

Chapter 2

Info-communications in Japan

1 The Info-communications Industry

1. Gross Domestic Output

The 1998 real gross domestic output of the info-communications industry amounted to ¥112.9 trillion, accounting for 12.5% of total real gross domestic output, a trend that indicates the relative strength of the industry amid several years of a sluggish domestic economy (Exhibit 32). A comparison of real gross domestic output statistic across various industries indicates that info-communications moved ahead of the wholesale sector in 1985 and exceeded the construction sector in 1995.

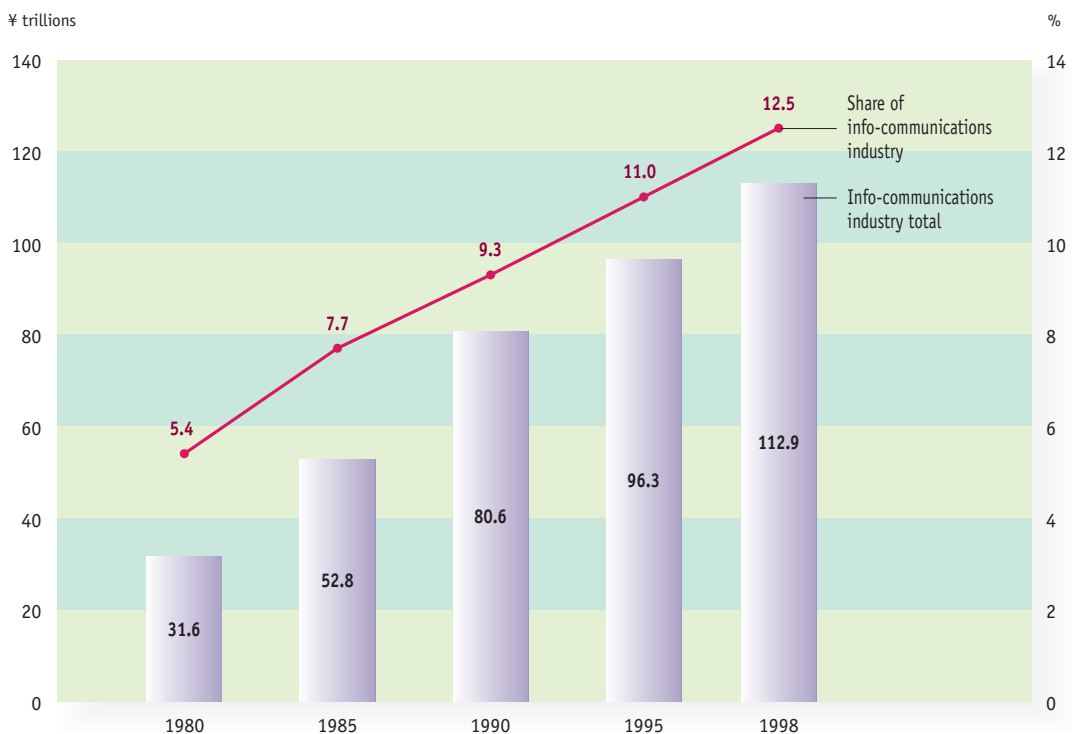
2. Gross Value Added

The 1998 nominal gross value added of Japan's info-communications industry stood at ¥47.8 trillion in 1998, accounting for 9.4% of the total domestic figure. The proportion began moving up year over year 1998, following a downtrend from 1990 to 1995.

3. Productivity

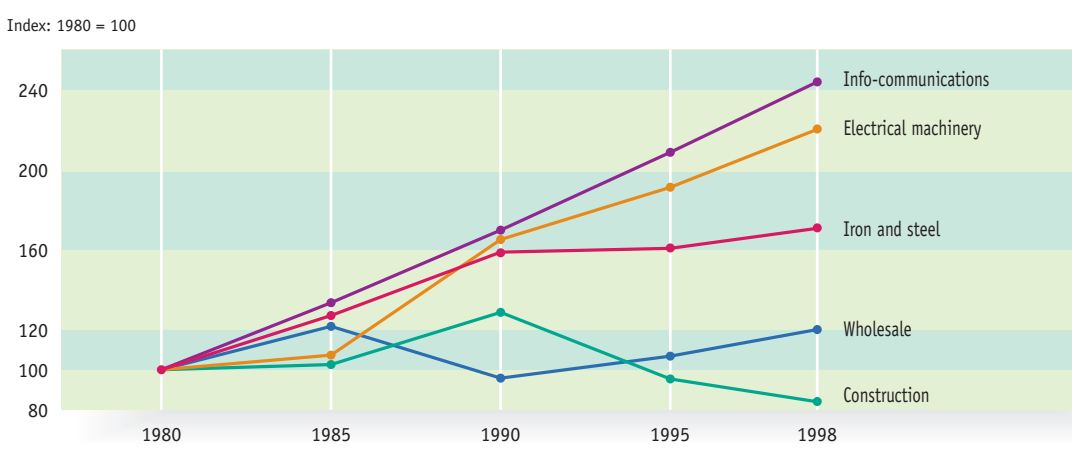
Labor productivity of the info-communications industry (real gross domestic output divided by total number of persons employed) amounted to ¥29.48 million in 1998. This statistic has

Exhibit 32. Trends in Real Gross Domestic Output of the Info-communications Industry



Sources: MPT; *Input-Output Tables*, Management and Coordination Agency; *Input-Output Tables (linked tables)*, Ministry of International Trade and Industry.

