

May 25, 2007

# Results of Telecommunications Usage Trend Survey 2006

The Ministry of Internal Affairs and Communications has summarized the results of the Telecommunications Usage Trend Survey for 2006, which polled households, businesses, and offices on the status of usage of telecommunications services and ownership of information and communication (ICT) equipment as of the end of 2006.

An executive summary is presented below. A more detailed summary of the survey will be found in the Attachment.

#### [Major Findings]

 The number of individuals using optical fiber connections to access the Internet is increasing.

Among users of broadband connections, the percentage of optical fiber users nearly doubled, from 14.8% to 27.2%. As for the type of terminal used by individuals to access the Internet, the number of PC users increased by 14.54 million (22.0%) over the previous year, to an estimated 80.55 million. Furthermore, approximately 70% (more precisely, 69.7%, or an estimated 60.99 million) of an estimated 87.54 million Internet users were using both a PC and a mobile terminal such as a mobile phone or a PHS device to access the Internet.

Several factors seem to be at work in the background of this trend. With the recent spread of subscription-based optical fiber networks, content carried over the Internet is expanding in capacity (data amount), from text and still images to voice, music, and video. A growing number of users are dissatisfied with the use of mobile terminals only, which cannot handle huge flows of such data content speedily enough. This gives rise to a new trend of mixed use of a PC and a mobile terminal, depending on the type of services they expect to receive via the Internet. [2. (1) (p.8); 1. (3) (p.2)]

#### <New>

 The use of consumer-driven media in business is emerging. Approximately half of large businesses are advertising on the Internet. Of various types of advertisement, "Linked to a search engine" is most popular.

Nearly 1 in 20 (4.4%) businesses were operating a business blog or SNS, indicating an emerging trend of utilizing "Web 2.0," a consumer-driven medium that enables "user participation." In particular, 1 in 10 (9.9%) big businesses (with 2,000 or more employees) were operating one.

Nearly 30% (more precisely, 27.9%) of all the businesses polled were using the Internet for advertisement. The usage ratio increases with the business size in terms of the number of employees. For example, nearly half (47.3%) of the businesses with 2,000 or more employees were advertising on the Internet. Of the variety of advertisements, "Linked to a search engine," which makes it possible to focus on individual consumers' needs, scored highest with 42.0%, followed by "E-mail (including mail magazines)" (39.2%) and "Specialized portal sites" (20.0%). [6. (1) (p.24); 6. (2) (pp.24-25)]

#### <New>

 The use of the Internet is spreading in consumers' purchase behavior. The majority of individuals in their 30s and 40s have purchased merchandise or services via the Internet.

The number of people who have purchased merchandise or services via the Internet was 41.4% of all who have used the Internet, an increase of 5.2 points over the previous year. The ratio went above 50% among the age groups of 30s and 40s.

Of the variety of reasons for shopping via the Internet, "I can purchase or trade things regardless of shop business hours" scored highest, with 51.4%, followed by "I can purchase things which only a few shops carry" (44.2%), which endorses the "long tail theory" under "Web 2.0." [1. (7) (p.6); 1. (8) (p.6)]

#### <New>

The use of e-money is picking up. Approximately 10% of individuals own e-money.
 The ratio of e-money ownership is high among people in their 20s through 40s.

Approximately one-tenth (10.7%) of individuals own e-money. By generation, the ratio of e-money users (owners) was highest (19.0%) among those in their 30s, followed by those in their 40s (14.9%) and 20s (13.9%). The most popular type of e-money was "Smart card" (7.6%), followed by "Mobile phone" (3.6%), and "Network" (0.7%). The "Smart card" type showed a larger disparity in usage rate between different sizes of municipality than the "Mobile phone" type. [3. (7) (p.15)]

#### [Method of Survey]

The Telecommunications Usage Trend Survey has been conducted every year since 1990 as a statistical survey approved under the Statistical Reports Coordination Act by polling three groups of subjects: households (overall, members), businesses, and offices. Note that the survey of businesses was added in 1993 and has since been conducted every year except 1994, and that the survey of household members was added in 2001.

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	Households	Businesses	Offices	
Date of survey	February 2007			
Subject area	nation-wide	nation-wide	nation-wide	
Subject by attribute	Households whose head is 20 years old or older (as of April 1, 2007) and their members	Businesses with 100 or more regular employees (except those in agriculture, forestry, fishery, mining, and telecommunications industries and public offices)	Offices with 5 or more regular employees (except those in telecommunications industry)	
Sample size	7,488 households	3,000 businesses	5,500 offices	
No. of effective	4,999 households	1,836 businesses	3,692 offices	
responses (%)	(14,642 persons) (66.6%)	(61.2%)	(67.1%)	
Survey topics	Usage of telecommunications services, Ownership of telecommunications equipment, etc.			
Method of sampling	Two-stage stratified random sampling, with municipality size used as the ratification criterion	Systematic random sampling, with business type and the number of regular employees used as the ratification criteria	Systematic random sampling, with business type and the number of regular employees used as the ratification criteria	
Data collection	Sending and collecting of questionnaires by ordinary mail			

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# Results of Telecommunications Usage Trend Survey 2006

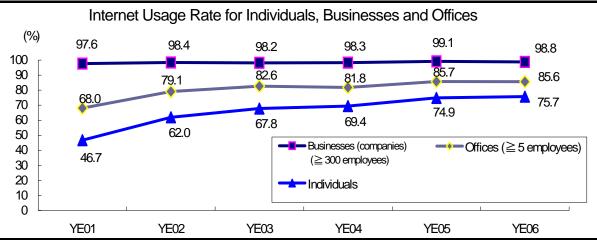
# **Table of Contents**

1 Use of the Internet and Other Networks	
(1) Internet Usage Rate (Individuals, Businesses, and Offices)	1
(2) No. of Internet Users and Diffusion Rate (relative to population) (Household Members)	1
(3) Type of Internet Terminal (Household Members)	
(4) Internet Usage Rate by Attribute (Household Members)	3
(5) Internet Usage Frequency (Household Members)	
(6) Purpose of Internet Usage (Household Members)	5
(7) Purchase of Merchandise and Services via the Internet (Household Members)	6
(8) Reason for Shopping via the Internet (Household Members)	6
(9) Use of e-commerce (Businesses)	
(10) Website Ownership (Businesses)	7
2 Diffusion of Broadband Connection	
(1) Types of Connection between Home PC and the Internet (Households)	
(2) No. of Broadband Line Users (Household Members)	8
(3) Types of Internet Connection (Businesses)	9
(4) Types of Internet Connection (Offices)	9
3 Usage of ICT Equipment	
(1) Usage Rate of Mobile Phone and PC (Household Members)	
(2) Ownership of ICT Equipment (Households)	
(3) Usage Rate of IP Telephony (Households)	12
(4) Usage Rate of Ubiquitous-related Tools (Businesses)	12
(5) Installation of Terminals (Businesses)	14
(6) Ownership of ICT Equipment (Offices)	14
(7) Usage Rate of e-money (Household Members)	15
4 State of Network Installation	
(1) Rate of Home LAN Installation (Households)	
(2) State of Intranet Installation (Businesses)	
(3) State of Inter-company Network Installation (Businesses)	
(4) Types of Communication Service Used in Corporate Network (Businesses)	18
5 State of Coping with Safety and Security Issues	
(1) Concerns about Internet Usage (Households)	
(2) State of Implementing Measures to Protect Personal Information (Households)	
(3) Problems in Using Information and Telecommunications Network (Businesses)	
(4) State of Implementing Measures to Protect Personal Information (Businesses)	
(5) State of Appointing Chief Information Officer (CIO) (Businesses)	23
6 Trends in Use of ICT at Businesses	
(1) Percentage of Operating Business Blogs and SNS (Businesses)	24
(2) Advertising on the Internet (Businesses)	
(3) Investment in ICT (Businesses)	
(4) Effects of Investment in ICT (Businesses)	27

#### 1 Use of the Internet and Other Networks

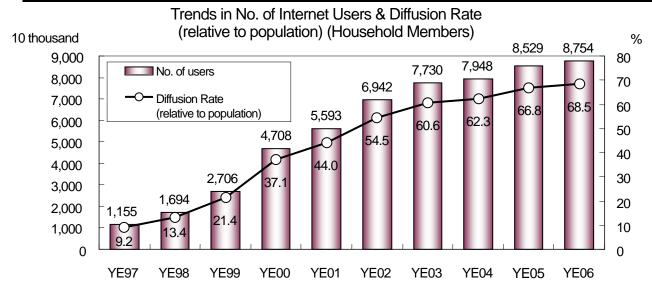
## (1) Internet usage rate (Individuals, Businesses and Offices)

The rate of Internet usage has slightly increased to 75.7% for individuals, whereas it has remained stable at 98.8% for businesses and 85.6% for offices.



