Government Statistics

Ministry of Internal Affairs and Communications

2018 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.

(Address label)

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 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. Regarding words marked *, refer to the attached "Guide to fill the questionnaire" as necessary.

3. In this survey, conventional mobile phones (nicknamed "galakei) should be separated from smartphones.

4. Please give answers reflecting the situation in your household on September 30, 2018.

5. Submit the completed survey to:
   Economic Research Office, Information and Communications Bureau, Ministry of Internal Affairs and Communications (MIC)
   2nd Bldg. of the Central Common Government Office, 2-1-2 Kasumigaseki, Chiyoda-ku, Tokyo 100-8786, Japan

* The survey form may also be obtained and submitted online. For detailed information, please look at "Request for cooperation" enclosed herein.

6. If you have any questions, please contact the survey firm at:
   "Communications Usage Trend Survey" Secretariat,
   Public Opinion Research Center (contracted by the MIC)
   4-8-6 Sendagaya, Shibuya-ku, Tokyo 151-8509, Japan
   Tel.: 0120-XXX-XXX (toll free) (Between 10:00 and 17:00, on weekdays)

7. The MIC has contracted the survey firm above to conduct this survey.

<<Household-wide questions>> Questions on pages 1 to 5 are made to householders, etc.

Q1 This question asks about your household's ownership of devices with communication functions.

Does your household own any of the devices 1 through 11 listed below?

Please circle all answers that apply.

*Do not count company-provided devices or devices that you own but have not used even once in the past year.
For devices 3 through 11, please indicate the number of devices in your household.

1. Fixed-line telephones

2. Fax machines

3. Mobile phones (includes PHS handsets)
   (how many? _____)

4. Smartphones (how many? _____)

5. Tablets (iPad, Galaxy Tab, etc.)
   (how many? _____)

6. Computers (how many? _____)

7. Wearable devices (glasses-type, watch-type information devices, etc.) (how many? _____)

8. Internet-enabled home game consoles that display video on a television or other monitor (PlayStation4, etc.) (how many? _____)

9. Internet-enabled home game consoles with built-in displays (Nintendo 3DS, etc.)
   (how many? _____)

10. Internet-enabled portable music players (iPod, etc.)
    (how many? _____)

11. Appliances available for Internet connection (Cooking heaters, refrigerators, etc.) (how many? _____)

12. Others

Q2 Questions about fixed-line telephone utilization are designed for <u>respondents who answered that they own fixed-line telephones in Q1.</u>

(1) Do you use a metal telephone^{Note} (so-called "black telephone")?
   <u>Please circle the one best answer.</u>

1. Yes	2. No

Note: The metal telephone means a subscribed telephone or an ISDN (Integrated Service Digital Network) telephone provided by NTT East or West, differing from a cable TV telephone, a fiber-optic IP (Internet Protocol) telephone or an IP telephone with a number beginning from 050. If "connection fee (basic fee)," "direct dialing charge" or INS (Information Network System) call charge" is written in a column for a breakdown of a telephone bill sent from NTT, you may interpret the bill as indicating that you have a metal telephone.

(2) <u>To households that answered 1 to Question 2 (1):</u>
   As of April 2018, NTT planned to terminate metal telephone contracts in the beginning of 2024 while allowing the existing telephones to be used at the same cost without any modification by customers unable to quickly switch to any other services.
   Are you planning to switch from the metal telephone service to any other service?
   <u>Please circle the one best answer</u> (as planned as of September 2018).

1. Willing to continue using the metal telephone in the future (at least beyond the beginning of 2024)

2. Willing to change the contract ⟶

   (If you choose to change the contract, <u>circle an option that applies</u> among the six options from a. to f. regarding the timing for the change)

   a. Willing to change the contract in less than one year from now
   b. Willing to change the contract in one to less than two years from now
   c. Willing to change the contract in two to less than three years
   d. Willing to change the contract in three to less than four years
   e. Willing to change the contract in four to less than five years
   f. Willing to change the contract in five to less than six years

(3) <u>To households that answered 1 to Question 2 (2) (i.e.: Willing to continue using the metal telephone in the future (at least beyond the beginning of 2024)):</u>
   What are reasons for continuing using the metal telephone you now use (without cancelling the contract or switching to another service)? <u>Please circle all answers that apply.</u>

1. The metal telephone service is cheaper than any other service

2. The metal telephone service is qualitatively better than any other service

3. Willing to continue using the telephone that I use now

4. Willing to continue using the telephone number that I use now

5. Any other service is unavailable due to service area restrictions and housing conditions (including difficult modification)

6. Procedures for cancelling the metal telephone service contract or switching to any other service would take much time or be difficult to understand.

7. Have never considered cancelling the metal telephone service or switching to any other service

8. Others

(4) <u>To households that answered 1 to Question 2 (2) (i.e.: Willing to continue using the metal telephone in the future (at least beyond the beginning of 2024)):</u>
   If the fixed-line telephone service that you use now is planned to end in the future (in or after January 2024), do you think that you would have to use some other fixed-line telephone service? <u>Please circle the one best answer.</u>

1. Yes	2. No

Q3 Concerning general Internet usage

(1) Has anyone in your household used the Internet (including sending or receiving email, using social networking services, browsing Websites, online shopping, etc.) in the past year? Please circle the one best answer.

1. At least one person has used the Internet	2. No one has used the Internet

Note 1: Do not count the use of email functions, such as Short Message Service, **sending by an address without @** for "sending / receiving email".

Note 2: **Internet use includes all Internet use** irrespective of what device has been used, whether Internet has been used for public or private purposes or where Internet use has taken place.

Note 3: **Count Internet use from devices not owned by the household**, such as computers in libraries or Internet cafes.

