Government Statistics

Ministry of Internal Affairs and Communications

2019 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.

–   –

Please note the following before completing the survey.

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

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

3. Please give answers reflecting the situation in your household on September 30, 2019.

4. 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.

5. 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)

   Take care not to misdial.

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

<<Household-wide questions>> Questions on pages 1 to 3 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 13 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.)

1. Fixed-line telephones	9. Computers
2. Fax machines	10. Wearable devices (glasses-type, watch-type information devices, etc.)
3. TV receivers	
4. Radios (including 5.)	11. Internet-enabled home game consoles (PlayStation4、Nintendo Switch, etc.)
5. Wide FM radios*	
6. Mobile phones (includes PHS handsets)	12. Internet-enabled portable music players (iPod, etc.)
7. Smartphones	13. Appliances available for internet connection (Cooking heaters, refrigerators, etc.)
8. Tablets (iPad, Galaxy Tab, etc.)	14. Others

Q2 Here is a question about internet connection lines.

Which lines do your household use for connecting to the internet at home? **Please circle <u>all</u> answers that apply.**

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

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.

Q3 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} (including "black telephone")? Please circle the <u>one</u> best answer.**

Note: The metal telephone means a subscribed telephone or an ISDN (Integrated Service Digital Network) telephone provided by NTT East or West. (Fixed-line telephones other than a metal telephone include a cable TV telephone, a fiber-optic IP (Internet Protocol) telephone and an IP telephone with a number beginning with 050.)

Check a telephone bill sent from NTT East or West to confirm whether you have a metal telephone. If "connection fee (basic fee)," "direct dialing charge" or INS (Information Network System) call charge" is written in a column for a breakdown of the telephone bill, you may interpret the bill as indicating that you have a metal telephone.

1. Yes	2. No

(2) **To households that answered 1 to Question 3 (1):**

Are you planning to switch from the metal telephone to any other fixed-line telephone (a cable TV telephone, a fiber-optic IP telephone or an IP telephone with a number beginning with 050)? **Please circle the <u>one</u> best answer** (as planned as of September 2019).

1. Switching to a fixed-line telephone other than a metal telephone →
   (circle <u>an option</u> that applies among the three options from a. to c. 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 three years from now
   c. Willing to change the contract in three to less than five years

2. Willing to continue using the metal telephone in the future
3. Canceling a fixed-line telephone contract

(3) **To households that answered 2 to Question 3 (2) (i.e.: Willing to continue using the metal telephone in the future):**

What are reasons for continuing using the metal telephone you now use? **Please circle <u>all</u> answers that apply.**

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
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

Q4 Concerning the use of internet services using television

(1) Does your household own any of the following devices? Please circle all answers that apply.

As for whether a device is connected to the internet, circle any answers that apply.

	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 Q4 (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 content transmitted via the internet on the display. If "Hybrid cast" is displayed on the screen when you push the "d" or "data broadcast" button on your remote TV controller, the hybrid casting function is available.

Q5 Concerning an environment for receiving 4K/8KSuper Hi-Vision satellite broadcasting signals

On December 1, 2018, the new 4K/8K Super Hi-Vision satellite broadcasting (Note 1) was launched. Which 4K or 8K broadcast programs (Note 2) are available for viewing at your household at present? **Please circle all answers that apply.**

(This question is designed to check the TV viewing environment at your home. **Irrespective of whether you view new 4K/8K satellite broadcast programs**, answer whether each of the following is available for viewing (Note 3).)

1. 4K programs "NHK BS4K"	3. 8K programs "NHK BS8K"
2. 4K programs "Shop Channel 4K" or "4K QVC"	4. None are available for viewing

Note 1: Special receivers are required for viewing new 4K/8K satellite broadcast programs, including TVs with built-in 4K/8K tuners, external 4K/8K tuners and 4K/8K set-top boxes. These receivers, excluding some, are accompanied by remote controls with 4K/8K buttons.
Note 2: "NHK BS1," "NHK BS Premium," "Shop Channel" or "QVC" does not represent 4K/8K broadcast programs.
Note 3: Display a television schedule and check if any program in the schedule is available for viewing.

Q6 Concerning your household's members and income

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

	(children aged less than six)
people	people

(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	

◎ **Those aged 6 or more** 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 who is 6 or older.
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

Q1 The question regards individuals' internet use.