# (2) No. of Internet Users and Diffusion Rate (relative to population) (Household Members)

The number of people who had used the Internet during the preceding 12 months continued to increase and is now estimated at 87.54 million, up 2.6% (2.25 million) over the previous year's figure. As a result, the diffusion rate (relative to population) increased 1.7 points, to 68.5%.



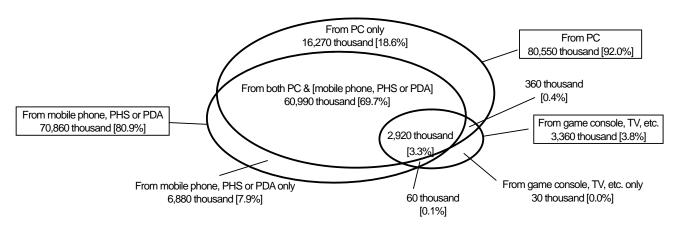
(Note) 1) No. of Internet Users (estimated) refers to the number of users estimated from the results of this survey of people aged 6 and above who had used the Internet during the preceding 12 months. All types of devices are assumed for connecting to the Internet, including PCs, mobile phones, personal handy-phone system (PHS) devices, personal digital assistants (PDAs), and game consoles (regardless of ownership); all purposes are assumed, including personal use, use for work, and use at school.

- 2) The diffusion rate (relative to population) (estimated) is obtained by dividing the total number of Internet users, 87.54 million, by the estimated population of Japan as of October 2006, 127.80 million (Future Population Trend of Japan (Medium-range Forecast), the National Institute of Population and Social Security Research).
- 3) The numbers for YE 1997 through YE 2000 are taken from the Telecommunications White Paper. The numbers for YE 2001 through YE 2006 are estimations taken from the Telecommunications Usage Trend Survey.
- 4) The range of ages subject to this survey was 15–69 up to 1999, but was expanded to 15–79 for 2000, and then to 6–79 for 2001, reflecting the expansion of users in age. Thus, consistency is not strictly maintained across the different survey periods.

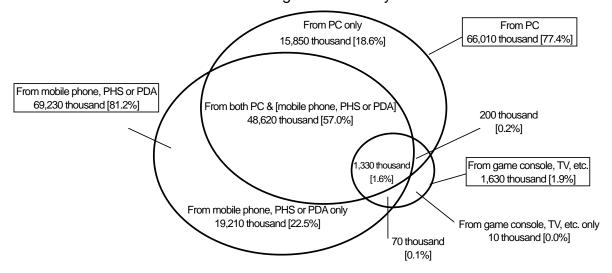
## (3) Types of Internet Terminal (Household Members)

While the number of individuals who have accessed the Internet via a PC increased by 14.54 million (22.0%) over the preceding year to reach 80.55 million (estimated), the number of those who have accessed the Internet via a mobile terminal such as a mobile phone or a PHS device increased modestly (2.4%) to 70.86 million (estimated). The number of people who have used both a PC and a mobile terminal increased by 12.37 million (25.4%) to 60.99 million (69.7%), whereas the number for mobile only decreased by 12.33 million.

#### Types of Internet Terminal (Household Members)



# (for information) Types of Internet Terminal (Household Members) in 2005 Telecommunications Usage Trend Survey

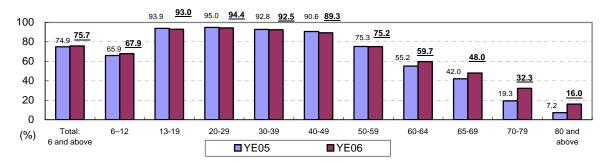


# (4) Internet Usage Rate by Attribute (Household Members)

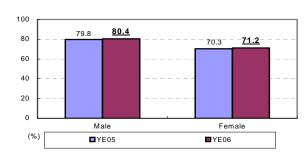
With more and more people in their 60s and above using the Internet, the gap in the usage rate of the Internet between age groups has shrunk over the previous year, but it remains large.

# Internet Usage Rate by Attribute (Household Members)

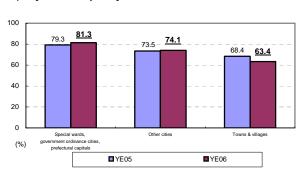
### 1) By generation



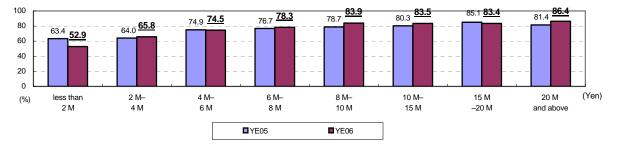
#### 2) By gender



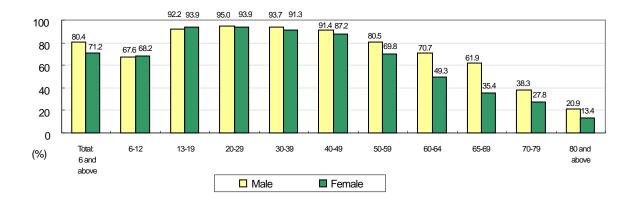
#### 3) By municipality size



#### 4) By annual household income



#### 5) By gender generation (YE06)

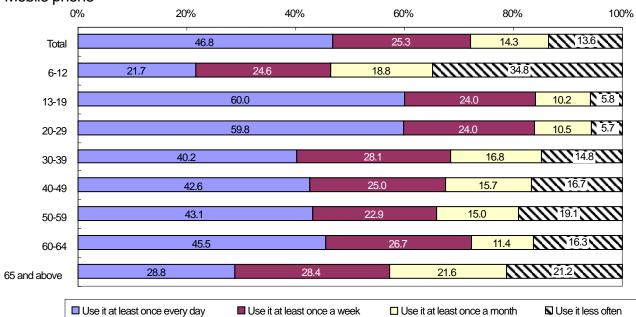


#### (5) Internet Usage Frequency (Household Members)

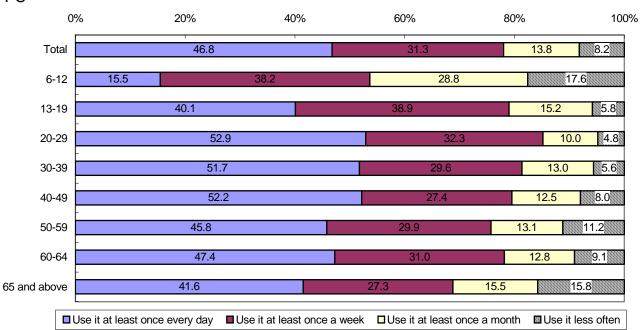
Looking at the breakdown by generation of the percentage of those that "Used the Internet at least once every day" to the total number of Internet users (household members), there is a clear gap in the use of the Internet among different generations. The frequency of mobile phone usage among the age groups of 13–19 and 20s was the highest among the age brackets and higher than that of PCs, while it was lower than that of PCs among the age groups of 30s and above. For the 6–12 age group, the PC and the mobile phone both scored between 10% and 20%, and few use the Internet every day.

