Please respond to the survey by Friday, September 25, 2020.



Ministry of Internal Affairs and Communications

2020 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.

	Please note the following before completing the survey.
	1. Regarding words marked *, refer to the attached "Guide to fill the questionnaire" as necessary.
	<ol> <li>In this survey, <u>conventional mobile phones (nicknamed "galakei") should be</u> <u>separated from smartphones</u>.</li> </ol>
(Address label)	3. Please give answers reflecting the situation in your household <u>on August 31, 2020</u> .
	<ul> <li>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</li> </ul>
We will send a ¥500 pre-paid book coupon to households that return the survey by the submiss deadline as a token of our appreciation.	Information, please look at "Request for cooperation" enclosed herein.
If you wish, please provide a telephone number below so that we may contact you if we have further questions about your survey answers.	<ul> <li>5. If you have any questions, please contact the survey firm at:</li> <li>"Communications Usage Trend Survey" Secretariat, Public Opinion Research Center (contracted by the MIC)</li> <li>4-8-6 Sendagaya, Shibuya-ku, Tokyo 151-8509, Japan Tel.: 0120-XXX-XXX (toll free) (Between 10:00 and 17:00, on weekdays)</li> <li>email: r2tsusin@yoron-kagaku.or.jp Take care not to misdial.</li> </ul>
	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	8. Wearable devices (glasses-type, watch-type information devices,
2. Fax machines	etc.)
3. TV receivers	9. Internet-enabled home game consoles (PlayStation4, Nintendo
4. Mobile phones (includes PHS	Switch, etc.)
handsets)	10. Internet-enabled portable music players (iPod, etc.)
5. Smartphones	11. Appliances available for internet connection (air conditioners,
6. Tablets (iPad, Galaxy Tab, etc.)	refrigerators, etc.)
7. Computers	12. Radios (Wide FM <sup>Note</sup> ) Regarding only radios, please circle relevant
	13. Radios (Others <sup>Note</sup> ) answers if your household owns them, <u>irrespective of whether your household</u>
	<u>used them in the past year.</u>

Note: A wide FM radio can receive frequency modulation radio signals with a frequency of 90 megahertz or more. The others cannot do so.

### Q2 Here is a question about internet connection lines.

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

Wired:	<ol> <li>1. DSL*</li> <li>2. Cable TV (CATV)*</li> <li>3. Optical fiber (FTTH)*</li> <li>4. Fixed wireless access (FWA)*</li> <li>5. Telephone (dial-up)</li> </ol>	Wi-Fi:	<ul> <li>7. Mobile phone<sup>Note 2</sup> (such as an iPhone up to iPhone 4S, whose service is named "3G" or "FOMA)</li> <li>8. Mobile phone (LTE*, BWA*)<sup>Note 2</sup> (other than 7; such as a phone, whose service is named "4G," "Xi," or "WiMAX")</li> <li>9. Mobile phone (5G standards)<sup>Note 2</sup></li> </ul>
	6. ISDN* <sup>Note 1</sup>	Others:	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</u> that they own fixed-line telephones in Q1.

### (1) Do you use a metal telephone<sup>Note</sup> (including "black telephone")? Please circle the one 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 one best answer (as planned as of August 2020). a. Willing to change the contract in less than 1. Switching to a fixed-line telephone other than a metal one year from now telephone b. Willing to change the contract in one to (circle an option that applies among the four options from a. less than two years from now to d. regarding the timing for the change) c. Willing to change the contract in two to 2. Willing to continue using the metal telephone in the future less than three years d. Willing to change the contract in three 3. Canceling a fixed-line telephone contract years or by the end of 2023

## (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 all answers that apply.

1. The metal telephone service is cheaper than any other service.	<ol> <li>Any other service is unavailable due to service area restrictions and housing conditions.</li> </ol>
<ul><li>than any other service.</li><li>3. Willing to continue using the telephone that I use now.</li><li>4. Willing to continue using the telephone number that</li></ul>	<ol> <li>6. Procedures for cancelling the metal telephone service contract or switching to any other service would take much time or be difficult to understand.</li> <li>7. Have never considered cancelling the metal telephone service or switching to any other service.</li> <li>8. Others</li> </ol>

### 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<sup>Note</sup>?

### Please circle the one best answer.

1. Used the hybridcasting	2. Not used the hybridcasting	3. Neither used the hybridcasting
function	function but planning to do so	function nor planning to do so
	played on the screen when you push the "d"	

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

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

- 3. ¥4 million to less than ¥6 million 6. ¥10 million to less than ¥15 million
- 8. ¥20 million and over

### <<Questions for household members>>...Following Questions 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 who is 6 or older. As responses without such indication are classified as invalid, be sure to make the indication. (Householder) В С D Α 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 This question regards all your household members' internet use in the past year.

