Big Bad Blunders

Like most companies, Apple trumpets its successes in widely circulated press releases and buries its mistakes in small-type footnotes, but for your reading enjoyment, I've exhumed a handful of boneheaded blunders that Apple probably wishes it had cremated.

Test Drive a Macintosh

John Sculley made a name for himself at Pepsi-Cola USA by coming up with the wildly successful "Pepsi Challenge," in which blindfolded consumers professed their preference for Pepsi over Coca-Cola. His reputation as a master of event marketing was enhanced with the critical acclaim lavished on Apple's *1984* commercial, which aired during Super Bowl XVIII. After the media frenzy surrounding the Mac's introduction began to fade, reality set in at Apple. After spending $15 million on a 100-day advertising blitz, Mac sales tapered off dramatically to roughly 20,000 units a month.

For the Mac's next big promotional push, Sculley fell back on his "Pepsi Challenge" ploy and conceived the "Test Drive a Macintosh" campaign. Sculley was so convinced of the superiority of the Mac that he figured all Apple had to do was get the computer into the hands of consumers and they too would fall in love with it. So Apple spent more than $2.5 million to buy all 40 pages of advertising in a special November 1984 election issue of *Newsweek* magazine. On November 8, 1984, Sculley remarked to the *San Francisco Chronicle*, "It's unclear whether Apple has an advertising insert in *Newsweek* or whether *Newsweek* has an insert in an Apple brochure." The issue's final, fold-out ad launched the innovative "Test Drive a Macintosh" promotion.

The way the program worked was that anyone with a credit card could walk into an Apple dealer, fill out some forms and take home a Mac for a 24-hour trial. At first it appeared Sculley had worked his marketing magic yet again. About 200,000 people participated in the program, eagerly lugging brand new Macs home for a day. Even *Advertising Age* magazine was impressed, naming "Test Drive a Macintosh" one of the ten best promotions of 1984.

Most who participated in Apple's "Test Drive" turned out to be tire-kickers, not buyers.

Apple may have been able to fool the outside world, but in Cupertino they realized the "Test Drive" program was more like a car wreck. Apple's dealers hated the program. They didn't have enough Macs to sell to earnest buyers, let alone lend out overnight to tire-kickers, and they resented the burdensome paperwork during their peak end-of-year sales season. Apple had wagered that program participants would become so enamored of their new toys that they'd decide to buy them outright instead of return them after 24 hours. Apple lost that bet as the vast majority of the loaner Macs were returned slightly worse for wear.

Lotus Jazz

Following its impressive introduction, the Mac sold well to early adopters, but the machine failed to gain acceptance in the all-important business market. Apple had introduced the Mac 512K in September, but there were still too few serious business applications. When Lotus Development Corporation (www.lotus.com) announced Jazz on November 12, 1984, Apple was anxious to find a "killer application" to help boost sagging Mac sales. Jazz looked like the answer to Apple's prayers since it came from Lotus, then the dominant force in the PC spreadsheet market with its Lotus 1-2-3. Scheduled for shipment in March 1985, Jazz was a $595 integrated software package comparable to the company's Symphony package for IBM PCs, including a word processor, spreadsheet, database manager, graphics editor, and telecommunications program.

Making a personal appearance at the November introduction, John Sculley declared Jazz, "strategically significant for Apple. This is a very important day for, obviously, Lotus—but also for Apple and the industry." When Mitchell Kapor, Lotus chairman, predicted that Jazz would be bought by about half of the Mac 512K buyers, Sculley corrected, "I would guess it would be quite a bit higher."

Jazz didn't get out the door until August 1985, and it failed to take the Mac market by storm. It required the top-of-the-line Mac 512K and a second floppy drive, which few users had. It lacked the macros, power, and speed that made Lotus 1-2-3 and Symphony hits on the PC. In addition, its word processor crapped out after only 17 pages of text had been entered. No wonder people accused Lotus of trying to do the hustle with Jazz. It was discontinued in June 1988.

Courtesy of Lotus Development Corp.

Despite high expectations, Lotus Jazz failed to help the Mac crack the business market.

