

The Japan Society of Ultrasonics in Medicine amidst the information technology revolution

Hiroyuki Hachiya

© The Japan Society of Ultrasonics in Medicine 2011

An American Internet shopping site announced that electronic book sales surpassed sales of paper versions in May 2011. The site said that it has been selling 105 electronic versions for every 100 printed books (hardcover and paperback) sold beginning in April 2011. Sales of electronic books surpassed sales of hardcover books in July 2010 and outstripped sales of paperbacks 6 months later. It said that sales of electronic books have tripled in 2011 compared to the same time last year and that sales of printed books are also growing.

Furthermore, we are now seeing the advent of new services such as digital textbook rentals. Students can choose from among several tens of thousands of textbooks provided by major textbook companies, renting them only for as long as they need them. By renting digital textbooks for short periods of time, students are able to save a lot of money compared with buying paper textbooks at full retail price. Margin annotations and underlines added to rented digital textbooks by the user are saved externally, and they can be displayed again if the user rents the same textbook again or buys it.

Current electronic publishing may be at the stage where efforts are focused on converting conventional print media for display on electronic devices. Even at this early stage, some of the shortcomings of conventional books have been overcome. Not only can electronic books be bought online anytime, but there is no need to worry about a book being out of stock or out of print. I think it is fair to say that electronic publishing is now at the stage where

digitalization has finally allowed books to boast the same characteristics as web-based media. When discussing this topic hereafter, it will be necessary to keep in mind that more convenient electronic reading devices will be devised in the future, and that electronic books have outstanding functions that printed books will never be able to imitate, and not assume that electronic books will continue to be mere digital copies of printed books and that current electronic reading devices will not evolve.

For instance, only still images from ultrasonic diagnostic equipment can be printed in hardbound books, but in the case of electronic reading devices it is possible to display moving images from diagnostic equipment by inserting them into electronic books. Moreover, readers can input text into electronic reading devices and ask the author questions or voice their opinions, and readers can exchange opinions with other people reading the same book via the Internet. In light of this, digitalization of content alone will not be sufficient to sustain electronic publishing. Rather, the various mechanisms designed with print media in mind will have to evolve in concert with the new environment, i.e., the Internet.

Let's take a moment here to consider the work of academic societies. Exchanging ideas within a group of experts, giving back to society as a whole the fruits of its efforts, and promoting an academic discipline have been and will continue to be the key objectives of academic societies. People gather to exchange ideas. A community forms around the latest information, and the existence of the community then brings in even more of the latest research results. This positive chain reaction is the essence of academic society management. How to forge this activity from the standpoint of the latest information technology is a major challenge for academic societies. At the Japan Society of Ultrasonics in Medicine, digital

H. Hachiya (✉)
Department of Mechanical and Control Engineering,
Graduate School of Science and Engineering,
Tokyo Institute of Technology, Tokyo 152-8550, Japan
e-mail: hachiya@ctrl.titech.ac.jp

contents are being successfully archived as digitalization of past journals and documents from society meetings progresses. Saving these digital data in several locations is important to avoid the risk of losing valuable data in the event of a disaster like the recent devastating earthquake and tsunami. Furthermore, the Japan Society of Ultrasonics in Medicine should promote open data distribution that is only possible via the Internet, not just digitalization of contents. Amendment of the Copyright Law has allowed the National Diet Library to digitalize data without the permission of the author, and over 1 million documents have already been digitalized. Academic societies own the

copyright for society-related published documents. However, there is little benefit to utilizing these resources only within the organization. Efforts are under way at the National Diet Library to create an archive that will allow integrated searches of records located throughout Japan. The Japan Society of Ultrasonics in Medicine will celebrate its 50th anniversary in 2012. It is important for us to keep a close eye on these developments and to make an effort to form a new community that is a more advanced version of the current entity based on an open data policy, so as to create an organization that is appealing to both its members and the public.