

Newsweek



Timothy Archibald for Newsweek

Television Reloaded

It's a transformation as significant as when we went from black-and-white to color—and it's already underway. The promise is that you'll be able to watch anything you want, anywhere—on a huge high-def screen or on your phone.

By **Steven Levy**

Newsweek

Updated: 6:25 a.m. ET May 23, 2005

May 30 issue - Forty-four years ago, when Newton Minow famously described television as a vast wasteland, he might have hit the bull's-eye on the wasteland part. But he didn't know from vast. TV back then—a few black-and-white channels with a test pattern after midnight—was a sleepy three-light town where everybody hung out at the same dull places because there wasn't much else going on. As monochrome moved to color, and we got pay TV, more channels, remote controls, VCRs and cussin' on HBO, television sprawled much wider. But compared with what's coming, our 2005 experience is only half vast.

Tomorrow's television? Now we're talking *vast*. Start with the screens—wide, flat, high-definition monsters that delineate tire treads on NASCAR rigs and zits on an anchorperson's chin—and move to the programming choices, which will expand from a lousy 200 or so channels to tens of thousands of 'em, if you figure in video-on-demand (VOD). It'll be a cosmic video jukebox where you can fire up old episodes of "Cop Rock," the fifth game of the 1993 World Series, a live high-school lacrosse game, a ranting video blogger and your own HD home-movie production of Junior's first karate tournament. While it's playing, you can engage in running voice commentary with your

friends, while in a separate part of the screen you're slamming orcs in World of Warcraft. Then you can pay your bill on screen. And if you ever manage to leave your home theater, you can monitor the whole shebang in your car, at a laptop at Starbucks or via the laundry-ticket-size screen on your cell phone. The ethos of New TV can be captured in a single sweeping mantra: *anything you want to see, any time, on any device*. "We are at a watershed moment in home entertainment," says Brian Roberts, CEO of the cable giant Comcast.

To paraphrase sci-fi author William Gibson, the TV future is already here; it's just not evenly distributed yet. Early adopters have jumped on the new stuff because they offer two qualities traditionally lacking in the fading era of broadcast television: personalization and empowerment. All of which is worse news than a crummy Nielsen rating for the major networks, whose market share has already plummeted in the past decade.

Start with the hardware. Ever notice that no one uses the term "TV set" anymore? That's because people can watch on anything from a traditional box in the den to their computer, to a screen on the seat back of a JetBlue plane. But when it comes to the living room, the standard is a big-screen monitor that delivers high-definition quality. After years of hype and wrangling about standards, prices are down and a quarter of all TVs sold are now high def. Once you get one, you're hooked. "You find yourself mesmerized," says Mark Cuban, an entrepreneur who used his dot-com earnings to buy the Dallas Mavericks—and now has started HDNet, a cable-and-satellite offering that hosts about 20 hours of original high-def programming a week. "You'll always give the benefit of the doubt to something in HD," he says. That's good for Cuban, who snags viewers with homegrown productions like "Bikini Destinations." Meanwhile, HD is a must-have for network prime-time dramas, and just last week ABC announced that "Good Morning America" would go HD.

Another transition well underway is time-shifting, the ability to rearrange the schedule to watch programs at your convenience, not the networks'. Though videocassette recorders have enabled this for decades, those devices were always too hard to use and too dumb to really shape our habits. But a digital video recorder —(DVR) can easily grab your favorite shows—even if you don't know they're on—and allows you to freeze-frame fast action and jump commercials. Former FCC head Michael Powell called it "God's machine." As DVRs are offered in cable and satellite set-top boxes, more people are finally enjoying the benefits.

Video-on-demand provides another way to bypass what programmers offer at a given moment—and millions are already experimenting with it, commonly choosing old episodes of "Curb Your Enthusiasm" to the usual prime-time fare. VOD libraries will inevitably expand to the equivalent of the mammoth music boxes of iTunes and Rhapsody. And if you ever get tired of old movies, you'll have a chance to watch flicks at home while they're still in theaters. "All the studios say it's a matter of not if but when... new movie releases will quickly air on cable TV," says Comcast's Roberts.

Some people believe that between the recorders and VOD, people will follow schedules only for real-time events like sports and election night. Fox TV president Peter Ligouri says, "People want to watch shows like 'American Idol' live, in the moment." But everything else can wait. "Look behind any programmer's desk and you'll see a chart with the prime-time schedule—in 20 years that model will be as obsolete as the nickelodeon," says Steve Perlman, CEO of Rearden, Inc., and founder of Web-TV.