Have you used the internet (including sending or receiving email or messages, searching information, using social networking services, browsing websites, online shopping, etc.) <u>in the past year</u>? Internet use here means that the internet was used irrespective of device types, purposes (business or private) or locations.

1. Yes 1	1	1	4
	· ·		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 or messages" excludes Short Message Service (using telephone numbers).

Please go to Question 6 (Page 8)

#### Q2 This question on individuals' internet use status is for those who circled "1. Yes" in Q1. (1) What are the devices for your internet use, no matter whether you own them? Please circle all answers that apply. С В D A 1. Computer 2. Mobile phone (including PHS handset) 3. Smartphone 4. Tablet 5. TV receiverNote 6. Home game console (PlayStation4, Nintendo Switch, etc.) 7. Other devices

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.	Α	В	С	C	)
1. Use at least once a day	1	1	1	1	1
2. Use at least once a week (but not every day)	2	2	2	2	2
3. Use at least once a month (but not every week)	3	3	3	3	3
4. Use at least once a year (but not every month)	4	4	4	۷	1

### (3) Where do you use the internet?

Please circle all answers that apply.	Α	В	С	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 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.	А	В
1. Sending and receiving email	1	1
2. Browsing and posting on, and opening and updating of, websites and blogsites	2	2
<ol> <li>Using social networking services (including free call services) (Facebook, Twitter, LINE, mixi, Instagram, Skype, etc.)</li> </ol>	3	3
4. Using online conference systems for business purposes	4	4
5. Using video posting / sharing sites (Youtube, Niconico Douga, etc.)	5	5
6. Using online gaming	6	6

le liext pa

С

D

					-				-
7. Searching information (Using weather forecast, news sites, map / traffic information services)		7		7		7		7	
8. e-learning (supplementary school lectures/exercises, language lessons, etc.)		8		8		8		8	
9. Using online diagnosis		9		9	1	9		9	
10. Financial transactions: banking, securities, insurance, etc. transactions over the internet		10		10		10		10	
11. Buying / exchanging goods and services (excluding digital content)		11		11		11		11	
12. Buying / exchanging digital content		12		12		12		12	
13. Buying and other transactions on internet auction and flea market applications		13		13		13		13	
14. Using e-Government, e-Local Government services: online applications, online reports, and online notifications		14		14		14		14	
15. Other (using forums or web album, etc.)		15		15		15		15	
) <u>To people who circled 3 to Question 3 (1) (i.e., people who us</u> <u>services)):</u> For what purposes do you use social networking services			two	orking s	serv	ices (ir	nclu	ding fre	e ca
Please circle all answers that apply.		А		В		С		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	
) <u>To people who are aged 15 or older and who circled any of "Buying/exchanging goods and services," "12. Buying/exchanging transactions using internet auction and flea market application.</u> What payment methods have you used when purchasing ginternet? Please circle all answers that apply.	ngin ons'	ng digita " to Que	al c esti	ontent, on 3 (1	" "1 ):	<u>3. Buy</u>	ing		
1. Credit card (excluding use for payment on delivery) <sup>Note</sup>	$  \vdash$	1	┢	1		1	$\vdash$	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	$\vdash$	4	
5. Payment by internet banking / mobile banking*		5	┢	5	╞	5	F	5	
		6		6	┢	6	┢	6	
6. Payment by addition to communication charges / provider charges		0			- H-		-		
<ul><li>6. Payment by addition to communication charges / provider charges</li><li>7. Payment by electronic money (Rakuten Edy, Suica, etc.)</li></ul>		7		7		7		7	
		-		7 8		7 8		7 8	

