

Gadgets offer too much, some say

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In the olden days, we turned a knob to tune the TV, dialed a phone to make a call and pressed the big button on top of a camera to take a picture.

But now gadgets meant to make our lives simpler come with so many features, the first hour or two is spent trying to get them to work. TVs, phones and cameras come with thick manuals and, with any luck, you'll figure out how to turn them on by Page 20.

Design experts say manufacturers' zeal to out-wow the competition has led to a generation of doodads known more for features than function. While a select few consumers appreciate and can quickly master a scanner that also copies and faxes, the rest of us are thinking, "What the heck is this button for?"

Three problems have converged to result in a perfect storm of confusion: baffling manuals, confounding design and a tendency to pack too many components into each device (akin to selling a Swiss Army knife to a person in need of a bottle opener).

In the interest of backward thinking, let's take the last problem first.

Too many functions

Nancy Dudenhoefer of Phoenix was no stranger to technology, working well for years with various computers and communication devices. But she struggled to figure out her new cellphone and while trying again to figure out how to manipulate her address book, she stumbled across a video editor.

Dudenhoefer had no idea should could shoot video with her phone, let alone edit it.

"If you're 14, the fact you can make a video on your phone is fascinating," she said. "But I'm not ever going to need to edit a video on my phone. I just want to call people."

Such stories do not surprise Whitney Quesenbery, a New Jersey consultant who specializes in making products easier to use.

Manufacturers feel compelled to offer the latest and greatest functions to stay ahead in the highly competitive tech industry, even if those functions are desired by a small percentage of the market. Corporations have put a twist on the "I think, therefore I am" philosophy: "We can, therefore we add."

"Manufacturers struggle with what they can offer as opposed to what people want," Quesenbery said. "They're not sure so they add lots of things just in case. Pretty soon there's so much packed inside, people have no idea how to get to the basics."

Many people don't want digital cameras with a "tintype" mode, or cellphones that hook to the Internet, or camcorders equipped with dozens of special effects.

An avalanche of features can bury consumers looking for simplicity, Quesenbery said. Consider the car, a very complex machine with one purpose, to get people from Point A to Point B.

"You don't have controls to set the rolling speed of each wheel," Quesenbery said. "You have a differential which makes the technology seamless. All we have to worry about is steering and speed control."

Confounding design

Theo Mandel loves to talk about the on/off switch. It's a very simple button, yet engineers have found a way to make it confusing.

Many computers, scanners and printers sport a toggle switch with a 1 and a 0. Rather than label it "On" and "Off," or simply "Power," engineers use the binary code for on and off.

"That's classic engineer-ese," said Mandel, a Phoenix design consultant who for more than 20 years has helped make products and Web sites more usable. "In the engineering world, the 1 and 0 is obvious. The ordinary consumer has absolutely no idea what he's talking about."

The remote control offers another classic example of design's inability to keep up with functions. Bundle your remotes for the TV, cable box, DVD player and stereo system and you likely have 100 small, hard-to-read buttons in front of you, and all you want to do is watch a movie. It's gone so far that some companies sell a universal, touch-screen remote that can operate more than 200 devices. The price: about \$1,000.

And should you press the wrong button, something will go awry, said Jakob Nielsen, a usability consultant and author based in Fremont, Calif.

"Things are designed to fit rather than designed to use," Nielsen said. "It's a big problem in the consumer electronics industry, but few seem to be making any changes toward simplicity."

Some products seem programmed to be counterintuitive. You click on the "Start" button in Windows to shut down the computer. You press the red "End Call" button to turn on your cellphone.

Dudenhoefer of Phoenix has often attempted to make a call, only to take another unwanted photo that she has no idea how to erase from the device's crowded memory.

Nielsen said design is not likely to improve within the next few years, as it has with computers over the past decade.

"Computers were inherently complicated, so the only way to have them accepted by everyone was to make them easier," Nielsen said. "They still have their problems, but they are much simpler than they were. I don't see that happening in consumer electronics, not when the push is still to add more functions, meaning more buttons and menus."

Baffling manuals

Alaina Chabrier of Phoenix has a simple rule about complex products: She will devote one hour to learning how it works. If it takes any longer, it's just not worth it.

As a result, she is a whiz with her Apple iPod, a device that does one thing (play music) and does it well, perhaps explaining its enormous popularity.

But Chabrier struggled with her digital camera. After spending the allotted time with the manual, she remained only faintly aware of the many features she would never understand.

"It was just too complicated," Chabrier said. "I don't have time to figure out all these directions."

Manufacturers may spend years developing a product, then give writers a few days to put together the instruction manual, said usability expert Quesenbery.

"If you're a high-tech company, it's easier to understand high-tech needs rather than basic needs," she said. "So the key is finding people who can convey ideas in plain language."

Better yet, said Mandel of Phoenix, include two manuals. The second should explain only the basic functions, a policy formulated and followed by the computer industry.

Open a new computer and you'll likely find a placemat-sized, colorful sheet illustrating the connections between computer, printer, monitor and speakers. In less than 15 minutes your computer is ready to run, and you feel a sense of accomplishment as well as comfort with a daunting piece of technology, Mandel said.

Now you may read the manual a chapter at a time, learning at your own speed. Other tech industries need to focus on providing such a positive out-of-the-box experience, Mandel said.

"You want to bring up the consumer's level of confidence, giving them a positive experience right off the bat," Mandel said.

Striking back

Who's responsible for the technology of confusion? You are, in part, Nielsen said.

"You look on the box and see all these features and you think, 'Well, all I need is this, but those couldn't hurt,' " he said. "So you buy it just as makers figured you would."

You come to find those extra features can hurt, from a thicker manual to a plethora of menus, sub-menus and buttons. Soon you're accidentally erasing photos, or faxing when you wanted to scan, or e-mailing a private note to everyone in your address book.

In short, buy those things with the features you want and no more, Nielsen said. When sales figures indicate consumers want simplicity, the tech industry will respond.

"For hundreds of years, more was better," Nielsen said. "That's not the case now. Less is better, but it is not going to be easy to overcome hundreds of years of thinking."

Some consumers are lashing back. They are filing reviews on shopping sites such as Amazon.com, or on sites dedicated to customer insights, such as Epinions.com. Others are blogging about problems with recent purchases, Mandel said.

"The backlash is starting," he said. "Phone companies realize there is a segment that wants a phone to be a phone. Baby boomers want large numbers and buttons. Sure, they're going to continue to build things with all the bells and whistles, but they're also going to build the things people want if people make those wants clear."

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