Product Update

Voice Recognition System - computers that listen?

by Reg Biddulph and John Burrell

On the 22nd of September 1994, at Law Society House (Perth), more than seventy members of the legal fraternity attended a demonstration of two voice recognition products; IBM's personal dictation system and Dragondictate.

For many, this was their first observation of what promises to be an exciting development in the world of computers.

There are a number of common features of the two systems namely:

- a fairly high powered PC is required - a minimum of 486 DX 33MGZ with 16 Mb of RAM, and performance improves with faster processors or more memory.

- what you purchase is a combination of the software, a special card to be inserted in to the PC and a microphone.

- a concentrated training session is required to teach the system your voice pattern, taking a minimum of 2 hours and essentially another 6-8 hours of use to achieve high rates of recognition.

- the systems recognise words by virtue of the gaps between them, so you must speak with at least a tenth of a second gap between words. This limits the speed of dictation to something in the order of 70 words per minute.

The IBM dictation system was presented by Osborne Computers. The application software used included Windows, OS/2 (mandatory) and the word processor used was Ami-Pro, although any can be used.

The limitation of the IBM system appeared to be that you firstly opened your word processor soft-

ware, then opened up a 'dictation window' in to which the spoken text was transcribed. Amendments and alterations to the text were then made. When completed, you placed the text from this window back in to the word processor system, where you can then revert to the keyboard to make the necessary editing for appearance eg. bolding, centering etc.

The Dragondictation system, presented by Voice Recognition Systems Pty Ltd, started from the DOS prompt with the command 'Start Word Perfect'. This system has the advantage that there is no need for an OS/2 environment or a special dictation window; the Dragondictate allows you to put away the keyboard, and can be run with either DOS or Windows, again with any word processing package, though extra features/options are available for WordPerfect in software known as 'Lawtalk'. The demonstration by Dragondictate, proceeded with dictation straight in to a WordPerfect document, with the power of using macros, and all the editing features available by spoken word enabled a one page letter to be created in these commands - a much higher rate than 70 wpm. Sending it off to the printer, fax or e-mail is again just a matter of telling it what to do.

Because the Dragondictate system communicates with the PC at the keyboard buffer and not via a dictation window, you are not limited to the simple dictation of document, but can in fact use voice commands instead of the keyboard across the entire range of software applications that you run, including accounting systems.

Both systems have a high level of accuracy, with several very similar

words being used in the one sentence and each being recognised for what it was. The systems in effect 'learn' your voice so the more you use them, the more accurate they are. An accuracy of 98% or more is claimed after prolonged use.

OK, so much for the technical aspects, are these things worth buying?

The machines required to run the systems (486 with 16 megs of RAM) will set you back over $3,000. The voice recognition systems cost about $2,000 and the Lawtalk software for use with WordPerfect (which is highly recommended) costs an additional $800. Whichever system you use requires, like all software, a considerable amount of effort to learn it properly.

After spending the time learning this system, you will still be left with the fact that, with the maximum dictation speed of around 70 wpm, you will be dictating words at less than half the speed that you will presently be dictating them on a dictaphone. The upside of that, of course, is that once you have finished doing the document, it can be printed straight away - there is no breathing down the neck of your stressed secretary waiting for her to type it up.

You also need to be reasonably familiar with the macros used by your word processor to use the systems properly. Indeed, unless you are familiar with your word processor software, it is going to be fairly difficult for you to get the full benefits of the voice recognition system.

The conclusion drawn by most people who saw the demonstration was that the systems still have a way to go before they will replace a secre-

tary. Their benefit at the present time, appears to be complimentary ie. they can be used after hours or to undertake urgent work, but you have to balance that advantage against cost.

Perhaps more fundamental, the problem with the system is that it still puts the lawyer in the front of a computer screen, which can some-times be an incompatible match. Nevertheless, these systems represent the stepping stones of the future; consider a system whereby you dictate, as you do now, into a dictaphone, that is then downloaded into your secretary's PC, processed by a voice recognition system and then immediately appears upon your secretary's screen, typed and ready for minor amendments/editing. The latter system, is at a guess, three to five years away from being developed and, like all things, will take time before being commercially viable. In the meantime, try one of the voice recognition systems or be real nice to your secretary!

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