

May 18, 2011

Communications Usage Trend Survey in 2010 Compiled

The Ministry of Internal Affairs and Communications (MIC) has compiled its Communications Usage Trend Survey as a result of the survey on the use of telecommunications services in households and enterprises as of end of 2010.

Highlights of the survey are provided below. For the survey summary, please see the attachment.

Details of the survey will be posted on the website for the MIC's Information & Communications Statistics Database.

(URL: http://www.soumu.go.jp/johotsusintokei/statistics/statistics05.html)

[Highlights of the Survey Results]

[Results for Individuals]

- The number of Internet users reached 94.62 million, with a 78.2% diffusion rate (relative to population).

The number of Internet users increased by 0.54 million from the previous year, reaching 94.62 million, with a 78.2% diffusion rate (relative to population) (an increase of 0.2 percentage points from the previous year).[p.1]

- The internet usage rate among people aged 70 and up showed an increase.

With regard to the Internet usage rate among individuals by age group, the rate among those aged 70 and up showed an increase. [p.3]

[Results for Households]

- The percentage of households using broadband lines increased to 77.9%, and the percentage using optical lines grew to 52.2%.

The percentage of households using broadband lines as internet connections for home computers increased to 77.9% (an increase of 1.1 percentage points from the previous year).

Of those using the Internet from home computers, the usage rate of optical lines rose to 52.2% (an increase of 11.1 percentage points from the previous year). [p.6]

[Results by Prefecture]

- The Internet usage rate among individuals was higher mainly in prefectures with large cities.

The Internet usage rate among individuals scored 80% and higher in Kanagawa, Tokyo, Kyoto, Osaka, and Aichi. [p.3 and p.4]

[Survey Outline]

Since 1990, the Communications Usage Trend Survey has been conducted annually with households (households and household members) and enterprises, as general statistics in accordance with the Statistics Act (Act No. 53 of 2007). (The survey of enterprises has been conducted since 1993, except for 1994. The survey of household members started in 2001.) Since 2010, the survey of households has been conducted by prefecture.

	Households	Enterprises	
Survey period	January 2011		
Survey area	Nationwide		
Scope of attributes/ Level of survey Number of	Households headed by someone aged 20 or older (as of April 1, 2010) and household members	Enterprises with 100 or more regular employees (excluding the agriculture, forestry, fisheries, mining and public services industries)	
samples [Effective mails]	45,120 [44,720]	5,160 [4,763]	
Effective responses [%]	22,271 households (65,202 persons) [49.8%]	2,119 enterprises [44.5%]	
Survey items	Use of telecommunication services, ownership of telecommunication related devices, etc.		
Survey method	Mail survey		

Contact information: International Policy Division, Global ICT Strategy Bureau, MIC

TEL: +81 3 5253 5744 / FAX: +81 3 5253 6041

Results of Telecommunications Usage Trend Survey 2010 (Outline)

Table of Contents

1. Diffusion of the internet and Other Networks	
(1) Number of Internet Users and Diffusion Rate (relative to population) (Individuals) 1
(2) Internet Usage Rate (Individuals)	
(3) Internet Usage Rate (Businesses)	5
(4) Types of Internet Connection (Households)	6
(5) Types of Internet Connection (Businesses)	7
(6) Usage Rates of Mobile Phones and computers (Individuals)	8
2. Trends in the Use of ICT by Individuals	
(1) Purpose of Internet Usage ······	
(2) Merchandise and Services Purchased or Traded via Internet	10
(3) Payment Methods for Purchase via Internet	
(4) Reasons for shopping via the Internet	11
3. Trends in the Use of ICT by Businesses	
(1) Use of Cloud Computing Services	
(2) Reason for not using Cloud Computing Services	
(3) Teleworking ·····	
(4) Introduction Rate of Service Systems Using ICT-related Tools	
(5) Use of E-commerce	
(6) Advertising on the Internet	18
4. State of Coping with Safety and Security Issues	
(1) Concerns about Internet Usage (Households)	
(2) Implementation of Security Measures (Households)	
(3) Problems in Using Internet and In-house LANs (Businesses)	
(4) Implementation of Security Measures (Businesses)	22
(5) Implementation of Measures to Protect Personal Information (Rusinesses)	23

1. Diffusion of the Internet and Other Networks

(1) Number of Internet Users and Diffusion Rate (relative to population) (Individuals)

The number of people who used the Internet over the course of the year 2010 increased by 0.54 million from the previous year, and is now estimated to be 94.62 million. The diffusion rate (relative to population) was 78.2%.

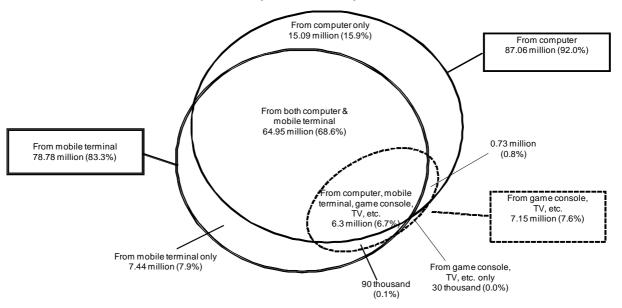
In terms of the types of Internet users by the terminals used to access the Internet, the number of users accessing the Internet via "computer and mobile terminal" (mobile phone, personal handy-phone system (PHS) device, etc.) was the highest, 64.95 million (68.6% of all the users), followed by "From computer only" 15.09 million (15.9%), "From mobile terminal only" 7.44 million (7.9%), and "From computer, mobile terminal, game console, TV, etc." 6.3 million (6.7%).

