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INTEGRATED INFORMATION

International Conference on Integrated Information

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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].

Preliminary Results on a Printed vs Electronic Text books Assessment through Questionnaire

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Abstract: *This paper presents the initial results of a survey that took place among higher education students in Greece[84]. The aim of the survey was to identify and analyze the attitude, and probable acceptance, of electronic textbooks as well as the transition from printed to electronic textbooks used by the Greek Universities and Technological Education Institutes. Although e-books have turned out to be the mainstream delivery method for the majority of publishers, the printed vs electronic academic textbook debate has become more often nowadays. The complexity of an e-book content as well as the intensity needed for reading are two of the most important reasons why students seem reluctant towards this transition.*

Keywords: *e-book, electronic text book, academic, printed vs electronic.*

I. INTRODUCTION

Recent advances both in the field of e-book readers and techniques/standards of e-book containment files (e.g. version 3 of EPUB format[85]) may speed up the transition from printed to electronic academic textbooks.

Before focusing on the transition, it is necessary to define the starting and ending point of this event. While printed books are self defined and no further elaboration on details is needed, an e-book definition is necessary. In this context, e-books are electronic books that can be read on a portable device (such as e-book readers or mobile phones) or on a computer screen. Initially e-books were just PDF files or a set of HTML pages, referred as the digital version of a printed book. Nowadays the e-book abilities have evolved, including interactive elements, such as sound, video, animation, simulations, live experiments etc. Also, they have inherited all the attributes offered by the Internet for information organization, such as links, online dictionaries, real time cross reference with other sources etc. It has become clear that the distance between "interactive" e-books and digitized books is the same as the distance between the latter and printed books. In this direction electronic textbooks are closer to the second phase of e-book evolution rather than simple PDF files. Moreover, textbooks either printed or electronic should meet students' requirements concerning annotation, fast browsing and smart indexing. It is obvious that e-books are superior compared to printed books in these areas, especially concerning collaborative annotation, which results in better learning results as Mayer, et al (1995) indicate.

II. SIMILAR RESEARCHES

Many surveys have been conducted by academic and public libraries, institutions and publishers in order to estimate the attitude of specific groups of users (librarians, academic staff, students, etc.) towards e-books and the advantages and disadvantages of both types of books (printed and electronic) as pointed out by Renner (2007), Rowlands et al. (2007).These studies show that although printed books may not cease to exist, users have become accustomed to e-books and in some cases they prefer them. This has become apparent from their sales which surpass those of printed books (Gabbatt, 2011).

III. THE SURVEY

A. Project EUDOXUS[86]

EUDOXUS is the implementation of an innovative service for higher education students. It provides them with the ability to get fast printed textbooks. Students are able to login into a web-based system and fill in their choices of textbooks. They have access to books details (including an indicative chapter in digital form), as well as to professors' recommendations on textbooks per study program course. After the order submission, students are eligible to pick up their textbooks from specific delivery points or via post. Certified publishers

[84] The survey was conducted by the Greek Research & Technology Network SA on behalf of the Greek Ministry of Education Lifelong Learning and Religious Affairs, in the context of Eudoxus, an Electronic Service for the Integrated Management of Academic Books and Readings (http://www.eudoxus.gr), funded by EU through the Digital Plan Programme (http://digitalplan.gov.gr).

[85] International Digital Publishing Forum-IDPF, EPUB3 (http://idpf.org/epub/30)

[86] Eudoxus of Cnidus, was a Greek astronomer, mathematician, scholar and Plato student.

are responsible for these delivery points and they must retain a book stock in order to satisfy student demands. Table 1 depicts the EUDOXUS service operation data for 2010-2011.

	Numbers
Institutes / departments participating	44 / 488
Registered students	>280.000
Num of delivered books	> 3,2 millions
Publishers participating	> 1000
Printed book titles (in greek)	> 31.700
Delivery points	> 900
E-books accessed (through web only, english content, major publishers collections, e.g. Elsevier, Springer etc.)	> 11.000

Table 1. EUDOXUS service in numbers

More than 280.000 students obtained their printed textbooks from EUDOXUS. The satisfaction rate was more than 80% according to the survey presented in this paper. Nevertheless, the technological breakthroughs in the area of e-books and e-book readers, like e-ink supporting color representation, or devices with touch screen technology, bring the dominance of e-books closer. In this sense it is crucial to identify the students' attitude towards this change and make a step by step plan to achieve a smooth transition to the e-book era.