Have you used the internet (including sending or receiving email, searching information, using social networking services, browsing Websites, online shopping, etc.) in the past year? Internet use includes use through devices at a workplace or school.

Please circle the one best answer.

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

Note 1: 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 2: "Sending or receiving email" excludes Short Message Service (using telephone numbers).

Please go to Question 4

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

(1) **What are the <u style="color:red">devices for your internet use,</u> no matter whether you own them?**

Please circle **all** 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, Nintendo Switch, 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.

(2) **How often do you use the internet?**

Please circle the **one** 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. While commuting on public transport	5	5	5	5
6. Hotels or other accommodations / Restaurants, coffee shops, etc.	6	6	6	6
7. Other locations	7	7	7	7

Q3 This question on purposes of internet use is for <u>those who circled "1. Yes" in Q1</u>.

(1) **What internet functions or services have you used <u>in the past year</u>?**

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	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 online gaming	6	6	6	6
7. Searching information (Using weather forecast, news sites, map / traffic information services)	7	7	7	7

	A	B	C	D
8. e-learning (supplementary school lectures/exercises, language lessons, etc.)	8	8	8	8
9. Financial transactions: banking, securities, insurance, etc. transactions over the internet	9	9	9	9
10. Buying / exchanging goods and services (excluding digital content)	10	10	10	10
11. Buying / exchanging digital content	11	11	11	11
12. Buying and other transactions on internet auction and flea market applications	12	12	12	12
13. Using e-Government, e-Local Government services: online applications, online reports, and online notifications	13	13	13	13
14. Other (using forums or web album, etc.)	14	14	14	14

(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 (SNS)?
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 expand exchanges	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 kill time	7	7	7	7
8. Other	8	8	8	8

(3) **To people who circled any of "9. Financial transactions," "10. Buying/exchanging goods and services," "11. Buying/exchanging digital content," "12. Buying and other transactions on internet auction and flea market applications" 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 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 4 (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

Q5 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 5 (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. Check terms and conditions and use only reliable applications	5	5	5	5
6. Set a password lock on my devices	6	6	6	6
7. Refrain from entering personal information	7	7	7	7
8. Do not connect to unknown Wi-Fi networks	8	8	8	8
9. Other	9	9	9	9

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

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 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.

Q6 Concerning personal ICT skills

Can you perform the following operations with computers, smartphones, tablets or any other 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)	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

Q7 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) **To people who circled 1 or 2 to Question 7 (1) (i.e., mobile phone or smartphone users):**

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

Please circle the one best answer.

		A	B	C	D
Mobile phone (including a PHS handset)	1. Using a mobile phone with NTT docomo, KDDI (au), Softbank or Y!mobile services	1	1	1	1
	2. Using a mobile phone with MVNO[Note] * services (such as low-cost mobile services)	2	2	2	2
Smartphone	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) Concerning the mobile terminal circled in Question 7 (2):

How much monthly installment before consumption tax do you pay for the terminal?

Put relevant figures in the box or circle a relevant alternative.

	A	B	C	D
1. ☐ Thousand yen or more *Put "0" if the amount is less than 1,000 yen.				
2. No such payment after completion of installment payments	2	2	2	2
3. No such payment after a lump-sum payment	3	3	3	3
4. No such payment after a purchase on a "no-installment payment" (0 yen in lump-sum payment) basis	4	4	4	4
5. Others	5	5	5	5
6. No idea	6	6	6	6

(4) Concerning the mobile terminal circled in Question 7 (2):

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

Put relevant figures in the box or circle a relevant alternative.

	A	B	C	D
1. ☐ Thousand yen or more *Put "0" if the amount is less than 1,000 yen.				
2. No idea	2	2	2	2

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

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

Q8 Engagement in telework

(1) **To employees at businesses, etc. (including public orgnizations and groups), excluding individual business owners, among those who answered "1. Yes" to Question 1 (all internet users):**

Have you engaged in telework Note 1 using the internet in the past year?

Please circle all answers that apply.

	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.

(2) **To people who answered 4 to Question 8 (1):**

Would you like to engage in telework?

Please circle the one best answer.

	A	B	C	D
1. Would like to engage in telework	1	1	1	1
2. Would not like to engage in telework	2	2	2	2

(3) To people who answered 4 to Question 8 (1):

  Why do you not engage in telework using the internet?

Please circle all answers that apply.