Trends in the Number of Internet Users & Diffusion Rate (relative to population) (Individuals) (10 thousand people) 100% 10,000 9,462 9,091 8,811 8,754 □No. of users 9,000 8.529 90% 7,948 8,000 7.730 80% -O-Diffusion rate (relative to population) 6 942 78.0 78.2 75.3 7,000 70% 72.6 73.0 70.8 6.000 5,593 66.0 60% 64.3 4,708 5,000 50% 46.3 4,000 40% 37 3,000 2 706 30% 2.000 20% 21.4 1,000 10% 13. YE 10 (YE) 97

Notes: 1. The numbers for YE 1997 through YE 2000 are taken from the Telecommunications White Paper.

- 2. The number of Internet users (estimated) refers to the number of users estimated from the results of this survey of people aged six and up who had used the Internet during the preceding 12 months for the survey. All types of devices are assumed for connecting to the Internet, including computers, 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.
- 3. The number of Internet users from YE 2001 and beyond is calculated by multiplying the estimated population aged six and up each year (estimated from census returns and life tables) by the Internet usage rate for people aged six and up obtained from this survey.
- 4. The range of ages subject to this survey was 15–69 until 1999; it was expanded to 15–79 for 2000, and then to six and up for 2001.

Types of Internet Terminals (Individuals) (End of 2010)



^{*} Mobile Terminal: mobile phone, PHS, personal digital assistant (PDA) or tablet terminal

(2) Internet Usage Rate (Individuals)

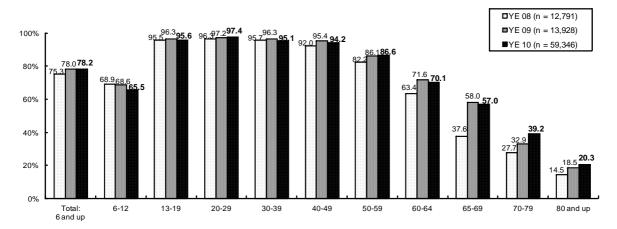
With regard to trends in Internet usage by age group, the rate among people aged 70 and up was increasing.

By age group and gender, the usage rate at the end of 2010 was generally higher for males.

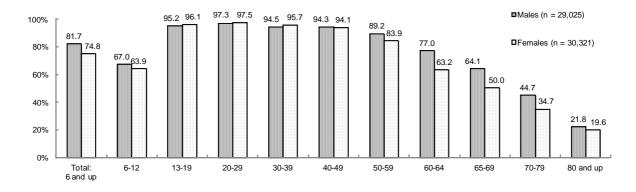
By annual household income, the usage rate was higher for higher income levels.

By prefecture, the usage rate was higher mainly in prefectures with large cities. In Kanagawa, Tokyo, Kyoto, Osaka, Aichi, Nara and Shiga, the usage rate was 80% and up.

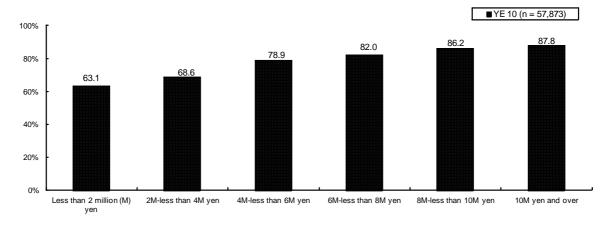
Trends in Internet Usage Rate by Age Group (Individuals)



Internet Usage Rate By Age Group and Gender (Individuals) (End of 2010)



Internet Usage Rate By Annual Household Income (Individuals) (End of 2010)



Internet Usage Rate By Prefecture (Individuals) (End of 2010)



Internet Usage Rate (Individuals)

Prefecture (n)		Usage rate (%)
Hokkaido	(1,047)	78.6
Aomori	(1,202)	67.7
lwate	(1,686)	68.5
Miyagi	(1,231)	75.0
Akita	(1,356)	66.9
Yamagata	(1,528)	68.8
Fukushima	(1,273)	71.9
Ibaraki	(1,353)	76.7
Tochigi	(1,129)	75.8
Gunma	(1,243)	77.3
Saitama	(1,128)	79.3
Chiba	(1,290)	77.5
Tokyo	(1,035)	83.6
Kanagawa	(1,337)	86.5
Niigata	(1,710)	68.0
Toyama	(1,719)	75.2
Ishikawa	(1,546)	75.6
Fukui	(1,489)	76.3
Yamanashi	(1,449)	76.6
Nagano	(1,444)	75.4
Gifu	(1,745)	75.9
Shizuoka	(1,342)	76.2
Aichi	(1,451)	81.8
Mie	(1,375)	76.4

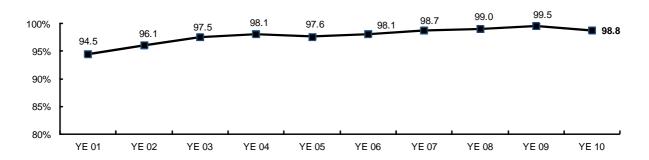
Prefecture (n)		Usage rate (%)
Shiga	(1,518)	80.7
Kyoto	(1,105)	82.4
Osaka	(1,189)	82.3
Hyogo	(1,064)	78.8
Nara	(1,433)	80.9
Wakayama	(1,244)	73.4
Tottori	(1,327)	72.7
Shimane	(1,367)	72.5
Okayama	(1,461)	76.0
Hiroshima	(1,317)	77.2
Yamaguchi	(1,190)	68.9
Tokushima	(1,228)	75.9
Kagawa	(1,246)	72.1
Ehime	(1,117)	74.0
Kochi	(744)	66.7
Fukuoka	(1,138)	77.4
Saga	(1,021)	77.3
Nagasaki	(985)	70.8
Kumamoto	(959)	70.4
Oita	(1,125)	72.2
Miyazaki	(915)	69.8
Kagoshima	(899)	73.5
Okinawa	(646)	79.9

