Why TV Will Never Be the Same
By Burt Helm in New York

Digital technologies mean more than just sharper pictures. Here's a look at three major trends they'll make possible.

The 1977 fight between Muhammad Ali and Joe Frazier was more than a colossal battle between two legendary heavyweights. "The Thrilla in Manila," shown on HBO, was the first live satellite broadcast over cable TV. It heralded the beginning of cable as a new standard that could one day replace the broadcast model.

Twenty-seven years later, analog cable will finally make way for a new champ -- digital TV. Though only 13% of homes will have digital TV by the end of 2004, according to the Consumer Electronics Assn., which expects that number to reach 65% by 2008. Three major tech trends will fuel this adoption: broadband Internet, wireless home networking, and high-definition broadcasting -- all of which will pave the way for entirely new possibilities in TV.

Old bulky sets won't be the only thing that's out of date. The way everyone watches TV, listens to music, or looks at photos will never be the same again. Here are three big trends to watch:

The super-high-tech TV will become as easy to set up as a low-tech appliance. It isn't just that a flat-panel TV's sleek shape and size makes it an easy addition in almost every room. Wireless technology allows smart TVs to work with a simple power cord -- forget today's tangle of wires and cables. Second-generation Wi-Fi routers, which you can buy at any electronics store or even Staples (SPLS), have enough bandwidth to stream video from a computer to the TV. Microsoft (MSFT) sells a TV adapter that makes this possible.

And this is only the beginning. Sometime in 2005 or 2006, Samsung and others hope to roll out "ultrawideband" wireless. This technology is powerful enough to wirelessly send a signal from a DVD player, audio tuner, or cable box to the TV screen. As wireless technology becomes faster and more reliable, digital panels all over the house will be able to play DVDs and crisp TV without needing to buy -- and find space for -- all of the set-top boxes, tuners, and other components. It will be as easy as plugging the TV in, like a desk lamp or a toaster.

Because the TVs will communicate over a home network, you'll be able to access digital content anywhere. Digital video recorders (DVRs), like the TiVo (TIVO) box and models offered by cable and satellite providers, are marching steadily into homes. GartnerG2, a unit of Gartner Inc., forecasts that 40% of all American homes will have one by 2008. By connecting them to home networks, and to your PC's hard drive, you'll not only be able to watch recorded shows from any TV in the house but you'll be able to access and play MP3 music files and view digital photos.
"The TV will become the central screen in the home," says Michael Gartenberg of Jupiter Research. "It becomes the portal for all digital content...linking back to every device where [data] is stored." Equipment that make this possible will hit the market over the next few months -- TiVo's second-generation set-top box allows a form of this kind of networking, as does Microsoft's home media extender.

But access to your data won't stop at the home. Because digital TV signals come over the same lines as your Web connection, you'll soon be able to control and access content remotely. The second-generation TiVo allows users to log onto a Web site to record specific shows while away from home. This kind of control will also soon extend to your cell phone, says Stephane Teral, a research analyst with RHK, a technology research and consulting firm.

With this Internet connectivity, TV won't come from just one provider anymore. Cable outfits and phone companies like Verizon (VZ) and SBC (SBC) are beginning to roll out Internet connections three and four times faster than current lines. When those speedy links are widely available, TV will be able to support video transfers over the Web -- while also receiving the standard channels from a cable, satellite, or telecom provider.

A DVR could then pull independent programming off the Internet, in much the same way as it records shows from regular TV today. Already, small companies like Mag Rack provide 20 different niche channels that a home user can view either by streaming directly from the Internet or downloading on-demand using a DVR.

"[Over the next 10 years] we're looking at entirely new business models for TV," says Roger McNamee, a co-founder of Elevation Partners, a private-equity firm focused on media and entertainment. Laura Behrens, a media industry analyst with GartnerG2, says on-demand choices may one day predominate over broadcast TV.

This won't happen all at once. Only 5% of households now own a DVR, and only 11% use a home computer network, according to GartnerG2. But these numbers are growing, and the existing technology is getting cheaper, more reliable, and easier to use. Very soon, you'll be able to watch "The Thrilla in Manila," or any of many thousand of commercial and independent programs, on the spur of the moment, from any room in the house.