POPULAR CHOICE

Since its introduction, the Control Program for Microprocessors (CP/M) has become the industry standard in operating systems. The phenomenal success of CP/M has changed the life of its designer, Gary Kildall, who left the teaching profession to found the company known as Digital Research.

Gary Kildall, a member of the Intel team that developed the 8080 microprocessor, created his first version of the CP/M system in 1974 to support a compiler for PL/M, the first high-level language produced by Intel. In 1975, he added an editor (ED), assembler (ASM), and debugger (DDT). He offered the new operating system to Intel, who turned it down—which was probably Kildall's luckiest break. Partnered by Dorothy McEwan, he started to publish hobbyist magazines and to sell CP/M privately. Kildall's CP/M quickly outsold the hobbyist magazines.

Whether by design or sheer good luck, Kildall had hit upon a system that greatly diminished the major problem of the microcomputer in its early years—compatibility. The three most significant consumer computers of the late 1970s (the PET, Apple, and Tandy) had incompatible disk operating systems, and independent software producers had to opt for one format or the other. Code had to be completely rewritten to make a software product work on a machine other than the one it had been designed for. But CP/M changed all that: its considerable popularity meant that a majority of manufacturers began to adopt it, thus creating a de facto 'standard'. Many computer manufacturers who had chosen the Intel 8080 or Zilog Z80 processors for their machines specified CP/M because it offered a simple way of handling access to the screen, printer, disks, keyboard and so on. And as its popularity increased, more and more CP/M software became available, providing an even greater incentive to adopt it.

The Control Program for Microprocessors was at first licensed to a few select users. The now famous abbreviation initially stood for 'Control Program/Monitor', but this rather humble title was soon changed! By 1976, Kildall was overwhelmed by requests for the product. He resigned as professor of computer science at a naval college in Monterey and founded Digital Research at Pacific Grove, California.

While CP/M was growing, Digital Research turned its attentions to the multiple-user systems and produced MP/M. This was intended to be compatible with CP/M in every respect, though in its early versions it had none of CP/M's success. Partitioning of the user areas, and other configurations that a systems programmer might need to do, were by no means straightforward, and in some cases file handling differed from CP/M's. However, since the physical costs of microprocessors have dropped as production has risen, the need for several users to share one processor has ceased to make economic sense, and the now-revised MP/M has not proved popular.

Digital Research raised finance from several venture capital companies in 1981, to become a true multinational, with a notably strong presence

LOGO Designs
Digital Research has moved into languages and leads the field with its DR LOGO. Like all good LOGOs, graphics are one of its strong points

IAN McKINNELL

Business Graphics
GSX is a pioneering software package designed to make graphics applications portable between different machines, such as the business graphics package shown here

COURTESY OF DIGITAL RESEARCH INC

John Rowley, President of Digital Research Incorporated

Gary Kildall