Your Name

Mr. Larson

Intermediate Computers

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The 21 Biggest Technology Flops

We fondly recall 21 over promoted products and technologies that utterly failed to live up to their hype -- and we give you a chance to choose the biggest flop of all.

Hype is the coin of the realm in the technology business. If you listen to vendors and the media, it may sometimes seem as though every new product, service, concept or even security threat will be the Next Big Thing. Some live up to all the fuss, but many don't -- and some fail spectacularly.

Take the Michelangelo virus, the subject of a media frenzy 15 years ago. March 6, 1992, was the day that the dreaded virus was supposed to strike. Journalists went overboard covering this virus, which had supposedly burrowed itself into hard drives around the world throughout 1991 and was set to start destroying data on March 6, the birthday of the famous artist.

It didn't happen that way, of course: Damage was minimal. But in honor of Michelangelo's birthday, we thought we'd track down history's biggest technology flops.

Here we nominate 21 of our favorite overhyped failures, presented in alphabetical order.

The Top Flops

First we present the biggest flops, in which the hype-to-success ratio was farthest out of whack. The 14 products and technologies listed here weren't all bad. In fact,

some were quite good but were either too far ahead of their time or were victims of overblown expectations. Others, of course, were downright lousy.

Apple Newton. In 1993, Apple hyped its Newton PDA as only Apple can, with clever advertising and relentless word-of-mouth campaigns. While the device's physical size was gargantuan by today's standards, it was full of features, such as personal information management and add-on storage slots, that remain essential parts of today's mobile devices.

So why did Newton flop? One reason was the ridicule heaped on it by talk show comedians and comic strips (most notably "Doonesbury"), which focused on the supposed inaccuracy of the handwriting recognition.

Also, Newton was expensive -- about $700 for the first model and as much as $1,000 for later, more advanced models. In addition, Newton was arguably ahead of its time.

Still, before it faded away in 1998, Newton paved the way for PDAs, which led, in turn, to today's smart phones. In particular, the smaller, cheaper Palm Pilot, which was released in 1995 and became a runaway success.

To clarify, the official name of Apple's product was the MessagePad; Newton was really the name of the operating system. But Newton captured the public's imagination, so that's what the device was popularly called.

Digital Audio Tape. Take yourself back to the mid-'80s when analog tape cassettes were still a common method of purchasing and transporting music. They were easier to manage than old vinyl LPs but they didn't sound as good.

So it was logical that digital audio tape (DAT), developed by Sony and Philips, would become a Next Big Thing: It was digital, didn't use compression and used higher sampling rates than audio CDs. Indeed, a quick office poll found that at least two Computerworld editors put off purchasing CD players because they were waiting for DAT to take off.

Alas, this was another good idea that failed miserably. First, there was the matter of competing formats. Audio CDs, which were introduced around 1983, were starting to be embraced by consumers. Then the recording industry became concerned that DAT would encourage piracy because it could be used to make near-perfect digital copies of recorded music. The industry convinced Congress to pass the Audio Home Recording Act in 1992, which required strong -- some might say Draconian -- copy protection for DAT. It also required that DAT equipment vendors pay royalties to the recording industry.

That stumbling block cleared the way for audio CDs. DAT survived a while for professional recording applications, but never came close to justifying its early hype.

DIVX. Presaging our current era of Netflix and downloadable movies, DIVX (not to be confused with DiVX, the video codec) flashed brightly in the late '90s, then flamed out. The idea, hatched by electronics retailer Circuit City, was interesting -- you would rent movies on DIVX discs that you could keep and watch for two days. Then you'd toss or recycle the discs, or pay a continuation fee to keep viewing them.

Prices were to be competitive with video store rental fees, with the added benefit of not having to return the disc. All that was required was a DIVX player, which Circuit

City would be happy to sell you, and the movie discs, which Circuit City also would be happy to sell you.