Exhibit 33. Labor Productivity per Employee, by Industry



| | 1980 | 1985 | 1990 | 1995 | 1998 |
|----------------------|-------|-------|-------|-------|-------|
| Iron and steel | 100.0 | 127.1 | 158.8 | 160.7 | 170.7 |
| Electrical machinery | 100.0 | 107.3 | 165.1 | 191.2 | 220.2 |
| Construction | 100.0 | 102.6 | 128.7 | 95.4 | 84.0 |
| Wholesale | 100.0 | 121.7 | 95.8 | 106.8 | 120.1 |
| Info-communications | 100.0 | 133.5 | 169.8 | 208.7 | 243.9 |

Sources: MPT; *Input-Output Tables*, Management and Coordination Agency; *Input-Output Tables (linked tables)*, Ministry of International Trade and Industry.

been rising steadily since 1980. By industry, the largest average annual increase between 1980 and 1998, 5.1%, was recorded by info-communications (Exhibit 33).

4. Employment

In 1998 some 3,828,000 people were employed in Japan's info-communications industry, up slightly from that of 1995, accounting for 6.7% of all-industry employment. The largest employer in 1998 was the retail industry (7,156,000 people) followed by construction (6,983,000 people). The number of people employed in the info-communications industries grew an average of

2.1% annually between 1980 and 1998, a faster rate than the 1.6% growth of all-industry employment.

5. Investment in Info-communications Equipment

About ¥10.4 trillion was invested in Japan's info-communications equipment in 1998, down 6.6% year over year but up 1.7-fold vs. 1990. The ratio of this investment to GDP stood at 2.2% in 1998, the figure that has almost held since 1995. Additionally, the ratio of this investment to total private-sector capital investment was 12.4% in 1998; this value has also held since 1995 on the whole.

6. Info-communications Ventures

6.1 Entrepreneurship

A *Survey of Students' Interest in Starting Up New Business*, found that as many as two of three respondents wanted either to “start up a new business in the future” or to do so “depending on conditions” (Exhibit 34). The most popular industry was info-communications (including equipment manufacturing and software), which 42.8% of respondents selected (Exhibit 35).

6.2 Fund Raising

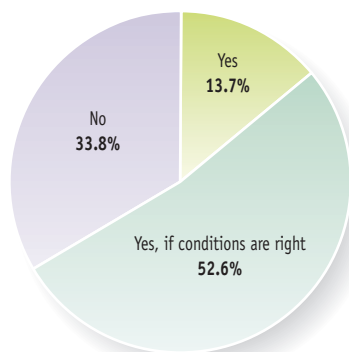
A comparison of venture capital trends in Japan and the US indicates that venture capital investment tends to take place in earlier stages of business in the US (admittedly, an exact comparison of stages is impossible, but the general trend holds). Furthermore, while

investment in the US in communications, software, and data processing accounts for more than 50% of total venture capital investment, the proportion of investment in communications, software, and information processing in Japan is less than 10%.

6.3 Corporate Ventures

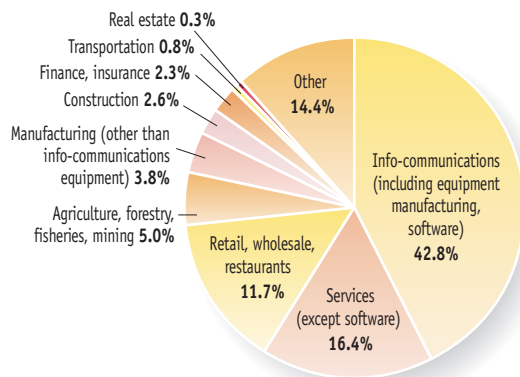
A number of Japanese companies have implemented corporate venture systems (in-house venture systems) as a means of boosting their operations in various ways: enhancing the quality of their personnel, encouraging the creation of new areas of operation, promoting restructuring by encouraging independence on the part of employees who have strong entrepreneurial potential, and attracting new employees with an entrepreneurial spirit.

Exhibit 34. Would You Be Interested in Starting Up New Business in the Future?



Source: *Survey of Students' Interest in Starting Up New Business*.

Exhibit 35. Industry Chosen If Respondents Were Given the Opportunity to Start Up New Business



Source: *Survey of Students' Interest in Starting Up New Business*.