#### Internet Usage Frequency (Household Members)

#### 1) Mobile phone



#### 2) PC



(Note) For each graph, the statistics exclude the respondents who did not choose any of the given choices. In addition, because of rounding errors, the total of breakdown figures does not necessarily match the aggregate total.

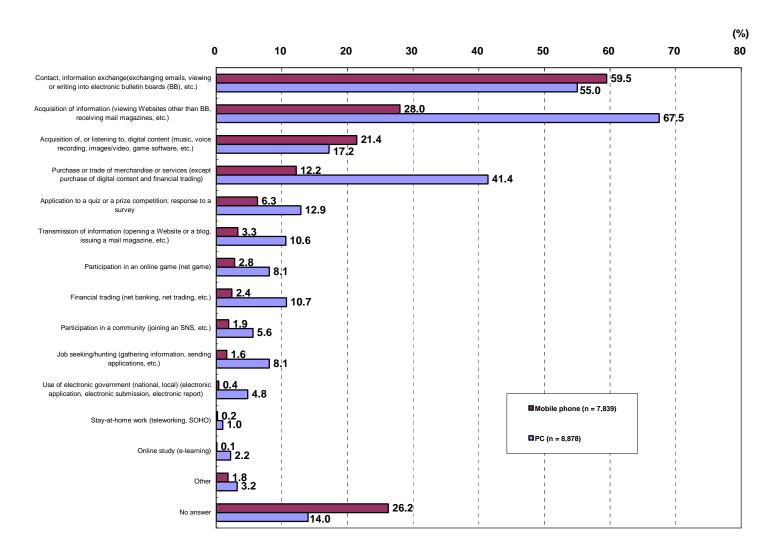
### (6) Purpose of Internet Usage (Household Members)

As for the purpose of using the Internet via a mobile phone, "Contact, information exchange" scored an outstanding 59.5%, followed by "Acquisition of information" (28.0%) and "Acquisition of, or listening to, digital content" (21.4%). On the other hand, as for the purpose of using the Internet via a PC, "Acquisition of information" scored highest with 67.5%, followed by "Contact, information exchange" (55.0%), "Purchase or trade of merchandise or services" (41.4%), and "Acquisition of, or listening to, digital content" (17.2%).

The mobile phone surpassed the PC only in "Contact, information exchange" and "Acquisition of, or listening to, digital content."

Two purposes were added for the present study: "Transmission of information" scored 10.6% for the PC and 3.3% for the mobile phone; "Participation in a community" scored 5.6% for the PC and 1.9% for the mobile phone.

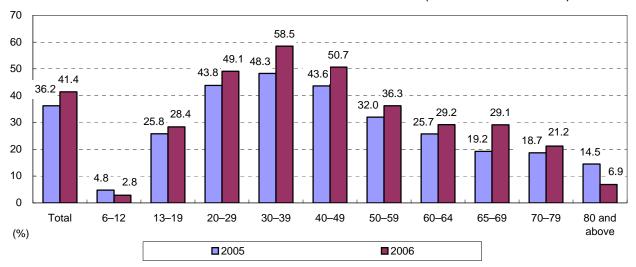
Purpose of Internet Usage (Household Members) (multiple choices allowed)



## (7) Purchase of Merchandise and Services via the Internet (Household Members)

The number of people who have purchased merchandise or services via the Internet was 41.4% of all who have used the Internet, an increase of 5.2 points over the previous year. The ratio went over 50% among the age groups of the 30s and 40s.

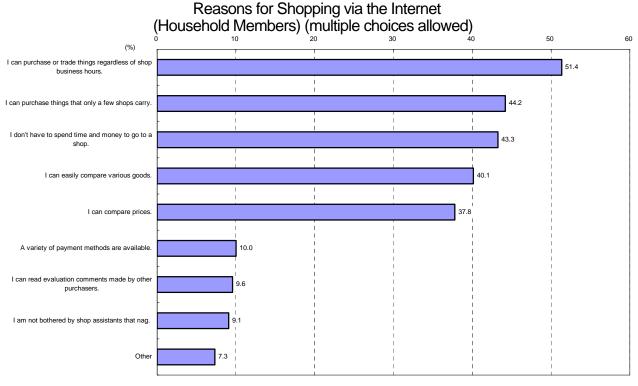
#### Purchase of Merchandise and Services via the Internet (Household Members)



#### (8) Reasons for Shopping via the Internet (Household Members)

Of a variety of reasons for shopping via the Internet, "I can purchase or trade things regardless of shop business hours" scored highest with 51.4%, followed by "I can purchase things which only a few shops carry" (44.2%), which endorses the "long tail theory" under "Web 2.0."

Another point to mention as one of the advantages of Internet shopping is the ease of gathering information, as exemplified by "I can easily compare various goods" (40.1%) and "I can compare prices" (37.8%).



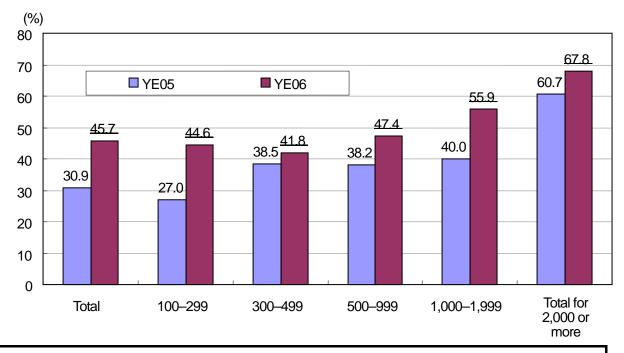
<sup>\*</sup> This question was directed to people aged 15 and above.

#### (9) Use of e-commerce (Businesses)

The percentage of businesses utilizing e-commerce (procurement/sales via the Internet) was 45.7% (increase by 14.8 points), showing a steady upward trend. Businesses with 100–299 employees and those with 1,000–1,999 employees scored a significant increase, up by 17.6 points and 15.9 points, respectively.

Further, almost 70% (67.8%) of businesses with 2,000 or more employees were utilizing e-commerce.

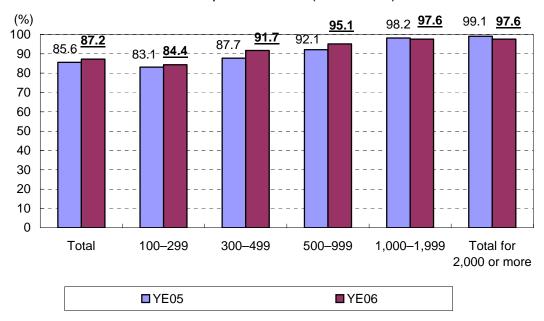
Use of e-commerce (Businesses) (by scale in terms of employee head count)



## (10) Website Ownership (Businesses)

The great majority of businesses, 87.2% in total, and 84.4% of relatively small businesses with 100–299 employees owned a Website, evidencing the widespread use of Websites as a means of disseminating information.

