In today’s digital libraries, e books enjoy a less prominent position than serials, both in terms of budget allocation and usage. In the late 1990s, Deloitte & Touche and other business analysts like them predicted that ebooks would quickly grow and would soon be a major new sector of the publishing industry by 2004. If optimistic predictions of double digit growth have not been realized, statistics released this week (April 10\textsuperscript{th}) from the Open eBook Forum (OeBF) show a good growth for ebooks in general.

Optimistic figures are touted also by the Association of American Publishers (AAP), with estimated 4.6 percent growth in the US, from 2002 to 2003. The revenues have now reached a staggering $23.4 billion. Is this growth due to price increases or to new user demand? There is a lesson to be learned about where the industry is going, by looking deeper at the winners and losers of book trade. With sales of trade hardcover books and adult paperback books declining, it seems that the good news comes from scholarly and university press. In other words, university, college, public libraries and organizations engaged in learning and research are finding increasing benefits from using e books.

Figures (quoted in the AAP report) support this interpretation: higher education sales rose 3.6 percent, and sales of professional and scholarly books also rose 3.6 percent, on sales of $3.98 billion.
Text books are highly popular within the scientific end user community, because of their synoptic nature. A biologist or chemist will often consult main reference texts, whether for refreshing the fundamentals of a theory or the elements of experimental science, or to refer to tables and graphs. The nature of science, in the broadest sense, is such as to make text books necessary reference tools and granting a constant demand.

Within the scientific world, clinical and medical communities have greater reasons to be looking for snippets of digested information. When saving lives is one’s business, the first challenge is to provide access to critical information at the time and place of need. Timely and accurate dissemination of information is has been a recognized need in healthcare organizations for a long time. Perhaps the pressures are greater for today’s organizations, dispersed on the territory, with high of productivity targets and smaller budgets, chronic shortage of clinical staff and a population increasingly sophisticated and “informed”. But in essence, the needs of the scientific community have not changed dramatically and cannot justify the sharp rise of e books products.

A primary factor in the growth of this sector is to be found in innovations in the delivery and dissemination of the information contained in e books. Innovations that have made e books a better tool than the its paper equivalent. Up until recently, pocket medical handbooks were the main source providing portable and digested information on tap. Doctors needing to find answers to clinical dilemmas would initially resort to a quick scan of a familiar reference text, then, if the answer they were looking for was not forthcoming, they would resort to informal means of education and learning, such as referral to colleagues and peers. This is by no means a thing of the past: such methods are still largely in use across medical communities world wide. But habits are beginning to change.

With the advent of new technologies and new devices, and the growing familiarity of clinical professionals with digital technologies, e books become increasingly attractive. Initially, CD Rom technology made books shareable across organization, departments and offices. CD Roms were not as transportable as a pocket book, but easier to search (by keyword or browsing). The benefits of converting to e books were still not big enough to create a major shift in habits. In the year 2000’s, new technologies emerged that are propelling the success of scientific and medical e books. These are possibly a primary growth factor, and it can be argued that they account for the acceleration of sectoral revenues reported above.

Below is a selection of the most significant digital innovations of the last decade and their application (real or auspicated) in the e books industry:

- Emerging standards to create API’s more easily
  
  The same book does not have the same cover in the US and Italy. Why should it have the same search interface for a medical student and for a nurse? API’s of today are based on industry standards that make them swift to build and easy to share. They can be created to suit communities needs, down to the individual level

- Federated searching and cross integration
Technology is there to incorporate book content in the information chain. This might be of limited use in the areas of humanities and arts, but there are endless applications for the scientific and medical communities.

- **Natural Language query models**

Another example of how technology responds to end user needs. A librarian will be familiar with searching syntax, searching principles and techniques and even with the quirks of individual content sources. Unfortunately, we all know that end users do not have a similar degree of knowledge. While it is important to continue to train end users on information retrieval, it is also important to recognize that the way they search and retrieve is different. To use a medical example again, a doctor would normally look for answers to questions of this nature: “Is the use of corticosteroids recommended for pregnant women with severe lower back pain?” or “What is the lowest possible therapeutic dosage of drug X for a patient who is 70 with chronic liver disease?”

New technologies offer the ability to search content repositories by using different types of search models, one of which is natural language syntax.

- **Multi media implementations**

Video and audio files offer endless possibilities to enrich digital books. Innovative technologies include dynamic creation of tables and graphs, which offer the ability to input real data and the software behind the book evaluates it, creates graphical representations or even selectively displays information. Going back to our clinical example, a doctor needing to assess clinical values in pregnant women no longer has to retrieve static tables, printed on the book with average values. She/he will be able to fill in real patient data and retrieve relevant diagnostic and therapeutic information, regardless of which chapter it resides in.

The future of e books lies beyond isolated e- books platforms, and beyond local CD rom networks. It begins with the integration of different types of information sources in unified repositories, with the personalization of the user experience, not just with its portability, with the purpose of meeting different user needs at different times of the day or in different phases of their professional lives. Information contained in e books will therefore be selected, extracted and disseminated in ways that are consistent with end users needs, habits, skills and locations. Information will not be static, but dynamic and offered in the context of a real life situation.

The Future of e books is already happening, watch this space.

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