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INTEGRATED INFORMATION

International Conference on Integrated Information

Kos, Greece September, 29 – October, 3 2011

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Preface: Proceedings of the International Conference on Integrated Information (IC-ININFO 2011)

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Aims and Scope of the Conference

The International Conference on Integrated Information 2011 took place in Kos Island, Greece, between September, 29 and October, 3, 2011. IC-ININFO is an international interdisciplinary conference covering research and development in the field of information management and integration.

The conference aims at creating a forum for further discussion for an Integrated Information Field incorporating a series of issues and/or related organizations that manage information in their everyday operations. Therefore, the call for papers is addressed to scholars and/ or professionals of the fields of Library and Archives Science (including digital libraries and electronic archives), Museum and Gallery Studies, Information Science, Documentation, Information Management, Records Management, Knowledge Management, Data management and Copyright experts the latter with an emphasis on Electronic Publications. Furthermore, papers focusing on issues of Cultural Heritage Management and Conservation Management are also be welcomed along with papers regarding the Management of Nonprofit Organizations such as libraries, archives and museums.

One of the primary objectives of the IC-ININFO will be the investigation of information-based managerial change in organizations. Driven by the fast-paced advances in the Information field, this change is characterized in terms of its impact on organizations that manage information in their everyday operations.

Grouping emerging technologies in the Information field together in a close examination of practices, problems and trends, IC-ININFO and its emphases on integration and management will present the state of the art in the field. Addressed jointly to the academic and practitioner, it will provide a forum for a number of perspectives based on either theoretical analyses or empirical case studies that will foster dialogue and exchange of ideas.

Topics of general Interest

Library Science, Archives Science, Museum and Gallery Studies, Information Science, Documentation, Digital Libraries, Electronic Archives, Information Management, Records / Document Management, Knowledge Management, Data Management, Copyright, Electronic Publications, Cultural Heritage Management, Conservation Management, Management of Nonprofit Organizations, History of Information, History of Collections, Health Information

Symposia

The Conference offered a number of sessions under its patronage, providing a concise overview of the most current issues and hands-on experience in information-related fields.

- Symposium on Integrated information: Theory, Policies, Tools
- 4th Symposium on Business and Management and Dynamic Simulation Models supporting management strategies

- Session on Open Access Rrepositories: Self-archiving, Metadata, Content policies, Usage
- Session on Evidence-Based Information in Clinical Practice
- Session on Business Management and Communication Strategies supporting Decision Making Process in Tourism Sector
- Session on Electronic Publishing: A Developing Landscape
- Session on Information and Knowledge Management
- Session on Information Content Preservation as Outcome of Conservation of Cultural Heritage: Ethics, Methodology and Tools
- Session on Advances Information for Strategic Management
- Session on Information History: Perspectives, Methods and Current Topics
- Session on Divergence and Convergence: Information Work in Digital Cultural Memory Institutions
- Session on Contemporary issues in Management: Organisational Behaviour, Information Technology, Education & Hospital leadership.

The wide range of aspects that the sessions covered, highlighted future trends in the Information Science.

Paper Peer Review

More than 300 papers had been submitted for consideration in IC-ININFO 2011. From them, 91 were selected for presentation, after peer review in a double blind review process. The accepted papers were presented at IC-ININFO 2011.

Thanks

We would like to thank all members that participated in any way in the IC-ININFO 2011 Conference and especially:

- The famous publishing house Emerald for its communication sponsorship.
- The co-organizing Universities and Institutes for their support and development of a high-quality Conference scientific level and profile.
- The members of the Scientific Committee that honored the Conference with their presence and provided a significant contribution to the review of papers as well as for their indications for the improvement of the Conference.
- All members of the Organizing Committee for their help, support and spirit participation before, during and after the Conference.
- The Session Organizers for their willing to organize sessions of high importance and for their editorial work, contributing in the development of valued services to the Conference.
- PhDc Marina Terzi for her excellent editorial work, contributing in the production of the Conference proceedings.

