



Technical Publications in the Paperless Era *by Marvin Rabinovitch*

As recently as ten years ago, computers dedicated to generating technical literature constituted no more than the source of camera-ready documentation. Within a mere decade, they have become a serious challenge to the print industry. New professions and skills have emerged in the wake of this technological revolution. What, indeed, would we have made of classified ads seeking “webmasters,” or courses in “Novell engineering,” back in the mid-80s? Familiarity with HotMetal in that benighted age would have been more closely associated with the blacksmith’s craft than the programmer’s. Or the technical communicator’s.

There can be no doubt that technical publications are on the cusp of transition from the printed page to the endless depths of cyberspace. This revolution became manifest when the first CD-ROM accompanied a computer-based product rather than the familiar paperback manual. In the computer-intensive domain of high technology, at least, thumbable user guides appear to be slowly sliding down the slippery slopes of obsolescence once travelled by the vacuum tube, the slide rule, and the T-square. Ten years hence, the conventionally published user guide may be as much a museum piece as these once ubiquitous staples of engineering schools and factories.



Most probably, it was the advent of e-mail as a document carrier capable of long-distance multi-addressing which sounded the death knell of the technical publications printing house. The bandwidth ceiling that constrained the transport of polymegabyte files was a factor in preventing the wholesale adoption of this solution as the final devastating broadside in the war between pixels and printer's ink.

Another limitation is the great diversity of DTP software among the world's users, sometimes even within the confines of a single company. This poses a real problem when documentation produced by specific software can be read only at the receiving end by means of identical software. Various attempts to cope with this difficulty have proven either excessively clumsy, insufficiently comprehensive, or both. The first type of shortcoming is painfully conspicuous in the option to convert files to postscript and have the recipient print them out with commands of unforgivingly rigid syntax in DOS. This is a slow and often frustrating process, and too often subject to postscript error. Conversion to ASCII renders the file compatible with most DTP packages, at the expense of styling and graphics. Even Rich Text Format (RTF) fumbles the artwork.

A recent innovation, the Adobe Acrobat package has surmounted these obstacles. As its name implies, this software combines the flexibility, power, and high-flying reach of the trapeze artist. Literally no desktop publisher currently in use is beyond its universalizing touch. For the first time, Acrobat Exchange/Distiller enables both the creator and user of technical publications to communicate unrestrictedly over the entire information spectrum without need of mediation by the printing house. With Acrobat Reader freely available (and free of charge) on the Internet and thus presumably omnipresent throughout computerdom, Exchange and



Distiller automatically render files of any genealogy eminently screen-displayable and faithful to the original, both in text and graphics, with all their bells and whistles, no matter what the source or destination.

The WorldWide Web takes the process to its logical conclusion. No longer does the purveyor of technical publications have to “deliver” the goods to market, whether by physical or electronic means. For the market is now wherever a web browser can gain entry to it, a mere keystroke away from a virtual display case of globe-girdling proportions. Once installed in its own site of the web “display case,” the technical publication is at the fingertips of both owner and user, for maintenance and revision by the former, scrolling and linkage-driven hypertextual tunneling by the latter.

The use of HyperText Markup Language (HTML) to design the web site does considerably more than provide instantaneous linkage between reference and description. Animated objects and even audio sources can capitalize on the multimedia capabilities of today’s computers. These exciting possibilities are precisely what inert ink and paper lack; the printed manual must resort to the labored symbolism of static graphics, replete with arrows and numbers in order to illustrate procedures. The web-installed graphic can dispense with arrows and numbers, and simply *perform* the sequence of steps in real time so that the user experiences visually (and sometime audibly) how the task is to be carried out. If one picture is worth a thousand words, imagine how many pictures one animation is worth.

This, in sum, is the magnitude by which the information explosion will gain power in the years ahead. The big bang is yet to come. ■