Macintosh Portable

Back in the early days of the personal computer industry, Steve Jobs was fond of deriding mainframes by saying, "Never trust a computer you can't lift." Jef Raskin took this idea to heart and originally specified that the Macintosh be an all-in-one portable computer. When Jobs took over the project, the industrial design focus shifted from portability to a reduced footprint, but he reminded the team to think of the desktop Mac as an interim step along the way to creating a "Mac in a book" by 1986. The only concession to portability in the first Mac was a recessed handle on top that allowed users to carry the 16.7-pound computer around with one hand.

"Our ultimate goal is to put Macintosh in a book, to make it the size of the notebook that's on your lap," product marketing manager Barbara Koalkin told *USA Today* just four months after the Mac's introduction. "We'd like to do that without sacrificing any of the features because we believe you need a nice display, you need a mouse, you need a certain amount of memory, you need a disk. What we're trying to figure out is how you get that into a very small package. That's not going to happen any time soon because the technology just isn't there." In fact, it took more than five years before Apple released its first "laptop" computer. Perhaps it should have waited a little longer.

In April 1985, Jobs failed to convince Apple's board of directors to build a battery-operated BookMac, as he called it, around a newly introduced flat panel display. By September, Jobs was gone and the idea languished in the labs until the fall of 1986, when Jean-Louis

"[Smaller portables] are OK if you're a reporter and trying to take notes on the run. But for the average person, they're really not that useful, and there's not all that software for them, either. By the time you get your software done, a new one comes out with a slightly bigger display and your software is obsolete. So nobody is writing any software for them. Wait till we do it—the power of a Macintosh in something the size of a book!"

Steve Jobs, speaking in a 1985 Playboy *interview*

Gassée initiated the Laguna project. "Our goal was to recreate the Mac SE in a portable measuring 8.5 by 11 by 1.5 inches, weighing about six pounds," says Terry Christensen, who had just managed product design on the Mac SE. "But having no experience with portables, we didn't know where to begin." That didn't stop Apple.

The Macintosh Portable offered many innovative features, such as a full-size keyboard, trackball (replaced by an optional numeric keypad above), and hard disk, but it will always be remembered for its weight.

September 20, 1989, marked the unveiling of the $5,799 Macintosh Portable. At the time, Apple's 1989 annual report proudly noted that "in the fourth quarter … we introduced a product the world had been waiting for: the innovative, no-compromise Macintosh Portable." The key phrase here is "no compromise." Jobs had inculcated the Mac team with a reverence for perfectionism, and Gassée continued the tradition by indulging his engineers' egos, giving them free rein to design everything from scratch rather than buy industry-standard parts. The result was a product with many innovative features that was virtually unsuitable for its intended purpose.

The Mac Portable came with a 68000 running at 16MHz, 1MB of static RAM expandable to 4MB, and a 1.4MB floppy drive. Performance-wise, it was roughly equivalent to the Mac SE, which had been released more than two years earlier at less than half the price. Why did it cost so much? The Mac Portable was loaded with features unheard of in PC notebooks of that era. It had a full-sized keyboard, a trackball that could be mounted on either side to accommodate both right- and left-handed users, sound output, and an optional internal 40MB Conner hard disk.

Another novel feature was the screen. Gassée insisted on an expensive active-matrix screen, where each pixel is controlled by its own transistor, resulting in a crisp monochrome display with no ghost images or submarine effect common on cheaper passive-matrix displays. To compound matters, he originally specified a liquid crystal display (LCD) with 640 by 480 pixels, despite the fact that nobody was then manufacturing LCDs that large. The screen was ultimately reduced to 640 by 400 pixels, and Sharp built a factory dedicated to its manufacture. The Mac Portable ended up with the largest and clearest screen of any portable on the market, but it wasn't perfect. Sharp had trouble manufacturing a defect-free large active-matrix display, so Apple simply declared that a Mac Portable was within specifications if it had six or fewer dead pixels.

"At a certain point, everyone knew the Mac Portable was not destined for greatness. There is an odor that emanates from such a project. People tend to distance themselves from that odor."

Industrial designer Jim Stewart

But the biggest problem with the Mac Portable was its weight. Marketing insisted on a predictable, long-life battery, so instead of using the same nickel-cadmium cells common in the PC market, Apple went with lead-acid batteries, the same type used in automobiles.