CONFERENCE DETAILS

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Dionysis Kokkinos, National Technical University of Athens

KEYNOTE SPEAKER

Professor Amanda Spink

Professor Amanda Spink has published over 340 scholarly journal articles, refereed conference papers and book chapters, and 6 books. Many of her journal articles are published in the Journal of the American Society for Information Science and Technology, Information Processing and Management, and the Journal of Documentation. She is Editor of the Emerald journal Aslib Proceedings. Amanda's research has been published at many conferences including ASIST, IEEE ITCC, CAIS, Internet Computing, ACM SIGIR, and ISIC Conferences. Her recent books include Information Behavior: An Evolutionary Instinct and Web Search: Multidisciplinary Perspectives, both published by Springer. Amanda's research focuses on theoretical and empirical studies of information behavior, including the evolutionary and developmental foundations. The National Science Foundation, the American Library Association, Andrew R. Mellon Foundation, Amazon.com, Vivisimo. Com, Infospace.com, NEC, IBM, Excite.com, AlltheWeb.com, AltaVista.com, FAST, and Lockheed Martin have sponsored her research. In 2008 Professor Spink had the second highest H-index citation score in her field from 1998 to 2008 [Norris, M. (2008)]. Ranking Fellow Scholars and their H-Index: Preliminary Survey Results. Loughborough University, Dept of Information Science Report].

Developing a National Database on Librarianship and Information Science. The Case of E-VIVA, the Hellenic Fulltext Database.

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Abstract: *The paper presents the Hellenic fulltext database on Librarianship and Information Science E-VIVA (Ellinike Vivliothikonomike Vase), developed by the Library of the University of Cyprus. The objectives of E-VIVA is to identify, gather, organize, digitize and promote the research, conducted in Greece and Cyprus in the scientific fields of Archival, Library and Information Sciences. Data are provided concerning the coverage, the content, the format and the environment of the database as well as the steps that have been followed for the development. The legal framework related with the copyright issues that are raised is also discussed. Furthermore a comparison is attempted between E-VIVA and eLIS. Finally the next plans of the Library of the University of Cyprus for the project are presented.*

Keywords: *National databases, Digitisation, Archival information and library science, Copyright issues.*

I. INTRODUCTION

The recognition of the lack of a (bibliographic) database containing the Hellenic LIS publications led the Library of the University of Cyprus to the launching of E-VIVA[46] intra-Library project. E-VIVA stands for ***E**llinike **Vi**vliothikonomike **Va**se*, that is the Hellenic Library and Information Science Database. E-VIVA aims on collecting, organizing and providing access to materials related to the Library and Information Science (LIS), produced or presented by or related with the Hellenic libraries as well as scientists and professionals of the field in Greece and Cyprus. The objective is to create a single, comprehensive and useful database in the specific scientific field that will be openly accessible to all interest parties. The audience to which E-VIVA is mainly addressed is professional librarians, students of LIS, Archivists and researchers interested in the subject. The time covered start from early 1980 until today. Currently E-VIVA contains papers and conference proceedings, among of which the PanHellenic Conferences of the Academic Libraries, other conferences on the subject that took place in Greece and Cyprus, related book chapters on LIS, print and e-journals articles, related studies etc. There can be found material published in Greece and Cyprus, material published by Greek and Cypriots abroad, as well as material that may be directly related to the two countries. Greek and English are the languages of the material included for the present.

II. DEVELOPMENT STEPS OF E-VIVA

A. Content and coverage

The first material that fed E-VIVA was originated from the Panhellenic Conferences of the Academic Libraries. In 2005 the University of Cyprus Library started collecting the proceedings of the Panhellenic Conferences of the Academic Libraries. These conferences are organized uninterruptedly since 1992, on an annual base, every year in a different Greek city by the Academic Library that host the conference each time. The Conferences are focused mainly on academic libraries interests, common problems and suggested solutions, collaborations, interoperability and common visions of the academic libraries. Printed proceedings had been published by each library for almost all the conferences. Some of the papers were also available in digital form on the sites of the hosting Libraries, but others, especially the old ones were found only in printed form.