B. Survey details

It is widely accepted that during a survey the followed sampling strategy has a direct effect on the results' quality. The selected method is usually determined by factors such as availability of data, time and budget limits.

During the sampling an attempt was made to ensure that there would be adequate representation of students from all institutes, based on their share in the total population.

The total number of students, that survey researchers attempted to call, was 5432, while the number of students that responded and took part in the survey was 2120 (39%). The results are presented below.

C. Preliminary results

The first and most important question was about students' preference of type of textbooks: printed or e-books. The result, as anticipated, was in favor of printed books (see figure next page).

More than 81% of the students answered that they prefer printed textbooks and almost 15% answered that they prefer e-books. Although, this result shows that the majority of students prefer printed books, it is quite encouraging that there is a small percentage of students which have already accepted e-books, even though they do not really have any experience with "academic e-textbooks".

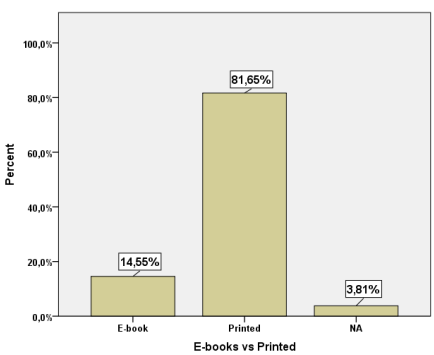

Figure 1. Ebook vs Printed (all answers)

The figure below shows how the type of a student's institute affects the e-book vs printed results. TEIs offer more technological oriented studies, while Universities include study programs like law, literature, history etc.

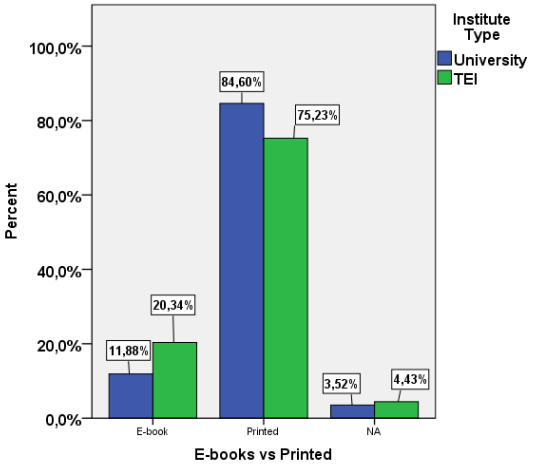

Figure 2. Ebook vs Printed (by institute type)

As expected 85% of University students favor printed books, while the percentage for TEI students is 75%. This result was expected due to the fact that TEIs are technologically oriented and therefore their students are more open to new technology applications (like e-books), while University students, a significant part of whom study humanities, classical and social sciences, prefer the traditional form of books.

Fig. 3 and Fig. 4, on the other hand, depict how results differentiate according to the scientific category of either the Institute (students' answers are grouped by University type) or the department. Only answers from University students have been taken into account. While the differentiation deriving from the Institute scientific category is negligible (only the Agricultural University results deviate), the variations deriving from the department scientific category are statistically significant.

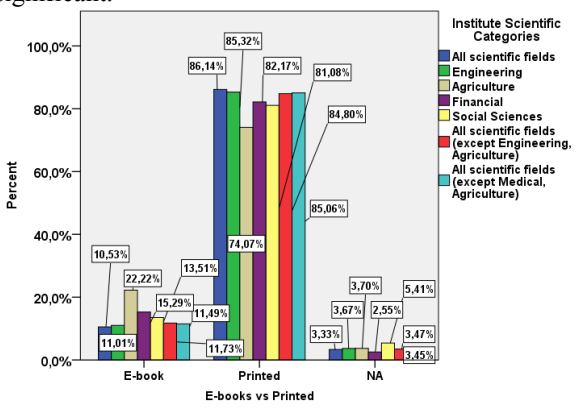

Figure 3. Ebook vs Printed (by institute scientific category)