While time-shifting changes the when of television, "space-shifting" tinkers with the where. Now that you've stored your show on a TiVo, it's only logical to take it with you on your laptop, hand-held viewer or PSP game player. A company called Sling Media sells a device that allows you to watch the program playing in your living room on your computer, anywhere in the world. Other schemes are designed to beam programming directly to gadgets not normally regarded as TV devices. MobiTV, a service that sends programs to cell phones (like CNN and Discovery Channel), has 300,000 subscribers. It may call to mind the characters in "Zoolander" squinting into their microscopic mobiles, but Idetic CEO Phillip Alvelda reminds us that people once scoffed at mobile phones. "The truth is, mobile devices have a lot of advantages over television," he says. "For one thing, it's personal." And while you might not want to watch a viewing of "Lawrence of Arabia" on your Razor, new programming ("Mobisodes") will fit the size and time constraints of commuter-potato viewing.

Video-on-demand provides another way to bypass what programmers offer at a given moment—and millions are already experimenting with it, commonly choosing old episodes of "Curb Your Enthusiasm" to the usual prime-time fare. VOD libraries will inevitably expand to the equivalent of the mammoth music boxes of iTunes and Rhapsody. And if you ever get tired of old movies, you'll have a chance to watch flicks at home while they're still in theaters. "All the studios say it's a matter

of not if but when... new movie releases will quickly air on cable TV," says Comcast's Roberts.

Some people believe that between the recorders and VOD, people will follow schedules only for real-time events like sports and election night. Fox TV president Peter Ligouri says, "People want to watch shows like 'American Idol' live, in the moment." But everything else can wait. "Look behind any programmer's desk and you'll see a chart with the prime-time schedule—in 20 years that model will be as obsolete as the nickelodeon," says Steve Perlman, CEO of Rearden, Inc., and founder of Web-TV.

While time-shifting changes the when of television, "space-shifting" tinkers with the where. Now that you've stored your show on a TiVo, it's only logical to take it with you on your laptop, hand-held viewer or PSP game player. A company called Sling Media sells a device that allows you to watch the program playing in your living room on your computer, anywhere in the world. Other schemes are designed to beam programming directly to gadgets not normally regarded as TV devices. MobiTV, a service that sends programs to cell phones (like CNN and Discovery Channel), has 300,000 subscribers. It may call to mind the characters in "Zoolander" squinting into their microscopic mobiles, but Idetic CEO Phillip Alvelda reminds us that people once scoffed at mobile phones. "The truth is, mobile devices have a lot of advantages over television," he says. "For one thing, it's personal." And while you might not want to watch a viewing of "Lawrence of Arabia" on your Razor, new programming ("Mobisodes") will fit the size and time constraints of commuter-potato viewing.

All these elements come together in what may be the most significant development of all—the movement of the television platform to the Internet. IPTV hopes —to merge the lay-back culture of the living room with the bustling activity of the lean-forward Net. "This is the future," gushes Microsoft chairman Bill Gates, who has a \$400 million deal with telecom giant SBC to implement it.

"Moving from broadcast TV to broadband TV changes the whole industry," says Gates's IPTV czar Moshe Lichtman. While cable and satellite companies have limited channel capacity, the Net—which, you'll recall, can host billions of Web pages without a sweat—has room for everything. You can stack as many shows on the screen as your eyes can handle. When you watch baseball, you can monitor several games at once, or choose to view the game from several different angles at the same time. A future presentation of the Masters

Tournament might let you follow any golfer for every minute of his round.

Since the Internet is open to any digital content, your television will merge with other activities. Someone on the phone? You'll get caller-ID information on the TV screen. If you don't feel like fast-forwarding past the commercials, check your credit--card bills. And you know those news-channel "tickers" that run on the bottom of the screen with headlines, weather reports and updates on Britney Spears's wedding status? "Ninety percent of that stuff you don't care about," says Gates. "We'll let you have a custom ticker [with stock quotes, scores and other information that you pick]."

"Once you put this stuff up nobody knows what will happen," says SBC's Randall Stephenson. What some people think might happen may not please media middlemen like... SBC. While IPTV originally requires a reliable high-bandwidth platform to ensure top-quality reception, fast connections will eventually become commonplace. In that case it might be feasible for programmers to reach the mass audience without going through a gatekeeper, be it a telecom, cable provider or satellite service. Video would be served directly, like everything else on the Web. "Most flat-panel TV sets will have Internet connections in their future," says Steve Shannon, founder of Akimbo, a Web video service that has content deals with more than 100 partners, including CNN, Turner Classic Movies and the BBC.

