

with experience in typesetting or periodicals layout will feel right at home. Ventura requires you to plan your work and allows high-volume reproduction for later projects with similar requirements.

The best program for you will depend heavily on your company's types of publications, work flow, management structure, and user-interface preferences. Some companies with diverse needs and users are even finding it useful to have both programs. Single users find their documents, work habits, and preferences play a big role in deciding which is best.

## Pagemaker 3.0 for the PC

### ALDUS

Desktop publishing originated on MS-DOS PCs with programs such as Studio Software's Front Page. However, they all but died when Aldus released Pagemaker on the Apple Macintosh, both legitimizing and defining the field. When Aldus ported Pagemaker to MS-DOS in the winter of 1987, it revived and legitimized MS-DOS as a desktop publishing environment. Ventura had been released earlier, but it received much less attention. Pagemaker also helped to make graphical interfaces on PCs used in business a reality.

Aldus took the next step — supporting flexible, mixed-machine hardware environments — by introducing file, feature, and interface compatibility between the MAC and MS-DOS versions of Pagemaker. This gave users on both platforms access to the same power without giving up their favorite operating-system styles and applications.

From the beginning, Pagemaker focused on layout and graphics. Through several upgrades, it has retained its free-form, unstructured approach in which you react to and modify designs as they progress.

But this lack of structure also means that duplicating a design across several pages or even columns can require a lot of manual fine-tuning — the same problem layout artists face with traditional paper layouts. Because each column is placed and repositioned with a mouse, it is difficult to ensure that each column's top and bottom align with the other columns' tops and bottoms. Pagemaker's latest version, 3.0, recognized the importance of at least some automation when it added automatic text flow to help ease these manual tasks.

In graphics, Pagemaker's highly WYSIWYG approach has been the key to its success: You can see the effects of your actions, such as cropping an image, as you carry them out. This helps greatly in

eliminating guesswork.

With Version 3.0, Pagemaker began paying more attention to typographic issues that are fundamental to publishing because they determine how easy it is to read text. Graphic artists are increasingly aware that good typography can transform text from a necessary evil to a fundamental design component.

Pagemaker still requires trade-offs, though, for text-oriented publications like most newsletters, magazines, and books. For example, you may want large word spacing in body text to help the reader distinguish individual words, but too much space between words in a headline looks wrong. But in Pagemaker, you can't control the spacing of different types of text in the same block separately, so you must find a compromise setting.

Pagemaker is thus optimal for any work — advertisements, brochures, posters, or covers — where images speak louder than words. Pagemaker is rightfully the graphic artist's program of choice.

Pagemaker's layout features include the unique capability to work on two facing pages (a "spread" in publishing lingo) simultaneously, and can even place graphics and text across them. This is extremely helpful in folded publications like brochures. Pagemaker lets you define your own page size for odd-size publications. A feature called Master Pages lets

you set basic global layout parameters, such as number of columns and margins, easing some of the program's manual burden. Rulers and guidelines also help you perform these tasks more accurately.

Two powerful features give graphic artists more creative control over graphics presentation: polygonal wrap and image control. As anyone who's tried to use a typesetter or an X-Acto knife to manually wrap text around an irregular graphic can tell you, Pagemaker's polygonal wrap capability goes beyond what you could achieve with conventional methods, giving desktop artists a unique power. For each graphic, Pagemaker also gives you a choice of three wrap methods: around the image like a doughnut around its hole, above and below an image like the bread in a sandwich, or only above an image. Pagemaker's text wrapping capabilities are greatly superior to Ventura's.

The control over image output also adds a new dimension to layout: It gives artists a degree of control over the printing of their work. You can now create special effects like making a photograph print as a series of lines rather than the usual series of dots, or you can intentionally use a coarse resolution on an image to create a rough feel.

Pagemaker also lets you define colors and produce spot-color overlays. The color capabilities are adequate if you use

## Word Processing and Desktop Publishing: Two Worlds Meet

Vigorous competition among office/professional, high-powered word processing programs has produced systems rivaling the heavyweights of desktop publishing. Indeed, the convergence of word processing and desktop publishing has helped define the competitive universe for the likes of Microsoft Word or Word Perfect as well as for Ventura and Pagemaker. Less than a few years ago, we couldn't seriously consider word processing programs in the same breath as desktop publishing systems, but with the appearance of Word Perfect 5.0 last year and Microsoft Word 5.0 this year, the distance separating these two approaches to words on paper has shrunk.

Despite some word processing features in desktop publishing, word processing tasks are still better accomplished in a word processor. Word processing systems, of course, start with the basic task of entering and editing words, organizing them into sentences, paragraphs, sections, and chapters. Word processing systems focus on the words, and only when the words are right do formatting issues become important. Consequently, as these programs evolved, they grew first in the editing category, adding features for spelling, finding and replacing, a thesaurus, cursor moves, cut and paste, tabs and indents, and similar functions. As the editing collection became more complete, the competition shifted more and more to issues of appearance and formatting. The programs began to work on headers and footers, justification and microjustification, boldface, underline, italics, footnote placement, hanging indents, centering, flush right, double columns, margins, and special character sets.