These batteries ran up to 12 hours on a charge, but were bulky and heavy. Really heavy. The Mac Portable weighed 15.8 pounds, almost the same weight as the original Mac—at a time when competing laptops weighed less than 10 pounds—leading industry pundits to deride it as the Mac Luggable. It was so massive that it didn't fit on airline tray tables, and even when balanced on one's knees, the Portable was hard to use in flight since its screen was almost unreadable in anything less than direct overhead light. It wasn't until February 11, 1991, that Apple introduced a revised Portable with backlighting. Given all its problems, the Mac Portable sold reasonably well, thanks to the pent-up demand of Mac users.

Like the original Mac, the Portable had more than 60 signatures of the product design team etched in the case underneath the keyboard.

PowerBook 5300

Following the Portable disaster, Apple finally got it right in October 1991 with its lightweight PowerBooks, which sold more than 400,000 units in their first year, contributing more than $1 billion in revenues. By November 1993, Apple had sold more than one million PowerBooks, but Apple didn't maintain its competitive lead, and the PowerBook line began to lag the desktop Macs in performance. The first Power Macs shipped in March 1994, but the faithful had to wait until August 25, 1995, before they could buy a notebook with a PowerPC. The PowerBook 5300 was developed under the code name Anvil, an apt description if ever there was one. It had so many problems that it significantly weighed down Apple's financial results.

The PowerBook 5300, Apple's first PowerPC-based laptop, was beset by a world of woes.

Apple had just shipped 1,000 PowerBook 5300s to eager dealers around the country when two early-production units caught fire, one at an Apple programmer's house and another at Apple's factory in Singapore. It turns out their Sony-manufactured lithium-ion (LiIon) batteries overheated while charging on AC power and exploded due to pressure inside the cells. Fortunately, nobody was hurt, but Apple's reputation went up in smoke as the national media portrayed the event as yet another example of Apple's decline. On September 14, Apple recalled all PowerBook 5300s, claiming that only 100 had by then made it into the hands of customers. Less than two weeks after the recall, Apple replaced the LiIon batteries with nickel-metal-hydride (NiMH) batteries originally intended for the PowerBook 190. The replacement NiMH batteries had 26 watt-hours of capacity, compared to 36 watt-hours for the original LiIon batteries, prompting Apple to lower the prices across the line by about $100 per model.

In a supreme bit of irony, the Sony factory responsible for producing the defective LiIon batteries in Koriyama, Japan, was itself eventually destroyed by fire.

Bursting batteries weren't the PowerBook 5300's only problem. The plastic case was prone to cracking, the power plug was too thin and

"We screwed up, clearly."
Apple COO Marco Landi, on the troublesome PowerBook 5300

often snapped off, and the power supply didn't produce sufficient current to run certain combinations of expansion-bay and PC Card accessories simultaneously. Also, the circuitry responsible for reducing power consumption during Sleep mode would shut down before completing its job, reducing the maximum nap from ten days to four. Some units locked up completely if the user pressed the Reset button and Power key together. On May 10, 1996, Apple halted production of the PowerBook 5300 and initiated another recall to replace motherboards for anyone affected by these problems. According to Dataquest, the recall helped drag down Apple's notebook revenues to $1 billion for 1996, from $1.5 billion the year before.

In the movie *Courage Under Fire*, Denzel Washington's character uses a PowerBook 5300 several times. The only problem is that the movie takes place right after the Gulf War in 1991, but the PowerBook 5300 wasn't released until August 1995. The only Mac "laptop" available in 1991 was the Mac Portable, a 15.8-pound behemoth that would have qualified Denzel for a Purple Heart if he had carried it around all the time.

On April 18, just weeks before the recall, Apple unveiled a $15 million tie-in with Paramount Pictures' *Mission: Impossible* film starring Tom Cruise. The promotion featured television and print advertisements, a special web site, and co-sponsorship of the movie's premiere. The choice of a film named *Mission: Impossible* seemed particularly ironic, since Apple had just reported its largest loss ever—$740 million for the second quarter—and some wags commented that newly installed CEO Gilbert F. Amelio was facing a task more daunting than any mission Mr. Phelps had ever accepted.

Tom Cruise, who is a Mac user in real life, uses a PowerBook 5300c in the movie, but Apple didn't have any control over the script because it signed on as a sponsor too late in the game. As a result, Cruise's character must put up with a clunky command-line interface rather than the Mac's graphical user interface. Even worse, when Cruise and cohorts plan to break into the CIA's computer system, the computer expert among them insists they need "Thinking Machines laptops." Never mind that Thinking Machines (www.think.com) has never made anything smaller than a supercomputer, much less a laptop. That's Hollywood for you. After ponying up $15 million, you can't even insist that your computer is the one requested in the script. To top it all off, the tie-in was generating demand for a product that dealers didn't have in stock anymore due to the recall—a situation that would last for four months.

