

# LEADING EDGE

**Probably the most interesting of all Japanese computer makers is also one of the least well-known — SORD. Most of the familiar names, from Hitachi to Sony, are all huge corporations employing thousands of people and with enormous resources, but SORD is a small company with only a few hundred employees.**

SORD derives its curious name from a combination of SOftware and hARDware. This is very fitting, since the company has always paid as much attention to the development of software as it has to machinery.

The company started somewhat falteringly. Its president, Takayoshii Shiina, left university to join Rikei Industries, a moderately successful company in the second rank of the Tokyo Stock Exchange in 1967. There he set about reorganising the company's marketing policy.

That Shiina was employed at Rikei at all is a small miracle in a land where people are taken on for life. He apparently announced in his interview that, since he intended to start his own business, he would only be staying for a few years.

By 1970, Shiina and a friend were ready to set up their own company, and so SORD was formed with a capital of 650,000 yen (under £2,000 at today's exchange rate). Shiina, however, continued to work for Rikei until December of that year. SORD's first products consisted of a low-cost logic tester and some contract programming work.

By 1971 SORD was beginning to pull in a reasonable amount of business, still mainly in writing software to order. By 1973 SORD had started manufacturing and by the end of 1974 had an imported floppy disk drive working with a SORD developed interface. This was soon followed by the SMP-80/20, one of Japan's first Intel 8080-based computers.

The SMP-80/20 was a very successful product and orders poured in. But Shiina had big ideas for expansion and in 1977 brought in Toppan, one of Japan's biggest printing companies, for a 20 per cent stake. The cash injection this provided helped SORD to develop considerable software support to go with its growing list of computer products, and by 1981 it had developed PIPS.

PIPS was a software package rather ahead of its time. It was one of the first examples of integrated software in the world and, more than any other factor, helped cement SORD's position in the marketplace. PIPS combines the functions of a spreadsheet, word processor and database in a



Takayoshii Shiina

form that even people who have never used a computer before can learn to use in a few hours.

The phenomenal success of PIPS in Japan can only be understood against the background of the domestic computer market of the time. In Japan it was standard practice for computers to be sold without supporting software.

Applications software of the type familiar in Europe and America for accounting, invoicing and so on was virtually unheard of in Japan. The reasons were twofold. Firstly, the Japanese reluctance to import anything they can do for themselves meant that very little American software was coming in to the country. Secondly, the Japanese are no linguists, ranking in aptitude only slightly above the British. If a Digital Research manual on CP/M is arcane to a British reader, it is totally incomprehensible to a Japanese reader. The dearth of applications software in the Japanese market left a gap wide open for SORD to exploit.

SORD started to develop the M200 series of Z80-based computers and, later the M23 series. Larger, multi-user requirements were satisfied with the M343 series. The M5 was introduced to cater for the home games market, and now we have the M68 series, incorporating both Z80 and Motorola 68000 processors, the M243 small