All seemed to be orderly and progressing nicely until the advent of the sophisticated laser page printer in popular price ranges. Nothing revolutionized the word processing marketplace more than the HP Laserjet and similar, relatively inexpensive 300-dpi printers capable of complex font management, graphic capabilities, and high-quality, elegant output. With the ante raised, word processing programmers rushed to take advantage of the new capability. Those systems lacking expansion room to adapt to the laser revolution faltered and quickly found that dot-matrix and daisy-wheel support was not enough. Products like Word Perfect and Microsoft Word took advantage of their special characteristics such as proportional spacing to add ever-more sophisticated laser printer support. Today, these systems have the capability to handle almost everything the currently available crop of laser printers can do: graphics inclusion, multiple fonts, proportionally spaced justified text, variable spacing, downloaded

fonts, and sophisticated layout tasks.

During this same period, PC desktop publishing programs helped to proliferate page printers for the masses. This put sophisticated printing devices on the desks of amateur typesetters and ordinary folk putting out newsletters, brochures, and even books using modest hardware. The desktop publishing programs rushed to improve ease of use and flexibility in order to be accessible to relatively untrained people. While already including most typesetting tools required to do complex layout, handle fonts, include graphics, and the like, desktop publishing programs were outclassed as editing tools. Indeed, many desktop publishing systems regard editing as a separate task unrelated to the layout and printing function. Desktop publishing has begun to fight back with improved compatibility with the market-leading word processing systems. Also, many desktop publishing packages include or are considering including word processing features such as search and replace, spelling checking, and others.

Where will this end? Predicting the course and speed of technological change in this industry is riskier than betting the lottery. However, the current crop of desktop publishing programs and word processing systems gives some indication of directions. Today, Microsoft Word 5.0 or Word Perfect 5.0 can produce almost anything available through a desktop publishing program such as Ventura. But that's not to say there is no room for Ventura in the market. Just because it's possible to do complex layout and formatting and insert graphics through Word Perfect doesn't mean that this is the best, easiest, most convenient, or highest-quality way to accomplish complicated layout.

In general, Ventura and Pagemaker still offer better tools for complicated publishing tasks. Such esoterica as kerning (the readjustment of inter-letter spacing between special letter pairs such as A and V), interline spacing (the variable adjustment of space between lines), and inter-word spacing or general inter-letter spacing still are done better and more easily in a desktop publishing program. Graphics inclusion, editing, and placement, while possible within Word and Word Perfect, can be done better and more effectively in Ventura or Pagemaker. Moreover, desktop publishing permits editing directly on the graphics screen, while the word processor still does not. Page preview in word processing programs is good, showing pages just as they will be printed, but changes still have to be made on the regular text-style screen. So in some situations, it is more convenient to use a desktop publishing package.

More important, perhaps, than the actual capability

to do things like columns, graphics, and proportionally spaced text, desktop publishing generally lets you prepare output that can drive higher-resolution devices. Most word processing systems work well with the standard 300-dpi personal laser printers; however, professional laser and photographic equipment exists with resolutions as high as 2,450 dpi — resolutions required for high-quality photographic reproduction of scanned pictures. Many desktop publishing packages can handle these high-resolution files.

Further, managers need to be careful about making everyone with Word Perfect or Microsoft Word a desktop publisher. Whether with a word processor or a desktop publishing program, the production of complex text and graphics requires skill and experience. Special terms and concepts underlie the effective use of typesetter's tools for layout. Users of Microsoft Word have a head start, of course, since that program, unlike most word processing systems, builds its tools on a typesetter's model that sees pages composed of text elements and frames. But even Word users, however, will need to spend a lot of time becoming mediocre layout specialists. The greatest danger in the proliferation of laser printers is the temptation to make every office a print shop and every document a publication.

The choice of word processing or desktop publishing requires only a little thought. If you have a laser printer and enough business to justify a true specialist who puts other people's words into elegant and complex formats, then desktop publishing makes sense. But such a system should include a high-powered, fast computer (a 386 of some kind) and a high-resolution monitor. Otherwise, the special tools of desktop publishing programs will not produce their full productivity benefit.

If you have an HP Laserjet II or similar page printer, an occasional newsletter or brochure to get out, and lots of general word processing to accomplish, Word Perfect or Word will do whatever you need in the way of desktop publishing. Assign one of your better staff members to learn enough about the fancy formatting and layout capabilities of these programs.

As time goes on, word processing programs will become better and better desktop publishers, if only because this represents one area where one product can show superiority over another. Since most high-end word processors do all the standard word processing tasks with about the same level of effectiveness, competition has moved to the exotic features and specialized capabilities, among which desktop publishing has emerged as the glamorous competitive arena.

— John Lombardi