The environment that hosts the database is ABEKT[47], a library software developed by the National Documentation Centre in Greece, provided almost free of charge, installed in more than 2000 small size libraries, spread all over Greece and Cyprus. ABEKT had already been used for hosting a number of bibliographic databases[48]. Being a traditional library software ABEKT permitted the treatment of the records in UNIMARC. For the papers that a digital form of the papers existed already, the first step was the cataloguing. There are two levels of cataloguing, one record for the documentation of the conference, and a different record for the each paper presented in the conference. Having created the two records a connection is created linking the two records in the UNIMARC field 463. In the field 856 a link leads to the full text of the paper or the conference program, the poster sessions etc. The name and the number of the conference is provided in field 225. The keywords and the abstract used for each record were those that were given by the author with the paper.

A second source used for indexing and feeding the E-VIVA database was the journal **"Libraries and information"** (*Vivliothikes kai pleroforesi*) an edition of the Association of Greek Librarians and Information

[46] http://abekt.lib.ucy.ac.cy/ebibazConnectELL.html

[47] http://abekt.ekt.gr/abekt/index.dot

[48] http://argo.ekt.gr/

Scientists[49] from 1984 until today. It began as a quarterly edition, then bimonthly and currently annual. The content of the journal diverse from featured scientific articles, translated abstracts of articles from foreign journals, bibliography on library science, letters, presentations, libraries announcements, events reports, advertisements, employment advertisement from 1984 until today etc., thus being a valuable information source for the evolution of the field for almost 30 years.

As the journal exist in printed version only, each article is first scanned, digitized and edited in Adobe Photoshop CS2 and finally saved in PDF version. The last step is the documentation and the cataloguing in the ABEKT software. . There are two levels of cataloguing, one record for the documentation of the issue, and a different record for the each paper. Indexing is exhausting including all articles from cover to cover, with no exceptions but advertisements. Again in the field 856 a link points to the full text of the articles, while the field 225 the item source.

Further to the previous sources other journals, newsletters, book chapters are used to feed E-VIVA. Articles that refer to Libraries, Archival, Library and Information science in Journals like:

- "Tekmirion"[50] the annual publication (*epetirida*) of the Department of Archives and Library Science of the Ionion University ,
- "Synergasia"[51], the on-line edition of the Organizing Committee for the Support of Libraries and is issued three times a year.

There can also be found subjects issued in the blog of the Technological University of Cyprus "Acta Diurna" and sporadic articles from "Koinotita"[52] and "Endeiktis"[53], while plans exist to digitize editions of CALIS (Cyprus Association of Librarians and Information scientists).

B. Numerical data concerning size and type of sources

The total number of records in the E-VIVA database is 2017 (September 2011). In details the records generated out of 68 journal issues, 22 newspaper articles, 93 conference proceedings and seminars, 4 presentations, 4 reports, 1 manual/guide, 5 articles, 5 book chapters, 3 research papers (1 master thesis, 1 bachelor thesis, 1 research project). Total storage used is 3GB including text and images in pdf.

C. Cataloguing

The records were implemented according the UNIMARC[54] cataloguing format.

An example of a record is given bellow:

Panhellenic Conference of Academic Libraries
Record Label: Record Condition: new record
Bibliographic level: monograph
Hierarchical level: record the highest level
010 ISBN
100 date
101 $a gre
102 $a GR
200 $a Main title: Write the book title
$ d Parallel title
$f Author (15th Panhellenic Conference of Academ
ic Libraries)
$f 15th Panhellenic Academic libraries conference
210 $a Place
$c Publisher
$d Date
215 $ a Pages
$d Dimensions
225 Panhellenic Academic Libraries
$v conference number
320 Index and Bibliography included in the book
510 Parallel title
606 Authority headings
$a Academic libraries
$y Greece
$x Congresses
710 are establishing the College
$a Panhellenic Academic Libraries
$d Number of Auditors
$e Place
$f date
801 $ b UCY
856 access link i.e.
http://abekt.lib.ucy.ac.cy/synedria/diafora/msstudy001.pdf

D. Classification

The classification of each record is follows JITA.[55] Librarians of the Digitisation and Archives office of the UCY library, translated the **JITA** Classification Schema which is used by eLIS[56]. As a result, the records have bilingual classification in Greek and English.

