Auto-mated-ly Speaking

WE ALL HAVE heard about the exciting new software that will revolutionize the world of technology. Five years ago it seemed that we would be talking to our computers by now. We would be able to throw away these clunky desk consuming keyboards and all of the hunters and peckers who type with one finger could rejoice. The world of verbal computing, it seemed, should have been on the fast track

But voice recognition (VR) software has not come nearly as far as everybody had hoped. In the past three years or so, the power of computers has nearly tripled, yet voice recognition has made only minor inroads into our daily lives.

VR software was supposed to enable us to give verbal commands to our computers. The computer would listen and understand everything we said. Just by talking, we would be able to control every aspect of the PC.

If the producer eagerly was awaiting the day he could speak commands to his computer and bark orders to his household appliances, he shouldn't hold his breath. What happened and why aren't we there yet?

The news really is not all bad; after all, I am using voice dictation software to write this article. But unfortunately, that is about the limit of today's software capabilities. The reasons mainly involve,the daunting task of processing the many. cultural differences and nuances in our speech. If We all spoke exactly the same, the process would be fairly straightforward. But you say tomato and I say tamato. Add in such verbiage as which witch is which, or,their information is there, and you quickly start to appreciate the complexities involved in trying to have a computer understand speech. No, for the time being we must be content with having voice recognition systems that must be trained to understand us.

Aside from the difficulty of trying simply to interpret a producer's speech pattern, the computer also must distinguish from background noises and other interference. This area of VR remains unconquered and limits the environment in which a VR software system may be used. It is understandable that we are not all yet speaking to our computers. It simply is not practical. Imagine an office full of workers speaking to their PCs, and you start to get the picture.

VR Gadgets

My lovable dad, "Mr. Gadget," has been using a voice organizer for some time now. These nifty little handheld devices allow the producer to speak into a digital recorder, set

the date and time to play the message back, schedule appointments, to-do's or telephone calls, all by simply speaking. As an example, the producer would push a button and say "August 31, 2 p.m." to set the time and date. He then would dictate a short message. On August 3 1 st at 2 p.m., the message automatically will be played to remind him of whatever it was he needed to be reminded.

A voice organizer like this should cost less than $200. The particular voice organizer that "Mr. Gadget" uses is called the IQ Voice Organizer and is available from www.voiceorganizer.com .

The two top contenders in the voice recognition software arena are IBM's ViaVoice (http://www-3.ibm.com/software/speech) and Lemout & Hauspies' Naturally Speaking (formerly Dragon Systems) (http://www.lhsl.com/naturallyspeaking) . If the producer invests the time to work with either product as instructed, a 96% to 98% accuracy rating can be achieved.

A high quality microphone, its placement, and the producer's articulation are all prime factors in determining accuracy. VR software best recognizes phrases and sentences.

Voice Training 101

A surprising side benefit of using VR is that it makes an excellent training tool. Composing while dictating is a new skill for many people. It forces the producer to think first and talk second (something with which a few producers I have come across needed lots of help).

In time, the automated agent will be video conferencing and recording video attachments to the prospect's computer file. VR software requires the producer to enunciate his words more carefully than usual. This is invaluable training for telephone communications, one-on-one sales presentations, seminar speaking, and the aforementioned video records.

Speaking with a Big Voice

The biggest advances in voice recognition technologies have occurred in enterprise call centers. Good examples of these are the automated voice response systems at Federal Express and the United Airlines arrival and departure information system. Large-scale businesses have the resources and deep pockets to help move this technology forward. The United Airlines system handles more than 70,000 calls a day. The economics of spending large sums of money to automate the process here makes sense. As with the fax machine and other business equipment over the years, big business will help bring better voice recognition technology to all of us ... eventually.

Tele-what-ics?

The next area most producers will see evolve in the speech recognition category is from a surprising source, "telematics." Just what is telematics? Simply put, it is voice-activated electronics for the automobile. Many companies are working on voice-activated computer-car telephone combos, which would enable the producer to talk on the telephone, review e-mail, and surf the Web, while keeping his eyes on the road and hands on the wheel.

This trend becomes slightly more newsworthy in light of increasing worries over

whether, like drinking and driving, computers and automobiles simply don't mix. The major automobile manufacturers are pushing hard to integrate voice recognition into their higher end vehicles.

One thing that is consistent in the world of VR is that it is limited outside of dictation software. By that I mean the number of words that must be recognized is only a small subset of our everyday language. Call center systems and organizers need to understand only a limited number of words, primarily numbers and dates. It is much easier to recognize a short list of responses than it would be if a system had to differentiate between Jan, Dan, Chan, and Sam.

I must say that I am impressed with my VR software and its ability to let me dictate this article. While it has limited me to working in a quiet area and has made only a few mistakes, continued training of the software and my enunciation will correct them eventually

The area of voice recognition is still young. The producer should look forward to an ever-increasing number of gadgets and products that implement it. Compaq has announced its plans to release a handheld organizer with limited voice recognition technology by the end of this year. Car electronics integrating telematic technology also will start to be commonplace shortly. Soon we might be able get rid of the keyboard and interact only by voice. Someday soon we may be saying, "Computer, full speed ahead."