### Ownership of a Website (Businesses)

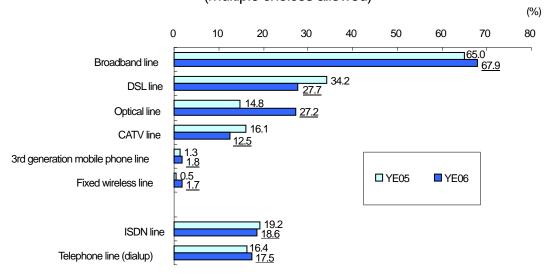


## 2 Diffusion of Broadband Connection

# (1) Types of Connection between Home PC and the Internet (Households)

The percentage of households having a broadband connection reached 67.9%, a little over two-thirds; however, the increase from the end of the previous year was meager (2.9 points). The usage rate of optical lines nearly doubled from 14.8% to 27.2%, while those of DSL and CATV decreased, indicating a growing shift toward optical lines.

Types of Connection between Home PC and the Internet (Households) (multiple choices allowed)



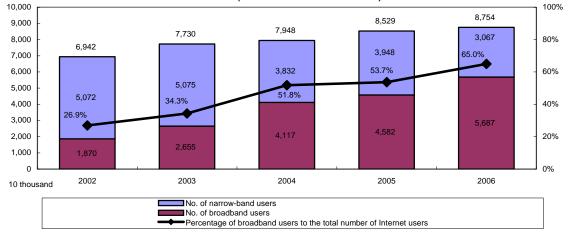
(Notes) 1) Object of statistics: Households using the Internet via a PC at home

- 2) "Broadband line" comprises DSL line, CATV line, optical line, 3rd-generation mobile phone line (only when connected to a PC), and fixed wireless line.
- 3) "Narrow band line" comprises, in addition to those in the graph above, mobile phone line, PHS line, etc.

## (2) No. of Broadband Line Users (Household Members)

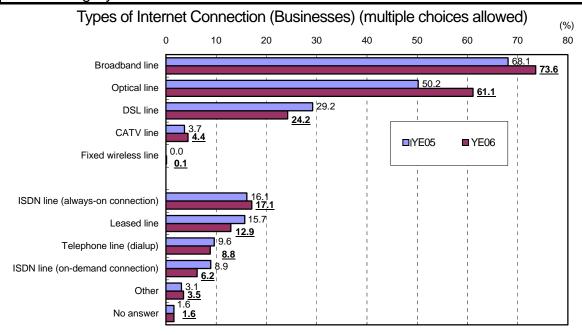
The number of broadband line users reached an estimated 56,870 thousand, a significant increase of 11,050 thousand (24.1%) from the end of the previous year. The percentage of broadband line users to the total number of Internet users was 65.0%, an 11.3-point increase from the end of the previous year.

# Trends in estimated numbers of broadband and narrow-band users (Household Members)



## (3) Types of Internet Connection (Businesses)

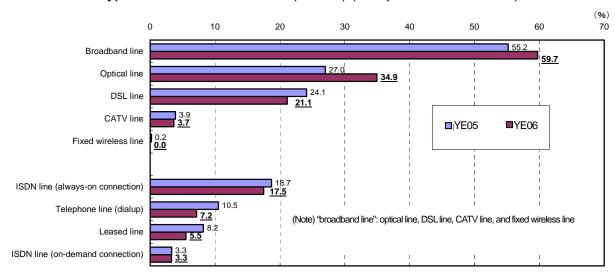
Of the businesses using the Internet, the number of broadband line users went above the 70% line (73.6%, up 5.5 points over the previous year). The rate of "Optical line" usage increased 10.9 points to 61.1%, while the usage rate for DSL dropped 5 points to 24.2%. Overall, this indicates a steady increase in the number of broadband users thanks to the increase in optical users, while the rates for "Telephone line," "ISDN line," and "Leased line" users slightly decreased.



#### (4) Types of Internet Connection (Offices)

The usage rate of broadband lines among offices using the Internet was 59.7%, a 4.5 point increase from the end of the previous year. The rate of optical line usage increased 7.9 points to 34.9%, while the usage rate for DSL dropped 3 points, showing an overall trend similar to that for businesses.





# 3 Usage of ICT Equipment

## (1) Usage Rate of Mobile Phone and PC (Household Members)

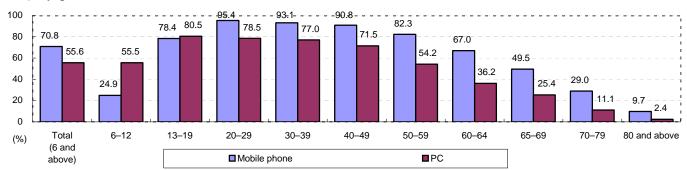
Overall, the usage rate of mobile phones (70.8%) was 15.2 points higher than that of PCs (55.6%). Peculiarly for the 6–12 age group, the usage rate of PCs outstripped that of mobile phones by a wide margin (approximately 30 points).

The usage rate of mobile phones was over 90% for the age groups of the 20s through the 40s; it scored also as high as approximately 50% for the late 60s age group. On the other hand, there existed a greater digital divide between generations for PCs than for mobile phones, presumably because the use of PCs demands a fair amount of knowledge. The usage rate of PCs was over 70% for the age groups of the 20s through the 40s, whereas it was 54.2% for the 50s age group and 25.4% for the late 60s age group.

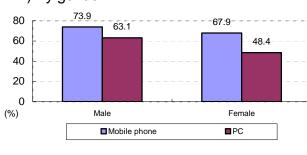
Similarly, the disparities in usage rate between genders, between different municipality size groups, and between different household annual income brackets were all greater for PCs than for mobile phones. The difference between the usage rate of PCs and that of mobile phones tended to decrease as the annual household income increased.

## Usage Rate of Mobile Phone and PC (Household Members)

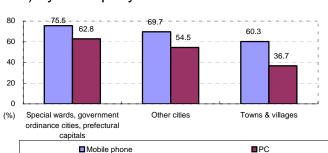
#### By generation



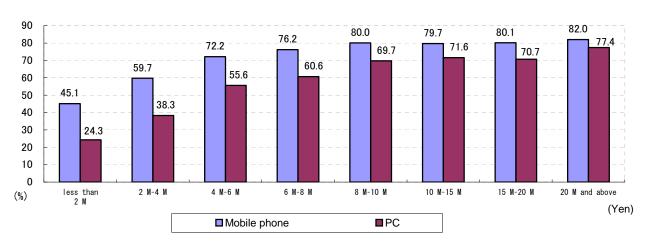
#### 2) By gender



#### 3) By municipality size



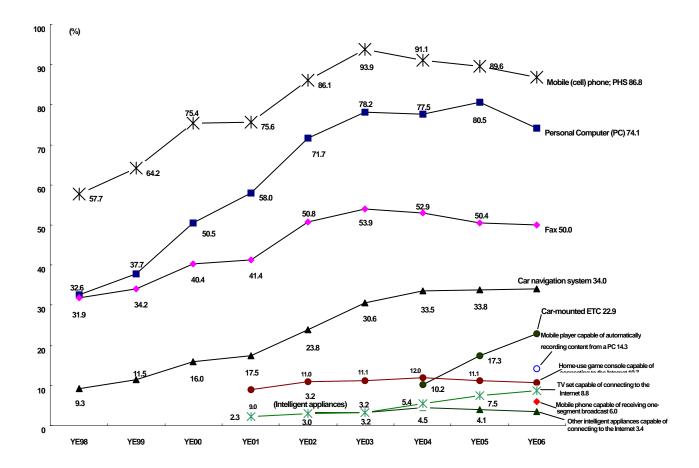
#### 4) By annual household income



#### (2) Ownership of ICT Equipment (Households)

The ownership rate per household was 86.8% for mobile phones or PHS devices and 74.1% for PCs, indicating that these pieces of equipment had already diffused into most households. The diffusion rates have reached saturation in recent years. Similarly, fax machines and car navigation systems had respectively diffused into approximately half and one-third of households a few years before, and the diffusion rates had since stayed flat. Of the two devices added in this survey, "Mobile player capable of automatically recording content from a PC" showed a diffusion rate of 14.3% (households), whereas "Mobile phone capable of receiving one-segment broadcast" showed a diffusion rate of 6.6%.

