



Figure 1. Three pathways are now available for delivering traditional journal articles to readers. All start with the same electronic files. In traditional, centralized printing, the files create printing plates for making issues and reprints; these are mailed to libraries and subscribers, and to authors who, receiving reprints in bulk, distribute them individually by mail to colleagues and others who request them. In electronic delivery, the files that made the printing plates create PDF, or Portable Document Format, files that are posted on a computer acting as a file server on the World Wide Web. An Internet user can transfer that file to a personal computer and, using free software, view the article or print it as an “electronic reprint.” Articles can also be developed into HTML files that can be read directly by Web browsers and can be enhanced by hyperlinks to additional material. Publishers can make PDF files of articles for as little as 90 cents a page, and server space costs an estimated 21 cents per article per year. Thus one year of an average journal (123 articles in 1,434 pages) can be put on the Web and kept

there for 20 years for as little as \$2,000 (allowing \$192 for preparing an HTML table of contents).