Telecom Troubles

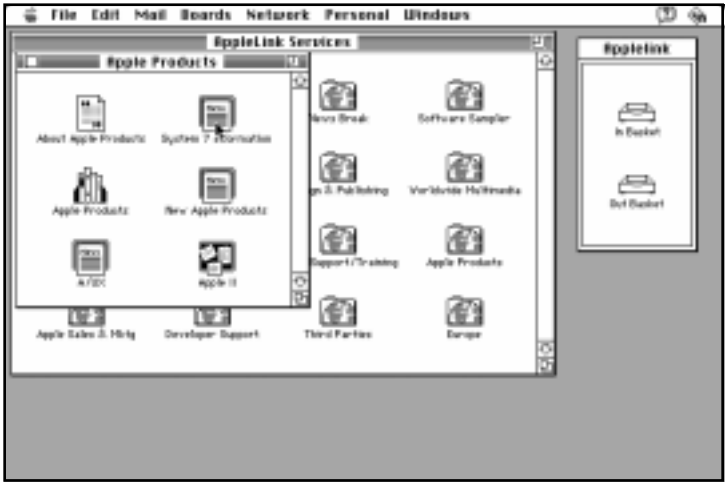
In many ways, the history of Apple consists of a long string of events in which the company failed to capitalize on emerging markets that it correctly identified years before its competitors. An excellent example is the trouble Apple has had with telecommunications.

Apple's entry into the online world began in 1984 as an effort to reduce the expense of supporting the company's worldwide network of dealers. An Apple II demo of an online system called Apple Shared Knowledge was developed, but John Ebbs, Apple's head of support and formerly a senior executive at General Electric, convinced management to showcase the Mac's value to corporations by using it to deploy the pricing and product database. His idea was to marry the corporate timeshare capability of General Electric Information Services Co. (which ran a consumer service called GEnie), with the ease of use of a Mac.

In July 1985, AppleLink debuted. It was the first online service to feature easy-to-use graphics, windows, and icons instead of a command-line text interface. Its extension of the desktop metaphor into the online world was as revolutionary as the Macintosh itself. While originally intended as a bulletproof dealer reference / support system, within weeks of its launch it became the de facto email system for Apple and its dealers. Although it bore Apple's name, it was actually maintained and operated as a joint effort of Apple and GE. As it was released to external customers over the years, users were

On August 28, 1991, the first true email message from space was sent by the crew of the space shuttle STS-43 Atlantis using a Mac Portable and specially configured AppleLink software. The shuttle crew's message: "Hello Earth! Greetings from the STS-43 Crew. This is the first AppleLink from space. Having a GREAT time, wish you were here,...send cyro and RCS! Hasta la vista, baby,...we'll be back!"

Courtesy of Elaine Sweeney



AppleLink was Apple's internal online service, but it was actually run by GE. AppleLink successfully used the Mac's desktop metaphor to make telecommunications simple.

charged from $10 to $100 per hour, depending on the service they received and their country of residence. Before long, Apple was paying over $30 million a year to GE, although a study demonstrated that use of the service saved Apple at least $100 million annually in reduced costs (paper, personnel, productivity, telephone, travel, etc.).

AppleLink was considered a resounding success, and it occurred to Apple that perhaps it should offer a similar version aimed at reducing consumer support expenses. At the time, a small firm called Quantum Computer Services was running QuantumLink, an online service for Commodore computer users. Apple dallied with the idea of buying Quantum outright for several million dollars, but instead decided to work with them to build a graphical service in the mold of the internal AppleLink, aimed initially at Apple II users but designed with the Macintosh in mind. Code-named Project Samuel, it was a joint venture with Apple providing its interface expertise, marketing muscle, funding, and logo. For its part, Quantum would build and operate the system.