Hardware vendors went along for a while but weren't overly enthusiastic, since the DVD format, for which they also were manufacturing players, was starting to gain traction at the time. And the video-rental industry fought the concept tooth and nail, loudly proclaiming the benefits of the DVD format, which they called "Open DVD," over DIVX.

Consumers didn't warm to the scheme either, fearing that DIVX vs. DVD could turn into another costly Betamax vs. VHS debacle. DIVX died a rapid death -- it was launched in 1998 and was pretty much sunk by the middle of 1999, leaving some people with worthless equipment -- although vendors did offer a $100 refund for those who bought a DIVX player. Still, left behind were lots of bad feelings about yet another bright idea that flopped.

Dot-Bombs. Oh, those glorious days in the late '90s, when everyone thought they'd get rich off the Internet! One poorly conceived dot-com company after another was launched and promoted with an influx of money from the venture capital community. The lucky ones went public and saw their stock prices go through the roof and then plummet after the bubble burst in 2000. Many others never even made it that far before fizzling out.

Although they represented a wide range of concepts and products, it's hard not to think of these "dot-bombs" as one entity, which is why we've entered them as a single nominee.

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E-books. E-book readers started being sold about 10 years ago and are still being developed. The most recent entrant into the market is the Sony Reader. But they're still a flop.

The idea is attractive because, theoretically, e-book technology allows you to load many books and periodicals on a reasonably small handheld device, making it easier to travel with lots of reading matter. Also, e-books are easily searchable, another huge advantage over paper books.

However, e-books are much in need of standardization. Specifically, the number of potential formats for e-books remains huge -- the Wikipedia entry for e-books lists more than 20 formats. It's not pleasant to contemplate buying an e-reader and then finding out that a book or periodical you want is available only in an incompatible format.

Furthermore, the devices themselves just aren't good enough yet. Some folks find them unwieldy; others say they're difficult to use. And for many people, there's just no replacing the old-fashioned, reassuring feel of paper.

IBM PCjr. Like the Apple Newton, IBM's PCjr was ahead of its time. Unlike Newton, PCjr was poorly designed.

Released to great fanfare in 1984 with at least two magazines devoted to it, IBM hoped PCjr would catch on as a relatively inexpensive version of its IBM PC for homes and schools. In those days, the Apple II and console devices like the Commodore 64 dominated those still-small markets.

The PCjr was both expensive and unpleasant to use. Its infamous chiclet keyboard was wireless, but the raised keys -- kind of like BlackBerry keys that overdosed on growth hormone -- were uncomfortable to use for basic tasks like touch-

typing. And, in another burst of dubious inspiration, PCjr didn't come with a hard drive. Instead, programs were contained on cartridges that you plugged into the front of the device.

IBM pulled the PCjr from the market in 1985. The company targeted the home and educational markets again a few years later with the PS/1, which met a similar fate as PCjr.

Internet Currency. Remember Flooz and Beenz? These two Internet bubble vendors arguably deserved to die simply because of their goofy names. They provided online currency, which many dot-com proponents in the late '90s considered the secret sauce that would lead to the wild success of e-commerce.

The idea was to create an "Internet currency" that was not legal tender in any particular country but could be used to purchase items on the Web. Both vendors generated a lot of hype, but Flooz's commercials featuring Whoopi Goldberg received the most attention.

Unfortunately, consumers inexplicably preferred to use real money and credit cards. And Flooz faced a battery of consumer complaints before its demise in 2001. Before they expired, Beenz and Flooz agreed to work together, proving once again that in the warped universe of techno-hype, one plus one can equal zero.

Iridium. It was an undeniably brilliant idea to launch 66 satellites and link them with mesh technology for routing calls to and from any point in the world. And when it started in 1998, Iridium entranced the technology world. "Iridium's core identity is defined by its transcendence of national borders, a structure that is particularly post-

Cold War," Wired magazine gushed in its October 1998 cover story. "Iridium may well serve as a first model of the 21st-century corporation."

