



Confidential

Submission deadline: February 28, 2014

Ministry of Internal Affairs and Communications

Government

2013 Communications Usage Trend Survey Form <<For Households>>

This statistics survey has been conducted in accordance with the Statistics Act. The privacy of information collected in this survey will be surely protected. Your accurate and complete answers are appreciated.

(affix address label here)

We will send a ¥500 pre-paid book coupon to households that return the survey by the submission deadline as a token of our appreciation.

If you wish, please provide a telephone number below so that we may contact you if we have further questions about your survey answers.

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Please note the following before completing the survey.

- 1 This survey asks about the communication devices and services you and your household regularly use and when you use them. (Please confirm your name with the address label on the left.) Anyone in your household may complete the survey form.
2 Words defined in the Glossary are denoted with asterisks (\*). Please refer to the Glossary as needed
3 Please give answers reflecting the situation in your household on December 31, 2013.
4 Submit the completed survey to: ICT Economic Research Office, ICT Strategy Policy Division, Global ICT Strategy Bureau, Ministry of Internal Affairs and Communications 2nd Bldg. of the Central Common Government Office, 2-1-2 Kasumigaseki, Chiyoda-ku, Tokyo 100-8786, Japan
5 If you have any questions, please contact the survey firm at: "Communications Usage Trend Survey" Secretariat, Nippon Research Center Ltd. (contracted by the Ministry of Internal Affairs and Communications) 2-7-1 Nihonbashi-Honcho, Chuo-ku, Tokyo 103-0023, Japan Tel.: 0120-921-409 (toll free) (Between 10:00 and 17:00, on weekdays)
6 The Ministry of Internal Affairs and Communications has contracted the survey firm above to conduct this survey.

Household section: Please give answers reflecting the situation for your entire household.

Q1 Concerning ownership and usage of communication devices

Note: Do not count company-provided devices or devices that you own but have not used even once in the past year.

(1) This question asks about your household's ownership of devices with communication functions.

Does your household own any of the devices 1 through 10 listed below? Please circle all devices that your household owns.

For devices 3 through 10, please indicate the number of devices in your household.

Note: Please enter separate answers for conventional mobile phones and smartphones for this and all subsequent questions in the survey.

- 1. Fixed-line telephones
2. Fax machines
3. Mobile phones (includes PHS handsets) (how many? )
4. Smartphones\* (how many? )
5. Tablets (iPad, GalaxyTab, etc.)\* (how many? )
6. Computers (how many? )
7. Internet-enabled home game consoles that display video on a television or other monitor (Wii, PlayStation, etc.) (how many? )
8. Internet-enabled home game consoles with built-in displays (NintendoDS, PSP, etc.) (how many? )
9. Internet-enabled portable music players (iPod, etc.) (how many? )
10 Other Internet-enabled home appliances (information appliances\*) (how many? )

(2) This question asks about **your household's ownership of devices that receive digital TV broadcasts.**\*

Does your household own any of the devices 1 through 6 listed below? Please **indicate the number of devices you own.**

For devices 1 through 3, please indicate **the number of Internet-connected devices you own.**

Note: For "No. of Internet-connected devices," count all devices that are directly connected to the Internet with either a LAN cable or a Wi-Fi connection.

	No. of owned devices	No. of Internet-connected devices
1. TVs (with digital broadcast support)	None • ____ (devices)	None • ____ (devices)
2. DVD / Blu-Ray disk recorders (with digital broadcast support)	None • ____ (devices)	None • ____ (devices)
3. Digital broadcast receiver tuners* (excluding types 4 and 5 below)	None • ____ (devices)	None • ____ (devices)
4. Cable TV tuners	None • ____ (devices)	
5. IPTV* (Hikari TV, etc.) tuners	None • ____ (devices)	
6. One-segment broadcast receiver tuners	None • ____ (devices)	
7. Other	None • ____ (devices)	

(3) Does your household use a **home Wi-Fi network**\*? Please **circle the one best answer.**

Note: A Wi-Fi network includes tethering of smartphones and mobile Wi-Fi terminals.

1. Use Wi-Fi	3. Do not use Wi-Fi, and have no plans to install Wi-Fi
2. Do not use Wi-Fi, but plan to install Wi-Fi	

**Q2 Concerning general Internet usage**

(1) **Has anyone in your household (excluding household members under 6 years of age) used the Internet in the past year?**

Please **circle the one best answer.**

Note 1: Do not count the use of email functions, such as SMS,\* sending by an address without @ that are only used between mobile phones or PHS handsets for "sending / receiving email."

Note 2: Count Internet use from **any kind of device**, including computers, mobile phones, smartphones, or game consoles.

Note 3: Count Internet use for **any purpose**, including use for work as well as for personal use. Count Internet use from any location, such as at home or outside

Note 4: Count Internet use from **any location**, such as at home or outside your home.

Note 5: **Count Internet use from devices not owned by the household**, such as computers in libraries or Internet cafes.

1. At least one person has used the Internet	2. No one has used the Internet
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**Please go to Question 7 on Page 6.**

(2) **To households that answered 1 to (1) above (i.e., households with at least one Internet user):**

**What device or devices have the Internet user(s) in your household used to access the Internet?**

Please **circle all answers that apply.**

1. Computers at home	2. Computers outside the home	3. Mobile phones (including PHS handsets and PDAs)	4. Smartphones	5. Tablets	6. Other devices
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(3) **To households that answered 1, 5, or 6 to (2) above (i.e., households where computers at home, tablets, or other devices are used): What type of connection is used to access the Internet?** Please **circle all answers that apply.**

Note 1: Circle 5, 6, or 10 only when the Internet is used by tethering to another device including a computer and a tablet. Note that tethering here indicates the cases where a stick device is connected to a computer or where a smartphone or another device is connected by Wi-Fi.

Note 2: Narrowband connections are low-speed connections with speeds generally less than 128 kbps. Broadband connections are connections capable of high speeds and ultra-high speeds.

Note 3: If you use ISDN over an optical fiber connection, please circle 3 "Optical fiber (FTTH)."

<p>●Broadband connections* Note 2</p> <p>○Wired: 1. DSL* 2. Cable TV (CATV)* 3. Optical fiber (FTTH)* 4. Fixed wireless access (FWA)*</p> <p>○Wi-Fi: 5. Mobile phone (LTE, BWA) (such as an iPhone 5 or newer model, whose service is named "4G," "Xi," or "WiMAX")<sup>Note 1</sup> 6. Mobile phone (other than 5; such as an iPhone up to iPhone 4S, whose service is named "3G2 or "FOMA")<sup>Note 1</sup></p>	<p>●Narrowband connections* Note 2</p> <p>○Wired: 7. Telephone (dial-up) 8. ISDN (not continuously connected)*<sup>Note 3</sup> 9. ISDN (continuously connected)*<sup>Note 3</sup></p> <p>○Wi-Fi: 10. PHS<sup>Note 1</sup></p> <p>●Others</p> <p>11. Other 12. No Internet connection</p>
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Q3 Concerning losses associated with Internet use

**To households that answered 1 to Question 2 (1) (i.e., households with at least one Internet user):**

Have you suffered any of the following **losses associated with Internet use in the past year**? Please **circle all losses** for each access device. Please **circle 10** if you have not suffered any losses. Please **circle 11** if no one has used the said device.

- Note 1: *Phishing* is a type of fraud in which the attacker fakes emails from a real corporation or a real corporation's Website in order to get the victim to enter his or her PIN or password.
- Note 2: *Illegal access* refers to access to a computer by abusing another person's ID and password (illegally using another person's account).
- Note 3: *Spyware* refers to a program that collects personal information on a computer, such as access logs, and sends the information to an external computer.

	Computers (used at home)	Mobile phones (including PHS handsets)	Smartphones	Others (game consoles, etc.)
1. Discovered a computer virus* but not infected	1	1	1	1
2. Discovered a computer virus* and at least one incidence of an infection	2	2	2	2
3. Received spam* (do not include fraudulent emails)	3	3	3	3
4. Received fraudulent emails*	4	4	4	4
5. Phishing* <sup>Note 1</sup>	5	5	5	5
6. Illegal access* <sup>Note 2</sup>	6	6	6	6
7. Personal information security breach by spyware,* <sup>Note 3</sup> etc.	7	7	7	7
8. Defamation on forums,* social media, etc.	8	8	8	8
9. Other (copyright infringements, etc.)	9	9	9	9
10. No losses	10	10	10	10
11. No one has used the said devices	11	11	11	11

**To households who received spam or fraudulent email:**

Supplementary Question

How frequently did you receive spam or fraudulent emails?  
Circle **the one best answer** for each access device.

	Computers (used at home)	Mobile phones (including PHS handsets)	Smartphones
10 or more a day	1	1	1
5 to 9 a day	2	2	2
2 to 4 a day	3	3	3
About 1 a day	4	4	4
About 1 every three days	5	5	5
About 1 a week	6	6	6
Less than 1 a week	7	7	7

Q4 Concerning Internet security measures

(1) **To households that answered 1 to Question 2 (1) (i.e., households with at least one Internet user):**

**Have you taken measures against viruses or illegal access** for devices that you use at home such as computers, mobile phones (including PHS handsets), smartphones, and tablets **in the past year?** Please **circle the one best answer.**

1. Yes	2. No
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Supplementary Question: **To households that answered 1 above (i.e., households that have taken measures):**

What measures have you taken against viruses or illegal access in the past year?

Please **circle all answers that apply.**

<ol style="list-style-type: none"><li>1. Installed or updated a security program</li><li>2. Signed up to or updated a security service from a provider or mobile telecom</li><li>3. Set a password on devices to prevent illegal access from outside or illegal use by outsiders</li><li>4. Did not connect to the Internet using an unknown or unsecured source</li><li>5. Set an administrator to check for changing the setting of device or installing suspicious software</li><li>6. Did not take the above measures</li><li>7. Don't know whether the above measures have been taken or not</li></ol>
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Q5 Concerning your concerns about using the Internet

**To households that answered 1 to Question 2 (1) (i.e., households with at least one Internet user):**

Do you have any concerns about using the Internet?

Please **circle all answers that apply.**

1. I'm concerned	2. I'm somewhat concerned	3. I'm not so concerned	4. I have no concerns
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Supplementary Question: **To households that answered 1 or 2 (i.e., households that answered they are concerned or somewhat concerned):** What specific concerns do you have?