At the AppleFest held in Boston on May 20, 1988, AppleLink—Personal Edition was introduced. For $6 per hour nonprime time, and $15 per hour prime time, subscribers could access Apple-specific resources such as a reference library, software center, and company store. Plus there were general services such as entertainment, business

Courtesy of Trevor Griffiths and Elaine Sweeney

AppleLink—Personal Edition came out first on the Apple II and was abandoned before the Mac version shipped.

services, online shopping, and education. Before the Macintosh version was released, Apple and Quantum began quarrelling over the future direction of the service, and Apple underwent another in a long series of reorganizations. Under pressure to eliminate what the new leadership felt were extraneous business commitments, Apple pulled its support for AppleLink—Personal Edition, but compensated Quantum by providing funding to complete the Mac beta and bring it to market without the Apple logo. In October 1991, Quantum renamed itself America Online and opened up its service to everyone, not just those using Apple computers.

Meanwhile, the GE-operated AppleLink remained in heavy use by approximately 14,000 Apple employees and contractors, as well as 20,000 dealers and developers around the world. Despite receiving $8 million per year from outside users, Apple was still losing money providing them access to the system. Apple put Peter Friedman in charge of managing the division in an attempt to reduce its costs and to formulate a plan for getting into the online services business. By 1992, the cost of employee use of AppleLink had been reduced by several million dollars a year, and the outside business turned a small profit on $25 million in revenue from 50,000 external users. However, it still remained closed to the general public, and Apple continued to write enormous checks to GE. Apple decided to kill two birds with one stone by building a new service that would be open to consumers and ultimately replace the costly AppleLink.

After talking to dozens of vendors, Apple turned to its old partner, America Online (formerly Quantum). In December 1992, Apple essentially agreed to pay a royalty based on usage for the Macintosh code that it had funded and co-developed for the aborted AppleLink—Personal Edition. Apple guaranteed America Online a minimum of $15 million in royalties over five years and agreed to pay $2.5 million to bring the system up to Apple's specifications. Since replacing AppleLink would save Apple $30 million a year in expenses, it seemed like a good investment. Nonetheless, Apple's chief counsel, Albert A. Eisenstat, shrewdly concluded that the deal would give AOL the funding and visibility it needed to be successful with a competitive service while Apple would

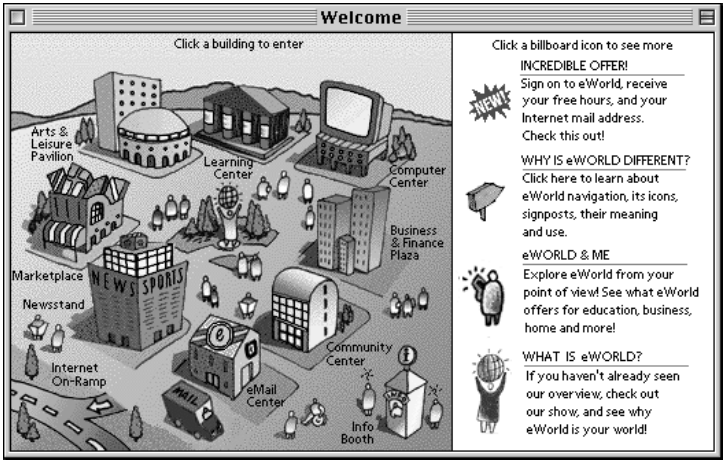
On November 9, 1995, Apple exercised its right to buy 2 million shares of restricted AOL stock at a cost of $12.5 million, representing 5.1 percent of the company. At the time, the fair market value was $161.5 million.To protect itself from market volatility, Apple entered into a derivative transaction that locked in a minimum price of $40 per share and allowed it to participate in an upside gain of up to $120 per share.The stock split shortly thereafter, and according to a former Apple executive, the company sold its shares in the third quarter of 1996 at a profit of about $39 million. If only Apple could have held off for two years; those shares became worth ten times as much on the strength of AOL's market performance.

probably botch the execution of its own system. So Eisenstat insisted that Apple acquire warrants that allowed it to buy a substantial stake in AOL at an attractive price. That way Apple could at least profit from AOL's success.

The Apple Online Services group and AOL spent 1993 working together on the new service. AOL adapted its technology to Apple's specifications, and the software was installed in Apple's new data center in Napa, California. Apple added its own modifications to the software, changed the overall look of the design, and assembled content from a few hundred third-party companies. All of this took longer than expected because Apple was then attempting to sell itself to AT&T. The merger talks were distracting to the Apple Online Services group and disconcerting to AOL, since it was negotiating with many players, including AT&T, in an attempt to build its own company. The merger fell through at the end of April, but the two companies continued to discuss a joint online venture until November, when Apple pulled out, fearing AT&T's dominance.

