



The Next Wave

Technology that will change your life

TV's high-tech, lowbrow future

Despite hundreds more channels, chances are remote you'll find anything more enlightening to watch

BY LEE GOMES
Mercury News Staff Writer

IT'S A Saturday afternoon a few years hence, and you're settling down for a few stimulating hours in front of your all-digital, interactive, computer-controlled, wide-screen, 300-channel cable television system.

Sounds like viewer heaven, you say? Television finally fulfilling its great promise?

Well, maybe. But here's another scenario, one called "High Tech Meets Lowbrow."

For starters, 100 of your channels are set aside for the same eight recently released movies, staggered in time so you can see any movie just about any time you want.

There's lots of sports; two channels are devoted to "Wrestlemania."

One channel shows a real-time interactive bingo game.

In a commercial targeted directly to your house, your detergent company is reminding you that it's been a month since you've bought any soap.

And if none of that sounds appealing, you can always escape to one of the dozen channels set aside for soft-core porn...

Because technology is changing rapidly, coming forms of television have the potential to transform TV from today's passive "idiot box" to an extraordinarily powerful communications tool, one that will eventually be connected not only to hundreds or thousands of potential programming sources but also to every other TV set.

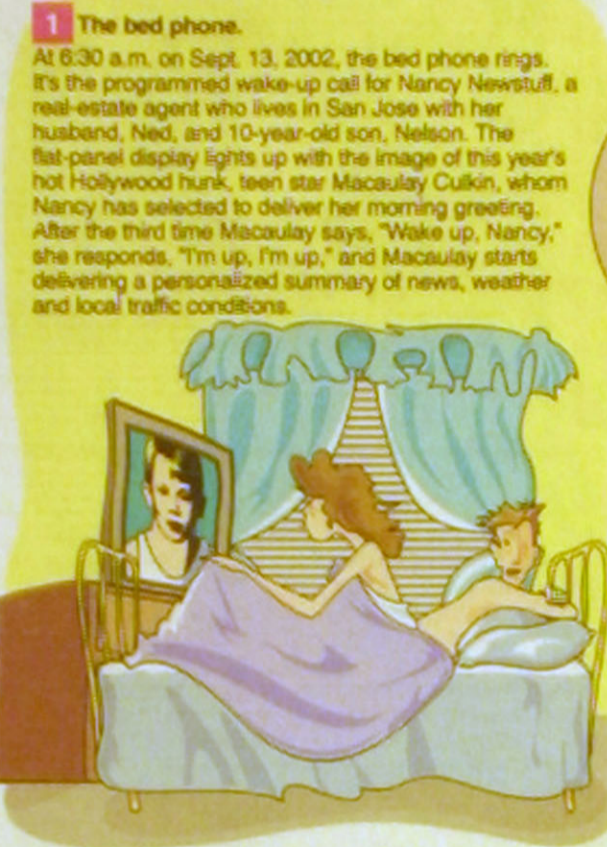
However, there's no concurrent shift occurring in the mass market economic rules, or in the low-to-middlebrow taste constraints, that have always governed TV.

As a result, many people fear that unless some government policy decisions are made in the next

See CONTENT, Page 3E

Scenes from 2002

Wireless data communications, fiber optics, palmtop computers... none of the future promise offered by information technology is worth anything unless our lives are somehow improved. Here's one vision of how the new technology could shape a typical day 10 years in the future - if all the wildest dreams of technologists come true.



1 The bed phone.
At 6:30 a.m. on Sept. 13, 2002, the bed phone rings. It's the programmed wake-up call for Nancy Newstuff, a real-estate agent who lives in San Jose with her husband, Ned, and 10-year-old son, Nelson. The flat-panel display lights up with the image of this year's hot Hollywood hunk, teen star Macaulay Culkin, whom Nancy has selected to deliver her morning greeting. After the third time Macaulay says, "Wake up, Nancy," she responds, "I'm up, I'm up," and Macaulay starts delivering a personalized summary of news, weather and local traffic conditions.



2 Driving to her first appointment.
Behind the wheel of her electrically powered 1999 General Motors Megavolt, Nancy retrieves her voice-mail messages on the car phone. One of the messages is from a client eager to look at new-home listings in Los Gatos. Nancy calls the central computer at her office and, using carefully chosen voice instructions, orders the computer to send pictures of several homes to her client by high-resolution color fax.



3 Showing a home.
Shown a home for sale in Los Gatos, Nancy's clients are eager to buy. Nancy takes her compu-phone out of her purse and calls into a local bank. Writing on the phone's screen with a stylus, Nancy quickly assures the potential buyers they can just barely afford the \$900,000 three-bedroom home.



