Three G: Another convergence disaster in the making

Al Ries

European telecommunications companies have spent an estimated 100 billion euros on 3G licenses and are committed to spending another I00 billion euros to build 3G networks. What a waste.

According to the International Telecommunications Group, the industry trade association, "The 3G device will function as a phone, a computer, a television, a pager, a videoconferencing center, a newspaper, a diary and even a credit card."

There's more. "It will automatically search the Internet for relevant news and information on pre-selected subjects, book your next holiday for you online and download a bedtime story for your child, complete with moving pictures."

All on a screen half the size of a playing card.

Just because something is doable doesn't necessarily mean that there is a market for the development. My take on the 3G smart phone, like many other convergence devices, is that it will remain a niche product. And a small niche at that.

Swiss Army knife thinking

The 3G phone that does everything is a good example of Swiss Army knife thinking, a pattern that follows a certain format.

- (1) A convergence product like the Swiss Army knife captures the imagination of the public.
- (2) The product generates an enormous amount of publicity.
- (3) Millions are sold.

- (4) Few are ever used; most wind up in dresser drawers gathering dust.
- (5) Nor does the convergence products replace any divergence products. (The Swiss Army knife didn't replace the screwdriver, the corkscrew, the scissors or any other tool.)

The 3G smart phone is not the first convergence product to capture the consumer's imagination.

When the airplane became an established means of transportation, the automobile industry became convinced that everyone was going to want a flying car. So they spent millions trying to put the automobile together with the airplane. (Today, entrepreneurs are still spending millions trying to accomplish this task.)

When television became an established medium, the electronic industry became convinced that everyone was going to get their daily newspaper printed out through their TV set. (That way you only needed to print what you wanted to read.)

When the Internet became an established medium, the high-tech industry became convinced that everyone was going to access the worldwide web through their television set. "Interactive TV" was the buzzword.

Convergence disasters at Microsoft

Microsoft, in particular, has become a big supporter of TV/Internet convergence. In 1997, Microsoft bought Web-TV Networks for \$425 million and has since poured more than half a billion dollars into their interactive-television venture.

But that was just a start. In 1999, Microsoft pumped \$5 billion into AT&T and secured a contract to install its TV software in as many as 10 million AT&T set-top boxes. Not a single box made it to the top of a television set serviced by an AT&T cable system and since AT&T is now out of the cable business, the contract is just another convergence dead end.

Microsoft keeps trying. After the lukewarm reception to WebTV, Microsoft moved on to UltimateTV, which may well be the end of the line for Microsoft's convergence efforts. It's hard to think of an adjective that will go beyond "ultimate." (Both UltimateTV and WebTV are currently on hiatus.)

The convergence disaster at America Online

Then there's America Online. Even before the Time Warner merger, AOL was a strong supporter of convergence. In 1999, the company invested \$1.5 billion in Hughes Electronics and got a deal to launch AOLTV on Hughes' DirecTV satellite service. In July 2000, AOL rolled out its AOLTV service, a \$249 set-top box that allowed users to send instant messages, read email, chat online and surf the web while watching a TV show.

USA Today called interactive television "the holy grail for AOL Time Warner. It will eventually enable TV viewers to communicate, shop, play games, call up information and order news and entertainment on demand from the TV screen." (It might be churlish of us to point out that in 2,000 years no one has ever found the Holy Grail.)

As you might have expected, AOLTV is in limbo and no longer accepting new subscribers.

Marketing Performance

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Remember the past

With the press, the pundits and virtually the entire high-tech community firmly behind the convergence concept, who could possibly doubt that one day it will all happen?

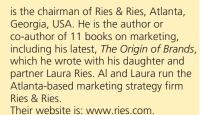
Any student of history, that's who. "Those who cannot remember the past," wrote George Santayana, "are condemned to repeat it."

Remember the mainframe computer? Today the mainframe computer has diverged and now we also have midrange computers, network computers, personal computers, laptop computers, tablet computers and handheld computers. The computer didn't converge with another technology. It diverged.

Remember broadcast television? Today broadcast television has diverged and now we also have cable TV, satellite TV and pay-per-view TV. Also analog and digital TV. Regular and high-definition TV. Standard (4/3) and widescreen (16/9) formats. Television didn't converge with another medium. It diverged.

Remember AM radio? Today AM radio has diverged and now we also have FM radio, cable radio and satellite radio. Also portable radios, car radios, wearable radios and clock radios. Radio didn't converge with another medium. It diverged.

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Remember the telephone? Today the telephone has diverged and now we also have cordless phones, headset phones, cellphones and satellite phones. Also analog and digital phones. The telephone didn't converge with another technology. It diverged.

Many companies are pouring millions of dollars into such convergence

concepts as smart phones, smart gas pumps, smart homes, smart watches, smart shoes, smart clothing, smart refrigerators, smart toilets and smart appliances

These companies are going in exactly the wrong direction.

Darwin and divergence

In his book The Origin of Species, Charles Darwin credits divergence for the millions of species that now populate the earth. As time goes on, new species are constantly being created, like the many branches of a tree that diverge from a single trunk. "The great tree of life" was his metaphor for the creation of species.

Darwin's genius was in recognizing that species like cats and dogs might have a common ancestor, but that they had "branched off" or diverged in response to environmental changes. Over time, the differences between each species becomes exaggerated. In Darwin's terms, "nature favors the extremes." Elephants and mice. Mercedes and Mini Coopers.

Which is exactly what Apple Computer did when they introduced the iPod, a classic divergence product. First there was a category called "MP3 player," which used flash memory to store songs. So Apple introduced an MP3 player with a disk drive which would store up to 10,000 tunes.

The hottest consumer electronics product of the past few years, the iPod has become an icon among the younger crowd. At the end of 2004, Apple had sold some 9 million iPods and the product is currently on backorder.

(By way of comparison, the most popular U.S. smart phone, palmOne's Treo 600, has sold less than a million units in spite of heavy discounts provided by the telecom companies over the past three years. Since there are some 160 million cellphones in operation in America, the smart phone has captured only a tiny percentage of its potential market.

Another wildly successful divergence product is Nintendo's DS player, the first dual-screen portable game player. In less than a week, Nintendo sold out an entire 800,000-unit shipment in the American market.

The Nintendo DS player is a classic divergence product. First there was a category called "portable video game player" which Nintendo dominates with its Game Boy device. Now there are two categories: single screen (Game Boy) and double screen (DS) and Nintendo hopes to dominate both categories.

The Apple iPod is also a typical divergence product. First there was the flashmemory MP3 player. Now there is also an MP3 player using hard-drive memory. Where once there was one type of portable music player, now there are two. Would it come as a surprise if the future would bring a third type of portable music player using some previously unexploited memory technology? Not to me.

Predictably, however, the pundits are looking in exactly the opposite direction. "The iPod and its ilk will not stop at music," says an article in the August 18, 2004 issue of the Financial Times. "So in a step towards genuine dual-use convergence," says the Times, "the iPod and other HD players look certain to pick up some of the PDAs' functions."

"Soon there will be no distinction between the two categories (PDAs and music players)," says Jakob Nielsen, an IT-usability expert, "other than brand names and which features are emphasized in advertising."

Sound familiar? "Don't worry about the difference between the TV set and the PC, in the future there will be no distinction between the two." So said Nicholas Negroponte, founding director of MIT's Media Lab.

The only difference is that Mr. Negroponte said it in 1995 and we're still waiting for the TV set to converge with the PC. Technologies don't converge. They diverge.