[49] http://www.eebep.gr/
[50] http://tab.ionio.gr/?q=el
[51] http://www.goethe.de/ins/gr/lp/prj/syn/ozs/elindex.htm
[52] The University of Cyprus newsletter issued bimonthly covering issues of interest to the University community: academic, administrative staff, and students.
[53] The University of Cyprus magazine issued every six months and includes articles about the University and educational issues in general, such as developments in European education, interviews, news and events, lectures, new books, etc.

[54] UNIMARC - The Universal MARC format created by IFLA in 1977 with the primary purpose of facilitating the international exchange of bibliographic data in machine-readable form. Source available : http://www.unimarc.net/general-information.html
[55] The **JITA** Classification Schema has been developed starting from a merger of News Agent Topic Classification Scheme (maintained by Mike Keen at Aberystwyth, UK, until 31st March 1998) and the RIS classification scheme of the (now defunct) Review of Information Science originally conceived by Donald Soergel (University of Maryland). **JITA** is an acronym of the authors' first names: **J**ose Manuel Barrueco Cruz, **I**mma Subirats Coll, **T**homas Krichel and **A**ntonella De Robbio. http://eprints.rclis.org/jita.html
[56] E-prints in Library and Information Science http://eprints.rclis.org/cms/jita/

E. Hardware & Software

For the digitisation of the printed items a scanner Fujitsu fi-6770 was used. Editing of the digital forms was made with Adobe Photoshop CS2, Abbyy Fine Reader 9 and 10 and Adobe Acrobat 9 Pro. The cataloguing was made on a PC with Processor Intel(R) Pentium(R) 4 CPU 3.60GHz, 2 GB RAM, 160GB Hard disk, Graphics Card NVIDIA GeForce 6600. For safety reasons the database is saved in a local pc, an external disk and a storage unit NAS in RAID (Redundant Arrays of Inexpensive Disks) topology 5 (Chen P. et al., 1994).

The Software used to create the database is ABEKT 5.5. while the plans are to migrate the whole database to the open source software DSpace[57]. There are at least two reasons for this migration.

a. ABEKT permits only the linking to the full text via the UNIMARC field 856. Not fulltext searching is available. Given that all records have been digitized and the results of OCR (optical character recognition) processing has been incorporated in the PDF versions of the articles, DSpace will offer direct searching of the full text of the articles and not only link to them.

b. ABEKT is designed for cataloguing by qualified librarians, shelf archiving was not within the goals. DSpace permits self archiving by the authors, an evolution that could be included in the future plans for the further development of E-VIVA.

c. ABEKT permits interoperability via Z39.50 protocol[58] this restricts the access to the E-VIVA via Z39.50 servers, while Dpace is OAI-PMH[59] compliant, permitting the accessibility via a number of aggregators of open access repositories.

F. Cost indications

The cost of the creation of a database can vary and it usually depends on several factors. Software and hardware, maintenance & upgrades, network infrastructure, storage costs, and of course the human resource factor (personnel hours) are issues that a library must take into consideration in order to calculate the total cost of creating a national database on LIS. The size of the database is a primary issue affecting gathering, hosting, initiation, run, maintenance and probably customization of the system. Then the level of existing staff and infrastructure must be also considered. Choosing an open source system a system administrator and/or a programmer is also needed (Gibbons, 2004). In the case of E-VIVA, ABEKT 5.5 is a software provided for free to non for-profit libraries. In the case that the database will be migrated to Dspace, again there will be no cost as this is an open source software. Equipment costs including software and hardware used for the digitisation, editing of the documents is estimated at €1100[60]. Personnel costs (including one assistant librarian (½ year), one supervisor of the project (⅓ / year) and the system administrator (¼ /year)) is calculated at €24.000 per year (taking in mind the staff fees variations among different countries). Storage costs has also to be included in cost estimation.