(2) To households that answered 1 to Question 3 (1) (i.e., households with at least one Internet user):
What device or devices have the Internet user(s) used to access the Internet? Please circle all answers that apply.

1. Computers at home	6. Internet-enabled home game consoles that display video on a television or other monitor (PlayStation4, etc.)
2. Computers outside the home	7. Game consoles with built-in displays (Nintendo3DS, etc.)
3. Mobile phones (including PHS handsets)	8. Portable music players (iPod, etc.)
4. Smartphones	9. Other devices
5. Tablets	

(3) To households that answered 1, or 5 to Question 3 (2) (i.e., households where computers at home, or tablets are used): What type of connection is used to access the Internet? Please circle all answers that apply.

Wired:	Wi-Fi:	7. Mobile phone (LTE*, BWA*) (such as an iPhone 5 or newer model, whose service is named "4G," "Xi," or "WiMAX")Note 2
1. DSL* (ADSL, etc.)		8. Mobile phone (other than 7; such as an iPhone up to iPhone 4S, whose service is named "3G" or "FOMA")Note 2
2. Cable TV (CATV)*		
3. Optical fiber (FTTH)*	Others:	9. Other
4. Fixed wireless access (FWA)*		10. No Internet connection
5. Telephone (dial-up)		
6. ISDN* Note 1		

Note 1: If you use ISDN over an optical fiber connection, please circle 3 "Optical fiber (FTTH)."

Note 2: Circle 7 or 8 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.

Q4 Concerning Internet security measures

(1) To households that answered 1 to Question 3 (1) (i.e., households with at least one Internet user):
Have you taken measures against viruses or illegal access for devices that you share at home, such as computers, mobile phones, smartphones, and tablets in the past year? Please circle the one best answer.

1. Yes	2. No	3. Don't know whether the measures have been taken or not

(2) To households that answered 1 to Question 4 (1) (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.

1. Installed or updated a security program
2. Signed up to or updated a security service from a provider or mobile telecom
3. Set a password on devices to prevent illegal access from outside or illegal use by outsiders
4. Did not connect to the Internet using an unknown or unsecured source
5. Set an administrator to check for changing the setting of device or installing suspicious software
6. Other measures

Q5 Concerning losses associated with Internet use

To households that answered 1 to Question 3 (1) (i.e., households with at least one Internet user) and which used any of the following devices:
Have you suffered any of the following losses associated with Internet use in the past year?
Please circle all losses for each access device.

	Computers (used at home)	Mobile phones (including PHS handsets)	Smartphones
1. Discovered a computer virus but not infected	1	1	1
2. Discovered a computer virus and at least one incidence of an infection	2	2	2
3. Received spam / fraudulent emails	3	3	3
4. Phishing[Note 1]	4	4	4
5. Illegal access[Note 2]	5	5	5
6. Other (personal information security breach, defamation, etc.)	6	6	6
7. No losses	7	7	7

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).

Q6 Concerning the use of Internet services using television

(1) Does your household own any of the following devices? Please circle all answers that apply.
Circle "Yes" for a device connected to the Internet, "No" for a device not connected to the Internet and "Unknown" for a case in which whether a device is connected to the Internet is unknown.

	Connected to Internet or not
1. TV receiver	Yes ・ No ・ Unknown
2. DVD/Blu-ray disc recorder (adapted to digital broadcasting)	Yes ・ No ・ Unknown
3. Tuner for receiving cable TV	Yes ・ No ・ Unknown
4. Tuner for receiving Internet Protocol TV services (including Hikari TV and au Hikari)	Yes ・ No ・ Unknown
5. Own none of 1 to 4 devices	

(2) To households that circled "Yes" for any of 1 to 4 in Q6 (1)
For what purpose is the device used? Please circle all answers that apply.

1. Videophone
2. Online gaming
3. Streamed programming (Video on demand (VOD)*)
4. Obtain information related to the current program
5. Make recording settings or watch recorded programs on smartphones or tablets
6. Web use, such as Website browsing/posting, using forums, social networking services, online shopping, etc.
7. Others

(3) To households that circled "Yes" for any of 1 to 4 in Q6 (1)
Does your household have the experience of using the hybridcasting function[Note]?
Please circle the one best answer.

1. Used the hybridcasting function
2. Not used the hybridcasting function but planning to do so
3. Neither used the hybridcasting function nor planning to do so

Note: The hybridcasting function refers to a service that indicates information and contents transmitted via the Internet on the broadcast display. You can use this function by pushing the "d" button of the remote controller or by switching to the data broadcast display if your TV receiver is equipped with this function and is connected to the Internet (The word "Hybridcast" is indicated on the display when the function is on).

(4) To households that answered "1. Used the hybridcasting function " to Question 6 (3):

For which purposes do you use the hybridcasting function? Please circle all answers that apply.

1. Program customize services	4. Videophone
2. Social TV services	5. Mobile terminal cooperation
3. Program recommendation services	6. Other

Q7 Concerning the awareness of 4K TV receivers and plans to use them

(1) Does your household own a 4K TV receiver? Please circle the one best answer.

1. Owns	3. Does not own or plan to own
2. Does not own but willing to own	4. No idea about whether the TV receiver my household owns is a 4K TV receiver or not.

(2) To households that answered "2. Does not own but willing to own" or "3. Does not own or plan to own" to Question 7 (1):

What are reasons for not owning a 4K TV receiver at present? Please circle all answers that apply.

1. A 4K TV receiver is expensive	4. Have no plan to purchase any new TV receiver until replacing the receiver that I own at present
2. There are not any programs or contents that I want to watch with a 4K TV receiver	5. No idea about what a 4K TV receivers is
3. Don't feel high-definition broadcast to be attractive	

Q8 Concerning the utilization of "My Number Card"

What are purposes for which your household wants to utilize your "Individual Number Card" among the following options? Please circle all answers that apply.

