Blog: Smart Homes Getting Smarter

At the beginning of December, while a monster of an ice storm had most of us in Dallas/Fort Worth trapped inside, a group of people gathered in San Antonio to talk about helping our wounded warriors. The meeting, held at the headquarters of grocery retailer H-E-B, was about a specific initiative: building state-of-the-art Smart Homes for our severely injured service members.

The initial phase of the project calls for two homes to be completed in 2014 – homes like no others in the world.



Using current technologies (think robotic vacuums, automated temperature control) and newly-developed technologies (single-purpose robots to take out the trash, network-enabled appliances, etc.), the homes will be specifically designed to suit the needs of the individual soldier and family that live in them.

The companies that attended the H-E-B meeting have a passion for helping the disabled, and were particularly interested in how they could be part of the effort to better the lives of our wounded warriors. The discussion focused on everything from addressing the medical needs of the homeowner, to ways in which to automate house work and handle specific space considerations. And the conversation extended to what technologies are anticipated down the road – what the group hoped for in terms of research and development of Smart Home components as the initiative progresses.

There's quite a bit of noteworthy work going on in this type of assistive technology, of course. Carnegie Mellon and the University of Pittsburgh's Quality of Life Technology Center (http://www.cmu.edu/qolt/) drives some impressive research into increasing the independence of the disabled and elderly. And UTARI's own Living Lab (http://www.uta.edu/utari/facilities/living.php) re-creates typical home living conditions to allow for realistic study of how products and processes will perform under everyday circumstances. Not surprisingly, using a *real* refrigerator when testing how a robot will open and remove items from a refrigerator, makes a world of difference.

The coming months will be filled with a massive amount of research and development for the H-E-B Smart Homes project (not to mention good, old-fashioned brick-and-mortar work). The hope is that this initiative is simply the beginning of hundreds of Smart Homes across the country for our severely injured soldiers.

University of Texas at Arlington Research Institute (UTARI) Blog, January 2014