

## The Difference Between Typing and Talking

By Robin Springer

What would it take for you to use desktop dictation? Really use it. Not just here and there, not just for the first three months, not because you might be developing a repetitive stress injury, but really use it. For pretty much everything - to dictate e-mail, letters, memos - because using speech is faster and easier than typing.

When it comes down to it, more of us would use desktop dictation if it was easier to use. But what really makes a product more usable? If software is "compliant" does that make it usable?

Compliant is defined as "willing to comply; submissive," so, when software is "Section 508 compliant," it means the product conforms to federal regulations, but may not mean much else.

For example, if a commercial structure has stairs at the entrance to the building but also has a wheelchair ramp with multiple switchbacks at the side of the building, it complies with the Americans with Disabilities Act, but my 96-year-old grandmother is not going to scale the side of the building with her walker. She is prevented from entering the building and, as such, even though it is compliant, she still can't use it.

For a product to be accessible, it can be approached or entered. It is possible for the individual to complete the task, although doing so may be cumbersome. For example, using desktop dictation to magnify a page, one might say, "View, zoom, tab, tab, 150, okay."

Compare that to saying, "Zoom to 150 percent." That's usable. The distinction is important.

If we are talking about an attorney with cerebral palsy who types very slowly with one finger, it's possible she will use the software if it is compliant and she will probably use it if it is accessible. However if we are talking about an attorney without cerebral palsy who types without difficulty, she is not going to use the software unless it is usable.

Usability is defined by the International Standards Organization as the "effectiveness, efficiency and satisfaction with which a specified set of users can achieve a specified set of tasks in a particular environment."

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The five factors that influence usability are productivity, learnability, error frequency, memorability, and satisfaction. While the software design addresses issues related to learnability and error frequency, we can modify the user environment to improve productivity and satisfaction.

It could be something as easy as upgrading the microphone, and not for the purpose of improving recognition rates. Many dictators stop using speech recognition because it takes too long to put on the headset. Think about it. Type a two-sentence memo or fumble for the headset, put it on your head (this requires

two hands), adjust the boom, turn on the microphone...you could have been done by now if you had just used the keyboard. In many cases this is a deal breaker but if we swap the headset that comes with the software for a hand-held microphone, the user just picks it up and talks. It could be the difference between typing and talking.

What about the user who is constantly switching between the headset for the phone and the headset for the computer? After a while it becomes a bother. Changing the headset to an integrated unit that will accommodate both devices removes the disruption and makes the system usable.

If a computer has a slower processor or is limited in swap space on the hard drive or lacking in RAM, dictation can be painful. Imagine talking into the microphone and being able to count the seconds before the text is inserted into the document. Not only is this unproductive, it is distracting. By the time the user sees the text on the screen, he has probably forgotten what he wanted to write next.

According to sources at Hewlett Packard, using a dual core processor, as found in computers including the HP dv1000t notebook, instead of a single core processor resulted in a 30 to 50 percent improvement in non-speech applications, so, even though a product like Nuance's Dragon NaturallySpeaking was not made to multi-task, the dual core processor may improve dictation response time simply because of the enhanced processing capabilities.

Desktop dictation can be a long-term solution. We can accelerate the path to usability by being proactive in improving the user experience.



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