	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. Impedes office / internal communications	4	4	4	4
5. The atmosphere at the employer is not favorable for telework	5	5	5	5
6. It is unclear whether telework is allowed at the employer	6	6	6	6
7. Have not moved to digital documents	7	7	7	7
8. The telework business environment (including satellite offices) has not been developed.	8	8	8	8
9. There is no adequate ICT systems required for telework	9	9	9	9
10. Others	10	10	10	10

<Questionnaire> The following question concerns the answering method for this survey. (The householder or the like should answer this question)

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)

＊If each respondent's gender or age is not specified on Page 3, the response may be invalid. Please make sure to enter such information.

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

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.

W	Wide FM radio	An FM radio receiver that can receive radio signals of a frequency of 90 megahertz or more except in some areas.
		○ Wide FM radio signals can be received ✕ Wide FM radio signals cannot be received
		FM 76 80 86 90 95 108 MHz FM 76 80 82 84 86 90 MHz

Ministry of Internal Affairs and Communications

2019 Communications Usage Trend Survey Form <<For Businesses>>

Government
Statistics

◎ 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, 2019**, 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) Take care not to misdial.

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)."
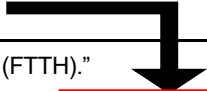
Q2 The following questions concern your company's provision of information via the internet.

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

1. Yes	2. No

Japan has established the <u>JIS standard</u> on the accessibility of Web content (<u>JIS X 8341-3:2016</u>) to make Websites accessible for everyone, including elderly people and persons with disabilities.

Regarding your company's initiatives for the accessibility of Web content, <u>please circle the **one** best answer</u>.

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.

Q3 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.**

   Note: cloud computing services include SaaS* (Software as a Service) provided by application service providers (ASPs)*

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

(2) <u>**To companies that answered 1 or 2 to Question 3 (1):**</u>

Which specific cloud computing services does your company use? <u>Please circle **all** answers that apply.</u>

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

(3) <u>**To companies that answered 1 or 2 to Question 3 (1):**</u>

Why do you use cloud computing services? <u>Please circle **all** answers that apply.</u>

1. Costs are lower than existing systems	6. Improve operational stability and availability
2. No need to have internal asset and storage systems	7. The same services are available irrespective of location or equipment
3. Quick response capability, such as upgrading system capacity	8. Useful as a backup at the time of disaster
4. Easy system scalability	9. Other
5. Reliability is higher (information leakage countermeasures, etc.)	

(4) **To companies that answered 1 or 2 to Question 3 (1):**

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 3 (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
2. Cloud services would hinder corporate compliance
3. Increase in communication costs
4. Cannot customize applications to suit needs
5. Concerns about network stability

6. Information theft and other security concerns
7. No legal system in place
8. Not necessary
9. Do not see the advantages, not convinced by the advantages
10. Other

Q4 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	"Working from home" includes not only full homeworking but also "partial homeworking" in which a worker works at home after going to the office or while visiting customers or attending business meetings.
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.

(2) **To companies that answered 1 to Question 4 (1):**

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

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

1. Raise efficiency (productivity) of business processes
2. Improve creativity of business processes
3. Improve workers' work-life balance
4. Reduce long working hours
5. Reduce office costs
6. Shorten workers' traveling time and avoid congestion
7. Increase customer satisfaction
8. Secure employment, prevent personnel losses
9. Meet needs of employees including persons with disabilities, elderly persons and those engaging in nursing care or childcare
10. Conserve energy and electricity
11. Prepare for business continuity in the event of emergencies (earthquakes, typhoon, heavy snow, super-flu outbreaks, etc.)
12. Other

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

What has been the overall impact of telework on the purposes given in Question 4 (3)? Please circle the one best answer.

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

(5) To companies that answered 3 to Question 4 (1):

Please circle all reasons why you have not introduced telework?

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

(6) To companies that answered 1, 2 or 3 to Question 4 (1):

What factors are required for diffusing telework further? Please circle all answers that apply.

<Inhouse initiatives>

1. Improving labor management
2. Improving work environment
3. Upgrading information and communication systems
4. Others

<National or local government initiatives or support>

5. Telework diffusion and enlightenment campaigns (holding seminars, distributing leaflets, etc.)
6. Support or subsidies for businesses adopting telework
7. Matching between businesses and local governments hosting business locations
8. Support for developing satellite offices and other telework facilities
9. Support for operating satellite offices and other telework facilities
10. Training personnel for regional diffusion of telework (holding seminars and training programs, etc.)
11. Others

Q5 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) 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	13. Encrypt data or networks
4. Training for employees	14. Line monitoring
5. Install anti-virus programs on computers and other devices (operating system, software, etc.)	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).