Do you have concerns about security, etc. during your intern	et <u>use?</u>			
Please circle the one best answer.	А	В	С	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
o 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.	Α	В	С	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
			J. J	-
	10 answer t	10 his quest	10	10 ding th
To people who circled "1. Yes" in Question 1, please implementation of security measures, etc. lave you experienced any of the following when using a con	answer t	his questi	10 ion regard	ding th
To people who circled "1. Yes" in Question 1, please implementation of security measures, etc. lave you experienced any of the following when using a con ablet?	answer t	his questi	10 ion regard	ding th
To people who circled "1. Yes" in Question 1, please implementation of security measures, etc. lave you experienced any of the following when using a con ablet? <u>Please circle all answers that apply.</u>	answer t	his questi obile phon	10 ion regard	ding th
To people who circled "1. Yes" in Question 1, please implementation of security measures, etc. lave you experienced any of the following when using a con ablet? <u>Please circle all answers that apply.</u> 1. Loss or theft of device	answer t	his questi obile phon	10 ion regard e, a smartp	ding th
To people who circled "1. Yes" in Question 1, please implementation of security measures, etc. lave you experienced any of the following when using a con ablet? <u>Please circle all answers that apply.</u> 1. Loss or theft of device 2. Infection by a computer virus	answer t nputer, a m	his questi obile phon	ion regard e, a smartp	ding the obtained of the obtai
To people who circled "1. Yes" in Question 1, please implementation of security measures, etc. Have you experienced any of the following when using a con ablet? Please circle all answers that apply. 1. Loss or theft of device 2. Infection by a computer virus 3. Receive spam / fraudulent email	answer t nputer, a m	his questi obile phon B 1 2	ion regard e, a smart C 1 2	ding the obone of the obone of the obone of the observation of the obs
To people who circled "1. Yes" in Question 1, please implementation of security measures, etc. Have you experienced any of the following when using a con ablet? Please circle all answers that apply. 1. Loss or theft of device 2. Infection by a computer virus 3. Receive spam / fraudulent email 4. Breach of personal information security (phone number, email address, location information, etc.)	answer t nputer, a m A 1 2 3	his questi obile phon B 1 2 3	10 ion regard e, a smartp C 1 2 3	ding the obtained of the obtai
To people who circled "1. Yes" in Question 1, please implementation of security measures, etc. Have you experienced any of the following when using a con ablet? Please circle all answers that apply. 1. Loss or theft of device 2. Infection by a computer virus 3. Receive spam / fraudulent email 4. Breach of personal information security (phone number, email address, location information, etc.) 5. Phishing <sup>Note</sup>	answer t nputer, a m A 1 2 3 4	his questi obile phon B 1 2 3 4	10           10           ion regard           c, a smartp           C           1           2           3           4	ding the phone of
To people who circled "1. Yes" in Question 1, please implementation of security measures, etc. Have you experienced any of the following when using a con- ablet? Please circle all answers that apply. 1. Loss or theft of device 2. Infection by a computer virus 3. Receive spam / fraudulent email 4. Breach of personal information security (phone number, email address, location information, etc.) 5. Phishing <sup>Note</sup> 6. See ad displays connected to Web browsing history	answer t nputer, a m A 1 2 3 4 5	his questi obile phon B 1 2 3 4 5	10           10           ion regard           e, a smartp           C           1           2           3           4           5	ding the obtained of the obtai
To people who circled "1. Yes" in Question 1, please implementation of security measures, etc. Have you experienced any of the following when using a con- ablet? Please circle all answers that apply. 1. Loss or theft of device 2. Infection by a computer virus 3. Receive spam / fraudulent email 4. Breach of personal information security (phone number, email address, location information, etc.) 5. Phishing <sup>Note</sup> 6. See ad displays connected to Web browsing history 7. Other	answer t nputer, a m A 1 2 3 4 5 6	his questi obile phon B 1 2 3 4 5 6	10           10           ion regard           e, a smartp           C           1           2           3           4           5           6	ding the phone of
To people who circled "1. Yes" in Question 1, please implementation of security measures, etc. Have you experienced any of the following when using a con- ablet? Please circle all answers that apply. 1. Loss or theft of device 2. Infection by a computer virus 3. Receive spam / fraudulent email 4. Breach of personal information security (phone number, email address, location information, etc.) 5. Phishing <sup>Note</sup> 6. See ad displays connected to Web browsing history 7. Other 8. None of the above Note: A type of fraud in which the attacker fakes emails from a real corporation to enter his or her PIN or password.	answer t nputer, a m A 1 2 3 4 5 6 7 8 on or a real co	his questi obile phon 1 2 3 4 5 6 7 8	Image: 10         Image: 10           ion regard         Image: 10           ion regard <t< td=""><td>ding the phone of the phone of</td></t<>	ding the phone of
To people who circled "1. Yes" in Question 1, please implementation of security measures, etc. Have you experienced any of the following when using a con- ablet? Please circle all answers that apply. 1. Loss or theft of device 2. Infection by a computer virus 3. Receive spam / fraudulent email 4. Breach of personal information security (phone number, email address, location information, etc.) 5. Phishing <sup>Note</sup> 6. See ad displays connected to Web browsing history 7. Other 8. None of the above Note: A type of fraud in which the attacker fakes emails from a real corporation to enter his or her PIN or password.	answer t nputer, a m A 1 2 3 4 5 6 7 8 on or a real co	his questi obile phon B 1 2 3 4 5 6 7 8 orporation's W	10         10         ion regard         e, a smartp         C         1         2         3         4         5         6         7         8         rebsite in order	ding the phone of
Have you experienced any of the following when using a conablet?         Please circle all answers that apply.         1. Loss or theft of device         2. Infection by a computer virus         3. Receive spam / fraudulent email         4. Breach of personal information security (phone number, email address, location information, etc.)         5. Phishing <sup>Note</sup> 6. See ad displays connected to Web browsing history         7. Other         8. None of the above         Note: A type of fraud in which the attacker fakes emails from a real corporation	answer t nputer, a m A 1 2 3 4 5 6 7 8 on or a real co	his questi obile phon 1 2 3 4 5 6 7 8	Image: 10         Image: 10           ion regard         Image: 10           ion regard <t< td=""><td>ding the phone of the phone of</td></t<>	ding the phone of

