

Trends in Publishing Technologies

This special issue is a collection of articles on the current developments in publishing technologies that affect publishing industry as well as libraries.

The publishing industry continues to change from advances in computer and printing technologies and from globalization of economy. Studies such as *Bridging to a Digital Future* in 1994 and *Vision 21 — The Printing Industry Redefined for the 21st Century* in 2000¹ describe the structural changes occurring in the business of printing. Large printing firms are becoming larger through mergers and prudent management practices. Smaller companies that are just starting out are willing to invest in the innovations of digital technology and also are providing specialised services.

Traditionally book publishers edited, typeset, designed the cover of an accepted manuscript for publication and sent the 'camera-ready' hard copies to the printers. Within a relatively short period, the notion of 'camera-ready copy' became anachronistic. Now publishers send out electronic files of typeset pages and covers by means of e-mail, electronic uploads on to printers' sites, or mail them out on Zip disks or CD-ROMs. The printers then create proofs from these electronic devices displacing the old-fashioned methods of photographing pages and laying them out.

Having the information on electronic files opened other doors and is transforming the publishing world. First, books and information materials such as newsletters no longer need to be printed out on paper. They can be made available in the form of electronic files mimicking printed books in terms of layout and attractiveness. These electronic books (known as eBooks as opposed to pBooks for printed books) have the advantage of being available 24-hours a day and accessible from any place in the world.

Advances in printing technologies caused the second transformation. The availability of information in electronic form enables the publishers move to 'print on demand' (POD) mode. In this scenario, publishers no longer gamble on the number of copies to print, thus becoming stuck with unsold inventories. They can move to the 'just in time' approach and print only enough to sustain the market. Another advantage is that it is no longer necessary to let books go 'out of print'. If a book is available in either electronic form or on a hard copy, it is now economically feasible to bring the 'out of print' but valuable books back to print. Technically speaking, books never need to go out of print. With the growth of digital colour printing, more and more titles are likely to appear as POD titles.

The inexpensive low-volume POD now opens up markets to more and diverse authors. Publishers, for instance, controlled the information entry into the marketplace because of the high cost of book and magazine production in the traditional publishing world. These restraints are now less relevant. Authors, who have had trouble finding publishers to publish and market their works, now have the ability to be their own publishers. The internet and online bookstores make marketing their works easier than the traditional book marketing controlled by a few book distributors.

The same forces also help small publishers and those who deal with specialised information. Again, the traditional publishing world was inimical to these publishers because of their small scale of operations and difficulty of reaching their specialized audience. Now, these publishers have a place on the table and can effectively compete in the market place because of the advances in printing and publishing technologies.

The emerging publishing technologies, in other words, are levelling the playing field for individual authors and for small, specialized publishers. We will be richer because of intellectual diversity that is accessible to the general public. It will continue to be difficult to monopolize and control the information flow.

The impact of these technologies on the libraries and information centres is equally fascinating. Although the predicted eBook revolution fizzled, it is still too early to write off the potential impact on the libraries. Library users are getting accustomed to having information at their fingertips and having it accessible at all times from a variety of geographic locations. This mindset will change how the library operates. It is still possible that libraries will no longer be monumental buildings as the growth of physical collections of books, journals and other materials may have peaked. Scholars across the world are likely to access once obscure information that could have been provided only by libraries. Collecting, analysing, and incorporating information into one's scholarly work may also undergo major changes. For instance, plagiarism is one of the problems plaguing the educational institutions as it is now much easier for students to search for information on the internet, download, and cut and paste that information into their publications.

We are only glimpsing the coming changes in publishing and library fields and the emerging changes in the use of information may have dramatic effects on scholarship, libraries, and societies in general.

This collection of essays touches on these notions. John Abbott, Collection Development Coordinator at Appalachian State University's Belk Libraries reviews the hype surrounding eBooks and predicted death of pBooks. Lynn Connaway of netLibrary (which is now owned by OCLC, Inc.) examines the challenges and opportunities created by eBooks for libraries, publishers, and eBook providers. John Craft, Associate Professor of Technology, Appalachian State University discusses the role of portable documents files (PDF) in exchange of information in a standardised platform and hardware-independent form, thereby facilitating both book printing and the availability of eBook information on computers. Benjamin Lee describes the workflow behind on-demand printing. In a second article, he presents, from the perspective of marketing, the concepts behind variable printing. However, one can speculate that the variable printing may one day lead to every book printed being a unique book that is highly personalised and targeted to specific user needs. In the last article, George Simonian studies different offset litho and digital printing systems in the market digital printers will become better and better and produce high quality printing there by challenging the dominance of offset litho printing in the publishing market.

The editors hope that the sampling of these articles provide an overview of the changes that are becoming evident in the publishing technologies.

1. Mandell, T.F., Hauser, S.M., Carney, M.J., Gonzalez, P. & Bose, R.K. Bridging to a digital future. SRI International, Menlo Park, California, USA, January 1994.
2. Printing industries of America. Vision 21—The printing industry redefined for the 21st century. Printing Industries of America, Alexandria, Virginia, USA, 2000. pp. 1-8

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