KAMAS

The first outline processor for CP/M machines

BY MARK RENNE
Review Board

Some tout outline processors as the next wave of word-oriented software packages, and products such as Think Tank from Living Vidoetext have moved onto best-seller lists. Most outline processors for microcomputers, however, have been available only to IBM PC and Macintosh owners.

But owners of CP/M computers from Kaypro, Morrow, and Epson can now use the same outline processing software with the Knowledge and Mind Amplification System, known by its acronym KAMAS, from Compusophic Systems.

Outline processors allow you to generate and manipulate outlines in a variety of different ways. KAMAS also includes text processing features, telecommunications software, and a complete structured programming language. Currently, KAMAS is the only outline processor for CP/M computers and the first programmable outline processor.

Applications for outline processors are wide and include writing, appointment scheduling, training, computer-aided instruction, and file indexing. Writers have long used outlines to develop stories and articles in a general form, adding the details of the story later. This technique leads to clearer and more organized writing.

You can also create an appointment calendar by using months and weeks as headings and subheadings, developing an appointment "outline." Additionally, information regarding training and instruction can be stored in an outline, with individual users viewing only those topics about which they want to learn more. File indexes can be stored in an outline and are available by individual keys within the index.

KAMAS allows you to create an outline on your computer and store it on a diskette. This outline can be arranged and rearranged as you fine-tune your project. You can display the entire outline or just the parts in which you are interested. If

Mark E. Renne is a professional free-lance writer who also teaches adult classes on computing for novices. He has been working with microcomputers for eight years.

you're interested only in the outline's general nature, the details can be "collapsed" and hidden from view. These details can be expanded at a later time to reveal the entire outline.

In KAMAS, each outline is called a "topic." A topic may be as large as 8 megabytes. (Of course, you need a disk drive large enough to hold that much information.) You can make as many as 16 topics available at one time, leaving you with a maximum of 128 megabytes of text available at any time (subject, again, to

InfoWorld
Report Card

KAMAS

	Poor	Fair	Good	Excellent
Performance	☐	☐	☑	☐
Documentation	☐	☐	☑	☐
Ease of Use	☐	☐	☑	☐
Error Handling	☐	☐	☐	☑

Summary: KAMAS is currently the only CP/M-based outline processor on the market, and it is a good one. It is also unique in providing a programming language as part of the system, improving flexibility for advanced users. A more concise manual on programming is needed, though.

Product details: List price, $175. Version tested available for Kaypro 2, 2X, 4, and 10 running CP/M 2.2. Also available for Morrow MDD2, MD3, Epson QX-10. Requires 64K RAM; two disk drives. Printer, serial port recommended. Published by Compusophic Systems, P.O. Box 5549, Aloha, OR 97007; (503) 649-3765.

disk capacity).

Each topic consists of one or more items, with each item having a key, a subtitle, and a text leaf. Subtitles describe the key, and the leaf holds the extensive information for each item. There is no limit to the number of items you can have for a given topic. Keys, subtitles, and leafs have a maximum length of 31, 63, and 2,420 characters, respectively.

You can develop a hierarchy by placing items underneath one another within the outline. Items can be rearranged at any time, and you can change the hierarchy at will. This flexibility allows you to jot down ideas quickly as you think of them and organize them later.

KAMAS provides you with a screen-based editor for entering text into each leaf. It allows you to insert, delete, and move text within a leaf. It also includes a "yank" buffer that saves text you have deleted from a leaf. Using this buffer, you can transfer text from leaf to leaf. Although not as sophisticated as a dedicated word processor, this editor has the most commonly used features found in word processors.

Although you don't need to do any programming to use the outline processing portion of KAMAS, a programming language is included for developing your own application programs. The language is most similar to a language called Forth. You can use the predefined commands of the language, or you can create your own commands out of combinations of the basic ones supplied.

KAMAS also can be operated remotely by using the included bulletin board software. You will do best to use a Hayes Smartmodem 1200 in this case, as not all Hayes-compatible modems work successfully with the software.

Comparing the performance of KAMAS to other outline processors is difficult, because the others on the market run on more advanced computer systems. Nonetheless, the program ran smoothly, and we encountered no problems during operation. Most operations take place quickly, although the program to set the current date takes almost a minute to get going. Manipulating the outline is straightforward for insertion, deletion, and rearrangement of the items. While some of the operations might be performed on a word processor, the program makes outlining

easier and faster — and does a few things you can't really do with a word processor.

Our version of the program came preconfigured for our Kaypro IV computer, and we needed to do no further installation. KAMAS uses the arrow keys for cursor movement and for moving through the outlines. Once you make a backup copy of the program, it is ready to run.

Outline processing can be performed by anyone, regardless of computer experience. The programming language with KAMAS however, requires serious study before you can start writing any complex programs. The language is not at all similar to Basic or other languages used by most new microcomputer owners. The language is complex and not easily learned. It is not required for outline processing and will probably not even be used by most owners of the product.

The outline processor is easy to use, and after a little practice you will likely be skilled at generating outlines. Help screens are available at any time listing possible commands. The text editor is equally easy to use.

KAMAS has superior error handling. When an error is encountered, a short message is displayed describing the error.

If that is not sufficient, you may request further information about the error, its probable cause, and how to eliminate it. This approach to error handling is one that should be used with most programs, especially those meant for operation by novices. The initial error messages are a bit cryptic — they are usually one or two words run together, such as DREADONLY for "disk is read only" — but this shouldn't create too much of a problem because a complete description of the error is only a keystroke away.

The thick documentation consists of three manuals comprising more than 700 pages. A small manual covers only outline processing and includes a step-by-step example. This manual is aimed at the beginner and explains every item in great detail. This manual allows you to get started quickly and concentrates on building outlines and using the leaf editor.

The other two manuals are users guides to the entire KAMAS system. These are more reference-type manuals and contain information regarding the programming language. They also describe different techniques for locating and modifying outlines. A complete index and table of contents are also included.

Although the manuals are generally well-done and contain some good examples, there is no gentle introduction to the programming language. We suggest an additional manual, similar to one included for outline processing, that would cover the programming language. Most users will be interested in the outline processing and should find the short manual adequate for that part of the package.

The program is supplied on an unprotected diskette with a 90-day media warranty. Compusophic publishes a newsletter, the *KAMAS Report*, which is sent to all registered KAMAS owners at no charge. The newsletter covers questions, application ideas, and extensions to existing KAMAS functions.

KAMAS is actually two levels of programs. The outline processor is simple, easy to use, and will appeal to all users. The documentation for this level is clear and straightforward. The second level, the programming language, is more difficult and will appeal only to advanced users. It is, however, this capability to be programmed that makes KAMAS a very powerful outline processor, since you're not trapped by an inflexible program. □