

R.I.P. Commodore

1954-1994

August 1994 / Commentary / R.I.P. Commodore 1954-1994

A look at an innovative computer industry pioneer, whose achievements have been largely forgotten

Tom R. Halfhill

Obituaries customarily focus on the deceased's accomplishments, not the unpleasant details of the demise. That's especially true when the demise hints strongly of self-neglect tantamount to suicide, and nobody can find a note that offers some final explanation.

There will be no such note from Commodore, and it would take a book to explain why this once-great computer company lies cold on its deathbed. But Commodore deserves a eulogy, because its role as an industry pioneer has been largely forgotten or ignored by revisionist historians who claim that everything started with Apple or IBM. Commodore's passing also recalls an era when conformity to standards wasn't the yardstick by which all innovation was measured.

In the 1970s and early 1980s, when Commodore peaked as a billion-dollar company, the young computer industry wasn't dominated by standards that dictated design parameters. Engineers had much more latitude to explore new directions. Users tended to be hobbyists who prized the latest technology over backward compatibility. As a result, the market tolerated a wild proliferation of computers based on many different processors, architectures, and operating systems.

Commodore was at the forefront of this revolution. In 1977, the first three consumer-ready personal computers appeared: the Apple II, the Tandy TRS-80, and the Commodore PET (Personal Electronic Transactor). Chuck Peddle, who designed the PET, isn't as famous as Steve Wozniak and Steve Jobs, the founders of Apple. But his distinctive computer with a built-in monitor, tape drive, and trapezoidal case was a bargain at \$795. It established Commodore as a major player.

The soul of Commodore was Jack Tramiel, an Auschwitz survivor who founded the company as a typewriter-repair service in 1954. Tramiel was an aggressive businessman who did not shy away from price wars with unwary competitors. His slogan was "computers for the masses, not the classes."

In what may be Commodore's most lasting legacy, Tramiel drove his engineers to make computers that anyone could afford. This was years before PC clones arrived. More than anyone else, Tramiel is responsible for our expectation that computer technology should keep getting cheaper and better. While shortsighted critics kept asking what these machines were good for, Commodore introduced millions of people to personal computing. Today, I keep running into those earliest adopters at leading technology companies.

Commodore's VIC-20, introduced in 1981, was the first color computer that cost under \$300. VIC-20 production hit 9000 units per day--a run rate that's enviable now, and was phenomenal back then. Next came the Commodore 64 (1982), almost certainly the best-selling computer model of all time. Ex-Commodorian Andy Finkel estimates that sales totaled between 17 and 22 million units. That's more than all the Macs put together, and it dwarfs IBM's top-selling systems, the PC and the AT.

Commodore made significant technological contributions as well. The 64 was the first computer with a synthesizer chip (the Sound Interface Device, designed by Bob Yannes). The SX-64 (1983) was the first color portable, and the Plus/4 (1984) had integrated software in ROM.

But Commodore's high point was the Amiga 1000 (1985). The Amiga was so far ahead of its time that almost nobody--including Commodore's marketing department--could fully articulate what it was all about. Today, it's obvious the Amiga was the first multimedia computer, but in those days it was derided as a game machine because few people grasped the importance of advanced graphics, sound, and video. Nine years later, vendors are still struggling to make systems that work like 1985 Amigas.

At a time when PC users thought 16-color EGA was hot stuff, the Amiga could display 4096 colors and had custom chips for accelerated video. It had built-in video outputs for TVs and VCRs, still a pricey option on most of today's systems. It had four-voice, sampled stereo sound and was the first computer with built-in speech synthesis and text-to-speech conversion. And it's still the only system that can display multiple screens at different resolutions on a single monitor.

Even more amazing was the Amiga's operating system, which was designed by Carl Sassenrath. From the outset, it had preemptive multitasking, messaging, scripting, a GUI, and multitasking command-line consoles. Today's Windows and Mac users are still waiting for some of those features. On top of that, it ran on a \$1200 machine with only 256 KB of RAM.

We may never see another breakthrough computer like the Amiga. I value my software investment as much as anyone, but I realize it comes at a price. Technology that breaks clean with the past is increasingly rare, and rogue companies like Commodore that thrived in the frontier days just don't seem to fit anymore.