(3) Internet Usage Rate (Businesses)

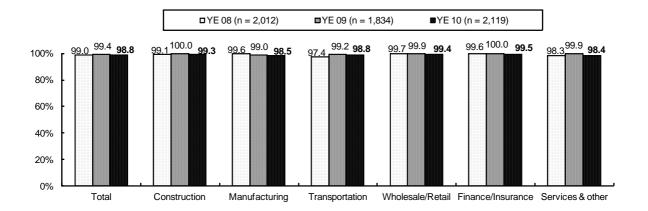
The rate of Internet usage by businesses as a whole was 98.8%.

By business category, trends in the usage rate for the last three years remained almost unchanged and at a high level in all categories.

Trends in Internet Usage Rate (Business)



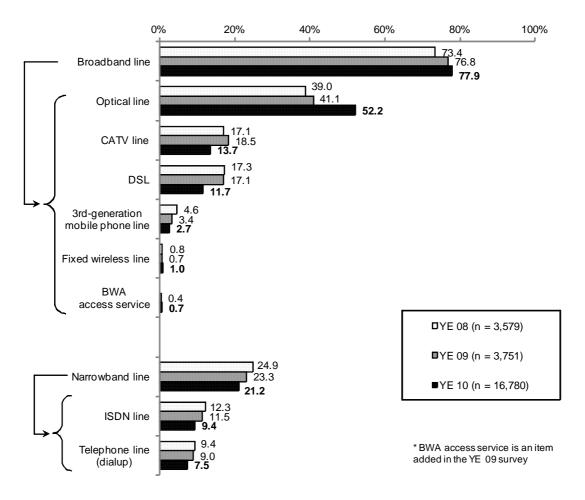
Internet Usage Rate by Business Category (Business)



(4) Types of Internet Connection (Households)

The percentage of households using broadband lines as Internet connections for home computers increased by 1.1 percentage points from the previous year, to 77.9%. Of households using the Internet from home computers, the usage rate of optical lines scored 52.2%.

Trends in Internet Connections Used for Home Computers (Households) (Multiple choices allowed)



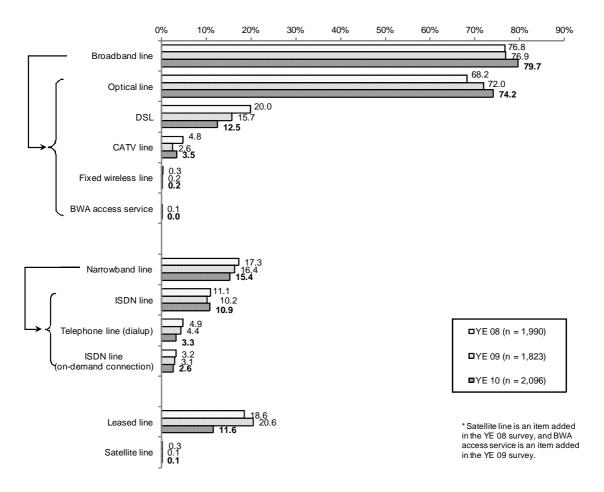
Notes:

- 1. The households subject to this survey were those using home computers to access the Internet.
- 2. Broadband lines consist of DSL, CATV lines, optical lines, 3rd-generation mobile phone lines (limited to cases in which a computer is connected to a mobile phone), fixed wireless lines, and BWA access service.
- 3. In addition to the types of narrow-band lines shown above, there are types using mobile phone line and PHS line.

(5) Types of Internet Connection (Businesses)

The percentage of businesses using broadband lines as Internet connections for businesses increased by 2.8 percentage points from the previous year, to 79.7%. The usage rate of optical lines increased by 2.2 percentage points to 74.2%, indicating that the diffusion of optical broadband connection for businesses is steadily progressing.

Types of Internet Connection (Businesses) (Multiple choices allowed)



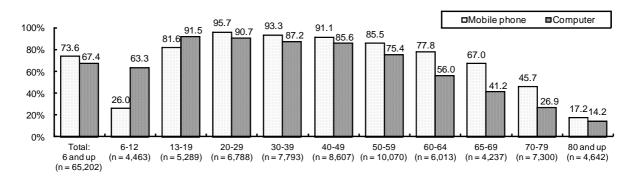
(6) Usage Rates of Mobile Phones and Computers (Individuals)

In terms of usage rates of mobile phones and computers among individuals, the rate of mobile phone usage (73.6%) was 6.2 percentage ponts higher than that of computers (67.4%).

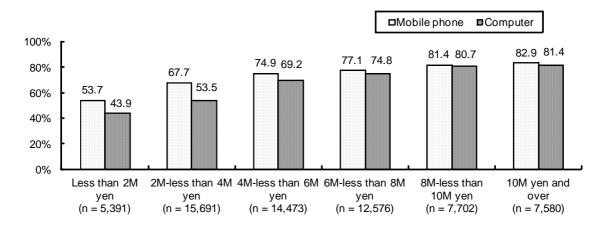
By age group, the usage rate for computers was higher than that for mobile phones for the under 20 age group, but, for all groups of ages 20 and over, the usage rate for mobile phones was higher than that for computers.