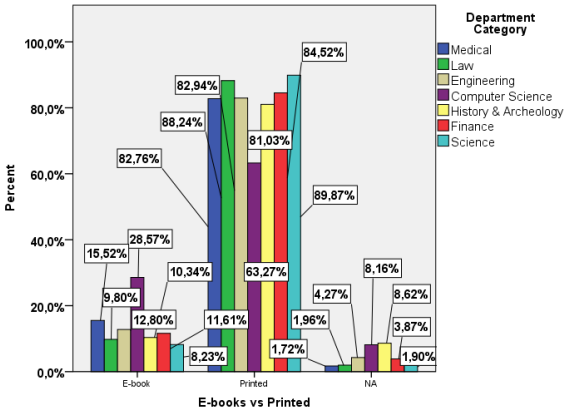

Figure 4. Ebook vs Printed (by departments' scientific field)

It is clear that Computer Science students are more receptive (28,5%) to e-books, followed by medical students (15,5%). On the contrary the most unreceptive students belong to department categories such as science, law, history & archeology (8,2%, 9,8% and 10,3% respectively).

Although students seem reserved on the e-book option, the majority of them is convinced that total transition will occur in the next three years. The following results depict the answers given to the question "Do you agree with the opinion that all textbooks will be converted to e-books in the next 3 years;" It is obvious, by the graphs below, that despite the general student preference for printed book, the majority of them (62,4%) considers that in the next three years all textbooks will be electronically available. On the contrary, 23,9% of students disagree with this opinion and a 13,63% keeps a neutral attitude.

Again (see Fig. 6) TEIs' students present almost a 4% higher result than that of those who either totally agree or just agree with the transition to e-book era in the next three years.

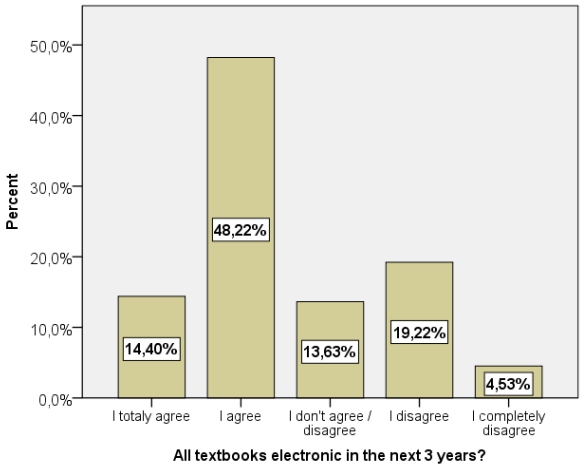

Figure 5. All textbooks electronic in 3 years (all answers)

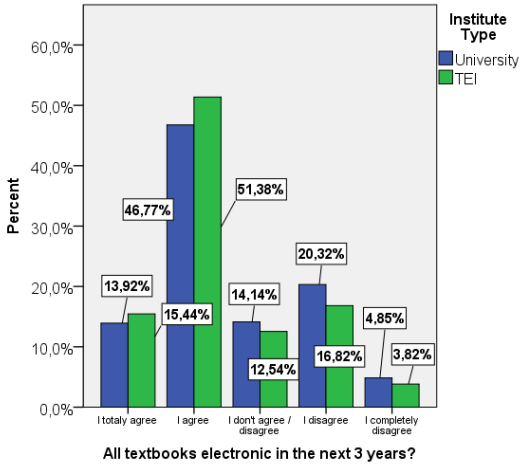

Figure 6. All textbooks electronic in 3 years (by institute type)

Finally once more Fig. 7 and Fig. 8 depict how results differentiate on the basis of the scientific category of either the Institute (students answers are grouped by University) or the department.Only answers from University students have been taken into account. Interesting conclusions derive from analyzing the results of Fig. 8, which is the reason why data from "Department scientific category" and "All textbooks electronic in the next 3 years" cross tabulation are given in Table 2.