Please **circle all answers that apply.**

<ol style="list-style-type: none"><li>1. Concern about leak of personal information and internet use history</li><li>2. Concern about the reliability of electronic payment means</li><li>3. Concern about unknowing breach of intellectual property rights of others such as copyrights</li><li>4. Concern about computer virus infections</li><li>5. Concern about the reliability of authentication technology*</li><li>6. Concern about a flood of illegal or harmful information</li><li>7. Concern about sending and receiving emails well</li><li>8. Unclear how far to take security measures</li><li>9. Concern about whether I understand security threats properly</li><li>10. Concern about trouble with communication on social media, etc.</li><li>11. Concern about myself or people close to me becoming an Internet addict</li><li>12. Concern about fraudulent email or fraud using the Internet</li><li>13. Concern about receiving spam</li><li>14. Other</li></ol>
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Q6 Concerning Internet use by children under 18

(1) **Do you have a child under 18 in your household?**

1. Yes	2. No
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(2) Does your household own devices that children under 18 use? Please choose "**yes**" or "**no**" for each device.

For devices concerning "yes," please **circle the one best answer** for use of filtering software\* or filtering services provided by Internet providers or mobile telecoms that can restrict access to harmful sites on the Internet.

	Internet use by children under 18 (Circle the one best answer for each device)		Filtering services or filtering software			
			Have used	Had used but have not used now	Have not used	Don't know whether having used
Computer	Yes	No	1	2	3	4
Mobile phone	Yes	No	1	2	3	4
Smartphone	Yes	No	1	2	3	4
Tablet	Yes	No	1	2	3	4

\* Circle the one best answer for each device

(3) Concerning use of filtering software or services above (1),

To **households that answered 2 or 3** for any device:

Why does your household not use filtering? Please **circle all answers that apply**.

<ol style="list-style-type: none"> <li>1. A child asked not to use filtering software/services</li> <li>2. Filtering software/services is an obstacle to my own use</li> <li>3. Setting of filtering software/services is troublesome</li> <li>4. Necessity faded away as my child has grown</li> <li>5. Dependence on filtering software/services may fail to improve child's judgment</li> <li>6. Didn't know about filtering software/services</li> <li>7. Have no particular reason</li> </ol>
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(4) **To households that answered in (2) above that children use Internet by a mobile phone (including PHS handsets) or smartphone:**

In the past year, **did a retail outlet's staff member explain filtering** when your household's under-18 child signed up for a mobile phone (including PHS handsets) or smartphone subscription?

Please **circle the one best answer**.

① Signing a new subscription

1. Yes	2. No	3. Don't remember	4. Did not sign up for a new subscription in the past year
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② Changing handset models

1. Yes	2. No	3. Don't remember	4. Did not change handset models in the past year
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Q7 Concerning use of digital TV broadcast receivers

(1) **To households that answered in Question 1 (2) that they have at least one device that can receive digital TV broadcasts:**

How often has your household used the following functions of a digital TV broadcast receiver in the past year?

**Please circle the one best answer for each function.**

	Use at least once a day	Use at least once a week	Use at least once a month	Use at least once a year	Do not use at all
1. Data broadcast function (using the d button on the remote control)	1	2	3	4	5
2. Internet access function (Use "acTVila," "HikariTV," etc.)	1	2	3	4	5

Please answer Supplementary Question 1.

Please answer Supplementary

Supplementary Question 1: **To households that answered any of 1-4 of data broadcast function in (1):**

**For what purpose** does your household use the data broadcast function?

Please **circle all answers that apply.**

1. Obtain news, weather, transportation, and other information
2. Obtain information related to the current program (E.g.: information related to music playing on the program)
3. Purchase goods or services presented by programs
4. Participate in quizzes, questionnaires, and other program projects
5. Use other services

Supplementary Question 2: **To households that answered any of 1-4 of Internet access function in (1):**

**For what purpose** does your household use the Internet access function?

Please **circle all answers that apply.**

1. Video on demand (VOD)* or other streamed programming
2. Web uses, such as browsing Websites, posting videos, using forums, chat,* social networking,* online shopping, etc.
3. Online gaming*
4. Videophone
5. Make recording settings or watch recorded programs on smartphones or tablets via a network
6. Obtain information related to the current program
7. Other

Supplementary Question 3: Do you want to use **the following services using digital TV broadcast receivers if they become available** in the future? Please **circle all answers that apply.**

1. Video on demand (VOD) or other streamed programming
2. Web uses, such as browsing Websites, posting videos, using forums, chat, social networking, online shopping, etc.
3. Online gaming
4. Videophone
5. Make recording settings or watch recorded programs on smartphones or tablets via a network
6. Obtain information related to the current program
7. Other
8. Have no particular

Q8 Concerning your household's members and income

(1) Please indicate the **number of people**, including yourself, in your household.

	people
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(2) What was your household's **combined annual income last year**?

Please **circle the one best answer.**

1. Less than ¥2 million	4. ¥6 million to less than ¥8 million	7. ¥15 million to less than ¥20 million
2. ¥2 million to less than ¥4 million	5. ¥8 million to less than ¥10 million	8. ¥20 million and over
3. ¥4 million to less than ¥6 million	6. ¥10 million to less than ¥15 million	

<Questionnaire> The following question concerns the answering method for this survey.

Do you want to answer this survey online (via the Internet)?

**Please circle the one best answer.**

1. Yes	2. No	3. Don't know
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**Household member section: Please give answers reflecting the situation for each member in your household.**

- Each member of your household who is 6 or older should answer the following questions individually. The head of the household may fill out answers for younger children or others who may find the questions difficult.
- If there are more than six people in your household who are 6 or older, please contact us for an additional survey form.

Please indicate the gender and age of each household member who is **6 or older**.

Gender (circle either male or female)
Age (fill in the person's age)

A (Head of household)	B	C	D	E
Male Female	Male Female	Male Female	Male Female	Male Female
___ years old	___ years old	___ years old	___ years old	___ years old

Please answer the following questions separately for each household member.

**The following questions are intended for all household members 6 and older.**

Q1 Concerning individual Internet usage

(1) **This question asks about your ownership of devices with communication functions.**

Do you own any of the devices 1 through 7 listed below?

Please **circle all answers that apply**.

1. Computers at home
2. Computers outside the home
3. Mobile phones (including PHS handsets)
4. Smartphones
5. Tablets
6. TV receivers
7. Internet-enabled home game consoles and other devices

A	B	C	D	E
1	1	1	1	1
2	2	2	2	2
3	3	3	3	3
4	4	4	4	4
5	5	5	5	5
6	6	6	6	6
7	7	7	7	7

Note: TV receivers (option 6) includes both digital TV receivers that connect directly to the Internet and the use of the Internet on the screen of a TV receiver via a recorder, tuner, or similar device. Please circle 7 if you used the Internet on the screen of a TV receiver via a home game console. This distinction applies to all subsequent questions.

(2) Have you **used** the **Internet** (including sending or receiving email, browsing Websites, etc. from a computer, mobile phone, or other device) **in the past year**?

Please **circle the one best answer**.

1. Yes
2. No

A	B	C	D	E
1	1	1	1	1
2	2	2	2	2

- Note 1: Do not count the use of email functions, such as SMS,\* sending by an address without @ that are only used between mobile phones or PHS handsets for "sending / receiving email."
- Note 2: Count Internet use from **any kind of device**, including computers, mobile phones, smartphones, or game consoles.
- Note 3: Count Internet use **for any purpose**, including use for work as well as for personal use.
- Note 4: Count Internet use from **any location**, such as at home or outside the home.
- Note 5: **Count Internet use from devices not owned by the household**, such as computers in libraries or Internet cafes.

Supplementary Question 1: To **all people who have used the Internet**:

What **device or devices have you used** to access the Internet **at home**? Please **circle all answers that apply**. In addition, please **enter the number of devices that you have used primarily**.

1. Computers at home
2. Mobile phones (including PHS handsets)
3. Smartphones
4. Tablets
5. TV receivers
6. Internet-enabled home game consoles and other devices
7. Do not use the Internet at home

A	B	C	D	E
1	1	1	1	1
2	2	2	2	2
3	3	3	3	3
4	4	4	4	4
5	5	5	5	5
6	6	6	6	6
7	7	7	7	7

Device that have used primarily (please enter one number.)
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Supplementary Question 2: To **all people who have used the Internet**:

What **device or devices have you used** to access the Internet **outside your home**? Please **circle all answers that apply**. In addition, please **enter the number of devices that you have used primarily**. **Use during travel** is included in **"outside your home."**

1. Computers outside the home
2. Mobile phones (including PHS handsets)
3. Smartphones
4. Tablets
5. Internet-enabled home game consoles and other devices
6. Do not use the Internet outside my home

A	B	C	D	E
1	1	1	1	1
2	2	2	2	2
3	3	3	3	3
4	4	4	4	4
5	5	5	5	5
6	6	6	6	6

Device that have used primarily (please enter one number.)
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(3) To **all people who have used the Internet:**

**How often** do you use the Internet?

Please **circle the one best answer for Internet use at home and for Internet use outside your home.**

1. Use at least once a day
2. Use at least once a week (but not every day)
3. Use at least once a month (but not every week)
4. Use at least once a year (but not every month)

A		B		C		D		E	
At home	Outside the home	At home	Outside the home	At home	Outside the home	At home	Outside the home	At home	Outside the home
1	1	1	1	1	1	1	1	1	1
2	2	2	2	2	2	2	2	2	2
3	3	3	3	3	3	3	3	3	3
4	4	4	4	4	4	4	4	4	4

(4) To **all people who have used the Internet outside the home in the past year:**

**Where** do you use the Internet **outside your home**?

Please **circle all answers that apply.**

1. Workplaces
2. Schools
3. Public facilities (government offices, libraries, community centers, etc.)
4. Airports / train stations
5. While commuting on public transport
6. Restaurants, coffee shops, etc. (excluding Internet cafés in option 7)
7. Internet cafés
8. Hotels or other accommodations
9. Other locations

A	B	C	D	E
1	1	1	1	1
2	2	2	2	2
3	3	3	3	3
4	4	4	4	4
5	5	5	5	5
6	6	6	6	6
7	7	7	7	7
8	8	8	8	8
9	9	9	9	9

Note 1: *Workplaces* (option 1) includes employed people who work at home and use the Internet and teachers, instructors, etc. who use the Internet at a school.