But Iridium's technology cost an immense amount of money to deploy, and most users were resistant to paying dollars per minute of call time and carrying around a phone larger than a brick. Less than a year later, Wired News backtracked, saying, "After losing nearly US$1 billion in two disastrous quarters, the engineering marvel is in danger of becoming the Ford Edsel of the sky."

In 2000, the company was taken over by Iridium Satellite LLC, which recently said that it wants to launch new satellites and hopes to attract partners to provide services beyond basic voice calling, such as a next-generation global positioning system. Time will tell if its current incarnation is more successful than its first.

Microsoft Bob. Bob was a graphical user interface built on top of Windows 3.1. The idea was to make Windows palatable to nontechnical users. But Bob, released in 1995, was far more stupid than its users, most of whom saw the interface as an insult to their intelligence.

Bob's cartoon-like interface was meant to resemble an office or living room. You were walked through tasks by silly-looking cartoon characters (something Microsoft persisted in doing with its Windows Help system long after Bob perished).

Perhaps worst of all, Bob's logo included a yellow smiley face for the "o" in the name. Bob eventually faded away, and even Microsoft executives agreed it had been a miserable failure.

The Net PC. The Net PC was yet another small, over promoted computing device aimed at home users.

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3Com's Audrey. Like the thin clients used in corporate IT, Net PCs consisted of a screen, keyboard, and pointing device with little built-in intelligence. They were designed to be placed unobtrusively throughout the home, providing a simple user interface for Web and e-mail access.

The best-known Net PC was the iOpener by Netpliance, which ran ads during the 2000 Super Bowl, along with a host of other hype-happy technology start-ups that no longer exist. 3Com Corp. got into the act with its Audrey, and Oracle Corp.'s Larry Ellison launched a company, New Internet Computer, to develop and sell the devices.

The problem: Net PCs were introduced just as the price of more intelligent desktop PCs was plummeting. Why buy an extremely limited device when you could get a full-featured computer for around $300? After a couple of years of hype, Net PCs faded away.

The Paperless Office. It's not known exactly when this dream of marketers and technology vendors emerged, although the Christian Science Monitor suggested in a 2005 article that the term "was probably first coined in a 1966 article in the Harvard Business Review in reference to the emergence of digital data storage."

Just as futurists in the 1950s boldly but inaccurately predicted that computers would cut our work days in half, offices without paper have turned out to be a pipe dream. A book published by MIT Press in 2002 called The Myth of the Paperless Office found that e-mail caused a 40% increase in paper use in many organizations.

True, the role of office paper has been changing recently. Most large organizations now depend on digital, not paper, storage of documents. And the Christian Science Monitor found that sales of plain white office paper are, indeed,

leveling off. But even if office paper consumption is leveling, take a look around your office: Is it paperless yet? Will it be paperless anytime soon? We didn't think so.

Push Technology. Vintage hype from the PointCast Network. We're not talking here about pushing e-mail to mobile devices, which was made incredibly popular by BlackBerries. This is about companies like the PointCast Network, which launched its software with a hype storm in 1996. The hype focused on how this technology could "push" news and other information to computer desktops with no user intervention.

However, most users never became excited about push. Those who did take the technology for a spin found themselves inundated with news, weather, sports and more; it wasn't easy to filter what specific information was received. There was also a strong backlash from employers, which prohibited the use of push products for fear they would hog network bandwidth and distract workers.

Push technology hasn't really gone away. In addition to mobile e-mail, RSS feeds and many of today's desktop widgets are a form of push, but with more filters and controls than their early forebears. But the original hype was so far off the charts that companies like PointCast faded away.

Smart Appliances. Your refrigerator knows when you are low on milk and automatically orders more over the Internet. The cow juice and your other groceries are delivered to your front door. How has our species survived so long without this?

The (supposedly) irresistible appeal of smart appliances created a buzz at trade shows and was widely discussed in the media in the two years before the dot-com bubble burst. The idea was supported by virtually all major appliance vendors as well as dot-com grocery delivery services like Peapod and NetGrocer. Supermarket chains

also scrambled to get a piece of the action. And Intel, always eager to sell chips -- even those used in refrigerators -- was part of the frenzy too.