1. Utilization for identification
2. Utilization for convenience store services for issuing seal registration, residence, household registration and other certificates
3. Utilization for authentication for Internet banking and other online services
4. Utilization for electronic signatures for preparing electronic files of contracts, etc.
5. Utilization for checking in to an event
6. Utilization for other private services

Q9 Concerning your household's members and income

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

people

(2) How many of the above number are children aged less than six?

people

(3) 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.

If you can respond to this survey on the Internet system display, would you like to respond via the Internet? Please circle the one best answer and specify reasons for your answer.

1. Yes	2. No	3. Don't know	(Reasons)

Household-wide questions are over. Please respond to questions for household members in the following.

<<Questions for household members>>…Questions on pages 6 to 12 are made to household members.

◎ <u>Those aged 6 or more</u> who live together with the householder may answer the following questions.

The householder may fill out answers for younger children or others who may find the questions difficult.

◎ If there are five or more household members aged 6 or more, we will send additional questionnaires. Please report to the contact on survey details specified on the cover.

Please indicate the gender and age of each household member <u>who is 6 or older</u>.
As responses without such indication are classified as invalid, be sure to make the indication.

	(Householder) A	B	C	D
Gender (circle either male or female)	Male · Female	Male · Female	Male · Female	Male · Female
Age (fill in the person's age)	___years old	___years old	___years old	___years old

======<u>All household members</u> should answer Questions 1 to 4.======

Q1 The question regards individuals' Internet use.

Have you used the Internet (including sending or receiving email, using social networking services, browsing Websites, online shopping, etc.) <u>in the past year</u>? Please circle the <u>one</u> best answer.

	A	B	C	D
1. Yes	1	1	1	1
2. No	2	2	2	2

Note 1: Do not count the use of email functions, such as Short Message Service, **sending by an address without @** for "sending / receiving email".

Note 2: **Internet use includes all Internet use** irrespective of what device has been used, whether the Internet has been used for public or private purposes or where Internet use has taken place.

Note 3: **Count Internet use from devices not owned by the household**, such as computers in libraries or Internet cafes.

Please go to Question 4 (1) on Page 8.

Q2 This question on individuals' Internet use status is for <u>those who circled "1. Yes" in Q1</u>.

(1) What are the <u>devices for your Internet use,</u> no matter whether you own them?
Please circle <u>all</u> answers that apply.

	A	B	C	D
1. Computer	1	1	1	1
2. Mobile phone (including PHS handset)	2	2	2	2
3. Smartphone	3	3	3	3
4. Tablet	4	4	4	4
5. TV receiver[Note]	5	5	5	5
6. Home game console (PlayStation4, Nintendo3DS, etc.)	6	6	6	6
7. Other devices	7	7	7	7

Note: TV receivers (option 5) includes both 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 6 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) How often do you use the Internet?
Please circle the <u>one</u> best answer.

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

(3) Where do you use the Internet?
Please circle all answers that apply.

	A	B	C	D
1. Home	1	1	1	1
2. Workplaces (including employed people who work at home and use the Internet and teachers, instructors, etc. who use the Internet at a school.)	2	2	2	2
3. Schools (including students who use the Internet in classes)	3	3	3	3
4. Public facilities (government offices, libraries, community centers, etc.)	4	4	4	4
5. Airports / train stations	5	5	5	5
6. While commuting on public transport	6	6	6	6
7. Internet cafés	7	7	7	7
8. Restaurants, coffee shops, etc. (excluding Internet cafés in option 7)	8	8	8	8
9. Hotels or other accommodations	9	9	9	9
10. Other locations	10	10	10	10

Q3 This question on purposes of Internet use is for those who circled "1. Yes" in Q1.

(1) What Internet functions or services have you used in the past year?
Please circle all answers that apply.

	A	B	C	D
1. Sending and receiving email	1	1	1	1
2. Browsing and posting on, and opening and updating of, websites and blogsites[Note]	2	2	2	2
3. Using social networking services (Facebook, Twitter, LINE, mixi, Instagram, etc.)	3	3	3	3
4. Using free calling apps or voice chat sites (Skype, LINE, etc.)	4	4	4	4
5. Using video posting / sharing sites* (Youtube, Niconico Douga, etc.)	5	5	5	5
6. Using on-demand radio, TV, and movie streaming services	6	6	6	6
7. Using online gaming	7	7	7	7
8. Entering quizzes and contests, answering questionnaires	8	8	8	8
9. Obtaining free map / traffic information services	9	9	9	9
10. Using free weather forecast	10	10	10	10
11. Using news sites	11	11	11	11
12. Using dictionary and encyclopedia sites	12	12	12	12
13. e-learning (supplementary school lectures/exercises, cram school and university lectures, language lessons, etc.)	13	13	13	13
14. Financial transactions: banking, securities, insurance, etc. transactions over the Internet	14	14	14	14
15. Buying / exchanging digital content: music, audio, video, games, etc.	15	15	15	15
16. Buying / exchanging goods and services: excluding digital content purchases and financial transactions	16	16	16	16
17. Internet auctions	17	17	17	17
18. Using e-Government, e-Local Government services: online applications, online reports, and online notifications	18	18	18	18
19. Other (using forums or web album, exchanging digital files: P2P*, etc.)	19	19	19	19

Please go to Question 3 (2) on next page.

If you circled any of the answers, please go to Question 3 (3) on next page.

Note: Websites or blogsites here include those that are opened by individuals, companies or public people.

(2) To people who circled 3 to Question 3 (1) (i.e., people who use social networking services):

    For what purposes do you use social networking services?

Please circle all answers that apply.

