9 *Advancing Info-communications Technology*

1. IT in Business

The use of information equipment and services is steadily increasing in the business world, where the Internet usage rate stood at 88.6% in fiscal 1999, the e-mail usage rate at 86.0%, and the LAN usage rate at 90.3%, the first time this value has exceeded 90%.

2. IT in the Home

The same is true of ordinary households, where the cell phone penetration rate is 64.2% and the Internet penetration rate is 19.1% (Exhibit 43). Average household spending on telecommunications and broadcasting increased between fiscal 1998 and fiscal 1999. In particular, average monthly spending per household on mobile telecommunications fees exceeded ¥10,000 for the first time. Overall household spending has been essentially flat since 1990, but spending on info-communications products and services has been rising consistently since 1995 (Exhibit 44).

## 3. IT in the Public Sector

3.1 IT in the Government Ministries and Agencies

The fiscal 1999 edition of *Basic Survey on*

Exhibit 43. Percentage of Japanese Households Subscribing to Communications Services
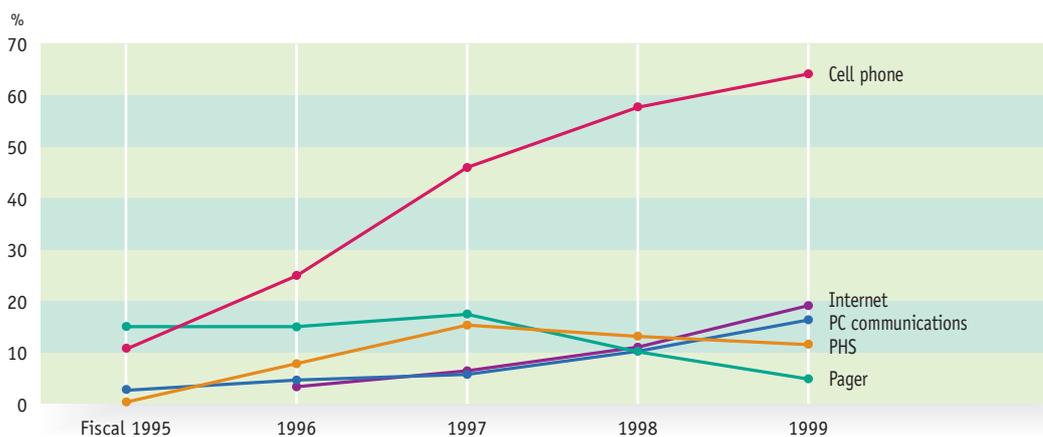
	Fiscal 1995	1996	1997	1998	1999
Cell phone	10.6	24.9	46.0	57.7	64.2
PHS	0.3	7.8	15.3	13.1	11.5
Pager	15.0	15.0	17.4	10.1	4.8
PC communications	2.6	4.6	5.7	10.2	16.3
Internet	–	3.3	6.4	11.0	19.1

Source: *Communications Usage Trend Survey (Household Section)*, MPT.

Exhibit 44. Trends in Household Spending on Info-communications and Total Living Expenses

Index: 1990 = 100
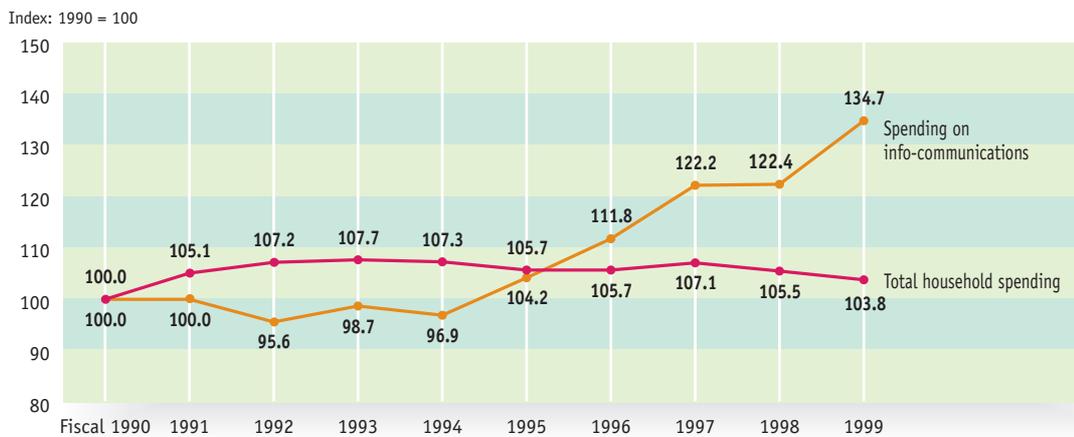
Sources: *Family Income and Expenditure Annual Report*, Management and Coordination Agency; *Family Income and Expenditure Survey*, Management and Coordination Agency.

Administrative Informatization, compiled by the Management and Coordination Agency, found that each employee of internal bureaus and departments of the ministries and agencies had access to almost one computer on average (to be exact, 0.98 computer) and that the LAN connection rate was 93.2%. Additionally, in March 2000 an electronic document interchange system between ministries/agencies was put into operation within the Kasumigaseki WAN.

3.2 IT in Local Government

Survey on the Use of IT by Administrative Workers, compiled by the Ministry of Home Affairs, reports that the number of PCs set up in local-government offices amounted to 507,504 as of April 1999, up 36.8% year over year, and that about half of these PCs are connected to networks.

3.3 IT in Education

IT is being used more and more in a variety of educational settings. Waseda University, for example, is implementing a "Network Classes" in which lectures are distributed over the Internet. 28 universities (as of January 2000) are participating in el-Net Open College, in which their public lectures are distributed over a special communications network of the Ministry of Education, el-Net, to regional social education institutions at no charge.

3.4 IT in Medicine, Public Health, and Social Services

The development and diffusion of IT has brought to reality telemedicine, a system in which medical personnel can send video images of patient symptoms to physicians at remote locations and obtain diagnoses and other guidance. Asahikawa Medical College Hospital, in Hokkaido, has set up a telemedicine center, which makes info-communications equipment available to all medical departments at the hospital.