Note 2: *Schools* (option 2) includes children, students, and university students who use the Internet in classes and elsewhere at elementary schools, junior high schools, high schools, secondary schools, universities, or graduate schools.

Supplementary Question 1: **What access methods (connections) do you use to access the Internet outside your home?**

Please **circle all answers that apply.**

Also **indicate your primary access method.**

1. 3G mobile phone connection*
2. LTE*
3. Public Wi-Fi
4. Other
Primary access method (please enter one number)

A	B	C	D	E
1	1	1	1	1
2	2	2	2	2
3	3	3	3	3
4	4	4	4	4

Supplementary Question 2: To **people who answered 3 to Supplementary Question 1 above (i.e., people who use public Wi-Fi connections):**

**What information security measures** do you take when using a public Wi-Fi connection?

Please **circle all answers that apply.**

1. Confirm the access point I'm connecting to
2. Turn off file sharing functions
3. Exchange important information over SSL
4. Avoid exchanging important information
5. Take no measures

A	B	C	D	E
1	1	1	1	1
2	2	2	2	2
3	3	3	3	3
4	4	4	4	4
5	5	5	5	5

Supplementary Question 3: To **people who answered 5 to Supplementary Question 2 above (i.e., people who do not take any security measures): Why do you not take any information security measures?**

Please **circle the one best answer.**

1. Don't know what to do
2. It's a nuisance
3. Don't feel it is necessary
4. Other

A	B	C	D	E
1	1	1	1	1
2	2	2	2	2
3	3	3	3	3
4	4	4	4	4



Q2 Concerning the purpose and applications of Internet use

(1) To **all people who have used the Internet**:

For what purposes or applications have you used Internet functions or services **in the past year**?

Please **circle all answers that apply to Internet use at home and to Internet use outside your home.**

Please answer Question 3 as well if you circled 6.

Please answer Question 4 as well if you circled 9 or 10.

1. Sending and receiving email (excluding newsletters)
2. Receiving newsletters by email (free newsletters)
3. Viewing / posting to business, government Websites and blogs*
4. Viewing / posting to personal Websites and blogs
5. Constructing / updating your Websites and blogs
6. Using social media (mixi, Facebook, GREE, Mobage, Twitter, LINE, etc.)
7. Using forums* and chat* sites
8. Using free calling apps or voice chat sites (Skype, LINE, etc.)
9. Using video posting / sharing sites (Youtube, Niconico Douga, etc.)*
10. Using on-demand radio, TV, and movie streaming services
11. Using web album (picture / image posting / sharing service including Flickr and Photozou)
12. Using online gaming
13. Entering quizzes and contests, answering questionnaires
14. Obtaining free map / traffic information services
15. Using free weather forecast
16. Using news sites
17. Using dictionary and encyclopedia sites
18. Exchanging / downloading digital files: P2P, FTP, etc.
19. Financial transactions: banking, securities, insurance, etc. transactions over the Internet
20. Buying / exchanging digital content: music, audio, video, games, etc.
21. Buying / exchanging goods and services: excluding digital content purchases and financial transactions
22. Internet auctions*
23. Using e-Government, e-Local Government services: online applications, online reports, and online notifications
24. Other

A		B		C		D		E	
At home	Outside the home	At home	Outside the home	At home	Outside the home	At home	Outside the home	At home	Outside the home
1	1	1	1	1	1	1	1	1	1
2	2	2	2	2	2	2	2	2	2
3	3	3	3	3	3	3	3	3	3
4	4	4	4	4	4	4	4	4	4
5	5	5	5	5	5	5	5	5	5
6	6	6	6	6	6	6	6	6	6
7	7	7	7	7	7	7	7	7	7
8	8	8	8	8	8	8	8	8	8
9	9	9	9	9	9	9	9	9	9
10	10	10	10	10	10	10	10	10	10
11	11	11	11	11	11	11	11	11	11
12	12	12	12	12	12	12	12	12	12
13	13	13	13	13	13	13	13	13	13
14	14	14	14	14	14	14	14	14	14
15	15	15	15	15	15	15	15	15	15
16	16	16	16	16	16	16	16	16	16
17	17	17	17	17	17	17	17	17	17
18	18	18	18	18	18	18	18	18	18
19	19	19	19	19	19	19	19	19	19
20	20	20	20	20	20	20	20	20	20
21	21	21	21	21	21	21	21	21	21
22	22	22	22	22	22	22	22	22	22
23	23	23	23	23	23	23	23	23	23
24	24	24	24	24	24	24	24	24	24

Please answer Supplementary Questions 1 through 3 as well if you circled 20, 21, or 22 in (1) above.

These questions are to be answered only by people aged 15 and older.

Supplementary Question 1:

What goods or services have you purchased or exchanged? Please **circle all answers that apply to Internet use at home and to Internet use outside your home.**

Products and services	1. Computers and related items (computers, peripheral devices, and software (limited to physical products sold on DVD-ROMs, etc.))
	2. Books, CDs, DVDs, Blu-Ray disks (excluding e-books and other digitally distributed content)
	3. Everyday sundries (food products, clothing, cosmetics, stationery, etc.)
	4. Consumer durable goods (furniture, home appliances, etc.)
	5. Hobby-related goods (accessories, musical instruments, sporting goods, toys, automobile supplies, etc.)
	6. Tickets, cash vouchers (reservation and purchase of tickets for transportation, hotels, inns, concerts, etc.)
	7. Other products and services (excluding digitally distributed content)
Digital content <sup>Note</sup>	8. Software (including games)
	9. Music (including ring tones)
	10. Video
	11. Images (including wallpaper)
	12. Ebooks
	13. Online game fees and charges for game items and avatars
	14. Internet service fees excluding online games
	15. News and magazine articles
	16. Newsletters
	17. Map / traffic information services
	18. Other digital content

A		B		C		D		E	
At home	Outside the home	At home	Outside the home	At home	Outside the home	At home	Outside the home	At home	Outside the home
1	1	1	1	1	1	1	1	1	1
2	2	2	2	2	2	2	2	2	2
3	3	3	3	3	3	3	3	3	3
4	4	4	4	4	4	4	4	4	4
5	5	5	5	5	5	5	5	5	5
6	6	6	6	6	6	6	6	6	6
7	7	7	7	7	7	7	7	7	7
8	8	8	8	8	8	8	8	8	8
9	9	9	9	9	9	9	9	9	9
10	10	10	10	10	10	10	10	10	10
11	11	11	11	11	11	11	11	11	11
12	12	12	12	12	12	12	12	12	12
13	13	13	13	13	13	13	13	13	13
14	14	14	14	14	14	14	14	14	14
15	15	15	15	15	15	15	15	15	15
16	16	16	16	16	16	16	16	16	16
17	17	17	17	17	17	17	17	17	17
18	18	18	18	18	18	18	18	18	18

Note: Products and services here indicate those distributed digitally. Please exclude those provided for free.

Supplementary Question 2:

**What payment methods** have you used when purchasing goods or making financial transactions on the Internet? **Please circle all answers that apply.**

1. Credit card (excluding use for payment on delivery) <sup>Note</sup>
2. Payment on delivery
3. Payment at bank / post office branch or ATM
4. Payment at convenience store
5. Payment by Internet banking / mobile banking*
6. Payment by addition to communication charges / provider charges
7. Payment by electronic money (Edy, Suica, etc.)
8. Payment by cash remittance by registered mail, money order, personal cheque
9. Other

Note: This option includes payments by debit cards (cash cards).

A	B	C	D	E
1	1	1	1	1
2	2	2	2	2
3	3	3	3	3
4	4	4	4	4
5	5	5	5	5
6	6	6	6	6
7	7	7	7	7
8	8	8	8	8
9	9	9	9	9

Supplementary Question 3:

**What is the highest amount** you have spent when purchasing goods or services on the Internet?

Please **circle the one best answer for Internet use at home and for Internet use**

1. ¥1,000 or less
2. Between ¥1,001 and ¥3,000
3. Between ¥3,001 and ¥5,000
4. Between ¥5,001 and ¥10,000
5. Between ¥10,001 and ¥20,000
6. Between ¥20,001 and ¥50,000
7. Between ¥50,001 and ¥100,000
8. ¥100,001 or more

A		B		C		D		E	
At home	Outside the home	At home	Outside the home	At home	Outside the home	At home	Outside the home	At home	Outside the home
1	1	1	1	1	1	1	1	1	1
2	2	2	2	2	2	2	2	2	2
3	3	3	3	3	3	3	3	3	3
4	4	4	4	4	4	4	4	4	4
5	5	5	5	5	5	5	5	5	5
6	6	6	6	6	6	6	6	6	6
7	7	7	7	7	7	7	7	7	7
8	8	8	8	8	8	8	8	8	8

The following questions are intended for all household members 6 and older.

Q3 Concerning use of social media

(1) **To people who answered 6 to Question 2 (1) (i.e., people who use social media\*):**

**For what purposes** do you use social media services? Please **circle all answers that apply**.

Note: Social media refers to information services in which one can communicate with multiple people on the Internet including mixi, Facebook, GREE, Mobage, Twitter, and LINE.

	A	B	C	D	E
1. To communicate with current friends	1	1	1	1	1
2. To find information on topics of interest	2	2	2	2	2
3. To find people who share the same interests or tastes / broaden social relationships	3	3	3	3	3
4. To announce my own information or creative work	4	4	4	4	4
5. To find people with the same concerns or problems	5	5	5	5	5
6. To engage in volunteering or community building activities	6	6	6	6	6
7. To gather or provide information during emergencies or disasters	7	7	7	7	7
8. To find old friends	8	8	8	8	8
9. To release stress	9	9	9	9	9
10. To kill time	10	10	10	10	10
11. To escape from reality	11	11	11	11	11
12. Other	12	12	12	12	12

(2) **Which device or devices** do you use to access social media services?

Please **circle all answers that apply**.