By annual household income, lower-income households showed a greater gap in usage rates between mobile phones and computers.

Usage Rate of Mobile Phones and Computers by Age Group (Individuals) (End of 2010)



Usage Rate of Mobile Phones and Computers by Annual Household Income (Individuals) (End of 2010)



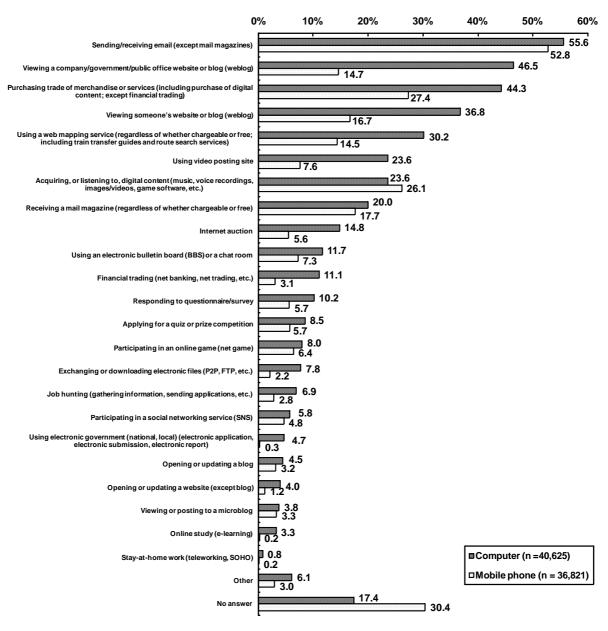
2. Trends in the Use of ICT by Individuals

(1) Purposes of Internet Usage

In terms of purposes for using the Internet via computers, "Sending/receiving e-mail" was the most common at 55.6%, followed by "Viewing a company/government/public office website or blog (weblog)" (46.5%) and "purchasing/trading in merchandise or services" (44.3%).

As with computers, for mobile phones, "Sending/receiving e-mail" was the most common at 52.8%, followed by "purchasing/trading in merchandise or services" (27.4%) and "Acquiring, or listening to, digital content (music, voice recordings, images/videos, game software, etc.)" (26.1%), indicating that top items cited are almost same for computers.

Purposes of Internet Usage via Computers and Mobile Phones (Individuals) (Multiple choices allowed) (End of 2010)



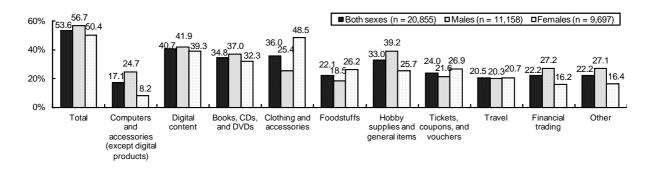
(2) Merchandise and Services Purchased or Traded via the Internet

In terms of the merchandise or services purchased or traded via the Internet during last year 2010, by gender, "Digital content" was highest at 41.9% for males, followed by "Hobby supplies and general items" (39.2%) and "Books, CDs and DVDs" (37.0%). For females, "Clothing and accessories" was highest at 48.5%, followed by "Digital content" (39.3%) and "Books, CDs and DVDs" (32.3%).

Of the digital contents purchased or traded, "Music" was highest at 57.1% for males, followed by "melody/song ringtones" (39.7%) and "Games" (29.5%). For females, "melody/song ringtones" was highest at 58.4%, followed by "Music" (58.1%) and "Standby display" (23.3%).

Merchandise/Services Purchased or Traded via the Internet (Multiple choices allowed) (End of 2010)

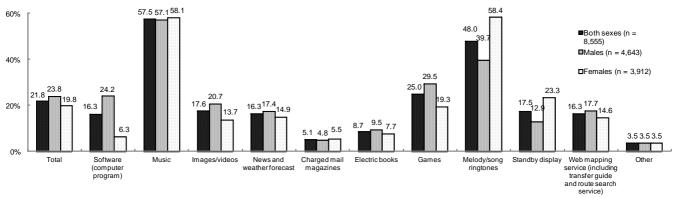
(This question was directed at people aged 15 and up who purchased merchandise/services or performed financial trading.)



^{* &}quot;Total" was the percentage of Internet users aged 15 and up who purchased merchandise/services or engaged in financial trading.

Types of Digital Content Purchased or Traded via the Internet (Multiple choices allowed) (End of 2010)

(This question was directed at people aged 15 and up who purchased digital content for which there was a charge.)

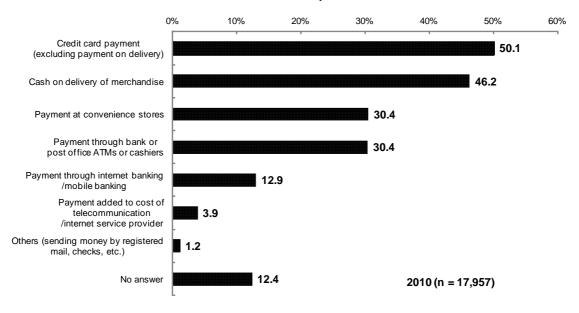


^{* &}quot;Total" was the percentage of Internet users aged 15 and up who purchased digital content for which there was a charge.

