:** Yaqub Norouzi

**Abstract:** A database is an essential part of an information storage and retrieval system. It is a collection of stored data free of redundancy that are used collectively by a number of users. Therefore, any changes in the storage and retrieval of data in a database is influenced by the architecture of the database. The architecture of a database consists of issues such as the elements and structure of the database, the design of its different levels and their functions, and the relationship exists among these levels and among different pieces of information. Appropriate storage of data and access of users in the external level to that data requires enough attention to the issues presented in the foundations of databases, and requires acquiring necessary knowledge and skills, and acknowledge of database management systems and significant relevant standards. Ignorance of any of the aforementioned, may cause malfunction in the storage and retrieval system, and face the database manager with several

problems. The present article discusses the architecture of a database. It also discusses other issues such as database management system and the functions of a database manager.

**Keywords:** Databases architecture, Database Management System, database manager

### ***Barriers to and Ways of Increasing Library User Satisfaction with a Glance to Mooers' Law***

**By:** Heidar Mokhtari

Mohammad Hossein Abdolhossein Zadeh

**Abstract:** Calvin Mooers, one of the pioneers in information retrieval, stated, as his law, that whenever obtaining information from an information system is difficult and cumbersome, users would prefer not to use that system, therefore, the system will remain unused. The present article is seeking to identify the barriers to using library systems and suggest ways in which to remove these barriers in relation to the Internet, search engines, web pages, user interface, information sources, reference services, Management Information Systems, communication infrastructure, user and staff education, and, professional ethics. The result is expected to be more satisfaction of library users.

**Keywords:** Mooers' Law, information storage and retrieval, libraries, library usage

### ***Precision and Recall in Farsi Search Engines in Regard with Information Retrieval in Library and Information Science***

**By:** Sedigheh Shakeri

**Abstract:** The aim of the present research was to identify the recall and precision of the Internet search tools with Farsi search interface. More than 40 search tools were identified in relation to Iran. Results of the study revealed that only 10 search tools complied with the conditions of the present research

and provide users with information search tools through a Farsi interface. In terms of precision, Webgah search engine, with 33.5% precision ranks highest, Dahive search engine with 32% precision ranks second, and Farsi Google search engine ranks 3<sup>rd</sup> with 30% precision. Also, the Aftab Subject Guide with 9% precision has the lowest precision among all search engines under study.

**Keywords:** Precision, recall, Farsi search engines, information retrieval, Internet

### *The Role of Tehran Local TV Archives in the Program Making Process*

**By:** Leila Ghanbari

**Abstract:** This research aimed at identification of the role of audio-visual archives in the process of program making. Survey method was used in this research in which data was collected by means of a questionnaire. Research population consisted of 93 TV program makers (directors and producers). Research results revealed that the majority of program makers believed local archives were not places only for storing sources; rather, they have an important role in storage and preservation, provision of services, and, transmitting information to the next generation; richness of archives are effective in the process of program making; archival sources have an important role in the quantitative and qualitative promotion of utilization of archives; and that provision of appropriate services can have favorable impact on the process of program making. According to the results of the survey, program makers expect the following archival services: 1) developing integrated database, 2) indexing archival sources, 3) abstracting during review of sources, 4) delivering a copy of the archival document to producers, 5) provision of the subject filmography, 6) arranging meetings for joining program makers and archivists. The majority of program makers believe in professional archivists and their suggestions and their mastery in the principles of program making. They also believe that availability

of facilities such as the Review Department, Copying and Re-listening is effective in the process of program making. Following is a list of problems by priority that program makers usually encounter: lack of access to the sources of other archives; inappropriate organization of sources; lack of suitable sources for program makers; unfamiliarity of archivists with program making stages, and, shortage of facilities in archives.

**Keywords:** Audio-visual archives, program making, Islamic Republic of Iran Broadcasting, audio-visual material

### *An Investigation into Information Literacy of Academic Staff of Departments of Librarianship in Government and Non-government Universities in Tehran and Its Impact on Their Creation of Scientific Information*

**By:** Leila Azad Pile'rood

**Abstract:** The present research is aimed at investigation of the degree of information literacy of academic staff of departments of librarianship in government and non-government universities in Tehran and its effect on their creation of scientific information. A sample of 56 academic staff in librarianship departments formed the research population and data was collected by means of a questionnaire that consisted of 28 open questions. The survey results revealed that the main purpose of the respondents' information searches was updating their own specialty, and books are their current sources of information. Results also revealed that the research population needed education in using electronic sources. Most of the respondents felt they needed training in searching internet resources. They used keywords for searching and information retrieval, and used databases and the Internet to access information. They could use English language in their academic work while mostly published in local journals. Their most important problem in accessing information was declared insufficiency of information sources. A statistical t-test proved the respondents enjoyed sufficient information literacy.

**Keywords:** Information literacy, academic staff, information seeking, scientific production

## *Electronic Information Sources: With Special Emphasis on E-journals*

**By:** C. P. Ramasesh and Y.Venkatesh

**Translated by:** Gholam Heidari

**Abstract:** Provision of access to precise, valid and relevant information has become a boring task. Distinguishing inappropriate and surplus information among the mass of accurate and precise information is today's need. The present article will introduce describe shortly a well-known fulltext database as well as explaining about table of contents and abstracting services available for Indian academic and research libraries. It will point out specific characteristics of each database and will highlight its advantages. The UMS ProQuest Dissertations database and some detailed statistics and its features are presented in this article. The article ends up with suggesting Indian libraries to join the Table of Contents Service, which is more economical compared with other databases, as a way to coup with inflation.

**Keywords:** UMS electronic sources, fulltext databases, Table of Contents Service, ProQuest database

