

## **Bill Gates and the fall of CP/M**

In the early days of microcomputers when Gary Kildall created CP/M (Control Program for Microcomputers), the only thing that was really standard about microcomputers was the microprocessor. Computers contained either the Intel 8080 or the Zilog Z80.

The personal-computer industry belonged to hobbyists, and personal computers were really personal because most of them were homemade systems. Except for the processor and a few standard support chips, they could contain almost anything from expensive data-processing components to objects scraped off the floor of a surplus store. As a result, it was rare to find any two computers that were actually compatible with each other. Software only ran on the computers they were developed with.

By setting up CP/M on each individual computer, a computer user could essentially make a system compatible with any CP/M software. CP/M would operate the computer and software developers could create their programs to operate CP/M. This in essence opened the door for a new industry: commercial software development.

With computer compatibility solved, a software developer could write one program and sell it to thousands of end users, instead of to just one. So, instead of making a few thousand from one big customer, the developer could, with the same effort, make millions of dollars from thousands of small customers.

Unfortunately, not everyone believed that universal compatibility was beneficial. Some computer companies reasoned that, if they developed their own operating systems, they would be able to maintain more control of their systems and, as an added advantage; they would not have to pay royalties to Kildall's company, Digital Research. That's why Apple Computer, Atari and Commodore Business Machines each developed its own operating system.

So, again the microcomputer industry had an incompatibility problem. Apple software would not run on CP/M computers, Atari computers or in fact any other computers. And the reverse was also true. If your favorite word processor ran under CP/M, you couldn't use it on the new Apple II.

Realizing the benefits of having industry standards, however, IBM went to Digital Research first when it wanted an operating system for

its new personal computer, the IBM PC. The reason IBM approached Digital Research was that it was a well established company and had a large number of applications that had been written for it. In addition it had standalone operating system, and all the other operating systems available worked only on proprietary computers (i.e. AppleDOS worked on Apples only, AtariDOS worked on Atari computers, and so on).

So IBM arranged to meet with Gary Kildall. The trouble was that IBM had a reputation for gaining control of all the products it used, and Digital Research had been pretty successful all by itself up to that point. So Gary Kildall didn't follow through with IBM-a decision that changed the microcomputer industry forever.

With Digital Research out of the picture, IBM went searching for another microcomputer operating system, which left the door open for Bill Gates.

Gates offered IBM an operating system that was functionally similar to CP/M, added a few features that IBM wanted, and negotiated a deal with IBM that was to make history.

IBM agreed that, whereas it would market the operating system under the name PC-DOS (Personal Computer Disk Operating System), bundled with its computers, Gates' little software company, Microsoft, could also sell the operating system under the name MS-DOS (Microsoft Disk Operating System).

This single event created the open environment we have today, in which other manufacturers can produce computer hardware that is functionally similar to the IBM computer. As long as the other computers are compatible with MS-DOS, they can run any program being developed for the IBM PCs.

As a result of this, IBM PCs and PC clones have become the industry standard, and Microsoft has become one of the most powerful companies in the microcomputer industry.