

APPLIED INTELLIGENCE

Text Management's Mission: Locate What's Relevant



**JAMES
MARTIN**

This is the second article in a series on text management and its influence in the corporate environment.

In the 1980s the need to manage and retrieve data—general ledger, purchasing, inventory, order entry, and so

on—was met by database-management systems (DBMSs). Now that corporations understand how effectively they can use computerized data, they're turning their attention to managing textual information.

As opposed to data, text comprises memos, E-mail messages, correspondence, manuals, articles and journals. Text management as illustrated in the figure refers to the maintenance and retrieval of text and its associated images. It emphasizes the content of the text items, rather than its format or structure.

This emphasis on content is why text management doesn't lend itself to traditional DBMS technology. DBMS retrieval is oriented to values in records and fields that are matched against the query criteria; those that match are returned.

Queries against a text collection are oriented to content. Words contained in the text items are matched against words used in a search criteria. But that's where the similarity in query capabilities end.

A match in a text item does not automatically determine that the text item is relevant. If a search phrase appears only once, the retrieved docu-

ment may be irrelevant, and users can't afford to spend valuable time sorting through irrelevant documents.

Computerized information systems usually deal with fixed-length data. Information about the data is embedded in the structural design of the application, and the rules concerning data ma-

text seem deceptively straightforward: Locate what's relevant.

In reality, this involves many steps and many variations. One user might simply want to browse through the text, another might want to incorporate a piece of a document into a memo or a report, and another might just want to file an inter-

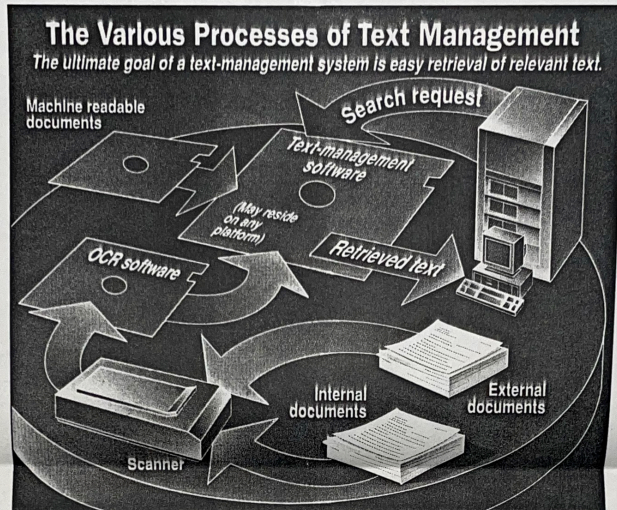
division has been assigned a major product update. The design and production changes are relatively straightforward, but revising the associated documentation will require disproportionate effort.

Is there an effective way to isolate all sections of the reference, maintenance and user manuals that will be affected by the proposed improvements? Or will every paragraph on every page need to be checked? What will this additional time cost? How long will it take?

The use of text-management technology could provide methods for efficiently and effectively handling this seemingly overwhelming task. If the manuals were in machine-readable form, they could be indexed, and a full-text search could be performed using words and phrases that reflect the nature of the changes.

If the reference, maintenance and user manuals were generated using document-assembly technology, the affected sections of those manuals could easily be identified. Document-assembly technology facilitates the management of small sections of text that are used in more than one document. The resulting document is generated on demand.

Next week I'll discuss the management of the creation of text. ■



nipulation are necessarily rigid, both to ensure the integrity of the data and to facilitate processing.

If the information doesn't fit into the pigeonholes established by the database design, it's often discarded. This problem can be avoided as text-management systems continue to evolve.

Users' objectives when dealing with

esting document for later use.

In addition, the way people deal with text differs from person to person—there's no standard pattern. To cope with these differences, text management must provide search and retrieval methodologies that are both intelligent and flexible.

Consider the following scenario: Your

The concepts in this article are described in a new volume, *Text Management, of The James Martin Report Series*. For more information on this volume, call (617) 639-1958. For information on seminars, contact (in the United States and Canada) Technology Transfer Institute, 741 10th St., Santa Monica, Calif. 90402 (213) 394-8305. In Europe, contact Savant, 2 New St., Carnforth, Lancs., LA5 9BX United Kingdom (0524) 734 505.

KES \ Version 3.0 Sports a GUI

Continued from Page 65

data manipulation features.

KES users welcomed the arrival of graphics for the expert-system shell.

"Our end users are often naive about technology, and in some cases are computerphobic," said Jacqueline Haynes, vice president of Intelligent Automation Inc., an industrial automation and training systems company in Rockville, Md. "The Windows environment is just a clearer and less ambiguous user interface." Haynes' firm used KES to build an expert system that helps educational administrators plan programs for handicapped students.

To speed development, KES 3.0 also provides templates for commonly used rule constructs, such as "if... then." With this feature, users need only fill in the template blanks to build rules.

Unlike some expert systems that offer template capabilities, KES lets developers easily mix templates with custom rules written with the KES language, according

to company officials and users. "One of the things I always want is the flexibility to go back and do it myself," Haynes said. "I really object to systems where you can't get out and hack it on your own."

To provide more programming muscle for users writing KES code, version 3.0 adds a new debugging feature that lets users set break points within code to stop program execution at preset intervals. In addition, a new browse feature lets developers examine several parts of their application simultaneously, Florian said.

The new version, available on 68 hardware platforms, also adds data-manipulation features: A pattern-matching function can be employed to extract and act upon specific types of data, and a new data type lets users establish direct relationships between two sets of records.

KES 3.0 pricing ranges from \$4,000 to \$60,000, depending on the hardware platform and operating system requirements.

Software A&E can be reached at (703) 276-7910. ■

EdenSoft \ Windows Utilities

Continued from Page 65

"[Resource Workshop] is a lot better than the Microsoft tools," said Ira Bibbero, vice president of United Data Corp., a San Francisco-based developer of Windows connectivity programs and a user of Resource Workshop. "It's easier to create a [Windows] dialogue and then get it to look the way you want."

When stacked against comparable tools in the Microsoft SDK, each Resource Workshop component also has advantages, according to Eden. For example, the editor used to create icons, bit maps, fonts and cursors offers paint program-type features. In addition, Microsoft's editor delivers only one mode—the close-up Fat Bits mode—for graphics work, whereas Resource Workshop offers a range of resolutions and two separate views, he said.

Resource Workshop also provides three specialized editors that the Microsoft SDK lacks: a menu editor, an editor for charac-

ter strings, and an editor for creating hot keys and keyboard equivalents.

Integration between the modules is another benefit of Resource Workshop, Eden said. All the tools run under Windows, and the resource editor is integrated with the resource compiler. This allows for incremental compilation, ensuring that when a resource element is modified, it is automatically recompiled.

To develop Windows applications, Resource Workshop must be used with Microsoft SDK.

Other capabilities of Resource Workshop include functions in the dialogue editor to manipulate, group and align controls such as radio buttons; a project-view mode for managing the files and resources of an application; and features that ensure changes are reflected in the updated resource source code without destroying comments and symbols made in the original code.

EdenSoft, based in Berkeley, Calif., can be reached at (415) 548-3554. ■