#### Ownership of ICT Equipment (Households)

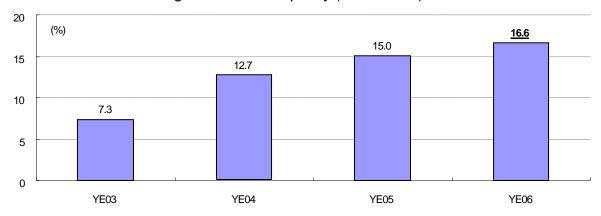


(Note) "Home-use game console capable of connecting to the Internet" and "TV set capable of connecting to the Internet" were added to the survey in 2001; "Other intelligent appliances capable of connecting to the Internet," in 2002; "Car-mounted ETC," in 2004; "Mobile player capable of automatically recording content from a PC" and "Mobile phone capable of receiving one-segment broadcast." in 2006.

#### (3) Usage Rate of IP Telephony (Households)

The diffusion rate of IP telephony per household reached 16.6%, a modest 1.6 point increase from the end of the previous year, indicating a decelerating pace of diffusion compared with the result of the previous survey (a 2.3-point increase). During the past few years, the diffusion rate has been decelerating.

## Usage Rate of IP Telephony (Households)

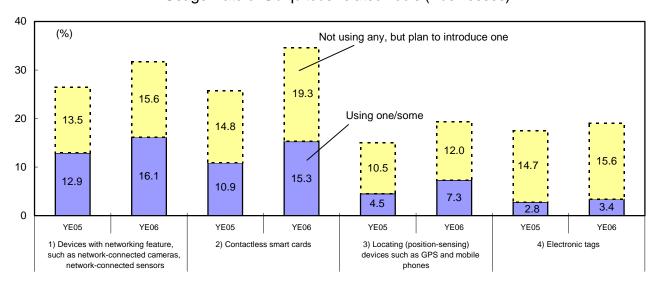


## (4) Usage Rate of Ubiquitous-related Tools\* (Businesses)

The diffusion rates of various ubiquitous-related tools in businesses were as follows (in decreasing order): "Devices with networking feature" (16.1%), "Contactless smart cards" (15.3%), "Position-sensing devices" (7.3%), and "Electronic tags" (3.4%). The order was the same as in the previous year; the diffusion rate increased for all these tools. As in the previous year, for each ubiquitous-related tool, more than 10% of the businesses polled indicated a plan to introduce one, so the diffusion rates are expected to grow.

Among businesses with 2,000 or more employees, "Contactless smart cards" (54.7%) and "Devices with networking feature" (45.3%) showed high diffusion rates.

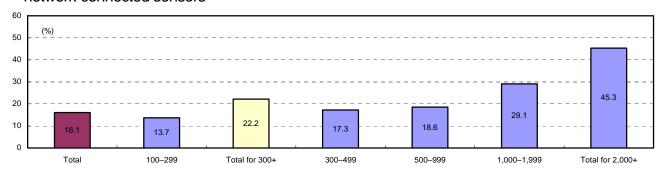
## Usage Rate of Ubiquitous-related Tools (Businesses)



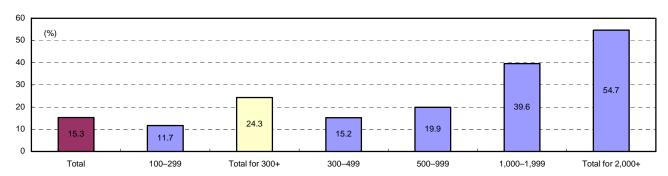
\* In this survey, the term "ubiquitous-related tool" generically means business tools equipped with next-generation telecommunication features such as electronic tags (RFID tags), contactless smart cards, network-connected cameras, network-connected sensors, and devices with a position sensing feature (such as mobile phones).

# Usage Rate of Ubiquitous-related Tools (Businesses) (by scale in terms of employee head count)

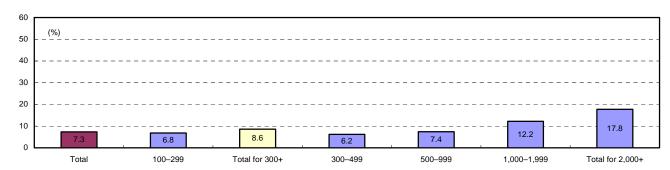
# 1) Diffusion rate of devices with networking feature, such as network-connected cameras, network-connected sensors



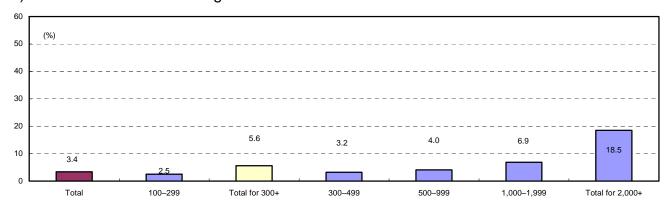
## 2) Diffusion rate of contactless smart cards



## 3) Diffusion rate of locating (position-sensing) devices such as GPS and mobile phones

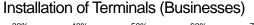


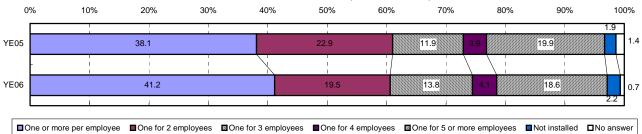
## 4) Diffusion rate of electronic tags



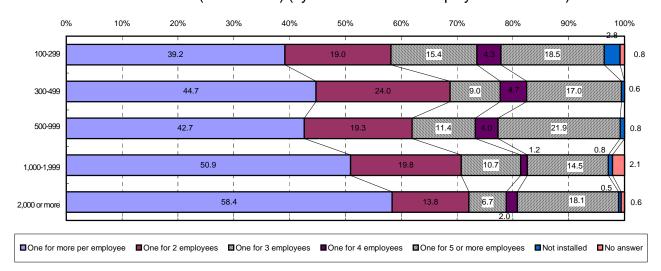
#### (5) Installation of Terminals (Businesses)

As for the installation of terminals connected to an intranet, an inter-company network, or the Internet, "One or more per employee" scored the highest (41.2%) followed by "One for two employees" (19.5%), which means that 60% of businesses had one or more such terminals installed for every two employees. More than 50% of businesses with 1,000 or more employees had one or more such terminals installed for every employee.





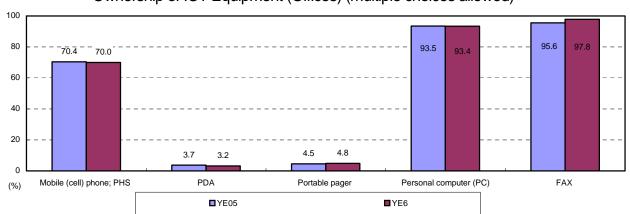
#### Installation of Terminals (Businesses) (by scale in terms of employee head count)



# (6) Ownership of ICT Equipment (Offices)

The ownership rates remained high, with 70.0% for "Mobile (cell) phone; PHS," 93.4% for "Personal computer (PC)," and 97.8% for "FAX," repeating the trends for the previous year.

#### Ownership of ICT Equipment (Offices) (multiple choices allowed)

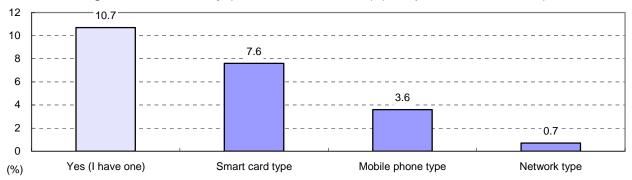


\* The mobile phone and PHS had been treated separately up to the previous year, but they were combined into a single item in the present survey. For information, the ownership rate was 70.4% for the mobile phone and 9.7% for PHS in the previous year.