	A	B	C	D	E
1. Computers	1	1	1	1	1
2. Mobile phones (including PHS handsets)	2	2	2	2	2
3. Smartphones	3	3	3	3	3
4. Tablets	4	4	4	4	4
5. Others (game consoles, etc.)	5	5	5	5	5

Supplementary Question 1: What is the primary device you use to access social media services?

Please **circle the one best answer for at home and for outside your home**.

	A	B	C	D	E
1. Computers    2. Mobile phones (including PHS handsets)    3. Smartphones    4. Tablets    5. Others (game consoles, etc.)    6. Do not use social media at home / outside my home					
① Primary device used at home (circle the one best answer)					
② Primary device used outside your home (circle the one best answer)					

(3) **How often** do you use social media services?

Please **circle the one best answer for at home and for outside your home**.<sup>Note</sup>

	A		B		C		D		E	
	At home	Outside the home	At home	Outside the home	At home	Outside the home	At home	Outside the home	At home	Outside the home
1. Use at least once a day	1	1	1	1	1	1	1	1	1	1
2. Use at least once a week (but not every day)	2	2	2	2	2	2	2	2	2	2
3. Use at least once a month (but not every week)	3	3	3	3	3	3	3	3	3	3
4. Use at least once a year (but not every month)	4	4	4	4	4	4	4	4	4	4

Note: If you only use social media at home or only use social media outside your home, do not circle an answer for the other location.

Q4 Concerning the use of audio and video content

(1) To **people who answered 9 or 10 to Question 2 (1)**:

**Which services** do you use?

Please **circle all answers that apply**.

1. On-demand* video sharing services (such as YouTube and Niconico Douga)
2. Live-distribution* video sharing services (such as Ustream and Niconico Live)
3. On-demand broadcast program streaming services* (such as NHK On Demand)
4. Live-distribution broadcast program streaming services
5. Radio broadcast service (such as Radiko)
6. Others

A	B	C	D	E
1	1	1	1	1
2	2	2	2	2
3	3	3	3	3
4	4	4	4	4
5	5	5	5	5
6	6	6	6	6

(2) **Which device or devices** do you use to access the services you listed in (1) above?

Please **circle all answers that apply**.

1. Computers
2. Mobile phones (including PHS handsets)
3. Smartphones
4. Tablets
5. TV receivers

A	B	C	D	E
1	1	1	1	1
2	2	2	2	2
3	3	3	3	3
4	4	4	4	4
5	5	5	5	5

Note: TV receivers (option 5) includes both digital TV receivers that connect directly to the Internet and the use of the Internet on the screen of a TV receiver via a recorder, tuner, or similar device.

Supplementary Question: **What is the primary device** you use to access the services you listed in (1) above?

Please **circle the one best answer for at home and for outside your home**.

1. Computers	2. Mobile phones (including PHS handsets)	3. Smartphones	4. Tablets	5. TV receivers	6. Do not use these services at home / outside my home
--------------	---	----------------	------------	-----------------	--

① Primary device used at home (circle the one best answer)
② Primary device used outside your home (circle the one best answer)

A	B	C	D	E

(3) **How often** do you use the services you listed in (1) above?

Please **circle the one best answer for at home and for outside your home**.<sup>Note</sup>

1. Use at least once a day
2. Use at least once a week (but not every day)
3. Use at least once a month (but not every week)
4. Use at least once a year (but not every month)

A	B	C	D	E
At home Outside the home	At home Outside the home	At home Outside the home	At home Outside the home	At home Outside the home
1 1	1 1	1 1	1 1	1 1
2 2	2 2	2 2	2 2	2 2
3 3	3 3	3 3	3 3	3 3
4 4	4 4	4 4	4 4	4 4

Note: If you only use the services at home or only use the services outside your home, do not circle an answer for the other location.

(4) To **people who answered 9 or 10 to Question 2 (1)**:

**Why** do you use these services over the Internet?

Please **circle all answers that apply**.

1. To watch videos by artists, etc., that I like
2. To watch programs that I missed
3. To watch popular / talked-about videos / programs
4. To watch videos released only on a specific site
5. Because I can watch when and where I want
6. Because I don't have a radio or TV / I live in an area with poor reception
7. Other

A	B	C	D	E
1	1	1	1	1
2	2	2	2	2
3	3	3	3	3
4	4	4	4	4
5	5	5	5	5
6	6	6	6	6
7	7	7	7	7

The following questions are intended only for household members 12 and older.

Q5 Concerning use of smartphones and tablets

(1) To **people (12 and older) who answered 3 or 4 to Question 2 (1) (i.e., smartphone or tablet users)**:

**Have you taken security measures** for using them? Please **circle 1 if you have taken measures**.

**Do you have security concerns** for using them? Please **circle 2 if you have concerns**.

**✘To be answered only by people 12 and older**

	A	B	C	D	E
1. I have taken security measures.	1	1	1	1	1
2. I have security concerns.	2	2	2	2	2

Supplementary Question 1: **To people (12 and older) who answered 2 in (1) above (i.e., people who have security concerns)**:

**What specific concerns** do you have?

Please **circle all answers that apply**.

**✘To be answered only by people 12 and older**

	A	B	C	D	E
1. Loss or theft of device	1	1	1	1	1
2. Infection by a computer virus	2	2	2	2	2
3. Receive spam (not including fraudulent email)	3	3	3	3	3
4. Receive fraudulent email	4	4	4	4	4
5. Breach of personal information security (phone number, email address, location information, etc.)	5	5	5	5	5
6. Receive nuisance phone calls	6	6	6	6	6
7. Phishing	7	7	7	7	7
8. See ad displays or emails connected to Web browsing history	8	8	8	8	8
9. Other	9	9	9	9	9

Supplementary Question 2: **To people (12 and older) who answered 1 in (1) above (i.e., people who have taken security measures)**:

**What specific security measures** do you take?

Please **circle all answers that apply**.

**✘To be answered only by people 12 and older**

	A	B	C	D	E
1. Keep software updated to the latest version	1	1	1	1	1
2. Subscribe to security services provided by mobile telecom	2	2	2	2	2
3. Install anti-virus software	3	3	3	3	3
4. Take any measures against spam	4	4	4	4	4
5. Do not download from untrusted app stores	5	5	5	5	5
6. Download only apps whose terms of use I have read and agreed to	6	6	6	6	6
7. Set a password lock on my devices	7	7	7	7	7
8. Refrain from entering personal information	8	8	8	8	8
9. Do not connect to unknown Wi-Fi networks	9	9	9	9	9
10. Other	10	10	10	10	10

(2) **Have you experienced** any of the following while using your **smartphone or tablet**?

Please **circle all answers that apply**.

**✘To be answered only by people 12 and older**

	A	B	C	D	E
1. Loss or theft of device	1	1	1	1	1
2. Infection by a computer virus	2	2	2	2	2
3. Received spam (not including fraudulent email)	3	3	3	3	3
4. Received fraudulent email	4	4	4	4	4
5. Breach of personal information security (phone number, email address, location information, etc.)	5	5	5	5	5
6. Received nuisance phone calls	6	6	6	6	6
7. Phishing	7	7	7	7	7
8. Seen ad displays or emails connected to Web browsing history	8	8	8	8	8
9. Other	9	9	9	9	9
10. None of the above	10	10	10	10	10

© This completes the survey questions. Thank you for your participation.

Please return the completed survey form in the enclosed return envelope.

**No postage stamp is required.**

**Please confirm once again that the gender and ages of each household member have been entered on Page 7 of the survey form before sending in the form.**

**Survey forms that do not include the gender and ages of each household member will be considered invalid. Please make sure to enter such information.**



Confidential

Submission deadline: February 14, 2014

Government

Ministry of Internal Affairs and Communications

2013 Communications Usage Trend Survey Form <<For Businesses>>

This statistics survey has been conducted in accordance with the Statistics Act. The privacy of information collected in this survey will be surely protected. Your accurate and complete answers are appreciated.

Form with fields for Department / section of the respondent, Name of the respondent, and Contact phone number. Includes instruction: (affix address label here)

Please note the following before completing the survey.
1 Please give answers reflecting the situation at your company on December 31, 2013, except where noted otherwise.
2 Submit the completed survey to: ICT Economic Research Office, ICT Strategy Policy Division, Global ICT Strategy Bureau, Ministry of Internal Affairs and Communications
3 If you have any questions, please contact the survey firm at: "Communications Usage Trend Survey" Secretariat, Nippon Research Center Ltd.
4 The Ministry of Internal Affairs and Communications has contracted the survey firm above to conduct this survey.
5 Words defined in the Glossary are denoted with asterisks (\*). Please refer to the Glossary as needed.

Q1 The following questions concern your company's communication networks.

(1) Does your company have a computer-based communication network in place?

Please circle the one best answer for each type of network.

Table with 2 columns: Company communication network type and Implementation state or future construction plans. Rows include Intranet and Inter-company network.

Note 1: Intranet refers to a communication network on the same premises or a communication network between the head office and branch offices or work sites of the same company.
Note 2: Inter-company network refers to a communication network that connects to another or other companies.

(2) To companies that answered either 1 or 2 to (1) above: Which of the following communication services do you use frequently?

Please enter the numbers of the top three services your company uses in order of frequency.

Form with columns for No. 1, No. 2, and No. 3. Lists services: Wide-area Ethernet, IP-VPN, Internet VPN, Leased line, Telephone (dial-up), Other, and Don't know.

Note 1: Wide-area Ethernet is a wide-area network service constructed by combining switching hubs using Ethernet, a LAN standard.
Note 2: VPN is short for Virtual Private Network. IP-VPN is a service that offers a high level of security by constructing a virtual private communication network over the closed IP communication networks of a telecom.
Note 3: Internet VPN is a service that constructs a virtual private network over the public Internet.
Note 4: Leased line is a communication service that directly connects a specific network segment with a line reserved for the client's sole use.

Supplementary Question 1: Why did your company choose the service you listed as No. 1 in (2) above?

Please **circle all answers that apply**.

- |  |  |   |
|--|--|---|
| 1. Lower communication costs           | 7. Ability to use XDSL* or FTTH* connections | 13. Broad service area                            |
| 2. Reliability / communication quality | 8. Past performance                          | 14. VoIP / IP phone* functionality                |
| 3. Distance-independent fee            | 9. Mainstream service                        | 15. Ability to use other protocols* other than IP |
| 4. High speed                          | 10. High level of security                   | 16. Other reason                                  |
| 5. Maintenance and operation systems   | 11. Recommended by telecom / integrator      |   |
| 6. Enriched add-on services            | 12. QA functionality                         |   |

Supplementary Question 2: Why did your company choose the service you listed as No. 2 in (2) above?