(3) Payment methods for purchase via the Internet

In terms of payment methods for purchases via the Internet, "Credit card payment" was highest at 50.1%, followed by "Cash on delivery of merchandise" (46.2%), "Payment at a convenience store" (30.4%) and "Payment through a bank or post office ATM/teller" (30.4%).

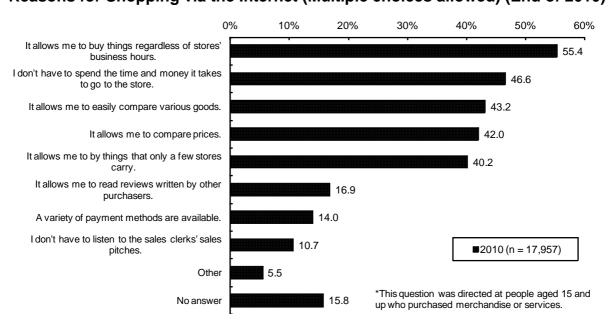
Payment Methods for Purchase via the Internet (Multiple choices allowed) (End of 2010)



(4) Reasons for Shopping via the Internet

Regarding reasons for shopping via the Internet, "It allows me to buy things regardless of stores' business hours" was the most common at 55.4%, followed by "I don't have to spend the time and money it takes to go to the store" (46.6%) and "It allows me to easily compare various goods" (43.2%).

Reasons for Shopping via the Internet (Multiple choices allowed) (End of 2010)



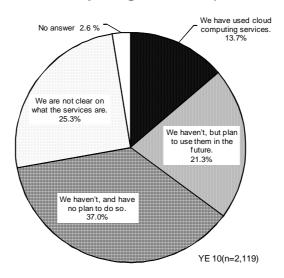
3. Trends in the Use of ICT in Businesses

(1) Use of Cloud Computing Services

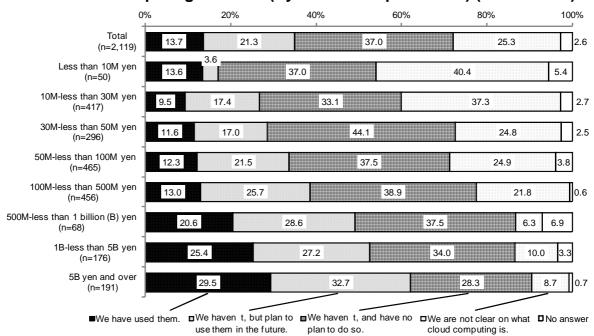
The percentage of businesses using cloud computing was 13.7%. By scale in terms of capital stocks, the usage rate was nearly proportional to the scale of capital stock, and the usage rate in businesses capitalized at 5 billion yen or more scored 29.5%.

Regarding the effects of using cloud computing services in business, the businesses answering that they "saw a very beneficial effect" or "saw some beneficial effects" totaled 79.9%, indicating that such services were effective for approximately 80% of the businesses.

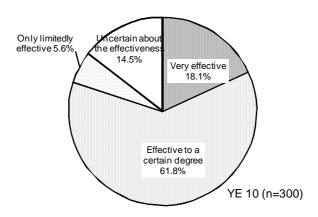
Use of Cloud Computing Services (End of 2010)



Use of Cloud Computing Services (By Scale of Capital Stock) (End of 2010)



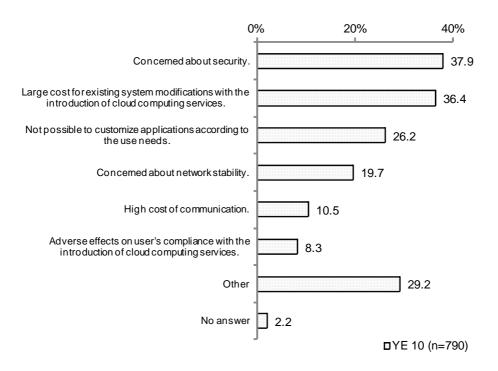
Effectiveness or Ineffectiveness of Using Cloud Computing Services (End of 2010)



(2) Reasons for Not Using Cloud Computing Services

In terms of reasons for not using cloud computing services, "Concerned about security" was highest at 37.9%, followed by "Large cost for existing system modifications with the introduction of cloud computing services" (36.4%) and "Not possible to customize applications according to the user needs" (26.2%).

Reasons for Not Using Cloud Computing Services (Multiple choices allowed) (End of 2010)



(3) Teleworking

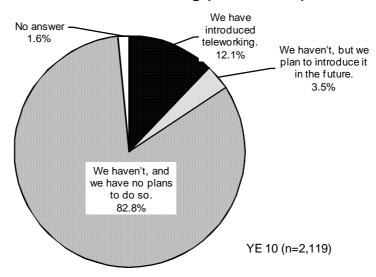
The percentage of businesses that have introduced teleworking was 12.1%. By scale in terms of capital stocks, the introduction rate of teleworking was nearly proportional to the scale of capital stock, and the introduction rate in businesses capitalized at 5 billion yen or more scored 28.4%.

Regarding the percentage of employees using teleworking in businesses, "Less than 5%" was highest at 51.8%, followed by "10% to less than 30%" (27.4%) and "5% to less than 10%" (8.2%).