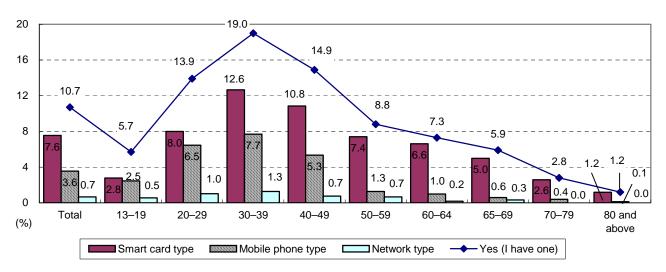
#### (7) Usage Rate of e-money (Household Members)

Approximately one-tenth (10.7%) of individuals own e-money. By generation, the ratio of e-money users (owners) was highest (19.0%) among those in their 30s, followed by those in their 40s (14.9%) and 20s (13.9%). The most popular type of e-money was "Smart card" (7.6%), followed by "Mobile phone" (3.6%), and "Network" (0.7%). The "Smart card" type showed a larger disparity in usage rate between different sizes of municipality than the "Mobile phone" type.

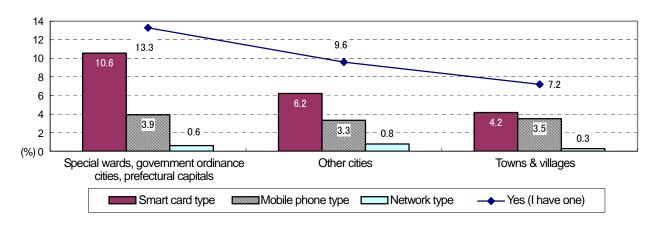
Usage Rate of e-money (Household Members) (multiple choices allowed)



# 1) By generation



#### 2) By size of municipality



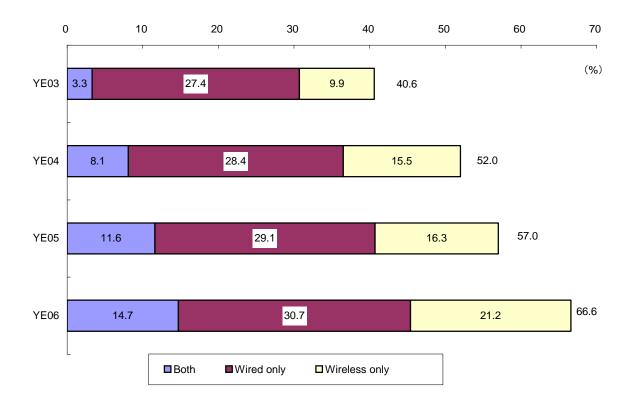
# 4 State of Network Installation

#### (1) Rate of Home LAN Installation (Households)

The rate of home LAN installations among households with two or more PCs was 66.6%, a 9.6 point increase from the end of the previous year.

As for the home LAN connection method, approximately one-half used "Wired only." The rate of "Wired only" installations, however, increased as little as 1.6 points, continuing very slow flat growth during the past few years. The rate of "Wireless only" installations increased 4.9 points, and the rate of "Both wired and wireless" installations grew 3.1 points; combined, wireless connection showed a higher rate of growth.

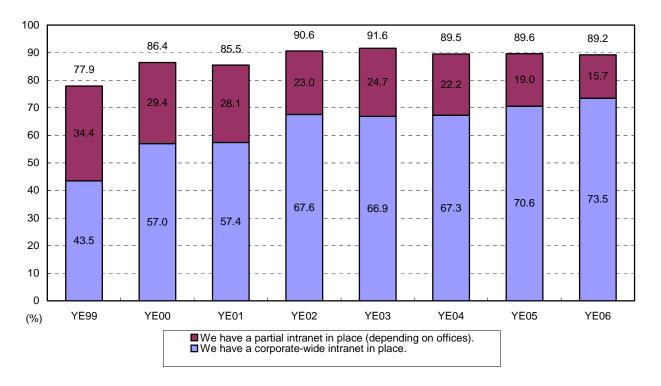
# Trends in Rate of Home LAN Installation (Households)



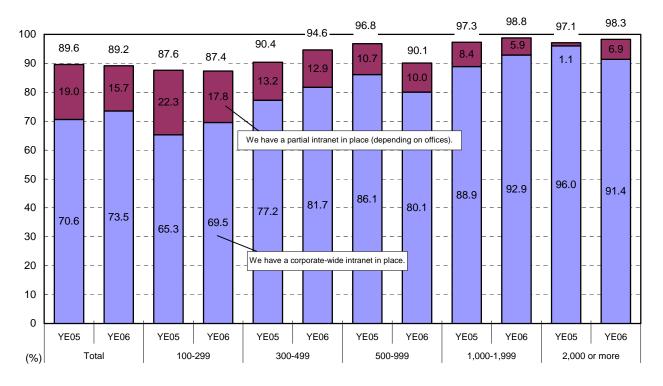
#### (2) State of Intranet Installation (Businesses)

The percentage of businesses having an intranet reached 89.2% overall, although the overall diffusion rate has remained flat in recent years. The percentage of businesses "Having a corporate-wide intranet" increased 2.9 points over the previous year, to 73.5%. Contributing to this increase were small-scale businesses: those with 100-299 employees scored an increase of 4.2 points, and those with 300-499 employees, 4.5 points.

Trends in Rate of Intranet Installation (Businesses)



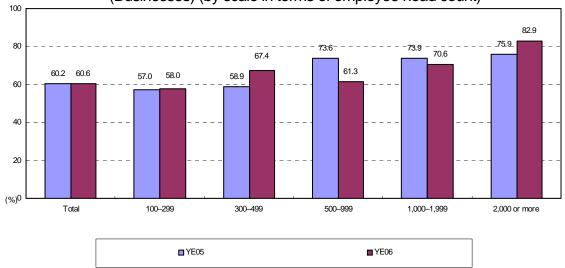
Rate of Intranet Installation (Businesses) (by scale in terms of employee head count)



#### (3) State of Inter-company Network Installation (Businesses)

The percentage of businesses having an inter-company network in place was 60.6%. As with the percentage of businesses having an intranet, the pace of growth was flattening. A closer look at the breakdown by business size (in terms of employee head count) reveals that the disparity in the rate of installation was as great as 24.9 points between businesses with 2,000 or more employees (82.9%) and those with 100–299 employees (58.0%).

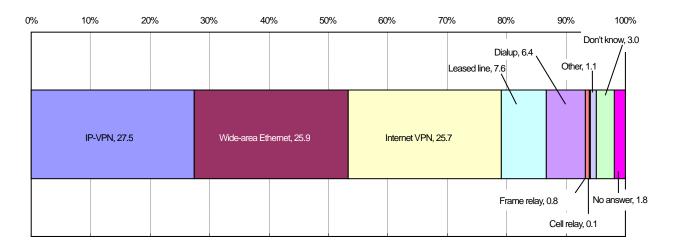
Trends in Rate of Inter-company Network Installation (Businesses) (by scale in terms of employee head count)



## (4) Types of Communication Service Used in Corporate Network (Businesses)

"IP-VPN" was the most popular with 27.5%, followed by "Wide-area Ethernet" (25.9%) and "Internet VPN" (25.7%). The top three were very close to each other, with only a 1.8-point difference between the most and least popular.

