The computing service decreased its market share from 21.8 per cent in 1987 to 19.3 per cent in 1988. This occurred because of the rise of distributionoriented office automation and the shift of small computers away from conventional host-centred and EDP-oriented data processing.

In 1988, the largest purchasers of software development were manufacturing production industries, which accounted for 29.2 per cent of total sales, an increase of 140.9 per cent over the previous year, followed by 24.9 per cent for sales to the financial and insurance industries, an increase of 146.5 per cent over the previous year. It is expected that sales to these industries will continue to increase.

3 Recent Trends in the Industry

Overcoming the High Yen Rate

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From 1985 to late 1987, trade friction existed between the U.S. and Japan regarding the semiconductor industry and there were disputes regarding protection over intellectual property. Although the yen appreciated against the U.S. dollar, stock values fell due to decreased investor confidence resulting from the stock market crash of October 1987.

Under these circumstances, the information service industry pursued an expansionary strategy that kept pace with Japan's growth industries. As a result, the computer industry improved as the Japanese economy recovered in 1988. New capital spending contributed to the recovery.

Domestic market growth was due mainly to increased sales of such office automation (OA) equipment as office and personal computers. Manufacturers of office computers increased their sales efforts and sold more personal and general-purpose computers and data processors. In 1988, exports of general-purpose computers grew by more than 20 per cent, whereas personal computer exports fell.

Diverse Backgrounds

Companies in the iron and steel, shipbuilding, machinery, petroleum and chemical industries have developed their own information services. In 1988, over 30 affiliates and subsidiary companies began developing software for their parent companies as well as for external users. Companies in the heavy industries, which employ large numbers of computer engineers, are investing in "informatization."

With large amounts of capital, subsidiary and affiliate companies intend to increase their external sales by 50 per cent by as early as 1992.

Preference for Public Ownership

In 1988, 15 information service companies were publicly listed and more than twice that number are expected to be publicly listed by 1992. These companies can raise equity financing without recourse to heavy debt financing. This approach avoids debt servicing and assures public recognition which can be useful in establishing brand recognition.

As competition intensifies, the Japanese information service industry recognizes the need to train and maintain competent human resources. The future of the information service industry is compromised as long as companies outside of the industry acquire software engineers only through mergers and acquisitions.

Growth of Information Related Investment in the Private Sector

Informatization processes information more efficiently by using information-related equipment (hardware) and programs and utilities (software) in the production, management and distribution stages of information processing.

One bank survey shows that investment aimed at improving information processing totalled \pm 4.4 trillion in 1980 and \pm 16.2 trillion in 1987. This represents an average annual increase of 20 per cent. Investment in informatization has a multiplier effect. When a leading company increases investment in informatization, its subsidiaries and affiliates tend to follow suit.

The Government's "System Integration Promotion Policy"

MITI has over 200 registered and licensed system integraters on its information processing service company list. Its system integration promotion policy encourages information service companies to provide value-added services.

This helps systems integration service suppliers increase their investment in informatization while upgrading the information service industry. Also, it encourages compatibility between information'service suppliers, computer manufacturers and users.