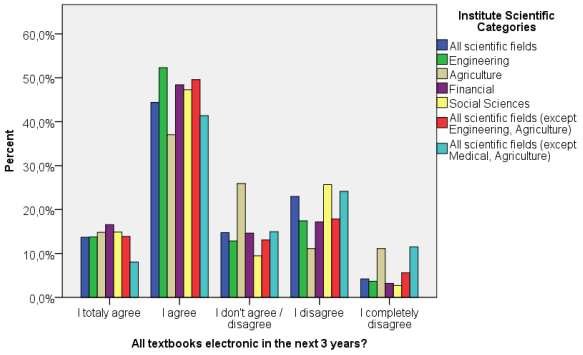

Figure 7. All textbooks electronic in 3 years (by institute scientific category)

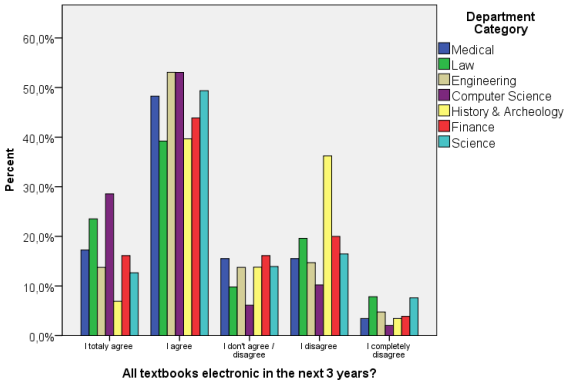

Figure 6. All textbooks electronic in 3 years (by departments' scientific category)

	% Dep. Category (DC) or % within all answers (AA)	I totally agree	I agree	I don't agree / disagree	I disagree	I completely disagree	% total
Medical	% DC	17,2%	17,2 %	17,2%	17,2%	17,2 %	17,2%
	% DC	8,8%	7,9%	8,9%	6,8%	5,4%	7,8%
Law	% DC	23,5%	39,2 %	9,8%	19,6%	7,8 %	100,0%
	% AA	10,5%	5,6%	5,0%	7,5%	10,8%	6,9%
Engineering	% DC	13,7%	53,1 %	13,7%	14,7%	4,7 %	100,0%
	% AA	25,4%	31,5%	28,7%	23,3%	27,0%	28,5%
Computer Science	% DC	28,6%	53,1 %	6,1%	10,2%	2,0 %	100,0%
	% AA	12,3%	7,3%	3,0%	3,8%	2,7%	6,6%
History & Archeology	% DC	6,9%	39,7 %	13,8%	36,2%	3,4 %	100,0%
	% AA	3,5%	6,5%	7,9%	15,8%	5,4%	7,8%
Finance	% DC	16,1%	43,9 %	16,1%	20,0%	3,9 %	100,0%
	% AA	21,9%	19,2%	24,8%	23,3%	16,2%	20,9%
Science	% DC	12,7%	49,4 %	13,9%	16,5%	7,6 %	100,0%
	% AA	17,5%	22,0%	21,8%	19,5%	32,4%	21,4%
	% of Total	15,4%	48,0 %	13,6%	18,0%	5,0 %	100,0%

Table 2. "Department scientific category" and "All textbooks electronic in the next 3 years" cross tabulation data

In specific, medical and history & archeology students totally agree or just agree in a percentage that is less than 50% (34,4% and 46,6% accordingly). On the other hand results for Computer Science students reach 81,7% which is almost 17% higher than the average percentage.

D. Discussion of results

Studying these preliminary results on the transition from printed books to e-books , it appears that greek higher education students are reluctant . More than 80% still prefer printed books, while at the same time 63,4% agree or totally agree with the opinion that all textbooks will be available in an electronic form three years from now.

III. CONCLUSIONS

The transition from printed to electronic books (in our case textbooks) is inevitable. The adoption of a new multilevel, multidimensional reading model, the technical abilities of the devices, the environment collaborative options and other parameters concerning publishers, authors etc. will determine the necessary time for the transition to occur. It is most encouraging that students, not having any experience in electronic textbooks, expect that this new form of knowledge delivery will increase their access options and result in better studies. As far as EUDOXUS is concerned, its next phase is the provision of greek academic textbooks, both open access and under certain copyright limitation, to specific categories of students (e.g. Computer Science and Engineers).

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