	A	B	C	D
1. To communicate with current friends	1	1	1	1
2. To find information on topics of interest	2	2	2	2
3. To find people who share the same interests or tastes or people with the same concerns or problems, or to broaden social relationships	3	3	3	3
4. To announce my own information or creative work	4	4	4	4
5. To gather or provide information during emergencies or disasters	5	5	5	5
6. To find old friends	6	6	6	6
7. To release stress	7	7	7	7
8. To kill time	8	8	8	8
9. Other	9	9	9	9

(3) To people who circled any of "14. Financial transactions," "15. Buying/exchanging digital content," "16. Buying/exchanging goods and services, "17. Internet auction" to Question 3 (1):

This question is to be answered only by people aged 15 or older.

What payment methods have you used when purchasing goods or making financial transactions on the Internet?

Please circle all answers that apply.

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

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

Q4 Concerning individuals' use of mobile services

(1) Do you own any of the devices listed below?

Please circle all answers that apply.

	A	B	C	D
1. Mobile phone (including PHS handsets)	1	1	1	1
2. Smartphone	2	2	2	2
3. Own neither	3	3	3	3

(2) <u>To people who circled 1 or 2 to Question 4 (1) (i.e., mobile phone or smartphone users):</u>

For a mobile terminal that you primarily use, which mobile phone service provider do you use?

<u>Please circle the one best answer.</u>

	A	B	C	D
1. Using a mobile phone (including a PHS handset) with NTT docomo, KDDI (au), Softbank or Y!mobile services	1	1	1	1
2. Using a mobile phone (including a PHS handset) with MVNO[Note] * services (such as low-cost mobile services)	2	2	2	2
3. Using a smartphone with NTT docomo, KDDI (au), Softbank or Y!mobile services	3	3	3	3
4. Using a smartphone with MVNO[Note] * services (such as low-cost mobile services)	4	4	4	4

Note: MVNOs are mobile operators other than NTT docomo, KDDI (au), Softbank and Y!mobile.

(3) <u>Concerning the mobile terminal circled in Question 4 (2).</u>

How much monthly installment <u>before consumption tax</u> do you pay for the terminal?

<u>Please circle the one best answer.</u>

	A	B	C	D
1. 1-999 yen	1	1	1	1
2. 1,000-1,999 yen	2	2	2	2
3. 2,000-2,999 yen	3	3	3	3
4. 3,000-3,999 yen	4	4	4	4
5. 4,000- yen	5	5	5	5
6. No such payment after completion of installment payments	6	6	6	6
7. No such payment after a lump-sum payment	7	7	7	7
8. No such payment after a purchase on a "no-installment, no-down payment" (0 yen in lump-sum payment) basis	8	8	8	8
9. Others	9	9	9	9
10. No idea	10	10	10	10

(4) <u>Concerning the mobile terminal circled in Question 4 (2).</u>

How much did you pay for mobile services <u>before consumption tax</u> in the latest month (excluding an installment payment for the terminal and a payment for contents)?

<u>Please circle the one best answer.</u>

	A	B	C	D
1. 0-999 yen	1	1	1	1
2. 1,000-1,999 yen	2	2	2	2
3. 2,000-2,999 yen	3	3	3	3
4. 3,000-3,999 yen	4	4	4	4
5. 4,000-4,999 yen	5	5	5	5
6. 5,000-5,999 yen	6	6	6	6
7. 6,000-7,999 yen	7	7	7	7
8. 8,000-9,999 yen	8	8	8	8
9. 10,000- yen	9	9	9	9
10. No idea	10	10	10	10

*If you use a data share plan, specify a per capita amount.

<u>Questions for those aged 11 or less are over. We thank you for responding the above questions.</u>

<u>Those aged 12 or more are asked to answer Q5 and other questions on the next page.</u>

Q5 Concerning your concerns about using the Internet

(1) Do you have concerns about security, etc. during your Internet use?

Please circle the one best answer.

	A	B	C	D
1. I'm concerned	1	1	1	1
2. Feel rather concerned	2	2	2	2
3. Feel rather unconcerned	3	3	3	3
4. I have no concerns	4	4	4	4

(2) To people who answered 1 or 2 to Question 5 (1):

What specific concerns do you have about security, etc.?

Please circle all answers that apply.

	A	B	C	D
1. Concern about leak of personal information and internet use history	1	1	1	1
2. Concern about the reliability of electronic payment means	2	2	2	2
3. Concern about computer virus infections	3	3	3	3
4. Concerned about the risk of viewing illegal or harmful information.	4	4	4	4
5. Unclear how far to take security measures	5	5	5	5
6. Concern about trouble with communication on social media, etc.	6	6	6	6
7. Concern about myself or people close to me becoming an Internet addict	7	7	7	7
8. Concern about fraudulent email or fraud using the Internet	8	8	8	8
9. Concern about receiving spam	9	9	9	9
10. Other	10	10	10	10

Q6 Implementation of security measures

(1) Have you taken any security measures for your Internet use?

Please circle the one best answer.

	A	B	C	D
1. I have taken security measures.	1	1	1	1
2. I have not taken security measures.	2	2	2	2

(2) To people who answered 1 to Question 6 (1) (i.e., people who have taken security measures):

What specific security measures do you take?

Please circle all answers that apply.

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

(3) Have you experienced any of the following when using a computer, a mobile phone, a smartphone, a tablet or a game console?

Please circle all answers that apply.

	A	B	C	D
1. Loss or theft of device	1	1	1	1
2. Infection by a computer virus	2	2	2	2
3. Receive spam / fraudulent email	3	3	3	3
4. Breach of personal information security (phone number, email address, location information, etc.)	4	4	4	4
5. Phishing[Note]	5	5	5	5
6. See ad displays or emails connected to Web browsing history	6	6	6	6
7. Other	7	7	7	7
8. None of the above	8	8	8	8

Note: 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.