Please **circle all answers that apply**.

- |  |  |   |
|--|--|---|
| 1. Lower communication costs           | 7. Ability to use XDSL* or FTTH* connections | 13. Broad service area                            |
| 2. Reliability / communication quality | 8. Past performance                          | 14. VoIP / IP phone* functionality                |
| 3. Distance-independent fee            | 9. Mainstream service                        | 15. Ability to use other protocols* other than IP |
| 4. High speed                          | 10. High level of security                   | 16. Other reason                                  |
| 5. Maintenance and operation systems   | 11. Recommended by telecom / integrator      |   |
| 6. Enriched add-on services            | 12. QA functionality                         |   |

Supplementary Question 3: Why did your company choose the service you listed as No. 3 in (2) above?

Please **circle all answers that apply**.

- |  |  |   |
|--|--|---|
| 1. Lower communication costs           | 7. Ability to use XDSL* or FTTH* connections | 13. Broad service area                            |
| 2. Reliability / communication quality | 8. Past performance                          | 14. VoIP / IP phone* functionality                |
| 3. Distance-independent fee            | 9. Mainstream service                        | 15. Ability to use other protocols* other than IP |
| 4. High speed                          | 10. High level of security                   | 16. Other reason                                  |
| 5. Maintenance and operation systems   | 11. Recommended by telecom / integrator      |   |
| 6. Enriched add-on services            | 12. QA functionality                         |   |

(3) Is it possible to **access your company's intranet or inter-company network from off premises** using a computer, a mobile phone, or a personal digital assistant (PDA)?

Please **circle the one best answer** for each type of access device.

Access device	Accessibility or future accessibility plans
① Computers	1. Accessible 2. Not accessible, but plan to make networks accessible 3. Not accessible, and have no plans to make networks accessible
② Mobile phones, PHS handsets, smartphones, personal digital assistants (PDA*)	1. Accessible 2. Not accessible, but plan to make networks accessible 3. Not accessible, and have no plans to make networks accessible

(4) What **Internet access connection or connections** does your company have? Please **circle all answers that apply**.

Circle 12 if your company does not have Internet access.

- |  |                                 |                        |
|--|---------------------------------|------------------------|
| 1. Telephone (dial-up)                               | 5. Optical fiber* (FTTH)        | 9. Leased line         |
| 2. ISDN (not continuously connected) <sup>Note</sup> | 6. Fixed wireless access (FWA)* | 10. Satellite link*    |
| 3. ISDN (continuously connected) <sup>Note</sup>     | 7. BWA access service*          | 11. Other              |
| 4. Cable TV*   | 8. DSL*                         | 12. No Internet access |

Note: If you use ISDN over an optical fiber connection, please circle 5 "Optical fiber (FTTH)."

Q2 The following questions concern your company's provision of information via the Internet.

(1) Does your company have a Website? Please **circle the one best answer**.

- |              |             |
|--------------|-------------|
| _____ 1. Yes | _____ 2. No |
|--------------|-------------|

Supplementary Question: To companies that have a Website: What is the purpose or application of your Website?

Please **circle all answers that apply**.

- |   |   |  |
|---|---|--|
| 1. Publicize / promote products or events | 5. Accept applications or notifications               | 8. Collect consumers' ratings and opinions |
| 2. Provide periodic information           | 6. Conduct questionnaires                             | 9. Other                                   |
| 3. Provide billing or usage details       | 7. Electronic public notices and financial statements |  |
| 4. Company profile / recruiting           |   |  |

(2) Does your company use private social media services\*? Please **circle the one best answer**.

1. Yes	2. No
--------	-------

Supplementary Question: To companies that use social media services: For what purpose or application do you use social media?

Please **circle all answers that apply**.

1. Marketing	4. Company profile / recruiting
2. Publicize / promote products or events	5. Collect consumers' ratings and opinions
3. Provide periodic information	6. Other

Q3 The following questions concern your company's usage of e-commerce.

(1) Does your company **use the Internet<sup>Note</sup> to make purchases or sales**? Please **circle all answers that apply**.

1. Make purchases from other companies over the Internet	3. Sell to consumers over the Internet (with services intended for computers)	5. None of the above
2. Sell to other companies over the Internet	4. Sell to consumers over the Internet (with services intended for mobile phones or smartphones)	

Note: This question includes both purchases made over the public Internet and purchases made over TCP/IP\* (the communication protocol used on the Internet) networks, such as TCP/IP leased lines.

Supplementary Question: To **companies that sell to consumers over the Internet**:

Which model or models do you use to sell to consumers? Please **circle all answers that apply**.

1. E-store (own site)	3. Sales broker	5. Other
2. E-store (store in an e-mall)	4. Online trading	

(2) Does your company **use Internet advertising**?

Please **circle all types of advertising that apply**. Circle 13 if your company does not use Internet advertising.

<p><i>(Web advertising)</i></p> <p>1. Text ads*<sup>Note 1</sup></p> <p>2. Banner ads*<sup>Note 2</sup></p> <p>3. Rich media ads*<sup>Note 3</sup></p> <p>4. Sponsored ads* (editorial tie-ups, etc.)</p> <p>5. Contextual search ads*</p> <p>6. Contextual content ads*</p> <p><i>(Email advertising)</i></p> <p>7. Newsletters</p> <p>8. Direct marketing ads* (targeted mailings, etc.)</p>	<p><i>(Mobile advertising)</i></p> <p>9. Picture ads*</p> <p>10. Content* ads</p> <p>11. Email ads*</p> <p><i>(Other forms of advertising)</i></p> <p>12. Other Internet ads</p> <p>13. Do not use Internet advertising</p>
--	---

Note 1: *Text ads* are ads composed only of text.

Note 2: *Banner ads* are images placed on Websites that advertise a different Website. When clicked, banner ads jump to the advertised Website.

Note 3: *Rich media ads* use audio and images and either respond to mouse movements or display video with streaming technology.

Note 4: Servers of *contextual content ads* analyze the context or keywords in the content on a Web page and display ads with the most relevance to the content.

Supplementary Question: To companies that **use Internet advertising**:

Why do you use Internet advertising? Please **circle all answers that apply**.

1. Easy to measure advertising effects	3. Able to target ads to the needs of individual consumers
2. Inexpensive ad prices	4. Able to provide information over a wide area



Q4 The following question concerns your company's adoption of systems and tools that use wireless communication technology.

Has your company adopted the **following systems and tools that use wireless communication technology**?

Please **circle the one best answer** for each system or tool.

System or tool that uses wireless communication technology	Adoption or future adoption plans
<p>① RFID tags*</p> <p>Ex: Production, inventory, or distribution management by means of identifying items</p>	<p>1. Adopted company wide</p> <p>2. Adopted in some offices or divisions</p> <p>3. Not adopted, but have adoption plans</p> <p>4. Not adopted, and have no adoption plans</p>
<p>② Contactless IC cards*</p> <p>Ex: Room access controls and cashless transactions by means of personal authentication</p>	<p>1. Adopted company wide</p> <p>2. Adopted in some offices or divisions</p> <p>3. Not adopted, but have adoption plans</p> <p>4. Not adopted, and have no adoption plans</p>
<p>③ New network-enabled devices (network cameras, sensors, etc.)</p> <p>Ex: Example: Security systems using network cameras or motion sensors</p>	<p>1. Adopted company wide</p> <p>2. Adopted in some offices or divisions</p> <p>3. Not adopted, but have adoption plans</p> <p>4. Not adopted, and have no adoption plans</p>
<p>④ GPS, mobile phone, or other location devices</p> <p>Ex: Traffic management based on vehicle location information</p>	<p>1. Adopted company wide</p> <p>2. Adopted in some offices or divisions</p> <p>3. Not adopted, but have adoption plans</p> <p>4. Not adopted, and have no adoption plans</p>

Q5 The following questions concern your company's use of cloud computing.

(1) Does your company use cloud computing (the cloud)<sup>Note?</sup> Please **circle the one best answer**.

1. Used company wide	3. Not used, but plan to use
2. Used by some offices or divisions	4. Not used, and have no plans to use
	5. Do not understand cloud services

Note: Cloud computing is a technology that provides, as a service, users with network-based computer assets when needed and in the amount needed via broadband or other Internet connection methods. An example is software as a service\* (SaaS) provided by application service providers\* (ASP).

→ (2) To companies that answered either 1 or 2 to (1) above: **Which device or devices** does your company use to access cloud computing services? Please **circle all answers that apply**.

1. Mobile phones <sup>Note</sup> / PHS handsets	3. Tablets	5. Other (PDAs, etc.)
2. Smartphones <sup>Note</sup>	4. Computers	

Note: Please give separate answers for conventional mobile phones and smartphones.

→ (3) To companies that answered either 1 or 2 to (1) above: Which specific cloud computing services does your company use? Please **circle all answers that apply**.

1. Server applications	9. Sales support	16. Production management, distribution management, store management
2. File storage / data sharing	10. R&D related	17. Billing and payment systems
3. Data backups	11. System development and Website construction	18. Authentication systems
4. Internal information sharing / portal	12. e-Learning	19. Other
5. Email	13. Payroll, financial accounting, HR	
6. Schedule sharing	14. Order taking and sales	
7. Project management	15. Purchasing	
8. Sharing information with business partners		

→ (4) To companies that answered either 1 or 2 to (1) above: Why do you use cloud computing services? Please **circle all answers that apply**.

1. Costs are lower than existing systems	9. Boost security against information theft, etc.
2. Initial investment is inexpensive	10. Improve operational stability and availability
3. No need to have internal asset and storage systems	11. Wealth of service options
4. Quick response capability, such as upgrading system capacity	12. Fast roll-out speed
5. Easy system scalability	13. Access services from anywhere
6. High service reliability	14. Access identical services from any device
7. Offered by system vendor	15. Can terminate use at any time
8. Easy license management	16. Other

↳ (5) To companies that answered either 1 or 2 to (1) above:  
 What impact has cloud computing had on the purposes given above? Please **circle the one best answer**.