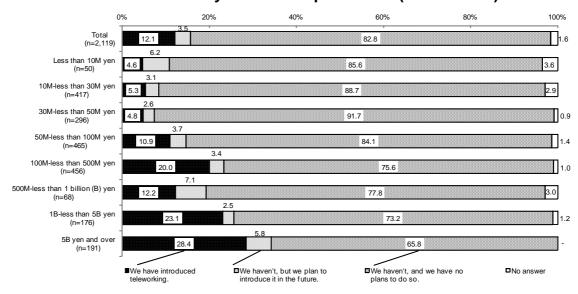
For main purposes of introducing teleworking, "Improvement of efficiency (productivity) of routine work" was highest at 46.3%, followed by "Reduction of employee's transport time" (41.1%) and "Preparation for business continuity in emergency situations (earthquakes, new flu virus, etc.)" (27.2%).

Regarding the effectiveness of introducing teleworking in businesses, the answers of "very effective" and "effective to a certain degree" totaled above 90% (95.4%), indicating the businesses saw a positive effect.

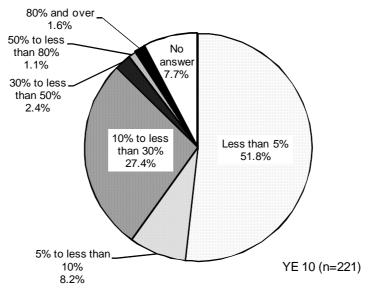
Introduction Rate of Teleworking (End of 2010)



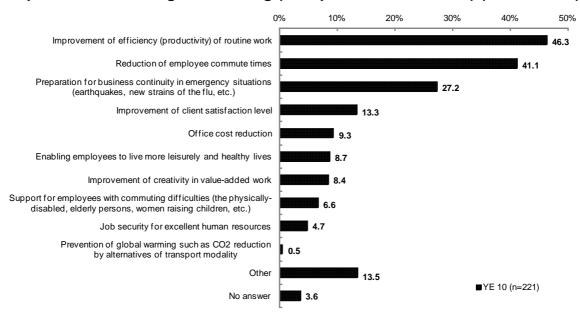
Introduction Rate by Scale of Capital Stock (End of 2010)



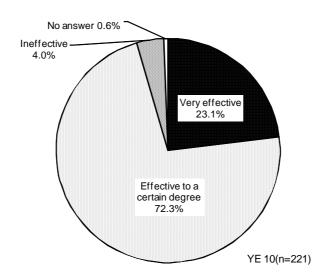
Percentage of Employees Using Teleworking (End of 2010)



Purpose of Introducing Teleworking (Multiple choices allowed) (End of 2010)



Effectiveness of Teleworking (End of 2010)

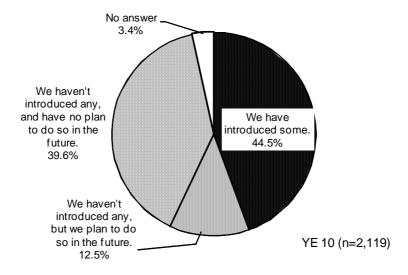


(4) Introduction Rate of Service Systems Using ICT-related Tools*

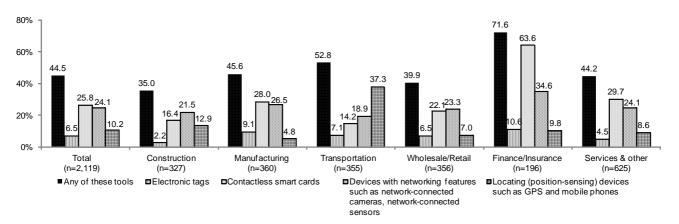
The introduction rate of service systems that use ICT-related tools among businesses was 44.5%.

For the introduction rate of each ICT-related tool by business category, "Electronic tags," "Contactless smart cards," and "Devices with networking features such as network-connected cameras, network-connected sensors" were highest in "Finance/Insurance," at 10.6%, 63.6% and 34.6%, respectively. "Locating (position-sensing) devices such as GPS and mobile phones" was highest in "Transportation," at 37.3%.

Introduction of Service Systems that Use ICT-related Tools (End of 2010)



Introduction Rate of ICT-related Tools by Business Category (End of 2010)



^{*} In this survey, the term "ICT-related tools" generically means business tools equipped with next-generation telecommunication features such as electronic tags (RFID tags), contactless smart cards, devices with networking features (e.g., network-connected cameras, network-connected sensors), locating (position-sensing) devices (e.g., GPS), and mobile phones.

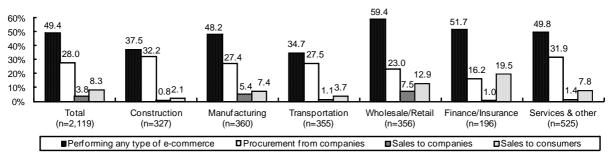
(5) Use of E-commerce

The percentage of businesses using e-commerce (procurement/sales via the Internet) was 49.4%. For the usage rate by business category, "Wholesale/Retail" was highest at 59.4%, followed by "Finance and insurance" (51.7%) and "Services & other" (49.8%).

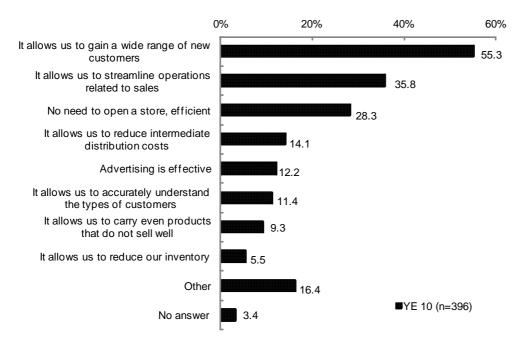
In terms of type of e-commerce by business category, "Procurement from companies" was highest in "Construction" with 32.2%, and "Sales to companies" was highest in "Wholesale/Retail" with 7.5%. "Sales to consumers" was highest in "Finance and insurance" with 19.5%.