Q7 Concerning personal ICT skills

Can you perform the following operations with computers, smartphones, tablets or any other terminals (irrespective of whether you have any terminals)?

Please circle all answers that apply.

	A	B	C	D
1. Copying files, copying and pasting letters and charts	1	1	1	1
2. Sending e-mails with pictures or documents being attached	2	2	2	2
3. Simple computation such as addition and subtraction using spreadsheet software including Excel	3	3	3	3
4. Preparing documents by using presentation software including PowerPoint	4	4	4	4
5. Connecting printers and cameras to computers	5	5	5	5
6. Using the Internet to download and install software	6	6	6	6
7. Exchanging data between computers and other devices (including smartphones and tablets)	7	7	7	7
8. Creating computer programs by using programming languages	8	8	8	8
9. Can't perform any of Operations 1 to 8	9	9	9	9

Questions for those aged less than 15 are over. We thank you for answering the above questions.

=========Question 8 is for those aged 15 or more only.=========

Q8 Engagement in telework

(1) Do you work for a company or other organization (including a public organization or association but excluding a self-employed business)?

Please circle the one best answer.

	A	B	C	D
1. Yes	1	1	1	1
2. No	2	2	2	2

(2) <u>To people who answered 1 to Question 8 (1):</u>

Have you engaged in Telework [Note 1] using the Internet in the past year?

<u>Please circle all answers that apply.</u>

	A	B	C	D
1. Engaged in Telework at home	1	1	1	1
2. Engaged in Telework at a satellite office[Note 2]	2	2	2	2
3. Engaged in Telework while out of office (mobile work[Note 3])	3	3	3	3
4. Not engaged in Telework	4	4	4	4

Note 1: Telework refers to working at a location different from the primary location of work.
Note 2: "Satellite office" refers to an office space located in a place different from the primary location of work.
Note 3: "Mobile work" refers to working while out of office for the purpose of sales and other activities.

(3) <u>To people who answered 4 to Question 8 (2):</u>

Would you like to engage in Telework? <u>Please circle the one best answer.</u>

	A	B	C	D
1. Would strongly like to engage in Telework	1	1	1	1
2. Would rather like to engage in Telework	2	2	2	2
3. Would rather not like to engage in Telework	3	3	3	3
4. Would not like to engage in Telework	4	4	4	4

(4) <u>To people who answered 1 or 2 to Question 8 (3):</u>

Why do you not engage in Telework using the Internet? <u>Please circle all answers that apply.</u>

(Employer-side reasons)

	A	B	C	D
1. There is not a Telework system at the employer	1	1	1	1
2. The employer cannot make adequate labor management	2	2	2	2
3. Work is not suited to Telework	3	3	3	3
4. The atmosphere at the employer is not favorable for Telework	4	4	4	4
5. It is unclear whether Telework is allowed at the employer	5	5	5	5
6. Others	6	6	6	6

(External or environmental reasons)

	A	B	C	D
7. The Telework business environment (including satellite offices) has not been developed.	7	7	7	7
8. There is no adequate ICT systems required for Telework	8	8	8	8
9. Others	9	9	9	9

◎ 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.

Finally, please confirm whether each respondent's gender and age are specified on Page 6 of the questionnaire.

*<u>If each respondent's gender or age is not specified, the response may be invalid.</u>

<u>Please make sure to enter such information.</u>

Glossary

Refer to the following explanations of the words marked * in the questionnaire

Index	Term	Definition
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 (UQ WiMAX from UQ Communications) and AXGP from Wireless City Planning.
C	Cable TV (CATV)	Refers to the application of cable TV cabling for Internet access.
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.
F	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	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.
	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	LTE	Short for Long Term Evolution. Also called 4G, LTE is a mobile communication standard for high-speed data communications. Examples include Xi from NTT docomo, 4G LTE from au and Softbank 4G LTE from Softbank.
M	MVNO	Short for Mobile Virtual Network Operator. It is an operator that provides its own mobile services by leasing networks from a mobile operator with a government license to use a radio frequency, instead of acquiring such a licensee on its own. In this survey, MVNOs are mobile operators other than NTT docomo, au, Softbank and Y!mobile.
O	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.
P	P2P	Short for Peer to Peer. P2P is the sharing of files between many computers via the Internet.
V	VOD	Short for Video On Demand. VOD is a service that steams video content as instructed by the user.

Please respond to the survey by Friday, December 21, 2018.

Ministry of Internal Affairs and Communications

2018 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.

(affix address label here)	Department / section of the respondent	
	Name of the respondent	
	Contact phone number	

Please note the following before completing the survey.

1 Please give answers reflecting the situation at your company **on September 30, 2018**, except where noted otherwise.

2 Submit the completed survey to: Economic Research Office, Information and Communications Bureau,
　　　　　　　Ministry of Internal Affairs and Communications (MIC)
　　　　　　　2nd Bldg. of the Central Common Government Office, 2-1-2 Kasumigaseki,
　　　　　　　Chiyoda-ku, Tokyo 100-8786, Japan

　　*The survey form may also be obtained and submitted online.

　　　　For detailed information, please look at "Request for cooperation" enclosed herein.

