
Wang Laboratories Overview

Background

Wang Laboratories (Wang) was founded in 1951 by Dr. An Wang. From the 1950s to the early 1970s, Wang specialized in laboratory instrumentation and calculators for small businesses. In 1972, Wang introduced its first business computer line—the Wang 2200 System. In 1976, Wang introduced the first full-screen word-processing system, called the Wang WPS. The Wang WPS used the same hardware and software architecture as the Wang 2200.

Each terminal (called a “workstation” in the Wang environment) contains a Z80-based microprocessor. The Z80 reduces the workload on the central processor during I/O-intensive activities. This feature allows the overall system performance to remain relatively unaffected by the number of workstations in use. The Wang WPS line was very successful, propelling Wang to the \$500 million sales mark by the year 1975.

In 1977, the company introduced its Office Information Systems (OIS) product family, also based on the Z80 microprocessor. The OIS is a shared word-processing system, and the basic system configuration consists of a central unit with hard disk storage and from 4 to 48 workstations connected via dual coaxial cable.

The Wang Virtual Storage (VS) system, introduced in 1979, is now the workhorse of the Wang product line. The Wang VS is a sophisticated minicomputer system that is most often used in office-automation settings. In essence, the Wang strategy revolves around configuring a minicomputer to act as a file server, traffic cop, and main storage device for workstations and personal computers connected to the host. These workstations and personal computers are intelligent, and system software is loaded into them via the host.

The typical VS system configuration consists of a central computer with hard disk storage and from 10 to 292 workstation typically connected via Wang’s proprietary 928 dual coaxial cable.

Other products in the Wang line include the Wang Alliance, a sophisticated database computer product line; Wang MS-DOS-based personal computers, which work as independent devices or within Wang VS-based networks; Wang Integrated Imaging System (WIIS), a new series of image-based systems for storing and retrieving large volumes of documents; and Freestyle, an MS-DOS-based system that permits users to annotate documents electronically using handwriting or voice.