The Apple-AOL deal didn't bear fruit until January 5, 1994, when Apple announced that its new online service, named eWorld, would be operational by that spring. On June 20, eWorld officially opened its electronic gates to Mac users only, with the NewtonMail messaging service to follow. Apple promised Windows support in 1995, but that fell victim to budget cutting when 80 percent completed. eWorld had a strong sense of community and a friendly, colorful, graphical user interface that used the metaphor of a town square, with activities centered around familiar buildings.

The strange bell-shaped inhabitants of eWorld were called ePeople.



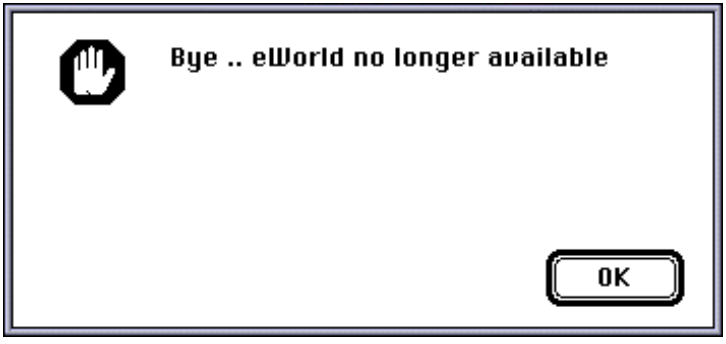
Courtesy of Raymond Kam

Like AOL upon which it was based, eWorld had a friendly, colorful, graphical user interface. Cleo Huggins was the art director for eWorld, and Mark Drury the illustrator.

Unfortunately, eWorld was slow to catch on for a variety of reasons. By mid-1994, the Internet was beginning its meteoric rise, and there were already several other proprietary online services such as America Online, CompuServe, Delphi, and Prodigy. Due to a lack of a cohesive strategy, it wasn't until late 1995 that the eWorld client software was included with every computer sold. In the meantime, AppleLink came installed on PowerBooks, and client software for some of Apple's online competitors was bundled on desktop Macs, while eWorld was left out. Another problem was the pricing. A monthly subscription set you back $8.95, which included just two free hours of evening or weekend use, with subsequent hours priced at $4.95 on the evenings or weekends, or $7.90 per hour from 6 AM to 6 PM weekdays. Apple intentionally kept the price high to moderate demand, but failed to adjust it downward when the demand never materialized.

By its first birthday, eWorld had signed up only 90,000 subscribers. Christopher Escher, director of marketing for eWorld, announced, "Our memberships have been doubling approximately every six months. We feel that's a pretty successful growth rate." To beef up the service, in June 1995, Apple added limited Internet support to eWorld 1.1 (code-named Golden Gate) and began forcing its employees to use eWorld instead of AppleLink. By September, eWorld had 115,000 members, compared to AOL's 3.5 million. With the rise of the Internet, it became clear that eWorld wouldn't make it as a proprietary online service, so in October 1995, Apple announced its intention to transition eWorld into an Internet-based system, and employees would move directly to an access-secured corporate intranet under a plan code-named DeLink.

When Gil Amelio took over Apple in February 1996, he rhetorically asked *The Wall Street Journal*, "Does the world really need another computer [online] service?" If eWorld was any indication, apparently



At midnight on March 31, 1996, the sun set permanently on eWorld.

"If it's necessary to shoot one of the lead buffaloes in order to send a message to the rest of the herd, you'd better be prepared to do it."

Apple CEO Gil Amelio, explaining his decision to kill eWorld

not. After one and one-half years of operation, eWorld boasted only 147,500 subscribers. On March 1, 1996, Apple announced that the sun would set permanently on eWorld at the end of the month. "The best way to structure [Apple's Internet] presence is with a portfolio of Web sites and services for particular customer groups, not a general online service like eWorld," explained Diane Keith, Apple's director of Internet productions. All eWorld subscribers were offered $15 off the Apple Internet Connection Kit and 20 free hours of connect time on AOL. Exactly one year after shutting down eWorld, operation DeLink concluded on March 31, 1997, with the termination of GE's AppleLink.