3 If you have any questions, please contact the survey firm at:
　　"Communications Usage Trend Survey" Secretariat,
　　Public Opinion Research Center (contracted by MIC)
　　4-8-6 Sendagaya, Shibuya-ku, Tokyo 151-8509, Japan
　　Tel.: 0120-XXX-XXX (toll free) (Between 10:00 and 17:00, on weekdays)

4 The Ministry of Internal Affairs and Communications has contracted the survey firm above to conduct this survey.

5 Regarding words marked *, refer to the attached "Guide to fill in the questionnaire" as necessary.

Q1 Please answer questions about Internet connection at your company

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

1. Telephone (dial-up)	6. BWA access service*
2. ISDN* Note	7. DSL*
3. Cable TV*	8. Leased line*
4. Optical fiber* (FTTH)	9. Other
5. Fixed wireless access (FWA)*	10. No Internet access

Note: If you use ISDN over an optical fiber connection, please circle 4 "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

(2) **To companies that answered 1 to Question 2 (1)** (i.e. companies that have a Website):

Japan has established the JIS standard on the accessibility of Web contents (JIS X 8341-3:2016） to make Websites accessible for everyone, including elderly people and persons with disabilities. Regarding your company's initiatives for the accessibility of Web contents, **please circle the one best answer.**

1. We have conformed to the standard (including relevant international standards, hereinafter the same applies).

   (Please circle one of the two conformity levels ➡ a. Conformity level at AA or higher　b. Conformity level at A)

2. We have failed to conform to the standard, or have implemented initiatives to conform to the standard while remaining unaware of whether we conform to the standard.

3. We have implemented some accessibility initiatives that are not necessarily designed to conform to the standard.

4. We are aware of the standard or what the accessibility is, but have implemented no relevant initiatives.

5. We had not been aware of the standard or what the accessibility is.

(3) Does your company use private social media^Note services? **Please circle the one best answer.**

1. Yes	2. No

(Note) Social media cover social networking services, blogs, video-sharing sites, etc.

(4) **To companies that answered 1 to Question 2 (3)** (i.e. companies that use social media services):

For what purpose or application do you use social media? **Please circle all answers that apply.**

1. Publicize / promote products or events
2. Marketing (excluding introduction or advertisement of goods or events)
3. Provide periodic information
4. Company profile / recruiting
5. Accept applications or notifications
6. Electronic public notices and financial statements
7. Collect consumers' ratings and opinions
8. Other

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

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

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

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*.

(2) To companies that answered "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)
2. E-store (store in an e-mall)
3. Sales broker
4. Online trading
5. Other

(3) Does your company use Internet advertising? **Please circle the one best answer.**

1. Yes	2. No

(4) **To companies that answered 1 to Question 3 (3):**
To what medium do you give priority for advertisement? **Please circle all answers that apply.**

1. Internet (Website, etc.)	3. Mail (mail magazines, DM ad, etc.)
2. Internet (Web ads, etc.)	4. SNS services (Twitter, Facebook, etc.)

Q4 The following questions concern your company's use of cloud computing.

(1) Does your company use cloud computing (the cloud)^Note? **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 allows users to use servers, applications, etc. in the network via the Internet. An example is software as a service* (SaaS) provided by application service providers* (ASP).

Companies that answered 1 or 2 to Question 4 (1) are asked to respond to Question 4 (2)-(4).

(2) Which specific cloud computing services does your company use? **Please circle all answers that apply.**

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

(3) Why do you use cloud computing services? **Please circle all answers that apply.**

1. Costs are lower than existing systems	6. Offered by system vendor
2. No need to have internal asset and storage systems	7. Improve operational stability and availability
3. Quick response capability, such as upgrading system capacity	8. The Same services are available irrespective of location or equipment
4. Easy system scalability	9. Useful as a backup at the time of disaster
5. Reliability of services and security against information leaks are high	10. Other

(4) 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	

(5) To companies that answered 4 to Question 4 (1):

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

Q5 The following question concerns your company's introduction of telework.

(1) Has your company introduced Telework[Note]? **Please circle the one best answer.**

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

1. Have introduced Telework   (a Working from home   b Satellite office work   c Mobile work)

2. Not introduced, but have plans to introduce telework

3. Not introduced, and have no 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. Specific Telework types include the following:

Working from home	Including partial telework in which the worker goes to the office, calls on customers or attend meetings and uses part of daily work hours for working from home.
Satellite office work	Working at telework facilities such as a share office, a coworking space and offices outside the office to which the worker belongs.
Mobile work	Working outside the office for sales and other business operations. In a mobile work type, a salesperson conducts business operations such as emailing and daily report preparation on public transportation, or at stations, cafes, etc. without returning to the office.

Companies that answered 1 to Question 5 (1) are asked to respond to Question 5 (2)-(4).

(2) What percentage of your employees use Telework? **Please circle the one best answer.**

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

(3) What were the purposes of introducing Telework at your company? **Please circle all answers that apply.**

1. Raise efficiency (productivity) of routine business processes	7. Secure employment, prevent personnel losses
2. Improve creativity of creative, value-added business processes	8. Address employees with commuting difficulties (persons with disabilities, elderly persons, nursing/child-rearing persons, etc.)
3. Provide healthy, comfortable lives for workers	9. Counter global warming by lowering CO_2 emissions through transportation alternatives
4. Reduce office costs	10. Conserve energy and electricity
5. Reduce workers' travel times	11. Prepare for business continuity in the event of emergencies (earthquakes, super-flu outbreaks, etc.)
6. Increase customer satisfaction	12. Other

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	

(5) **To companies that answered 3 to Question 5(1):**

Please circle all reasons why you have not introduced Telework?

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

(6) What does your company think are factors required for diffusing rural Telework[Note]?
Please circle all answers that apply.

<Inhouse measures>

1. Labor management improvement	3. ICT system improvement
2. Business environment development	4. Other

<National and local government measures and support>

5. Telework diffusion and encouragement campaigns (seminars, leaflets, etc.)	8. Supporting the development of satellite offices and other business bases
6. Supporting/subsidizing companies introducing telework	9. Supporting the operation of satellite offices and other business bases
7. Matching between companies and local governments accepting them	10. Training Teleworkers (seminars, training, etc.)
	11. Other support measures by national or local governments

Note: Rural telework uses rural satellite offices, etc. for doing urban business operations.