Regarding main reasons for businesses conducting sales via the Internet, "It allows us to gain a wide range of new customers" was highest at 55.3%, followed by "It allows us to streamline operations related to the sales" (35.8%) and "It is efficient, as there is no need to open a store" (28.3%).

Use of E-commerce by Business Category (Multiple choices allowed) (End of 2010)



Reasons of Sales via the Internet (Multiple choices allowed) (End of 2010)

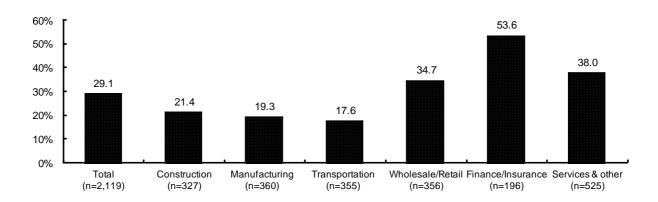


(6) Advertising on the Internet (Businesses)

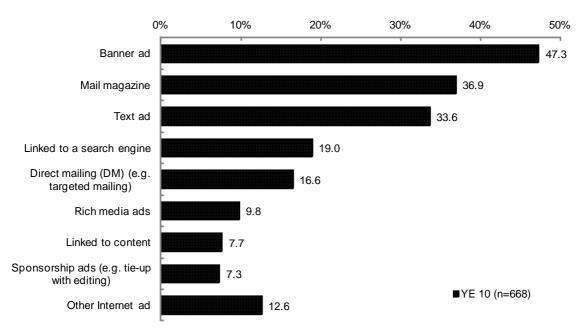
The percentage of businesses using the Internet to advertise was 29.1%. For the usage rate by business category, "Finance/Insurance" was highest at 53.6%, followed by "Services & other" (38.0%) and "Wholesale/Retail" (34.7%).

Regarding types of advertising, "Banner ads" were highest at 47.3%, followed by "Mail magazines" (36.9%) and "Text ads" (33.6%).

Usage Rate of Advertising on the Internet (End of 2010)



Types of Advertising on the Internet (Multiple choices allowed) (End of 2010)



- * Rich media ads: An advertising technique with displays that change with the motion of the mouse, or with moving images and sound using streaming technology.
- * Linked to content: An advertising technique that analyzes Web content and distributes material related to the content.

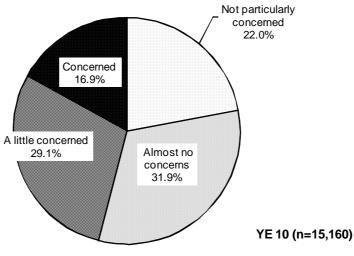
4. State of Coping with Safety and Security

(1) Concerns about Internet Usage (Households)

Of households using the Internet, those "a little concerned" and those "concerned" totaled 46.0%, indicating that approximately half of households are concerned.

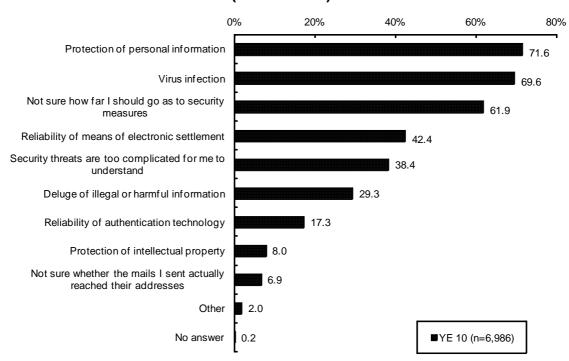
As for details of their concerns, "Protection of personal information" was highest at 71.6%, followed by "Virus infection" (69.6%) and "Not sure how far I should go as to security measures" (61.9%), suggesting that they are concerned about information security.

Concerned or Not Concerned about Internet Usage (Households) (End of 2010)



*Excluding "No answer"

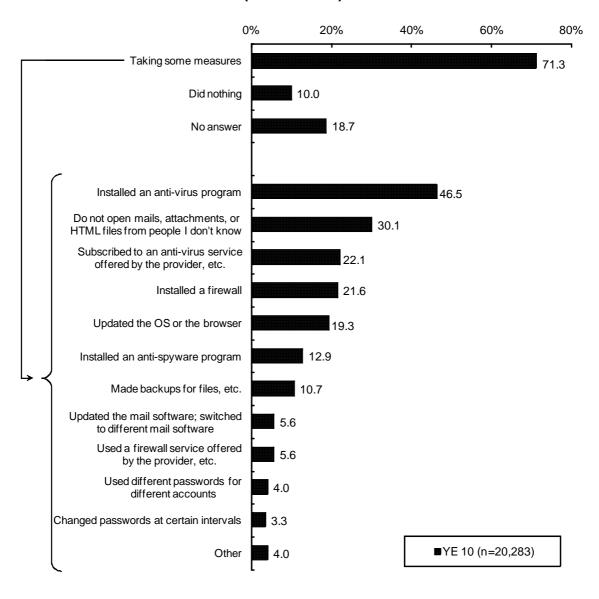
Concerns about Internet Usage (Households) (Multiple choices allowed) (End of 2010)



(2) Implementation of Security Measures (Households)

The percentage of households taking security measures was 71.3%. As for details of the measures, "Installed an anti-virus program" was highest at 46.5, followed by "Do not open mails, attachments, or HTML files from people I don't know" (30.1%) and "Subscribed to an anti-virus service offered by the provider, etc." (22.1%).

