**Desktop publishing** (also known as DTP) combines a personal computer and page layout software to create publication documents on a computer for either large scale publishing or small scale local economical multifunction peripheral output and distribution. Users create page layouts with text, graphics, photos and other visual elements using desktop publishing software such as QuarkXPress, Adobe InDesign, the free Scribus, Microsoft Publisher, or Apple Pages. For small jobs a few copies of a publication might be printed on a local printer. For larger jobs a computer file can be sent to a vendor for high-volume printing.

The term “desktop publishing” is commonly used to describe page layout skills. However, the skills and software are not limited to paper and books. The same skills and software are often used to create graphics for point of sale displays, promotional items, trade show exhibits, retail package designs, and outdoor signs.

Desktop publishing began in 1985 with the introduction of PageMaker software from Aldus and the LaserWriter printer from Apple Computer for the Apple Macintosh computer. The ability to create WYSIWYG page layouts on screen and then print pages at crisp 300 ppi resolution was revolutionary for both the typesetting industry as well as the personal computer industry. The term “desktop publishing” is attributed to Aldus Corporation founder Paul Brainerd, who sought a marketing catch-phrase to describe the small size and relative affordability of this suite of products in contrast to the expensive commercial phototypesetting equipment of the day. Often considered a primary skill, increased accessibility to more user-friendly DTP software has made DTP a secondary skill to art direction, graphic design, multimedia development, marketing communications, administrative careers and advanced high school literacy in thriving economies. DTP skill levels range from what may be learned in a few hours (e.g. learning how to put clip art in a word processor) to what requires a college education and years of experience (e.g. advertising agency positions).

**Early systems**

By today’s standards, early desktop publishing was a primitive affair. Users of the PageMaker-LaserWriter-Macintosh 512K system endured frequent software crashes, the Mac’s tiny 512 x 342 1-bit black and white screen, the inability to control letter spacing, kerning and other typographic features, and discrepancies between the screen display and printed output. However, for that moment in time, it was received like a magic trick: difficult to believe, but everyone wants to know how to do the trick. Behind-the-scenes technologies developed by Adobe Systems set the foundation for professional desktop publishing applications. The LaserWriter and LaserWriter Plus printers included high quality, scalable Adobe fonts built into their ROM memory. The LaserWriter’s additional PostScript capability allowed publication designers to proof files on a local printer then print the same file at DTP service bureaus using optical resolution 600+ ppi PostScript-printers such as those from Linotronic. Later, the Macintosh II was released which was much more suitable for desktop publishing because of its larger, color screen.

In 1986, the GEM-based Ventura Publisher was introduced for MS-DOS computers. While PageMaker's pasteboard metaphor closely simulated the process of creating layouts manually, Ventura Publisher automated the layout process through its use of tags/style sheets and automatically generated indices and other body matter. This made it suitable for manuals and other long format documents. Desktop publishing moved into the home market with Publishing Partner for the Atari ST in 1986 and later for the Amiga, GST’s Timeworks Publisher on the PC and Atari ST, Calamus for the Atari TT030, Home Publisher and Newsroom for 8-bit computers like the Apple II. During these early years, desktop publishing acquired a bad reputation from untrained users who created chaotically organized ransom note effect layouts – criticisms that would be levied again against early web publishers a decade later.
Mature systems

The improved typographic controls and image handling of PC and Mac-based publishing systems increasingly attracted the attention of professional publishers. The turning point was the introduction of Quark XPress in the 1990s and an ever increasing number of digital typefaces. XPress became dominant in the publishing world until the early 2000s when Adobe InDesign grew in popularity for its powerful typographic controls and integration with other Adobe publishing products, especially those which were predominate within the design, photography, publishing, printing, and digital media industries.

By the late 1990s, virtually all publishing had become “desktop publishing.” The superior flexibility and speed of desktop publishing systems has greatly reduced the lead time for all forms of publication and accommodates elaborate designs and layouts that were unfathomable in the decades before DTP. Database publishing has further reduced the time required to develop thick manuals and catalog publications.

Desktop publishing helped condition a generation of personal computer users to be on the lookout for “the next big thing.” In the late 1980s, developers hopefully applied the “desktop” prefix to potential new markets like “desktop presentations,” “desktop forms” and “desktop video.” All of these markets proved to be important (see PowerPoint, Adobe Acrobat, and miniDV for example), especially desktop video editing. Many cinema length movies are now edited on Apple Final Cut Pro on a desktop computer, replacing equipment and software that would have cost a hundred thousand dollars in the 1980s.

Comparisons with word processing

While desktop publishing software still provides extensive features necessary for print publishing, modern word processors now have publishing capabilities beyond those of many older DTP applications, blurring the line between word processing and desktop publishing.

In the early days of graphical user interfaces, DTP software was in a class of its own when compared to the fairly spartan word processing applications of the time. Programs such as WordPerfect and WordStar were still mainly text-based and offered little in the way of page layout, other than perhaps margins and line spacing. On the other hand, word processing software was necessary for features like indexing and spell checking, features that are today taken for granted.

As computers and operating systems have become more powerful, vendors have sought to provide users with a single application platform that can meet all needs. Software such as Microsoft Word offers advanced layouts and linking between documents, and DTP applications have added in common word processor features.

Comparisons with other electronic layout

In modern usage, DTP is not generally said to include tools such as TeX or troff, though both can easily be used on a modern desktop system and are standard with many Unix-like operating systems and readily available for other systems. The key difference between electronic typesetting software and DTP software is that DTP software is generally interactive and WYSIWYG in design, while older electronic typesetting software tends to operate in batch mode, requiring the user to enter the processing program’s markup language manually without a direct visualization of the finished product. The older style of typesetting software occupies a substantial but shrinking niche in technical writing and textbook publication; however, since much software in this genre is now open source, it can be more cost-effective than the professionally-oriented DTP systems.

There is some overlap between desktop publishing and what is known as Hypermedia publishing (i.e. Web design, Kiosk, CD-ROM.)