

# Using Speech

## Speech Recognition: Detracting the Distractions

By Robin Springer

When I recently went shopping for a new car, I was particularly looking forward to seeing how speech recognition was being marketed and sold. While I wasn't surprised to find that, at times, the accuracy exceeded my expectations, I was quite surprised by the ways in which speech technology was addressed by the salespeople. I encountered three typical scenarios: the salespeople who possessed great pride in their ability to use speech recognition, those who preferred not to discuss speech at all, and those who emphatically told me the technology, "just isn't there yet."

The first group displayed an attitude that their knowledge was supreme and I, as a consumer, was not capable of trying to use the system; rather, it was appropriate for me to watch and listen – and be awestruck. The second group wasn't really sure how to use speech and when the system did not respond appropriately they said things like, "it should work." The third category of salespeople attributed all misrecognitions to proof that we still have a long way to go before speech is a viable option.

None of these strategies encourage the use of speech-recognition. Instead of exploiting the availability of speech as a differentiating factor, no one bothered to talk about its benefits. In spite of the improvements in the technology, no one tried to sell it.

I was repeatedly dissuaded from considering a car with speech as an option. In fact, even in luxury lines, it was impossible to find speech recognition in cars that were not fully loaded. Speech is typically the last feature added to cars that have all other options, and that is not expected to change before the technology becomes more prevalent. It also means that those

who want to incorporate speech in their cars without investing in a top-of-the-line model automobile need to purchase after-market speech-enabled navigation systems and hands-free car kits for cell phones.

Leasing a car with speech recognition is not a big-ticket proposition. For an Audi A6 it's an increase of \$5 to \$7 a month on a 36-month lease. While some manufacturers offer speech to control navigation and/or Bluetooth only, Audi's speech module controls the navigation system, Bluetooth phones and audio (radio and CD).

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Carmakers' costs vary based on factors, including the number of languages in which speech will be available, text-to-speech capabilities and the number of devices that will be controlled by speech, but automakers have already made the investment for the design and implementation of the features they find most attractive. Wouldn't increasing the number of units sold increase the return on investment, making the technology more profitable and ultimately more affordable? Using the A6 as an example, while not all A6s have navigation systems, every A6 comes with an audio system, but the per-

centage of A6s that includes speech recognition is probably only in the teens.

In addition to increased revenue for manufacturers, speech recognition in vehicles addresses the issue of driver distraction. According to the National Safety Council, distracted driving accounts for approximately one third of car accidents. Being able to rely on voice commands for hand/eye busy tasks such as adjusting audio controls, navigation systems and cell phones increases the amount of time our hands are on the steering wheel and our eyes are on the road.

Jeff Foley, marketing manager for embedded speech at Nuance, believes speech technology addresses safety concerns, "...it helps, especially with the convergence of more distractions coming our way, but it may be hard to judge the effects of speech in decreasing car accidents until there is more market penetration."

It may be worth a try. The National Highway Transportation Safety Administration (NHTSA) estimates the economic impact of motor vehicle collisions in 2000, including those caused by distracted drivers, exceeded \$230 billion. In a separate study, NHTSA found that while most people made a conscious effort to limit distracting activities to when the vehicle was stopped, nearly all of the study participants engaged in distracting activities while driving.

We have a target market that is cognizant of the inherent risks that they are assuming by engaging in distracting activities while behind the wheel. We have technology to address the problem. Don't we also, then, have the opportunity to provide the solution and, in the process, perhaps also save lives?



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