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.

(2) <u>To companies that circled 2 to Question 6(1):</u>

What human resources are short at your company? <u>Please circle all answers that apply.</u>

1. Network engineers	5. IoT[Note3] 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.

Note 3: 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.

(3) <u>To companies that circled 2 to Question 6(1):</u>

What measures has your company taken to secure ICT human resources?
<u>Please circle all answers that apply.</u>

1. Recruiting new graduates	5. Inhouse human resources training
2. Recruiting mid-career workers	6. Crowdsourcing[Note]
3. Outsourcing (domestic)	7. Development of flexible work styles including telework (to maintain employment or prevent employees from leaving jobs)
4. Outsourcing (overseas)	8. Other

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

Q7 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 or AI systems or services to collect or analyze digital data? <u>Please circle the one best answer.</u>

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

<u>Please go to Question 7 (5) on next page.</u>

(2) <u>To companies that answered 1 to Question 7 (1):</u>

What are purposes of digital data collection and analysis? <u>Please circle all answers that apply.</u>

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) <u>To companies that answered 1 to Question 7 (1):</u>

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	8. Cellular modules for automobiles[Note 4]
2. Physical security devices[Note 2]	5. Sensors[Note 3]	9. OCR[Note 5]
3. Electronic tags (RFID tags)	6. Industrial robots	10. Others
	7. Surveillance cameras	

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: Sensors are devices that sense temperatures, pressure, locations, etc.
Note 4: Vehicle-mounted wireless modules for connecting vehicles with networks
Note 5: OCRs are devices that convert written text information on paper into electronic data.

(4) **Have systems or services <u>chosen in Question 7 (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) <u>To companies that answered 3 to Question 7 (1):</u>

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

Q8 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) <u>To companies that answered 1, 2 or 3 to Question 8 (1):</u>

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[Note]
2. Inhouse utilization for creating new business operations and models[Note]
3. Providing data to other companies (selling data, etc.)
4. Others

Note: In all business stages including product planning, production, distribution/sales and after-sale services

(3) **To companies that answered 1, 2 3, 4 or 5 to Question 8 (1):**

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. It is difficult to decide if specific data are persona data or not	5. Unclear cost-effectiveness
2. Personal data collection and management costs are increasing	6. Shortage of human resources for treating (processing, analyzing, etc.) data
3. Risks accompanying personal data treatment (data leaks, etc.)	7. Others
4. Risks accompanying personal data treatment (repercussion from consumers, etc.)	8. No particular challenge or obstacle

Q9 The following questions concern the administrative sector's measures required for promoting companies' ICT utilization.

(1) **Circle all relevant answers regarding roles you ask the national or local governments to play.**

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

(2) **To companies that answered 2 and/or 3 to Question 9 (1):**

What kind of data does your company want national or local governments to open?
Please circle all answers that apply.

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

(3) **To companies that answered 2 and/or 3 to Question 9 (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	4. Publishing data in machine-readable formats to enable processing through automatic cooperation of data
2. Improving data-updating schedules and frequency	
3. Implementing secondary data utilization rules allowing data to be freely edited or processed	5. Others

Q10 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	

As for F2-7, put monetary amounts or numbers of people.

∗Right-align monetary amounts in millions of yen.

No.	Survey item	Monetary amount or number of people	Unit
F2	Annual sales[Notes1,2]		**million yen**
F3	Operating profit[Notes1,3]		**million yen**
F4	Labor costs[Note1]		**million yen**
F5	Deprecation costs[Note1]		**million yen**
F6	Amount of fixed assets[Note4]		**million yen**
F7	Full-time employees[Note5]		employees

Note 1: Put monetary amounts for FY2018 (April 2018-March 2019). If it is difficult to specify amounts for the period, put those for the latest business year.

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.

Note 3: 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.

Note 4: Please fill in the amount of fixed assets as of the end of FY 2018. 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.

Note 5: Full-time employees: This is the number of full-time employed people at your company as of August 1, 2019 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.

This completes the survey questions. 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	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	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.
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.