III. LEGAL - COPYRIGHT FRAMEWORK

Copyright exceptions and limitations are the tools libraries are offered to use in order to continue providing their services, supporting innovation, creativity and economic growth in all parts of the world (Fragkou A. and Strakantouna V., 2011). The balance between rights and exceptions/limitations in copyright is not an easy matter, particularly in light of ongoing technological developments and shifting of social and economic expectations, with respect to users and authors [Okediji, 2006]. The Berne Convention provides that states "may" impose certain limitations and exceptions to copyright61. 'The International Convention for the Protection of Literary and Artistic Works', known as the Berne Convention was adopted by Cyprus Law No. 86/1979. According to article 7 (2) (ι) of the Cyprus Copyright Law 59/1976 a library is permitted to use and present works if the use is in the public interest and draws no income from it and provided that no entry fee will be charged for the transmission of works to the public. In matters of reproduction, article 7 (2) (ιη) of the copyright law provides that copyright in a scientific, literary, musical or artistic work or in a cinema film or photograph shall consist in the exclusive right to control the making of – in the Republic of Cyprus – among other, the reproduction in any form of the whole work or a substantial part thereof. It is understood that copyright in any such work shall not include the right to control:

The doing of the aforesaid act by way of fair dealing for purposes of research, private use, criticism or review, or the reporting of current events, on condition that, if such use is made in public, it shall be accompanied by an acknowledgement of the title of the work and its authorship, except where the work is incidentally included in a broadcast.

E-VIVA was developed in good faith by the University of Cyprus Library to enforce the scientific research of the Archival, Library and Information sciences. It is provided completely free and no fee is or will be asked. The names of the Intellectual property owners are always referred. Of course in any case that any author disagree with the provision of his/her work

[57] www.dspace.org
[58] http://www.niso.org/standards/resources/Z39.50_Resources
[59] http://www.openarchives.org/pmh/

[60] No new scanners or other hardware equipment were bought for the needs of this database
[61] http://www.wipo.int/treaties/en/ip/berne/trtdocs_wo001.html#P140_25350

in E-VIVA we are ready to respect him/her and exclude the work indicated.

IV. COMPARING E-VIVA AND ELIS

E-VIVA is a free access, National Database created by the University of Cyprus Library. It only includes content that is created or presented in Greece or Cyprus or is referred to the LIS of the two countries. ELIS contributions are from all over the world and authors contribute to it via self-archiving as ELIS is a self archiving open access repository. On September 2011 there were 12.311 records in ELIS and 2017 records in E-VIVA.

V. FUTURE PLANS

Future plans concerning E-VIVA include the increase of the records included with the continuous enrichment of the database, apart the Panhellenic Academic Libraries conferences, any other conference, seminar on the subject area covered will be idexed and included. Additionally master and doctoral theses produced in the academic institutions of Greece, Cyprus and abroad are to be identified and included. Migration to DSpace environment is scheduled for the next year. The database and the fulltext will be included in the "Lekythos"[62] the home of the digital collections and the Institutional Repository of the University of Cyprus Library, which is operating under DSpace. "Lekythos" (catalog of Cypriot collections, organized by subject) hosts digitized material on several subjects and it is expected to serve as an one point access to all our digitized or born digital material developed or hosted by the library. The challenges to this transportation will be firstly the transfer of the ABEKT 5.5 software to the Open Source software DSpace and secondly the transfer of the UNIMARC format to the Dublin Core[63] metadata standard.

VI. CONCLUSIONS

"Future libraries are not just about collections but about services and facilities that support the changing needs of its clientele" (Ingersoll and Culshaw, 2004). The developments of Information Technology have always affected organizations that create and manage information. The University of Cyprus Library following the technological improvements of our era and having as a mission to "create and support a reliable information environment that will enhance learning and progress at the University of Cyprus and society in general, to develop strategies and systems through which will promote and facilitate the diffusion of world scientific knowledge"[64], noted the absence of a national Database for Archival, Library and Information science and created E-VIVA in order to collect and preserve information resources in support of the whole range of scientists of this fields. Is believed that this database will be a valuable contribution to the society of Archivists, Librarians and Information Scientists, students, professionals or researchers at east in the two countries.

[62] http://lekythos.library.ucy.ac.cy/xmlui
[63] http://dublincore.org/
[64] http://library.ucy.ac.cy/ENGLISH/general_infoE/geninf_mission_en.htm

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html#P140_25350 accesse