Robots Can’t Tell Stories

BY BEN DAY, Member

I have been a technical writer for Digital Equipment Corporation, Avid Technology, and other companies. I have written about LANs, WANs, token rings, video production tools, and other products and systems. Not once in all those years at all those jobs has my work had the vital importance that my work here at iRobot Corporation does. If a LAN failed or a token ring network had disabling packet collisions and my manual didn’t fully explain how to fix the problem, there were no serious repercussions.

In my current position, however, if I do not clearly explain how to operate the iRobot PackBot® EOD Tactical Mobile Robot and if a soldier does not understand how to operate it properly, lives may be lost. My work here at iRobot saves lives. Explaining how to operate a robot that can disable roadside bombs is exciting and demanding; there is no room for error in the documentation. It’s a lot different from explaining how to add another track to your home video. Consequently, I spend considerably more time with my SMEs than I have in any previous writing assignment.

Special Documentation

Here at iRobot we make the PackBot EOD, among other robots, and I have been documenting this robot since its beginnings on the drawing board about six years ago. I have seen the PackBot evolve from a prototype to a deployed system that is capable of disabling improvised explosive devices (IEDs) along roadsides in Afghanistan and Iraq. Sometimes the IED detonates when the PackBot is close by and we end up with a large collection of robot pieces! (The PackBot EOD comprises more than two thousand pieces and parts.) If not for the PackBot EOD, a person would have suffered the same fate.

I have been the sole technical writer on this project and it has been my responsibility to explain exactly how to operate this robot so that its users will remain out of harm’s way. When iRobot receives images of a robot that has been demolished by a roadside bomb (see Figure 1), we realize that a soldier’s life has been spared and we redouble our efforts to build life-saving robots and create concise, clear user manuals. When iRobot receives feedback from users saying “You have saved lives today!” then my job takes on an importance that I have never before felt in a technical writing position. This is special, important documentation, and iRobot is a special place to work.

Our Mission

Our mission statement is simple and straightforward: Build cool stuff; deliver great products; make money; have fun; change the world.

And build cool stuff we do (that’s me in Figure 2 with one of our robots). Our products include the iRobot Roomba® Vacuuming Robot, the iRobot Scooba® Floor Washing Robot, and the iRobot John Deere R-Gator, a six-wheel utility vehicle that can motor around our parking lot without anyone driving it and can perform perimeter patrolling, unmanned reconnaissance, logistics resupply, and more. Because these are great products, we’re also accomplishing our goals of making money and having fun.

What about changing the world? iRobot Corporation is changing the world by designing and manufacturing low-cost, consumer robots that do dull, dirty, dangerous tasks so that humans don’t have to. Whether it’s investigating caves in Afghanistan or vacuuming the floor under your bed, we have created a better way of doing things—a way that makes life safer and easier.

And I, as the technical writer, take the complex information provided by some of the world’s brightest roboticists and simplify it so that the user, who may be operating under the most hazardous conditions, can easily understand and use the robot’s functions and capabilities. When I do this, my documentation is actually helping save lives. And that’s the best reward of all.