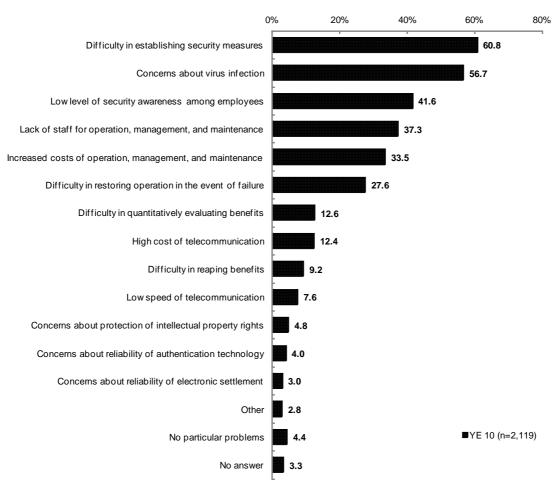
Implementation of Security Measures (Households) (Multiple choices allowed) (End of 2010)



(3) Problems in Using the Internet and In-house LANs (Businesses)

Regarding problems in using the Internet and in-house LANs, "Difficulty in establishing security measures" was most common, at 60.8%, followed by "Concerns about virus infection" (56.7%) and "Low level of security awareness among employees," (41.6%) indicating that security issues were the top three cited. Issues of human resources and costs related to operation, such as "Lack of staff for operation, management, and maintenance" (37.3%) and "Increased costs of operation, management, and maintenance" (33.5%) were also cited by many businesses.

Problems in Using the Internet and In-house LANs (Businesses) (Multiple choices allowed) (End of 2010)



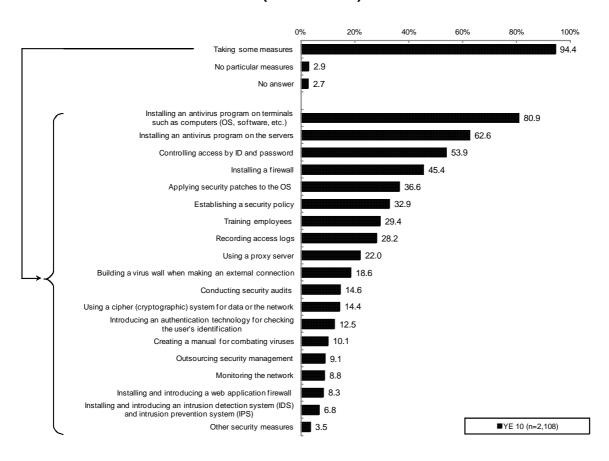
(4) Implementation of Security Measures (Businesses)

The percentage of businesses using the Internet or in-house LANS that took some security measures amounted to 94.4%.

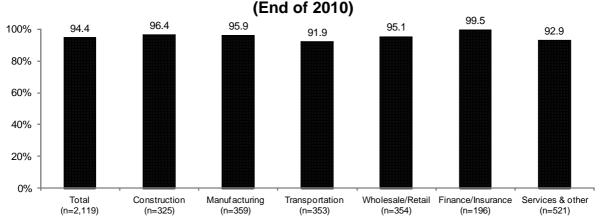
In terms of major security measures taken, "Installing an antivirus program on terminals (OS, software, etc.)" was highest at 80.9%, followed by "Installing an antivirus program on the servers" (62.6%) and "Controlling access by ID and password" (53.9%).

For the implementation rate of security measures by business category, the rate was high in every category, but particularly high in "Finance/Insurance" at 99.5%.

Implementation of Security Measures (Businesses) (Multiple choices allowed) (End of 2010)



Implementation Rate of Security Measures by Business Category (Businesses)

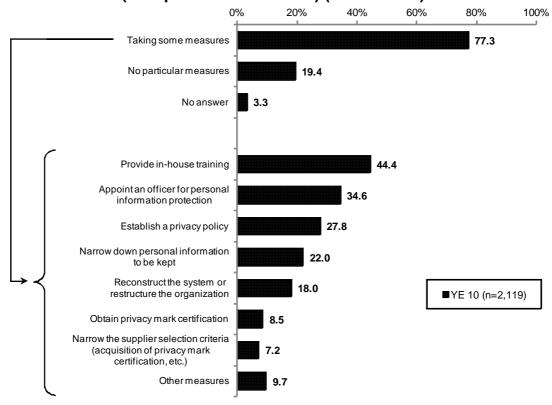


(5) Implementation of Measures to Protect Personal Information (Businesses)

The percentage of businesses taking some measures to protect personal information scored 77.3%. Main measures taken were "Provide in-house training" was highest at 44.4%, followed by "Appoint an officer for personal information protection" (34.6%) and "Establish a privacy policy" (27.8%).

For the implementation rate of measures to protect personal information by business category, the rate was high in "Finance/Insurance" (98.2%), "Services & other" (82.3%), and "Wholesale/Retail" (77.5%).

Implementation of Measures to Protect Personal Information (Businesses) (Multiple choices allowed) (End of 2010)



Implementation Rate of Measures to Protect Personal Information by Business Category (Businesses) (End of 2010)