Others focus on the prospect of outsiders' gaining access to your TV set, as bloggers have invaded media on the Web. "Already there is more data downloaded for video over the Internet than there is for music," says Mike Ramsay, cofounder of TiVo. "What happens when a 14-year-old creates a BitTorrent browser that's easy to use and plugs right into your TV? You go from 500 channels to 50 million channels." We soon may find out, as a number of open-source-inspired Internet efforts hope to open the floodgates. "We have tools to let anyone make high-quality videos to reach millions of people," says Tiffiniy Cheng of the Participatory Culture Foundation in Worcester, Mass. "We'll give a channel to anyone who wants a channel."

Given that future programming will be largely on demand, a "channel" could simply be a periodic video blog, a set of fly-fishing videos or a streamed soft-porn Webcam. "The cost of establishing a traditional programming vehicle and securing distribution is incredibly high," says Jeremy Allaire, founder of online distributor Brightcove. In the era of

Internet television, it will be as simple and cost-effective to create a microchannel as it is to create a Web site.

Since the Internet is open to any digital content, your television will merge with other activities. Someone on the phone? You'll get caller-ID information on the TV screen. If you don't feel like fast-forwarding past the commercials, check your credit--card bills. And you know those news-channel "tickers" that run on the bottom of the screen with headlines, weather reports and updates on Britney Spears's wedding status? "Ninety percent of that stuff you don't care about," says Gates. "We'll let you have a custom ticker [with stock quotes, scores and other information that you pick]."

"Once you put this stuff up nobody knows what will happen," says SBC's Randall Stephenson. What some people think might happen may not please media middlemen like... SBC. While IPTV originally requires a reliable high-bandwidth platform to ensure top-quality reception, fast connections will eventually become commonplace. In that case it might be feasible for programmers to reach the mass audience without going through a gatekeeper, be it a telecom, cable provider or satellite service. Video would be served directly, like everything else on the Web. "Most flat-panel TV sets will have Internet connections in their future," says Steve Shannon, founder of Akimbo, a Web video service that has content deals with more than 100 partners, including CNN, Turner Classic Movies and the BBC.

Others focus on the prospect of outsiders' gaining access to your TV set, as bloggers have invaded media on the Web. "Already there is more data downloaded for video over the Internet than there is for music," says Mike Ramsay, cofounder of TiVo. "What happens when a 14-year-old creates a BitTorrent browser that's easy to use and plugs right into your TV? You go from 500 channels to 50 million channels." We soon may find out, as a number of open-source-inspired Internet efforts hope to open the floodgates. "We have tools to let anyone make high-quality videos to reach millions of people," says Tiffiniy Cheng of the Participatory Culture Foundation in Worcester, Mass. "We'll give a channel to anyone who wants a channel."

Given that future programming will be largely on demand, a "channel" could simply be a periodic video blog, a set of fly-fishing videos or a streamed soft-porn Webcam. "The cost of establishing a traditional programming vehicle and securing distribution is incredibly high," says Jeremy Allaire, founder of online distributor Brightcove. In the era of

Internet television, it will be as simple and cost-effective to create a microchannel as it is to create a Web site.

Does this mean that traditional programming like "Desperate Housewives" and "The Daily Show" will get overwhelmed? Not necessarily. If two obscure animators at Web site JibJab could get millions of viewers for their Internet-based Bush/Kerry campaign video, would a 2015 "Sopranos Reunion" have any difficulty reaching a mass audience? "There is a consistent hunger for good stories and good characters," says HBO's Carolyn Strauss. David Hill, a DirecTV exec, contends that no matter how open the distribution is, the public will flock to tiny islands of quality, even if quality is defined by what's always been on TV. "People who say that everyone can be a David E. Kelley have no clue of this business," he says. The result may be that when all the time-shifting and space-shifting is accounted for, most people will watch the same stuff by the same creators.

In fact, even with today's relative abundance, most people stick to only a few channels. According to Nielsen Media Research, households that receive about 60 channels usually watch only 15. Households whose systems can receive 96 channels (around the national average) actually watch... 15.

What's more, a recent study conducted at the UPenn Annenberg School for Communications showed that when people were offered more programming choices, they stuck to fewer selections—and, alarmingly, watched fewer news shows.

This doesn't surprise Barry Schwartz, a Swarthmore professor and author of "The Paradox of Choice." He fears that people may stick to a small group of selections that don't challenge any of their assumptions. "I worry about 250 million separate islands," he says. It's a long way from the first era of television, when there were so few choices that almost everything you viewed was a mass-shared experience. Schwartz does concede that when you have millions of options to choose from, you're more likely to find ones that really appeal to you. But even then, you won't necessarily be more satisfied. "Whatever you watch," he says, "you'll know that there's something else out there that's good, and regret you're not watching it."

Can it be that in the vast world of television's tomorrow, we'll be nostalgic for the wasteland?

With Brad Stone and Jennifer Ordonez

© 2005 Newsweek, Inc.