Q6 The following questions concern how to train and secure ICT human resources

(1) Does you company have enough ICT human resources? **Please circle the one best answer.**

1. Enough	2. Not enough	3. No such human resources are required	4. Don't know

Note: ICT stands for Information and Communications Technology and has the same meaning as IT.

What human resources are short at your company? **Please circle all answers that apply.**

1. Network engineers	5. IoT system engineers at user companies
2. System development engineers	6. IoT system and other security engineers
3. Data scientists[Note 1]	7. Others
4. SDN/NFV (Software Defined Network/Network Function Virtualization) human resources[Note 2]	

Note 1: Data scientists are data analysis specialists who can not only collect and process inhouse data but also select useful knowledge among the data and take advantage of such knowledge for making business decisions.
Note 2: SDN (Software Defined Network) and NFV (Network Function Virtualization) human resources include engineers who design software-based network services and install software.

(3) **To companies that circled 2 to Question 6(1):**

What measures has your company taken to secure ICT human resources? **Please circle all answers that apply.**

1. Employment of new Japanese graduates	6. Outsourcing (domestic)
2. Employment of experienced Japanese	7. Outsourcing (overseas)
3. Employment of new foreign graduates	8. Crowdsourcing[Note]
4. Experienced foreigners	9. Development of flexible work styles including Telework (to maintain employment or prevent employees from leaving jobs)
5. Inhouse human resources training	10. Other

Note: Crowdsourcing means a system for using ICT for getting necessary human resources in a timely manner.

Q7 The following questions ask companies that use ICT networks (intranets, inter-company networks*, the Internet, etc.) about their security measures.

(1) Has your company experienced any of the following cyberattacks in the past year? **Please circle all answers that apply.**

1. Have received targeted emails[Note 1]	6. DoS (DDoS) attack[Note 4]
2. Discovered a computer virus* but not infected	7. Website defacement
3. There was at least one incidence of a computer virus infection	8. Data breach due to theft or negligence
4. Illegal access[Note 2]	9. Other losses
5 Used as a spam[Note 3] bot or zombie	10. No particular losses

Note 1: Targeted email, which often has virus attachments, is sent to a specific organization or person with the objective of stealing confidential information.
Note 2: 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 3: Email sent in massive volumes indiscriminately without regard for any attribute the recipients.
Note 4: 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) **To companies that answered 1 to Question 7 (1):**
What happened as a result of receiving targeted emails? **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

(3) 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, etc.
3. Install anti-virus programs on servers	10. Install and maintain intrusion detection systems (IDS)[Note 2]
4. Apply security patches[Note 1] 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)*
6. Enhance access controls for servers and other devices that store sensitive data	13. Other measures
	14. No particular measures
7. Maintain access logs	

Note 1: A program distributed to repair another software program when a security hole is discovered in the program.
Note 2: Includes intrusion protection systems (IPS).

(4) What measures has your company taken for data security and anti-virus protection on ICT networks? **Please circle all answers[Note 1] that apply.**

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

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).

(5) Does your company plan to increase inhouse security personnel? **Please circle all answers that apply.**

1. CISO (Chief Information Security Officer), etc.[Note 1]	5. Incident response personnel[Note 2]
	6. CSIRT (Computer Security Incident Response Team) and SOC (Security Operation Center) personnel[Note 3]
2. System division manager	
3. System manager	7. Other human resources
4. System operator	8. No plan to do so

Note 1: Including CISO (Chief Information Security Officer）
Note 2: Personnel who can respond to security incidents
Note 3: The CSIRT is a team to respond to computer security incidents such as information leaks and other losses from cyberattacks.

Q8 The following questions concern data collection/utilization at your company.

(1) In recent years, the collection or analysis of digital data has made it possible to create new values or solve problems. Has your company introduced IoT[Note] or AI systems or services to collect or analyze digital data?
Please circle the one best answer.

1. Have introduced	3. Have not introduced
2. Have not introduced, but are planning to introduce	4. Don't know

Note: IoT here means a technology that connects various things (including computers, smartphones, tablets and other information and communications equipment, as well as sensors in general, office equipment, electrical appliances, industrial machines, cars, etc.) with the Internet, LAN and other networks to digitalize their data for collection and accumulation.

(2) **To companies that answered 1 to Question 8 (1):**

What are purposes of digital data collection and analysis? **Please circle all answers that apply.**

1. Improvement of business efficiency/operations	4. New business projects/management
2. Business continuity	5. Improvement of customer services
3. Overall optimization of business operations	6. Others

(3) **To companies that answered 1 to Question 8 (1):**

What are components of AI or IoT systems or services that your company has introduced? **Please circle all answers that apply.**

1. Smart meters[Note 1], energy management systems	4. Non-contact IC cards	7. Surveillance cameras
2. Physical security devices[Note 2]	5. Sensors (temperature, pressure and other sensors)	8. Cellular modules for automobiles[Note 3]
3. Electronic tags (RFID tags)	6. Industrial robots	9. Others

Note 1: Smart meters are power management devices that measure electricity consumption digitally and have communication functions.

Note 2: Physical security devices are components of access control and video monitoring systems (including IC card verification devices, biometric identification devices and surveillance/security cameras)

Note 3: Vehicle-mounted wireless modules for connecting vehicles with networks

(4) Have systems or services <u>chosen in Question 8 (2)</u> been effective for attaining the purposes of their introduction?
Please circle the one best answer.

1. Very effective	3. Unchanged	5. No idea about any effect
2. Somewhat effective	4. Negative effect	

(5) **To companies that answered 3 to Question 8 (1):**

What are reasons for refraining from introducing AI or IoT systems? **Please circle all answers that apply.**

1. Communications infrastructure for the IoT or AI introduction is insufficient.	4. The IoT or AI introduction and operation would be very high.
2. Legal infrastructure for the IoT or AI utilization and introduction is insufficient.	5. There are no human resources to effectively use IoT or AI systems.
3. Business models after the IoT or AI introduction are uncertain.	6. Systems or services to introduce are not decided.
	7. Others

Q9 The following questions concern personal data utilization at your company.