Types of Communication Service Used in Corporate Network (Businesses)



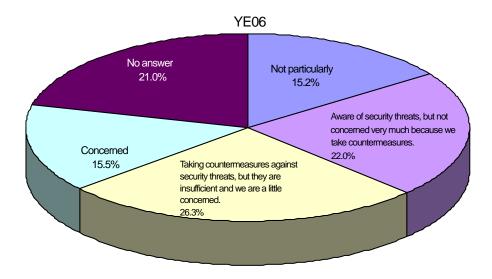
# 5 State of Coping with Safety and Security Issues

#### (1) Concerns about Internet Usage (Households)

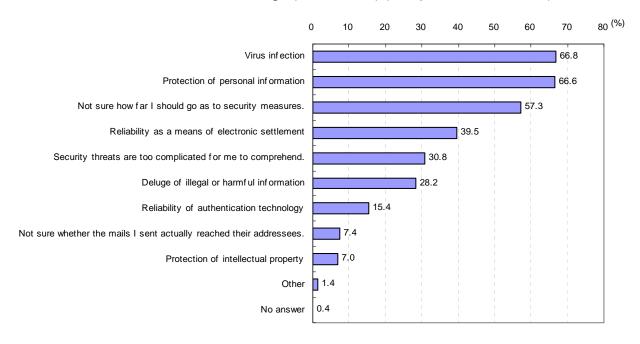
Of households using the Internet, only 15.2% "Were not particularly concerned." Conversely, most households using the Internet had some concerns or fear.

As for concerns about using the Internet, "Anxious about virus infection" scored highest with 66.8%, followed by "Concerned about insufficient protection of personal information" (66.6%) and "Not sure how far I should go as to security measures" (57.3%).

Concerned or Not Concerned about Internet Usage (Households)



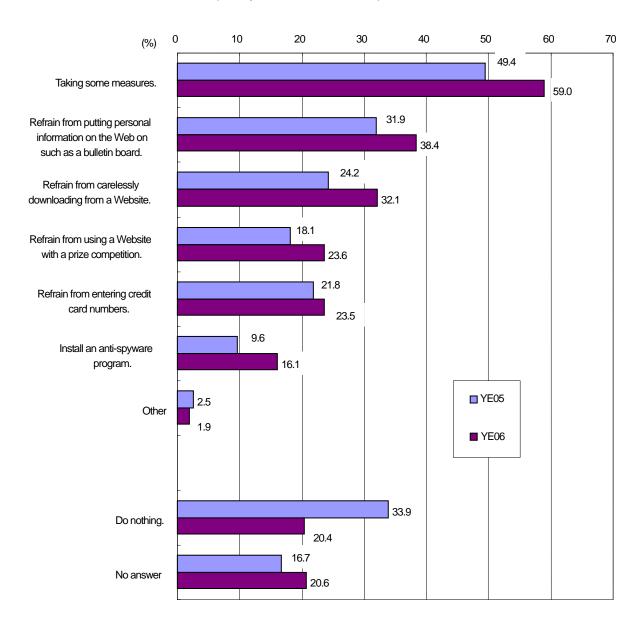
## Concerns about Internet Usage (Households) (multiple choices allowed)



(2) State of Implementing Measures to Protect Personal Information (Households)

The percentage of households taking some measures to protect personal information was 59.0%, a significant increase over the previous year, reflecting the general increase in fear and concern. The most popular measures were "Refrain from putting personal information on the Web on such as a bulletin board" (38.4%), "Refrain from carelessly downloading from a Website" (32.1%), "Refrain from using a Website with a prize competition" (23.6%), and "Refrain from entering credit card numbers" (23.5%), all of which scored an increase in the rate of adoption.

# State of Implementing Measures to Protect Personal Information (multiple choices allowed)

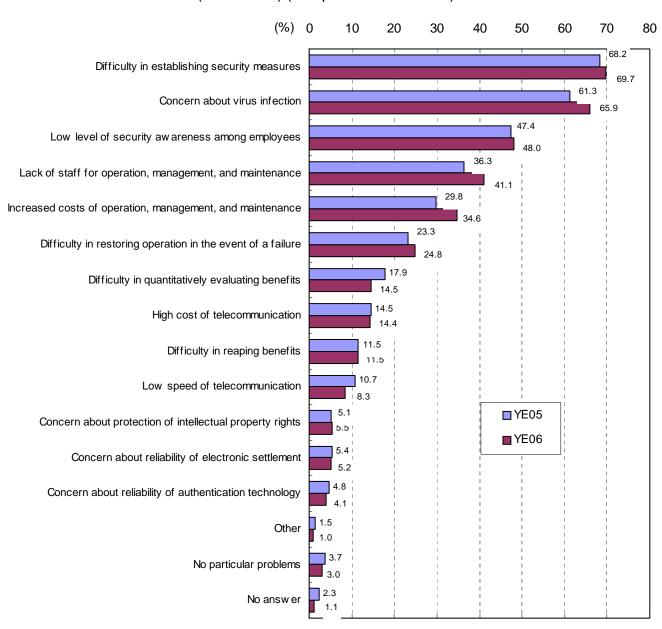


(3) Problems in Using Information and Telecommunications Network (Businesses)

Most frequently cited as a problem in using information and telecommunications networks such as the Internet and corporate networks were those related to security, such as "Difficulty in establishing security measures" (69.7%) and "Concern about virus infection" (65.9%), as in the previous year. Human resource issues such as "Employee awareness" and "Lack of staff for operation, management, and maintenance" were also cited by many businesses.

While the ranking of the top 10 problems remained the same as in the previous year, "Concern about virus infection," "Lack of staff for operation, management, and maintenance," and "Increased costs of operation, management, and maintenance" scored more than 4 points higher.

# Problems in Using Information and Telecommunications Network (Businesses) (multiple choices allowed)



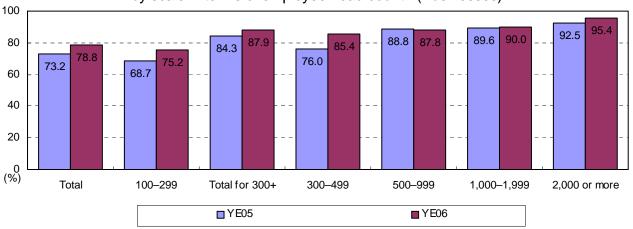
(4) State of Implementing Measures to Protect Personal Information (Businesses)

The percentage of businesses taking some measures to protect personal information to all businesses using an information and telecommunications network such as a corporate network or the Internet increased 5.6 points from the end of the previous year, to 78.8%.

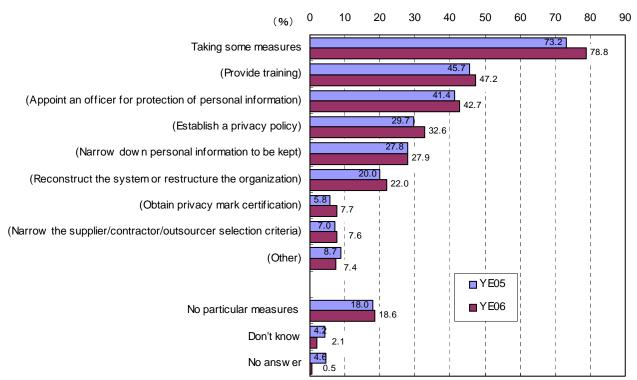
More than 80% of businesses with 300 or more employees were taking some measures, whereas businesses with 100–299 employees increased the ratio by 6.5 points, to 75.2%.

Of a variety of measures taken, "provide training" (47.2%) was the most popular as in the previous year, followed by "Appoint an officer for personal information protection" (42.7%), "Establish a privacy policy" (32.6%), and "Narrowing down personal information to be kept" (27.9%), all of which showed a higher adoption rate than in the previous year.