4 At the office.
When Nancy arrives at the office, she clips on her employee badge. The badge includes a tiny radio transmitter identifying her to the office monitoring system. While Nancy is talking with her friend Susan in an adjoining office, the monitoring system automatically transfers an incoming videophone call for Nancy onto Susan's phone. It's a reluctant seller with an offer on his home that he worries is too low. As they talk, Nancy displays on the screen a list of recent home sales in the neighborhood. Either Nancy or the client can touch any listing on the screen to call up a picture of the home and details of the sale.



5 Lunch.
On the way to a nearby park for lunch, Nancy grabs a sandwich from the office refrigerator and her five-pound portable satellite TV. Sitting on a park bench, Nancy unfolds the collapsible two-foot dish, pops up the 10-inch flat screen and watches today's episode of the newly merged mega-soap "As the Hospital Turns in Santa Barbara" beamed directly from a satellite 22,300 miles overhead.



6 Shopping.
On the way home from work, Nancy decides to look for a dress that she needs. She asks the car phone to tell her which stores are having sales. With a call into an electronic Yellow Pages data base and coordination with the car's internal satellite navigation system, a display screen quickly produces a map showing Nancy's location and the nearest stores holding sales on women's clothing.

Will we buy it? Nifty gadgets await a mass market use

BY MIKE LANGBERG
Mercury News Staff Writer

"Consumers don't buy technology. They buy things that make their lives easier or better."

So says Gary Arlen, a futurist and media consultant in Bethesda, Md.

And that, perhaps, is the biggest challenge facing the computer, telecommunications and media companies striving to capture a market that isn't yet defined: What do people want? And how much are they willing to pay?

"Everyone involved has no clue where they fit into this," Arlen says.

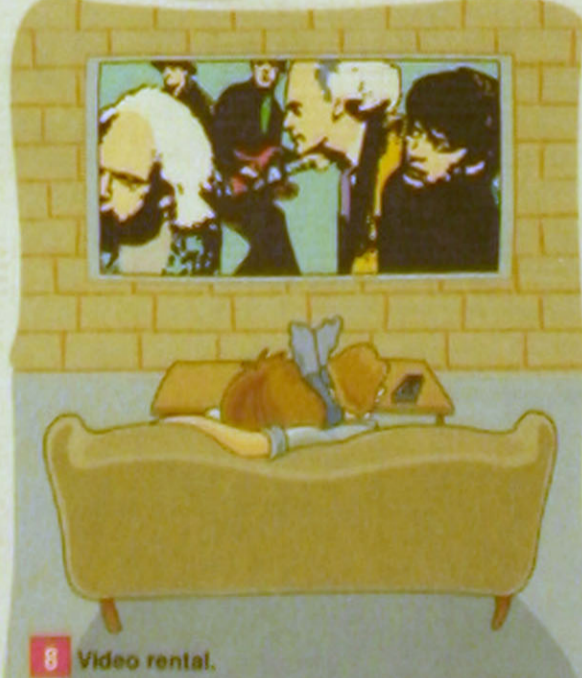
This confusion is visible in the dozens of product introductions in the past year from companies including Apple Computer Inc., Tandy Corp., Hewlett-Packard Co., Microsoft Corp., North American Philips Corp. and Sony Corp. Most of their gadgets don't have a clear-cut appeal and won't communicate with each other - creating frustration among consumers.

Apple, for example, unveiled its highly touted Newton personal digital assistant, or PDA, at the annual Consumer Electronics Show in Chicago in May. Newton, scheduled for shipment early next year, was described as the ultimate pocket organizer - capable of reading notes scrawled on its screen with a special pen and of wireless communi-

See DEMAND, Page 2E



7 At the store.
Nancy sees a floral print dress on a mannequin and steps over to the "magic mirror" kiosk. The kiosk takes a video image of Nancy's face and then displays an image of her wearing the dress. Nancy inserts a credit card and gets the disappointing news that her size isn't in stock. The kiosk offers to deliver the dress in 10 days, but Nancy decides she doesn't want to wait that long and leaves.



8 Video rental.
At her final stop on the way home, Nancy goes to the local CD video rental store and checks out "Back to the Future VII." That evening, she pushes aside a painting on the living room wall to reveal a 11-foot by 6-foot flat-panel high-resolution TV screen on which Nancy and Ned watch the movie.



9 Nelson's homework.
After an afternoon playing baseball with his friends, Nelson is behind in preparing a social studies report due tomorrow on the Los Angeles riots of 1992. Nancy, upset with the big bills Nelson is running up for on-line video services, told him last week to go to the library and research the report in books. But Nelson decides to risk parental wrath by preparing his project from the small video screen in his bedroom. While his parents watch the movie, Nelson taps into a CNN data base and pulls up video clips of burning buildings and then adds comment from political leaders culled from an on-line encyclopedia. The charge comes to \$47.25, but Nelson hopes his parents won't notice when the family's monthly videophone bill - which typically runs between \$200 and \$300 - arrives at the end of the month.

REPORTED BY MIKE LANGBERG, GRAPHIC BY REID BROWN - MERCURY NEWS