(1) Does your company utilize or plan^{Note} to utilize personal data (customer information, registered information, etc.) for developing and providing services? **Please circle the one best answer.**

Note: Data utilization in this question includes data provision to other companies (third parties).

1. Already utilizing positively	4. No plan to utilize
2. Utilizing to some extent	5. No idea
3. Not utilizing but considering utilizing	

(2) **To companies that answered 1, 2 or 3 to Question 9 (1):**
For what purposes does your company utilize or want to utilize personal data?
Please circle all answers that apply.

1. Inhouse utilization for expanding or enhancing existing business operations and models
(In all business stages including product planning, production, distribution/sales and after-sale services)

2. Inhouse utilization for creating new business operations and models (within the industry or sector to which your company belongs)
(In all business stages including product planning, production, distribution/sales and after-sale services)

3. Inhouse utilization for creating new business operations and models (to expand into other industries, sectors or layers)
(In all business stages including product planning, production, distribution/sales and after-sale services)

4. Providing data to other companies (selling data, etc.)

5. Others

(3) **Please circle all answers that apply** about challenges and obstacles assumed at present and for the future regarding the treatment and utilization of personal data.

1. The definition of personal data is unclear (It is difficult to decide if specific data are persona data or not)

2. Personal data collection and management costs are increasing

3. Incident risks and social responsibilities regarding personal data management are great (data leaks, etc.)

4. Reputation risks accompanying personal data treatment (repercussion from consumers even if legal problems are not involved, etc.)

5. Lack of personal data utilization methods in business operations, unclear cost-effectiveness

6. Shortage of human resources for treating (processing, analyzing, etc.) data

7. Others

8. No particular challenge or obstacle

Q10 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?

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

Q11 The following questions concern the administrative sector's measures required for promoting companies' ICT utilization.

(1) What measures does your company want national and local governments to take?

Please circle all answers that apply.

1. Online administrative procedures
2. Opening national government data
3. Opening local government data
4. Developing data distribution infrastructure (information banks, etc.)
5. Resolving the digital divide
6. Developing system standards, etc.
7. Securing consistency between national and local government measures
8. Training and securing human resources
9. Promoting "My Number Card" diffusion
10. Improving ICT user protection and information literacy

(2) **To companies that answered 2 and/or 3 to Question 11 (1):**

What kind of data does your company want national or local governments to open?

Please circle all answers that apply.

1. Maps, land features, geology
2. Transportation
3. Disaster prevention
4. Crime prevention
5. Urban planning/construction
6. Healthcare, nursing care, welfare
7. Statistical data
8. Environment/energy
9. Tourism
10. Education
11. Various public facilities
12. Others

(3) **To companies that answered 2 and/or 3 to Question 11 (1):**

What measures does your company think should be taken by national or local governments to enable ordinary people to easily utilize open data on the Internet? **Please circle all answers that apply.**

1. Improving data accuracy
2. Improving data-updating schedules and frequency
3. Implementing secondary data utilization rules allowing data to be freely edited or processed
4. Publishing data in machine-readable formats to enable processing through automatic cooperation of data
5. Others

Q12 Concern general aspects of your company

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[Notes1,2]** of your company? Please indicate your annual sales to **the nearest million yen**.

							Million yen

Note 1: Please enter your FY 2017 sales (the year April 2017 through March 2018). 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[Notes1,2]** of your company? Please indicate your operating profit to **the nearest million yen**.

							Million yen

Note 1: Please enter your FY 2017 operating profit (the year April 2017 through March 2018). 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[Note]** of your company? Please indicate your labor costs to **the nearest million yen**.

							Million yen

Note: Please enter your FY 2017 labor costs (the year April 2017 through March 2018). If this is difficult to calculate, please enter the most recently calculated annual labor costs.

F5   What are the **deprecation costs**^{Note} of your company? Please indicate your deprecation costs to **the nearest million yen.**

								Million yen

Note: Please enter your FY 2017 deprecation costs (the year April 2017 through March 2018). If this is difficult to calculate, please enter the most recently calculated annual deprecation costs.

F6   What is the **amount of** your company's **fixed assets**^{Note}? Please indicate your deprecation costs to **the nearest million yen.**

								Million yen

Note: Please fill in the amount of fixed assets as of the end of FY 2017. If it is difficult to identify the amount as of the end of FY 2017, please fill in the amount as of the end of the most recent fiscal year for which the figure is available.

F7   How many **full-time employees**^{Note} does your company have?

					employees

Note: Full-time employees: This is the number of full-time employed people at your company as of September 1, 2018 or the nearest payroll deadline date. Full-time employed people are those employed indefinitely or for one-month or longer definite periods irrespective of whether they are called full employees, regular employees, part-timers, temporary employees, non-regular employees or contract employees.

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

Would you like to respond to this survey online (via the Internet)? **Please circle the one best answer.**

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

Specify reasons for your answer.

(Reasons)

◎ **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

Refer to the following explanations of the words marked * in the questionnaire

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 (UQ WiMAX from UQ Communications) and AXGP from Wireless City Planning.
C	Cable TV (CATV)	Refers to the application of cable TV cabling for Internet access.
D	DSL	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.
F	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	Inter-company network	Refers to a communication network that connects to another or other companies.
	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.
	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	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 (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.
P	Protocol	A protocol is a set of predetermined conventions that allows computers to communicate via a network.

S	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.
	SPF	Short for Sender Policy Framework. SPF is a technology that prevents falsification of an email sender's address.