- |                        |                        |                           |
|------------------------|------------------------|---------------------------|
| 1. Very beneficial     | 3. Not very beneficial | 5. Do not know the impact |
| 2. Somewhat beneficial | 4. Negative impact     |                           |

→ (6) To companies that answered 4 to (1) above:  
 Why does your company not use cloud computing services? Please **circle all answers that apply**.

- |   |   |
|---|---|
| 1. Considerable cost to retool existing systems when introducing cloud services | 6. Information theft and other security concerns              |
| 2. Cloud services would hinder corporate compliance                             | 7. No legal system in place                                   |
| 3. Increase in communication costs  | 8. Not necessary  |
| 4. Cannot customize applications to suit needs                                  | 9. Do not see the advantages, not convinced by the advantages |
| 5. Concerns about network stability   | 10. Other   |

Q6 The following question concerns your company's introduction of telework.

Has your company **introduced telework**\* <sup>Note?</sup> Please **circle the one best answer**.

(If your company has introduced telework, circle all answers of a, b, and c that your telework includes.)

- |  |   |
|--|---|
| 1. Have introduced telework (a Working from home b Satellite office work c Mobile work)<br>(Please answer questions ①, ②, and ③ below) | 3. Not introduced, and have no specific plans to introduce telework<br>(Please answer question ④ below) |
| 2. Not introduced, but have specific plans to introduce telework   |   |

Note: *Telework* is a working arrangement where the worker works in a location physically separate from the company's building but with nearly the same work environment as in the company's building by means of communication networks. Depending on the worker's work location, telework is called working from home, **satellite office work (where the worker works at an office that is not the original work place)**, or mobile work (where the worker, such as a salesperson, works using a mobile information device while out of the office).

To companies that answered 1 to the question above.

→ ① **What percentage of your employees use telework?** Please **circle the one best answer**.

- |                                       |                                       |
|---------------------------------------|---------------------------------------|
| 1. Less than 5 percent                | 4. 30 percent to less than 50 percent |
| 2. 5 percent to less than 10 percent  | 5. 50 percent to less than 80 percent |
| 3. 10 percent to less than 30 percent | 6. 80 percent or more                 |

→ ② **What were the purposes of introducing telework** at your company?  
 Please **circle all answers that apply**.

- |   |   |
|---|---|
| 1. Raise efficiency (productivity) of routine business processes  | 8. Support people who have difficulty using public transportation (physically disabled, older people, pregnant women, etc.) |
| 2. Improve creativity of creative, value-added business processes | 9. Counter global warming by lowering CO2 emissions through transportation alternatives                                     |
| 3. Provide healthy, comfortable lives for workers                 | 10. Conserve energy and electricity   |
| 4. Reduce office costs  | 11. Prepare for business continuity in the event of emergencies (earthquakes, super-flu outbreaks, etc.)                    |
| 5. Reduce workers' travel times                                   | 12. Other   |
| 6. Increase customer satisfaction                                 |   |
| 7. Attract better employees                                       |   |

→ ③ What has been the overall **impact** of telework on the purposes given in ② above?  
 Please **circle the one best answer**.

- |                        |                        |                           |
|------------------------|------------------------|---------------------------|
| 1. Very beneficial     | 3. Not very beneficial | 5. Do not know the impact |
| 2. Somewhat beneficial | 4. Negative impact     |                           |

④ To companies that have not introduced telework; i.e., answered 3 to the question above. Please **circle all reasons why you have not introduced telework**? If you circle 14 "Other," please give a specific reason in the space provided.

- |   |   |
|---|---|
| 1. Work is not suited to telework                   | 9. Impedes handling customers and other external entities |
| 2. Difficult to advance work operations             | 10. Too expensive   |
| 3. Do not see the advantage of introducing telework | 11. Troublesome to introduce an HR system                 |
| 4. Difficult to assess employees                    | 12. Difficult to calculate wages                          |
| 5. Impedes office / internal communications         | 13. Have not moved to digital documents                   |
| 6. Shifts burden to other employees                 | 14. Other ( )   |
| 7. No requests from union or employees              |   |
| 8. Concern about information security breaches      |   |

Q7 The following question concerns all ICT (IT)<sup>\*Note</sup> education provided by your company to employees.

Note: ICT is short for Information and Communication Technology. It is synonymous with IT.

Which of the following education programs does your company provide?

Please **circle all answers that apply**.

- |   |   |
|---|---|
| 1. Internal ICT (IT) education / training programs                                      | 5. Provide time to employees who voluntarily enroll in ICT (IT) courses |
| 2. External ICT (IT) education / training programs                                      | 6. Test ICT (IT) abilities and skills                                   |
| 3. Provide financial assistance to employees who voluntarily enroll in ICT (IT) courses | 7. Other education and training   |
| 4. Pay bonuses to employees who obtain ICT (IT) qualifications                          | 8. None of the above  |

Q8 The following questions ask companies that use ICT networks (intranets, inter-company networks, the Internet, etc.) about their security measures.

(1) Have any **security breaches equivalent to 1 to 8 below occurred** in the past year in the use of ICT networks at your company?

Please **circle all answers that apply**. Circle **9** if no security breaches occurred.

- |   |   |
|---|---|
| 1. Discovered a computer virus <sup>*</sup> but not infected              | 6. Website defacement                     |
| 2. Discovered a computer virus and at least one incidence of an infection | 7. Data breach due to theft or negligence |
| 3. Illegal access <sup>*Note 1</sup>                                      | 8. Other losses                           |
| 4. Used as a spam <sup>*</sup> bot or zombie                              | 9. No breaches                            |
| 5. DoS (DDoS) attack <sup>*Note 2</sup>                                   |   |

Note 1: *Illegal access means infiltrating a company or individual's computer system without permission and causing system failures or making use of the system without authorization.*

Note 2: *DoS attack is an attack where the attacker sends massive amounts of packets to a server to bring down a system or disrupt services.*

(2) **What measures** has your company taken **for data security and anti-virus protection on ICT networks**?

Please **circle all answers<sup>Note 1</sup> that apply**.

- |  |   |
|--|---|
| 1. Establish security policies   | 12. User authentication by means of authentication technologies               |
| 2. Security audits   | 13. Encrypt data or networks  |
| 3. Outsource security management   | 14. Line monitoring   |
| 4. Training for employees  | 15. Install and maintain firewalls  |
| 5. Install anti-virus programs on computers and other devices (operating system, software, etc.) | 16. Use proxy servers, etc.   |
| 6. Install anti-virus programs on servers  | 17. Install and maintain intrusion detection systems (IDS) <sup>*Note 2</sup> |
| 7. Apply security patches <sup>*</sup> for operating systems                                     | 18. Install and maintain Web application firewalls                            |
| 8. Construct anti-virus walls at external access points  | 19. Other measures  |
| 9. Establish manuals on responding to viruses  | 20. No particular measures  |
| 10. Control access with IDs, passwords, etc.   |   |
| 11. Maintain access logs   |   |

Note 1: Regardless of your answer to 3. "Outsource security management", circle all applicable answers even if the measures are implemented in part with the use of external suppliers or external services.

Note 2: Includes intrusion protection systems (IPS).

Supplementary Question 1: To companies that answered 1 to (2) above:

Does your company's security policies have **rules on the use of smartphones in work operations**?

Please **circle the one best answer**.

- |   |   |
|---|---|
| 1. Prohibit all use                                       | 4. Permit the use of both company-supplied smartphones and personal smartphones |
| 2. Permit use of only company-supplied smartphones        | 5. Have no specific rules   |
| 3. Permit use of personal smartphones for work operations |   |

Supplementary Question 2: To companies that answered 1 to (2) above:

Does your company's security policies have **rules on the use of social media**?

Please **circle all answers that apply**.

- |   |                             |
|---|-----------------------------|
| 1. Prohibit opening accounts with company name  | 4. Prohibit use during work |
| 2. Obligated to open accounts with company name | 5. Other rules              |
| 3. Prohibit work-related posts                  | 6. Have no specific rules   |

(3) Has your company **received targeted emails**<sup>\* Note 1</sup> in the past year?

Please **circle the one best answer**.

- |  |
|--|
| 1. Targeted emails reached an employee's device and there was at least one incidence of a computer virus infection |
| 2. Targeted emails reached an employee's device, but there were no computer virus infections                       |
| 3. Anti-virus programs and other measures blocked all targeted emails before reaching any device                   |
| 4. Have seen no traces of targeted emails  |

Note 1: Unlike spam that is sent to random recipients, *targeted email*, which often has virus attachments, is sent to a specific organization or person with the objective of stealing confidential information.

(4) **What measures** has your company taken **against targeted email**?

Please **circle all answers that apply**.

- |  |  |
|--|--|
| 1. Training for employees  | 8. Line monitoring   |
| 2. Install anti-virus programs on computers and other devices (operating system, software, etc.) | 9. Use proxy servers, <sup>*</sup> etc.                                      |
| 3. Install anti-virus programs on servers  | 10. Install and maintain intrusion detection systems (IDS) <sup>Note 2</sup> |
| 4. Apply security patches for operating systems  | 11. Share information between organizations and divisions                    |
| 5. Construct anti-virus walls at external access points  | 12. Install a sender policy framework (SPF) <sup>*</sup>                     |
| 6. Enhance access controls for servers and other devices that store sensitive data               | 13. Other measures   |
| 7. Maintain access logs  | 14. No particular measures   |

Note 2: Includes intrusion protection systems (IPS).

(5) **What measures** has your company taken **for personal information protection**?

Please **circle all answers that apply**.

- |   |   |
|---|---|
| 1. Obtained Privacy Mark certification <sup>*</sup>                 | 6. Enhanced internal training   |
| 2. Established a privacy policy                                     | 7. Strengthened conditions on external supplier selection (e.g., has obtained Privacy Mark certification, etc.) |
| 3. Appointed a manager in charge of personal information protection | 8. Other measures   |
| 4. Minimized the personal information handled                       | 9. No particular measures   |
| 5. Rebuilt systems and organizations                                |   |

(6) Does your company have a chief information officer (CIO)<sup>\* Note 2</sup>?

Please **circle the one best answer**.

