## **REPLAY IT AGAIN**

You probably knew a kid like Jim Barton, the type who could recite every line of dialogue from *Star Trek*, which Barton himself admits "was sort of a sad thing."

While his adolescent enthusiasm may have been decidedly geeky, like many a *Star Trek* fan, he, went on to pursue computer science and dream of what the future might look like. Today, Barton – co-founder of TiVo Inc. – is a revenged nerd, whose situation is anything but sad.

TiVo, as anyone who hasn't spent the last few years under a rock knows, is the killer gadget that enables TV viewers to warp time. Using a hard drive for program storage, viewers watch what they want at their convenience. For all its technological power, however, much of TiVo's incredible success rests on how easy it is to operate. While Barton may be technologically gifted – he worked on building the first supercomputers and has helped construct networks and design software for companies such as Bell Labs, Hewlett-Packard, Silicon Graphics, and his own start-up, Network Age Software – but he knows the average consumer is less technically inclined.

"When a consumer brings home a new device," Barton says, "they may play around with it for 30 minutes. But if they can't figure it out in 30 minutes, they never go back." His wife, he says, is even worse. "If she can't figure something out in five minutes, it's broken." So Barton

brought home a prototype TiVo in 1996 and put the remote in his wife's hands. In a short time, she was master of her television domain and he was convinced that any user would have the patience to master TiVo.

Ten years later, 4.4 million devotees have discovered, like Barton's wife, that to know TiVo is to not only to use it, but to be a little obsessed with it.

"I was one of those people who always said there's nothing good on [TV]," he recalls. "But there's always something good on TV, the problem is it's not there when you want to watch it.



"There was an 'aha' moment when this notion of pausing TV popped up and [TiVo co-founder Mike Ramsay and I] said, 'Wouldn't it be cool to do that?' I suddenly realized that given the PC-type technology available at the time in terms of hard disk drives, I could build a device to do that. And that's where the real invention is. Lots of people have ideas. It's being able to build a thing that can actually do that idea that makes it an invention."

The challenge now is the competition. It irks Barton that folks will call any digital video recorder (DVR) a TiVo. Having invented the very notion of time-warping television, Barton is a stickler for nomenclature (and patents). But like it or not, TiVo, like Kleenex, is the name-brand synonym – and gold standard – for DVRs. Barton believes TiVo's focus on simplicity of design and idiot-proof usability will continue to keep the company ahead of the clones.

And Barton's gang has continued to dream up home entertainment innovations to centralize music and video content. TiVoToGo, TiVo Online Scheduling, TiVo Mobile (cell phone scheduling), and TiVo KidZone (advanced parental controls) are just some of the recent additions designed to keep TiVo above the hoi polloi.

Barton stresses that the company isn't done yet. "We're inventing more than we ever have," he says. "We're widening the gap between us and those other DVRs. Its not narrowing." The course is set, you might say, to go where no DVR has gone before. - Erika Milvy