

TECHNOLOGY: Tyrant^{OR} Tool?

Kevin Engel, Australian publishing consultant, looks at how technology will affect publishers in developing countries in the new millennium.

Isabela leads a publishing program in Latin America. Thinking about 21st century technology terrifies her. Daudi, a Kiswahili publisher, thinks that his country will quickly fall behind in applying new technology due to its weak economy. In a Pacific Islands nation, Timoci feels he is out of touch with what is happening in Asia. Do you have concerns about technology? Are you afraid your publishing house will collapse? Will print media become part of communication history?

Technology and its possibilities need not cause us concern. Instead, Isabela, Daudi, Timoci and the rest of us should see these as God-given tools.

Three key assumptions

Technology requires a regular power supply. Many villages, mountainous areas, islands and isolated communities in developing nations do not yet have electricity. Most publishing houses, even in the poorest regions, will be located in cities, towns or institutions with power for at least part of each day.

Computers are required. Current and foreseeable technology uses computers with "add-ons" such as scanners, modems and printers. Many publishers have acquired computers as prices have fallen. This trend will continue.

Even in very poor countries, electronic communication will become more readily available. This channel may

not be open to individuals, but certainly governments, businesses, churches, institutions and publishing houses will have greater access. Great changes have taken place even within the past year.

Given these qualifications, how will technology affect publishing? Here are three broad areas where dramatic change is expected.

1. Technology and administration

E-mail is fast becoming a normal communications method as telephone and satellite networks grow. Visual communication is available by attaching a digital camera to the computer. Tele-conferencing and editor-author conversations via the computer will be normal activities. Timoci will receive answers in minutes instead of weeks. We are just beginning to see this occur.

Beyond electronic communication, computers can process almost everything that in many places is still hand-written. The results will be greater accuracy, immediate information, clearer reporting and readily available figures on which Isabela and other publishers can base decisions. With better data, Isabela can obtain considerable savings and greater efficiency.

Many publishing houses have failed in financial management. Improved technology should mean better management and more responsible stewardship. Necessary accounting processes can be done on computers, for accurate, imme-

diately end-of-month figures and an easier audit process. Daudi will have a clear idea of what he can invest in new technology. However, he should choose hardware and software that have local support.

Access to technology and programs will only be part of the story. Though raising the capital to invest in new technology might be a problem, it will be easier than finding and training the right people to use this equipment. For example, editors must be trained efficiently in word processing. Advanced versions hit the market every month. Benefits of new technology can only be seen when dedicated men and women use it to create quality product. Technology is no substitute for committed personnel.

2. Production

Many Asian Christian publishers remember the leap from hot metal typesetting and letterpress, to offset printing by the use of film. It was almost overnight! The changes now taking place, and future refinements to existing systems, mean sharper editing, relevant local design, quicker production times and shorter, cheaper print runs.

On-screen writing by authors, with their work downloaded onto disks, will become common. Even when the author still produces a handwritten (there are some!) or typewritten manuscript, this can be quickly transferred to a computer and edited on screen.

In some developing countries, book design is still done by third parties. The final product leaves a lot to be desired. The book may appear to be old-fashioned. The illustrations are not always locally relevant. There is no reason to continue this. With suitable software and a desktop scanner, illustrations and layout can accurately reflect local culture. Production teams can work to produce appealing books for all levels of the local market. The technology to make this happen improves every few months and the cost of such programs is now coming within an affordable price range for publishers like Timoci and Daudi. They can produce better books at the right price.

One major development is desktop publishing (DTP), which allows short runs of titles on specialized subjects at a reasonable price. Inventory is reduced, turnover rates improve and a wider range of titles is published each year. In-house production of some titles can be a reality, with quality control from editing to placing the book in the warehouse. When there are large print runs and the work goes to an outside party, control remains in the hands of the publisher, who provides the printer with ready-to-print material on disk.

Production also raises the question of future forms of publishing. As the costs of producing CD ROM's decrease, certain titles could appear in two forms: an edition bound as a book for general readers, and CDs for those with playback facilities and buying power. For example, Encyclopaedia Britannica discontinued printing over 40 volumes; instead, it publishes two CDs for about \$199!

What will this mean for your copyright? Simply take the normal steps. Perhaps you will produce a CD in Spanish or Mandarin, with potential for worldwide use. Take the usual precautions. Copyright ownership should be noted on the CD. People using it must agree to

certain license terms before accessing the material. Then lodge your published CD with the appropriate national authority such as the National Library or wherever you now send copies of all your published books. The music industry has strict controls in place now.

Publishers in developing countries could see their titles available for research and reference in libraries around the globe. Secular companies in some nations will set up CD production facilities: Christian publishers should be alert to use them. In developing countries, Christians with professional positions use computers and CDs for reference in their day-to-day work. They expect similar resources for their Christian study. Seminaries in poorer countries will try to provide computers and programs for their students in libraries. Will they find needed reference materials in a national language?

3. Distribution and Fulfillment

Aside from greater opportunities for marketing of non-print materials, apply technology in promotion. In-house advertising materials can be produced in limited print runs. Our purpose, as Christian publishers, is to get the right book into the hands of the right person at the right price in the right place. How can Esperanza, a publisher in the Philippines, or Habib, in the Middle East, do this? We must look at new ways to take books to the people. As national media uses new technology, we should avail ourselves of these channels of publicity and set up systems to reach people.

As laptops come down in price, sales agents can be equipped with programmed, illustrated catalogs on screen. This can be a convenient way to introduce bookstore buyers to the range of available titles. Laptops will have longer life batteries for several hours' use without electricity. Orders can be sent to the warehouse overnight by modem. Supply times can be reduced.

The internet has irrevocably placed the world in a global village. Technology will soon make it easy to broadcast images, sounds and data over the internet. Magazines will no longer need to be mailed. Production costs will be lower. Subscribers all over the world will be able to download files and read the magazine on their computer screens. The internet, where major revenues are earned in the virtual sex trade, needs to be invaded by Christian sites that show the Way, the Truth and the Life.

—Renato Fleischer

Inventory management has been a major headache for publishers in developing countries. Hand-written stock cards or stock books have invariably been inaccurate, out of date and showing shortages when checked against a physical stock count. With new technology, records are kept up-to-date on a daily basis. The system that processes a sales order, also writes the invoice or packing slip and will adjust the stock figures at the same time. The source of discrepancies can be readily identified. Use of barcodes or stock identification codes allows publishers to save time and money. Warehouse control will require less staff.

Coping with the changes

What must we do now? Isabela, Daudi, Timoci and all Christian publishers: "let not your hearts be troubled" about new technology. Instead, learn what is happening.

Develop a network of contacts. Read widely. Attend training. Don't wait, act now. Upgrade obsolete equipment. Build up funds for future development. Recruit knowledgeable people. Be open to new guidance and direction. Make your concerns for the future a matter of informed prayer.

Think of the effect movable metal type had on book production in the 15th century. It multiplied the spread of the gospel. Let's welcome new technology as God's gift for the new millennium—and use it to proclaim the truth of the gospel.❖