- |  |
|--|
| 1. Have a full-time CIO  |
| 2. Have a part-time CIO whose primary responsibility is ICT (IT)   |
| 3. Have a part-time CIO whose secondary responsibility is ICT (IT) |
| 4. Do not have a CIO, but plan to appoint one                      |
| 5. Do not have a CIO, and have no plans to appoint one             |

Note: A *CIO* is an executive officer who organizes and oversees information communication strategy and business strategy.

Q9 The following question concerns issues associated with ICT network (intranets, inter-company networks, the Internet, etc.) usage and issues preventing ICT network usage.

**What issues do you see associated** with usage of ICT networks (intranets, inter-company networks, the Internet, etc.)? **For companies that do not use ICT networks, what issues are preventing you from using ICT networks?**

Please **circle all answers that apply**.

- |   |   |
|---|---|
| 1. Difficulties in establishing security measures                   | 9. Concern about the reliability of authentication technology |
| 2. Rising operational and management costs                          | 10. Concern about the reliability of electronic payments      |
| 3. Lack of operational and administrative personnel                 | 11. Low security awareness among employees                    |
| 4. Difficulties in restoring operations after a fault               | 12. High communication charges                                |
| 5. Concern about protection of copyrights and intellectual property | 13. Low communication speeds                                  |
| 6. Concern about virus infections                                   | 14. Other   |
| 7. Difficulties in achieving benefits from network adoption         | 15. No particular issues                                      |
| 8. Difficulties in quantifying benefits of network adoption         |   |

<Questionnaire> The following question concerns the answering method for this survey.

Do you want to answer this survey online (via the Internet)?

Please **circle the one best answer**.

- |        |       |               |
|--------|-------|---------------|
| 1. Yes | 2. No | 3. Don't know |
|--------|-------|---------------|

The final questions concern general aspects of your company.

You may attach a copy of your annual financial statement in lieu of completing the answers on this form if the financial statement contains the same information as the questions. Please underline the relevant sections in the financial statement.

F1 What is the capitalization value (sum of investments and funds) of your company?

Please **circle the one best answer**.

- |   |   |                                       |
|---|---|---------------------------------------|
| 1. Less than ¥10 million                | 4. ¥50 million to less than ¥100 million  | 7. ¥1 billion to less than ¥5 billion |
| 2. ¥10 million to less than ¥30 million | 5. ¥100 million to less than ¥500 million | 8. ¥5 billion or more                 |
| 3. ¥30 million to less than ¥50 million | 6. ¥500 million to less than ¥1 billion   |                                       |

F2 What are the annual sales<sup>Notes1,2</sup> of your company? Please indicate your annual sales to the nearest million yen.

										million yen
--	--	--	--	--	--	--	--	--	--	----------------

Note 1: Please enter your FY 2012 sales (the year April 2012 through March 2013). If this is difficult to calculate, please enter the most recently calculated annual sales.

Note 2: Companies in the banking industry, please enter your income before tax; life insurance companies, please enter your insurance contributions, etc.; and non-life insurance companies, please enter your net premiums written.

F3 What is the operating profit<sup>Notes1,2</sup> of your company? Please indicate your operating profit to the nearest million yen.

										million yen
--	--	--	--	--	--	--	--	--	--	----------------

Note 1: Please enter your FY 2012 operating profit (the year April 2012 through March 2013). If this is difficult to calculate, please enter the most recently calculated annual operating profit.

Note 2: Companies in the banking industry, please enter your net operating profit; life insurance companies, please enter your basic profits; and non-life insurance companies, please enter your underwriting profit.

F4 What are the labor costs<sup>Note</sup> of your company? Please indicate your labor costs to the nearest million yen.

										million yen
--	--	--	--	--	--	--	--	--	--	----------------

Note: Please enter your FY 2012 labor costs (the year April 2012 through March 2013). If this is difficult to calculate, please enter the most recently calculated annual labor costs.

F5 What are the depreciation costs<sup>Note</sup> of your company? Please indicate your depreciation costs to the nearest million yen.

										million yen
--	--	--	--	--	--	--	--	--	--	----------------

Note: Please enter your FY 2012 depreciation costs (the year April 2012 through March 2013). If this is difficult to calculate, please enter the most recently calculated annual depreciation costs.

F6 How many full-time employees<sup>Note</sup> does your company have?

						employees
--	--	--	--	--	--	-----------

Note: Full-time employees: This is the number of full-time employed people at your company as of December 1, 2013 or the nearest payroll deadline date. This definition includes people called temporary workers, day laborers, or part-time workers with employment contracts longer than one month and includes people employed on the date of the survey who worked 18 days or more in both October and November 2013.

© This completes the survey questions. Please **return the completed survey form in the enclosed return envelope. No postage stamp is required.**

**Thank you for your participation.**

## Glossary

<For Households>

Index	Term	Definition
	3G mobile phone	Digital mobile phones compliant with the IMT-2000 standard. Examples include NTT Docomo's FOMA series, AU's CDMA 2000 1x and CDMA 1x WIN series, and Softbank's SoftBank 3G series.
A	Access point	A radio-wave relay device that connects terminals via Wi-Fi network.
	App (application)	A software program used for a specific operational purpose, such as word-processing programs, spreadsheet programs, or image-editing programs.
	Authentication technology	A technology for verifying the proper identity of the target by some means. Examples include ID and passwords, fingerprint authentication, digital signatures, etc.
B	Blog	Short for Weblog. A blog is a regularly updated Website with sequential articles much like a diary and comments posted about articles.
	Broadband	Communication lines capable of high speeds and ultra-high speeds such as FTTH, DSL, and cable Internet.
	Broadcast program delivery service	A service by which the government, TV stations, or communication companies deliver programs via the Internet. Examples include the National Diet Internet feed and NHK's on-demand BeeTV.
	Browser	A software program for viewing Web pages.
	BWA	Short for Broadband Wireless Access. BWA is a generic name for data communication services that use wireless (radio waves) in place of cables to convey signals. Examples include mobile WiMAX (such as UQ WiMAX from UQ Communications) and AXGP from Wireless City Planning.
C	CATV	Refers to the application of cable TV cabling for Internet access.
	Chat	A service that allows the parties to have a text conversation simultaneously over a network. Because multiple parties converse simultaneously, the text from one party can be viewed by all parties.
	Computer virus	A program designed to damage or destroy a computer system. Computer infect files via other files or email in order to reach and attack a computer system.
D	Digital TV broadcasting	A television broadcasting method that uses digital signals. It also refers to the broadcasting itself. Digital TV broadcasting can deliver very high quality broadcasts and it makes more efficient use of the radio spectrum than existing analog broadcasting. Digital TV broadcasting is distinctive for its easy connectivity with computers and other digital devices.
	DSL	Short for Digital Subscriber Line. DSL permits existing phone lines to be used for high-speed Internet access with technologies that enables high-speed transmissions over phone lines. Variants include ADSL, VDSL, HDSL, and SDSL.
	[reference] ADSL	Short for Asymmetric Digital Subscriber Line. ADSL is a transmission method that enables high-speed data communications on the order of several Mbps to tens of Mbps using copper subscriber phone lines running from central offices to homes or offices. ADSL has an asymmetric structure, in that the data transmission speeds are different depending on the direction (from the user's standpoint, sending data upstream and receiving data downstream).
E	E-learning	A form of learning using the Internet or other electromagnetic means. In a broad sense, e-learning is a kind of correspondence education. The advantages of e-learning include studying only the material necessary, real-time exchanges between the instructor and the students, and easy use of teaching materials including audio and video materials.

Index	Term	Definition
F	Filtering software	Software that assesses Web pages on the Internet according to set criteria and selectively blocks Web pages that are illegal or harmful.
	Firewall	Refers to a system to protect computers from unauthorized intrusions from external networks.
	Forum	A digital display board service. When a user posts a message to a forum, all members of the forum can view the message. Other members can post replies to the original message.
	Fraudulent email	A type of scam involving sending fraudulent invoices randomly by email and demanding payment, or email with similar fraudulent demands.
	FTP	Short for File Transfer Protocol. FTP is used to transfer files between the user's computer and a server or another host computer via the Internet. It is frequently used to download files from a file server to a client.
	FWA	Short for Fixed Wireless Access. FWA is a system that involves installing an antenna at the subscriber's premises to connect wirelessly with the telecom's base station antenna.
I	Illegal access	Refers to infiltrating a computer system without permission and causing system failures or making use of the system without authorization.
	Information appliance	Household electric appliances such as refrigerators or air-conditioner units with connectivity to the Internet or other networks.
	Internet auction	A service that acts as an intermediary, in the form of an auction, between people wishing to buy and sell goods over the Internet.
	Internet banking, mobile banking	A service that provides bank transfers, balances, and other bank procedures via the Internet essentially 24 hours a day. Mobile banking services allow users to access the same banking procedures from mobile phones and other mobile devices via the Internet.
	IP phone	A voice call service that uses Internet protocol (IP) technology along some or all of its communication networks.
	IPTV	A service that delivers broadcast programming and other video content via an IP network.
	ISDN	Short for Integrated Service Digital Network. ISDN is a general name for a digital communication network that integrates telephone, fax, telex, data communications, and other services.
L	Live delivery	A method of delivering video or other content in real time. The viewing times are predetermined like TV broadcasts.
	LTE	Short for Long Term Evolution. Also called 4G, LTE is a mobile communication standard for high-speed data communications that succeeds the W-CDMA and HSPA standards. An example is Xi from NTT Docomo.
M	Microblog	Microblogs are a type of blog where posts from computers or mobile phones are limited to around 200 characters (usually called tweets). Also called miniblogs.
N	Narrowband	Low-speed communication lines with speeds generally less than 128 kbps. Examples include dial-up and ISDN.
	Net trading	Stock or currency trading done using the Internet. Also called online trading.
O	On demand	The provision of services in respond to requests by the listener or viewer. On-demand distribution allows users to view material when they want to view it.
	Online gaming	Games that use the Internet so that multiple players can share in the same game experience.



