## CASE STUDY

# **Dragon NaturallySpeaking** Transforms the Court **Reporting Profession and Eliminates the Need for Transcription**

Voice Recognition Software Helps "Voice Writing" Document a Verbatim Record of Court Proceedings and Save Approximately \$10,000 Per Year.

#### **CHALLENGE**

Improve the efficiency of a court reporter by reducing the manually intensive and expensive process of transferring court proceedings from audio files into digital records with outside transcription services.

### **STRATEGY**

Use Dragon NaturallySpeaking to digitize court proceedings as they transpire.

# **RESULTS**

Reduction in costs from \$8-10,000 per year and an improved level of customer service. In addition, information can now be provided from proceedings almost instantaneously.

Court reporters play a crucial role within judicial systems throughout the world, creating a written record of legal depositions and trial proceedings. The importance of a court transcript is extraordinary, demanding levels of accuracy approaching perfection. On the surface it would seem that technology should be able to automate court reporting tasks. However, the adoption of new technology-based techniques has been limited because the official record must be text-based and highly precise. For over 50 years court reporters have used the stenotype method, where a specialized device and keypad combined with Computer Aided Transcription (CAT) software is used

"The ability to produce real-time transcripts has enriched my life and career, saved me a lot of money. and has been instrumental in changing the course of the entire court reporting profession."

- Jennifer Smith, Court Reporter

to capture the record in short-hand language. After the proceedings, the court reporter either manually transcribes this shorthand off of paper to create a formal, full text-based transcript or proofs the converted shorthand via the CAT system. In either case converting stenotype notes requires a significant amount of manual keying.

In recent years a new solution has emerged that combines the efficiency of digital recording with the ability to allow the court reporter to identify speakers and add other notes to the record. Called "voice writing", this method is derived from the stenomask method of reporting where the reporter would dictate into a speech silencing mask which was connected to an analog tape recorder then type the transcript from that recording after the fact. Voice writing employs the same technique only the speech silencing mask is connected to a computer which utilizes voice recognition software. Voice writing is not simply repeating what another person has said. A voice writer speaks each word immediately after a person in the courtroom says a word, and does this continuously for anyone speaking. If you were to hear a voice writer at work, it would sound as though every word being spoken was being said twice - once by the initial speaker, and nearly instantaneously by the voice writer. The voice writer must also verbally identify who is speaking, and add verbal notes describing any physical actions that are pertinent to the record.

As court reporting technology has changed, so has the need for skilled professionals to document proceedings. Jennifer S. Smith, CVR is very active in the profession as a working court reporter and co-owner of Verbatim, Inc., a progressive court reporting firm in Columbia, South Carolina. For the last six years, she has served on national and state boards to help promote the profession, especially relating to new technology. Smith has been the guest speaker at conventions and conferences all over the U.S. promoting speech recognition and voice-writing. She recently demonstrated this technology on the international stage in Vienna, Austria in July 2005, and placed 3rd in the world speed competition for voice writers.



# CASE STUDY JENNIFER SMITH

She assumed the office of President of the National Verbatim Reporters Association in August 2005. Founded in 1967, NVRA is the only national professional organization dedicated to the practice of voice writing.

Smith began her speech recognition journey in August 2001. She purchased an AudioScribe CAT System, based on Dragon NaturallySpeaking, to replace transcription services. According to Smith, "Each year, I would pay a typist anywhere from \$8,000 - \$10,000, to transcribe recordings. The process was slow and costly. From the initial draft I would proof what was typed, make corrections and finally certify that it was a true record of the proceeding. Through NVRA I learned of Dragon NaturallySpeaking at professional conventions where vendors were showcasing their newest tools for court reporters. I knew voice recognition was going to revolutionize the industry. I did research and considered the secondary use of other voice recognition products, but did not find the personal success that I found with Dragon NaturallySpeaking."

Smith believed the software would make her court reporting job easier and more efficient, as it afforded her the opportunity to stop spending hard-earned funds on a typist, which she had done for so many years. At the time of her initial purchase, she was a freelance court reporter and owned her own court reporting agency. Currently her business partner and several of the reporters that work in her firm also use the AudioScribe SpeechCAT software with Dragon NaturallySpeaking. Since then, either as a firm owner, trainer, or the national representative for voice writers, she has encouraged every person she meets to join the ranks of reporters utilizing this cutting-edge speech recognition technology.

"I use Dragon NaturallySpeaking every day to take down a verbatim record of court proceedings and produce a written transcript of what was said. Once I certify that it is true and correct, it is then the official record of the proceeding. My end document is an .rtf file in either Microsoft Word or Corel WordPerfect. As a freelancereporter, I am sure I do not produce the quantity of pages that an official court reporter would, but I would say that my average production is approximately 15 to 20 hours of testimony per week at 50-60 pages per hour. As deposition and court proceedings can generally be in excess of 200 words per minute (wpm), I find that with fairly steady Q&A testimony at 180-200 wpm, my recognition accuracy averages between 95-98%. Speaking this fast really stretches the limits of the software. It is advertised to work with greater than 99% accuracy at speeds up to 160 wpm. Of course, there are days when my speeds can reach 250-300 wpm, and admittedly the accuracy does suffer. As court reporters, our role as the "guardian of the record" is to take down a verbatim record of the proceedings. However, in doing this, it is vital that we are not heard outside of our mask. Using speech recognition with a speech silencer (mask), we are totally pushing the envelope by speaking at high rates of speeds, at a very low volume (almost a whisper), into the closed environment of the mask. Though it does not seem possible, many court reporters are able to achieve great success, giving us the opportunity to compete professionally as never before. Because of this technology, we are now able to offer the same real-time services as our stenographic colleagues."

Before the use of speech recognition, Smith used a dual track analog recorder to record her voice, via a speech silencer (mask), and a live room track simultaneously. She also used a backup tape recorder. Adds Smith, "I would then transcribe or have transcribed the audio tapes into text via typing. Dragon NaturallySpeaking helps me produce a real-time translation of the proceedings, be it a hearing or deposition, or business meeting. I have the ability to hook up a real-time feed from my CAT software to litigation support software running on a clients' (attorneys and/or judges) pc, if requested. I can also choose to stream both audio and text via our CAT software over a Helix server. Since my transcripts are basically in a rough draft format when the proceeding is concluded, I no longer have to spend money for a typist. I have also used this product to provide CART (Communication Access Real-time Translation) services for the hearing-impaired members of my church."

"After many years of using voice recognition software I have found the perfect recipe for success – a high-end business class laptop combined with a CAT vendor that is second to none, and incrementally improving Dragon NaturallySpeaking's voice files with my individual corrections. I am very happy with the performance of Dragon NaturallySpeaking and plan to continue using it in my business, and to promote the use of speech recognition nationally and internationally as President of NVRA. People are always amazed when they find out what voice writers can accomplish with this technology. I love it when attorneys want to see my computer screen and the look of astonishment on their faces when they see the words that were just spoken already there on the screen. The comments usually are, "So it understood what I was saying and put the words on the screen?" And I smile and say, "No. I was repeating everything that was said in the room into this mask, and the software understood ME! Dragon NaturallySpeaking's ability to produce real-time transcripts has enriched my life and career, saved me a lot of money, and has been instrumental in changing the course of the entire court reporting profession."

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