Percentage of Implementing Measures to Protect Personal Information < by scale in terms of employee head count> (Businesses)



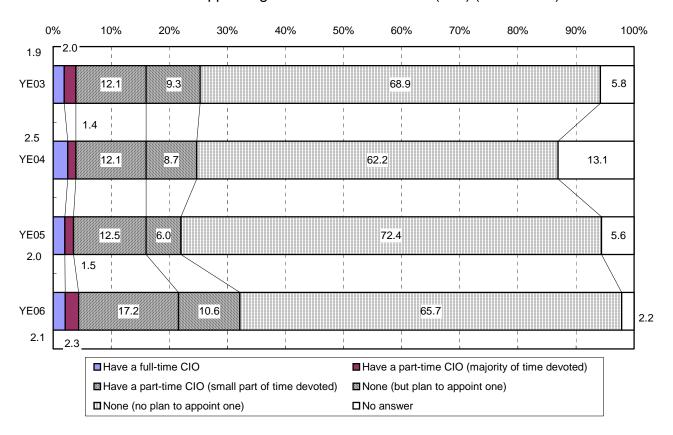
State of Implementing Measures to Protect Personal Information (Businesses) (multiple choices allowed)



## (5) State of Appointing Chief Information Officer (CIO)\* (Businesses)

The percentage of businesses having a full-time CIO was still extremely low (2.1%). With those having a part-time CIO added, the percentage came up to 21.6%, 5.6 points higher than in the previous year. Further, with those having plans, the percentage was higher than 30%.

## Trends in Rate of Appointing Chief Information Officer (CIO) (Businesses)



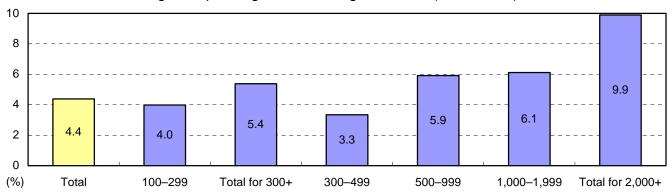
\*CIO: Chief Information Officer, an executive who oversees the company's information and telecommunications strategy and aligns it with its management strategy.

## 6 Trends in Use of ICT at Businesses

#### (1) Percentage of Operating Business Blogs and SNS (Businesses)

Overall, nearly 1 in 20 (4.4%) businesses were operating a business blog or SNS, indicating an emerging trend of utilizing "Web 2.0," a consumer-driven medium that enables "user participation." In particular, 1 in 10 (9.9%) big businesses (with 2,000 or more employees) were operating one.

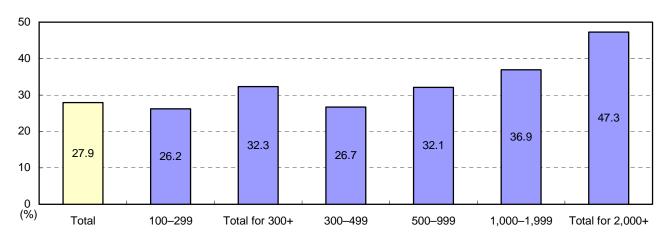
#### Percentage of Operating Business Blogs and SNS (Businesses)



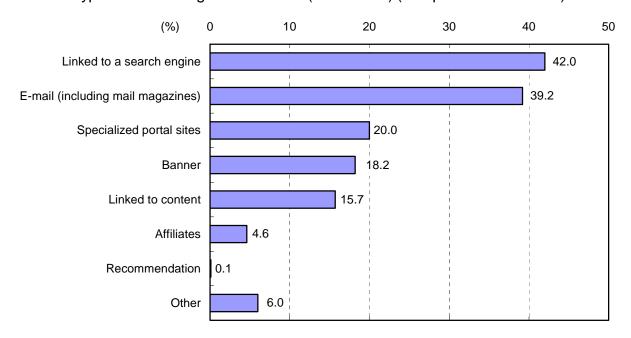
#### (2) Advertising on the Internet (Businesses)

Nearly 30% (more precisely, 27.9%) of all the businesses polled were using the Internet for advertisement. The usage ratio increases with the business size in terms of the number of employees. For example, nearly a half (47.3%) of the businesses with 2,000 or more employees were advertising on the Internet. Of a variety of advertisements, "Linked to a search engine," which makes it possible to focus on individual consumers' needs, scored highest with 42.0%, followed by "E-mail (including mail magazines)" (39.2%) and "Specialized portal sites" (20.0%).

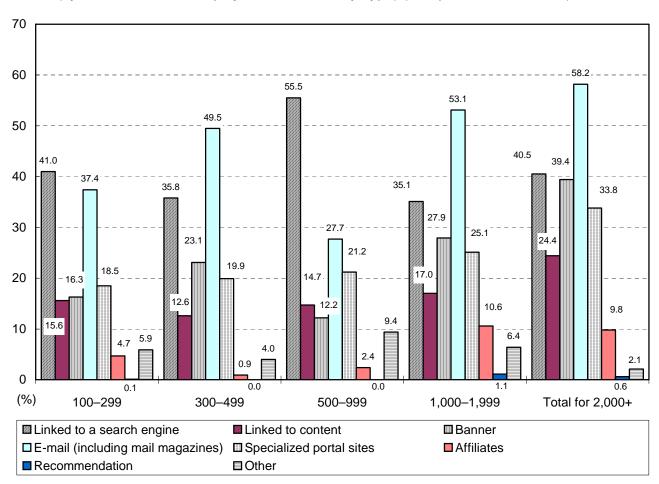
Percentage of Advertising on the Internet (by scale in terms of employee head count)



Types of Advertising on the Internet (Businesses) (multiple choices allowed)



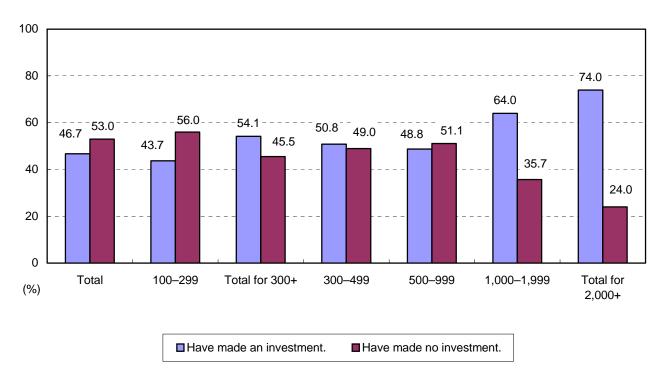
Types of Advertising on the Internet (Businesses) (by scale in terms of employee head count; by Type) (multiple choices allowed)



# (3) Investment in ICT\* (Businesses)

Overall, 46.7% of the businesses polled have invested in ICT during the past 3 years. A closer look at a breakdown by the scale in terms of the number of employees revealed a large disparity among businesses of different scales. In general, except for businesses with 500–999 employees, the greater the scale, the greater the ratio of businesses making ICT investment.

#### Investment in ICT (Businesses) (by scale in terms of employee head count)



<sup>\*</sup> Here, "Investment in ICT" means investment in information and telecommunications networks, ubiquitous-related tools, or Internet functions and services (e.g., blogs, SNS).

#### (4) Effects of Investment in ICT (Businesses)

Of a variety of investment items, the following scored high in "Effect observed (high, medium, low)" in descending order: "Improvement in quality of products or services" (49.6%), "Widening the range/scope of products or services" (43.3%), "Increase in variety of production or sales methods" (39.7%), and "Development of new products or services" (38.2%).

Of the investment items which received high percentages of "Effect observed," the following scored high in "High [degree of effect]" (in descending order): "Expansion of production capacity" (5.4%), "Increase in variety of production or sales methods" (4.6%), and "Improvement in quality of products or services" (4.3%).

#### Effects of Investment in ICT (Businesses)