Index	Term	Definition
	Optical fiber (FTTH)	A data communication service capable of very fast transmission speeds that uses optical fiber. Optical fiber is a cable made from glass fibers that is used as the transmission path for optical communications.
	OS	Short for Operating System. This is the basic software of a computer system that manages the entire system and supplies I/O functionality, such as keyboard inputs and screen outputs, disk and memory functionality, and the basic functionality shared by many software applications that run on the computer system.
P	P2P	Short for Peer to Peer. P2P is the sharing of files between many computers via the Internet.
	Personal digital assistant (PDA)	A computer smaller than a notebook with digital assistant functions to manage personal information, such as schedules, address books, and memos, and remote access functions to email, the Internet and local Wi-Fi networks via a mobile phone or PHS handset. The PDA category does not include notebook computers.
	Phishing	A type of fraud in which the attacker fakes emails from a real corporation or a real corporation's Website in order to get the victim to enter his or her PIN or password.
S	Smart TV	A service centered on a television receiver with Internet access capability that obtains and displays Web information connected to the current program, that can run a wide variety of apps, and that can connect to smartphones and tablets from all manufacturers.
	Smartphone	A mobile phone with the additional functionality of a personal portable information device. In addition to voice calls, smartphones can browse the Web, send and receive email, and view and create documents. Smartphones have open-source operating systems, and users are free to add apps as they like.
	SMS	Short for Short Message Service. SMS are services that send and receive short text messages and other information between mobile phones.
	Social media	Media where users create and distribute information, such as blogs, social networking sites, and video-sharing sites. Social media are distinctive in having various mechanisms to encourage users to connect with each other and to see connections visually.
	Social networking service	See the entry for "SNS"
	Social networking site (SNS)	A community site where participants introduce friends in order to extend new personal relationships. Some sites allow anyone to join and others require an introduction from a current member.
	SOHO	Short for Small Office/Home Office. SOHO is a work configuration in which a suburban home or small office is used as a work space using computer networks. SOHO also refers to this kind of work space.
	Spam	Email for promotional or advertising purposes sent to users without their consent.
	Spyware	Refers to a program that collects personal information on a computer, such as access logs, and sends the information to an external computer.
	SSL	Short for Secure Socket Layer. SSL is a protocol for encrypting and sending and receiving information over the Internet. SSL can be used for securely sending and receiving sensitive information, credit card numbers, or confidential company information.
T	Tablet	A flat portable information device that has a touch LCD panel for its visual display and is operated by finger touches. Leading tablets are Apple's iPad and Amazon's Kindle.

Index	Term	Definition
	Telework	A flexible working arrangement using ICT that frees workers from time and location constraints. Telework can be divided into telework for employees of corporations (e.g., working from home, mobile working, or working at satellite offices) and telework for self-employed people or small businesses (e.g., SOHO or working from home).
	Tuner	A device, component, or an integrated circuit or circuit board (expansion card, etc.) containing the component for receiving broadcast signals.
V	Video posting and sharing site	A Website on the Internet that allows users to post videos and share them for other users to view. Examples include YouTube, Dailymotion, and Niconico Douga.
	VOD	Short for Video On Demand. VOD is a service that streams video content as instructed by the user.
W	Wi-Fi network	A network on which data are sent and received wirelessly. Wi-Fi networks consist of Wi-Fi access points, which correspond to the base unit, and Wi-Fi adaptors, which correspond to extension units (Wi-Fi adaptors are built into notebook computers and other devices).
	WPA, WPA2	Short for Wi-Fi Protected Access. WPA is an information security standard for Wi-Fi networks. It patches vulnerabilities in previous standards and strengthens the overall information security measures. WPA2 is an even more secure standard than WPA.

#### <For Businesses>

Index	Term	Definition
A	ASP	Short for Application Service Provider. An ASP is a business that provides customers with business applications over the Internet.
B	BWA	Short for Broadband Wireless Access. BWA is a generic name for data communication services that use wireless (radio waves) in place of cables to convey signals. Examples include mobile WiMAX (such as UQ WiMAX from UQ Communications) and AXGP from Wireless City Planning.
	Banner ads	A banner ad is placed on a Website and has an image promoting another Website. Clicking on the banner ad takes the user to the banner's Website.
C	CIO	Short for Chief Information Officer. A CIO is an executive officer who organizes and oversees information communication strategy and business strategy.
	Cable TV	Refers to the application of cable TV cabling for Internet access.
	Cloud computing	Cloud computing is a technology that provides, as a service, users with network-based computer assets when needed and in the amount needed via broadband or other Internet connection methods. An example is software as a service (SaaS) provided by application service providers (ASP).
	Computer virus	A program designed to damage or destroy a computer system. Computer viruses infect files via other files or email in order to reach and attack a computer system.
	Contactless IC card	An IC card with a built-in antenna that sends and receives data using weak radio waves emitted by an external reader. Data can be processed quickly just by bringing the IC card close to the reader. The operating principle is the same as RFIC tags.
	Content	An entire information unit or a portion of that information unit consisting of text, images, video, audio, games, etc. Content is often used to refer to information exchanged via digital media or networks.

Index	Term	Definition
	Contextual content ads	Contextual content ads automatically identify the keywords in a Website and what keywords are preferred by posting ad tags issued by the service operator in the Website.
	Contextual search ads	Ads displayed beside a search engine's search results that are linked to the search keywords entered by an ordinary user.
D	DSL	Short for Digital Subscriber Line. DSL permits existing phone lines to be used for high-speed Internet access with technologies that enables high-speed transmissions over phone lines. Variants include ADSL, VDSL, HDSL, and SDSL.
	Direct marketing	A type of advertising that uses email sent to a specific user where the entire message is a form of advertising.
	DoS (DDoS)	DoS is short for Denial of Service. It is a type of attack where the attacker sends massive amounts of data to the target computer or router to disrupt the normal operation of the targeted business or organization's systems.
E	Email ads	Advertisements that use email addressed to a specific user.
F	FTTH	Short for Fiber To The Home. FTTH offers ultra-high-speed Internet access of speeds from tens of Mbps to a maximum of 1 Gbps by installing fiber-optic cable all the way to the subscriber's home.
	FWA	Short for Fixed Wireless Access. FWA is a system that involves installing an antenna at the subscriber's premises to connect wirelessly with the telecom's base station antenna.
I	ICT (IT)	ICT is short for Information and Communication Technology. It is synonymous with IT.
	IDS	Short for Intrusion Detection System. An IDS monitors communication lines and notifies an administrator when it detects a network intrusion.
	IP-VPN	Short for Internet Protocol – Virtual Private Network. An IP-VPN is a service that constructs a virtual private communication network over the closed IP communication networks of a telecom. IP-VPNs allow remote networks to operate like LANs.
	ISDN	Short for Integrated Service Digital Network. ISDN is a general name for a digital communication network that integrates telephone, fax, telex, data communications, and other services.
	Illegal access	Refers to infiltrating a company or individual's computer system without permission and causing system failures or making use of the system without authorization.
	Inter-company network	Refers to a communication network that connects to another or other companies.
	Internet VPN	A service that constructs a virtual private network over the public Internet.
	Intranet	Refers to a communication network on the same premises or a communication network between the head office and branch offices or work sites of the same company.
L	Leased line	A communication service that directly connects a specific network segment with a line reserved for the client's sole use.
O	Optical fiber	A data communication service capable of very fast transmission speeds that uses optical fiber. Optical fiber is a cable made from glass fibers that is used as the transmission path for optical communications.

Index	Term	Definition
P	Personal digital assistant (PDA)	A computer smaller than a notebook with digital assistant functions to manage personal information, such as schedules, address books, and memos, and remote access functions to email, the Internet and local Wi-Fi networks via a mobile phone or PHS handset. The PDA category does not include notebook computers.
	Picture ads	Banner ads mainly posted on the top page of a mobile site.
	PrivacyMark System	The PrivacyMark is a registered trademark that JIPDEC authorizes businesses to use if they meet certain conditions regarding personal information protection.
	Protocol	A protocol is a set of predetermined conventions that allows computers to communicate via a network.
	Proxy server	A proxy server is a computer placed at the boundary of the Internet and a corporate or other internal network. This computer connects to the Internet as a "proxy" for computers in the internal network that cannot directly access the Internet.
R	RFID tag	A tag containing an IC chip and antenna. The IC chip stores a unique identifier and other data that can be read by radio waves when in the proximity of a reader without the tag coming into physical contact with the reader.
	Rich media ads	Ads that use audio and images and either respond to mouse movements or display video with streaming technology.
S	SPF	Short for Sender Policy Framework. SPF is a technology that prevents falsification of an email sender's address.
	SaaS	Short for Software as a Service. SaaS is a mechanism that provides the functions of software applications to customers as needed over a network.
	Satellite link	A configuration that uses links with a communication satellite to provide Internet access. The advantage of satellite Internet is that it is unaffected by disasters that knock out mobile phones or normal Internet access methods.
	Security patch	A program distributed to repair another software program when a security hole is discovered in the program.
	Social media	Media where users create and distribute information, such as blogs, social networking sites, and video-sharing sites. Social media are distinctive in having various mechanisms to encourage users to connect with each other and to see connections visually.
	Spam	Email sent in massive volumes indiscriminately without regard for any attribute the recipients. Spam has become a problem because of the traffic it places on the public Internet.
	Sponsored ads	The provision by a specific advertiser of some or all of a Website's content.
T	TCP/IP	The communication protocol used on the Internet.
	Targeted email	Unlike spam that is sent to random recipients, targeted email, which often has virus attachments, is sent to a specific organization or person with the objective of stealing confidential information.
	Telework	Telework is a working arrangement where the worker works in a location physically separate from the company's building but with nearly the same work environment as in the company's building by means of communication networks. Depending on the worker's work location, telework is called working from home, mobile work (where the worker, such as a salesperson, works using a mobile information device while out of the office), or satellite office (where the worker works at an office that is not the company's office).

Index	Term	Definition
	Text ads	Ads that consist entirely of text.
V	VoIP / IP phone	A voice call service that uses Internet protocol (IP) technology along some or all of its communication networks.
W	Wide-area Ethernet	A wide-area network service constructed by combining switching hubs using Ethernet, a LAN standard.
X	XDSL	<p>DSL is short for Digital Subscriber Line.</p> <p>DSL permits existing phone lines to be used for high-speed Internet access with technologies that enables high-speed transmissions over phone lines. Variants include ADSL, VDSL, HDSL, and SDSL.</p> <p>XDSL is a general term for all DSL variants.</p>