Long story short: The bubble burst, and we haven't heard much about intelligent appliances since. Somehow, we're still surviving.

Virtual Reality. The idea sounds fantastic -- put on special goggles, gloves and perhaps other connected clothing and immerse yourself fully in a 3-D game, training session or other activity. That idea made early VR proponents heroes to many technologists. One of those folk heroes was Jaron Lanier, who in the mid '80s started a company called VPL Research to create virtual reality products.

Maybe VR failed in the mass market because of consumer concerns that the equipment would cost too much or make them look silly. Or maybe virtual reality worlds were less real and compelling than our own imaginations. In any case, VR never took off commercially, even though some useful niche applications, such providing surgeons with a way to practice tricky medical procedures, still exist.

The Runners-Up

Not all flops were as spectacular as the ones mentioned above. Many were momentarily successful or technically adept -- or they simply weren't hyped as much as our main flops. Here we present six additional flops that we consider also-rans -- but perhaps you'll think differently.

Apple Lisa. Before the Macintosh, there was the Apple Lisa, released in early 1983. Unlike the Macintosh, the Lisa went nowhere fast.

It sported a graphical user interface and supported multitasking, but it was slow, slow, slow and expensive -- just under $10,000 at first. Its demise was hastened both

by the growing popularity of the IBM PC and by the release of Apple's sleeker, less expensive Macintosh in 1984.

Dreamcast. Sega was an important early player in the game console business, but its fortunes had faded by the late '90s. It hoped its Dreamcast system, launched in the U.S. in late 1999, would help it regain its place in the game console pantheon.

But even though the device sold more than 10 million units, Dreamcast fell victim to other game consoles, most notably the PlayStation 2, which was released in spring of 2000.

NeXT. If it's possible for a failure to be a huge success, this is it. Launched by Steve Jobs in 1985 after his exile from Apple, NeXT's platform and high-end computers didn't sell well.

But when Jobs sold NeXT to Apple in 1996 for a reported $400 million, the NeXT operating system eventually became a significant part of Mac OS X.

OS/2. This operating system wasn't a true failure, but its hype far exceeded its success.

When it was released in 1987, OS/2 was a joint project between Microsoft and IBM, but when that marriage hit the rocks -- about the time Microsoft released Windows 3.0 -- IBM decided to go it alone with OS/2. Remarkably, even though IBM's interest in OS/2 faded out in the '90s, it only stopped supporting the operating system at the end of last year.

Qube. Talk about an idea that was way before its time. Qube (not to be confused with The Qube, a Sun server appliance) was launched in 1977 by Warner Communications as an attempt to give the company a leg up in the early cable TV wars.

The system used a set-top box and remote control to give viewers features like interactive television and pay-per-view feature movies. Launched to great fanfare in Columbus, Ohio, Qube spread to a handful of other cities. It was popular among many users, but it couldn't overcome other Warner mistakes and met its demise in the early '90s.

Speech Recognition. Over the years, Bill Gates (among others) has repeatedly predicted that speech recognition will be a major form of input, but it hasn't happened yet. Part of the problem is that, even with 99% accuracy, there are still a lot of errors to correct. Plus, many of us use computers in public places where speech recognition would be clumsy, embarrassing or downright rude. Still, the technology continues to improve, and it is being used in niche markets such as in medicine. Maybe someday it'll make it to the rest of us.

WebTV. This flop is still around, and Microsoft remains its primary proponent. In simple terms, it consists of a set-top box that connects your TV to the Internet. WebTV Networks was founded in 1995, and Bill Gates was enamored enough with the concept to buy the company a few years later -- it's now called MSN TV. Among the reasons this idea never caught on was that set-top boxes don't have much intelligence, and the Web looks wretched on standard low-definition televisions. Undaunted, Microsoft continues to plug away.

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