#### (3) To people who answered 1 to Question 5 (2) (i.e., people who have taken security measures): What specific security measures do you take?

Please circle all answers that apply.	Α	В	С	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

### Q6 This question concerning ICT skills is asked to all people.

### Can you perform the following operations with computers, smartphones, tablets or any other terminals?

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

А	В	С	D
1	1	1	1
2	2	2	2
3	3	3	3
4	4	4	4
5	5	5	5
6	6	6	6
7	7	7	7
8	8	8	8
9	9	9	9

### Q7 This question concerning the use of mobile services is asked to all people.

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

	Please circle all answers that apply.	Α	В	С	D
٢	1. Mobile phone (including a PHS handset)	1	1	1	1
Ţ	2. Smartphone (5G standards)	2	2	2	2
	3. Smartphone (Pre-5G standards)	3	3	3	3
Ľ	4. Own neither	4	4	4	4

## (2) To people who circled "1. Mobile phone," "2. Smartphone (5G standards) or "3. Smartphone (pre-5G

### standards) in Question 7 (1)

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

### Please circle the one best answer.

Mobile phone	1. Using services of a so-called major mobile service provider <sup>Note</sup>
(including a PHS handset)	2. Using services of a so-called discount mobile service provider <sup>Note</sup>
Smartphone	3. Using services of a so-called major mobile service provider <sup>Note</sup>
	4. Using services of a so-called discount mobile service provider <sup>Note</sup>

	А		В		С		D	
	1		1		1		1	
	2		2		2		2	
	3		3		3		3	
	4		4		4		4	
lud	na VI mo	hilo	and Dal		n Mahila		agunt	

Note: "Major mobile service providers are NTT Docomo, KDDI (au), Softbank (including Y! mobile) and Rakuten Mobile. Discount mobile service providers are other mobile service providers.

ut relevant figures in the box or circle a relevant alternative.	Α	В	С	D	
1. Thousand yen *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 5	4	4	4	
5. Others		5	5	5	
6. No idea	6	6	6	6	
Concerning the mobile terminal circled in Question 7 (2): How much did you pay for mobile services <u>before consumption ta</u> installment payment for the terminal and a payment for content)?	ax in the la	atest mont	h (excludii	ng an	
Concerning the mobile terminal circled in Question 7 (2): How much did you pay for mobile services <u>before consumption t</u>	ax in the la				
Concerning the mobile terminal circled in Question 7 (2): How much did you pay for mobile services <u>before consumption ta</u> installment payment for the terminal and a payment for content)?	ax in the la	atest mont	h (excludii	ng an	

Question 8 is for those who meet all the following conditions:

- (i) Aged 15 or older
- (ii) Those who circled "1. Yes" (used the internet within the past year) in Question 1
- (iii) Those who work for businesses or other organizations (such as public organizations) (excluding selfemployed individuals)

### **Q8 Engagement in telework**

### (1) Have you engaged in telework<sup>Note 1</sup> using the internet in the past year?

### Please circle all answers that apply.

1. Engaged in telework at home
--------------------------------

- 2. Engaged in telework at a satellite office<sup>Note 2</sup>
- 3. Engaged in telework while out of office (mobile workNote 3)
- 4. Not engaged in telework

ast year?								
	В							
	1							
	2							
	3							
	4							
	ir?	B 1 2 3						

	D
	1
	2
	3
	4

C 1

2

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) <u>To people who answered 4 to Question 8 (1):</u> Would you like to engage in telework?

Please circle the one best answer.					
1. Would like to engage in telework					
2. Would not like to engage in telework					

А	В	С	D
1	1	1	1
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.	А	В	С	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? <u>Please circle the one best answer</u> 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 4, 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
В	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.
С	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,	A service that provides bank transfers, balances, and other bank
	mobile banking	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.
0	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.



### Ministry of Internal Affairs and Communications

### 2020 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.

	Department / section of the respondent
(affix address label here)	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 August 31, 2020, 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

\* You may respond to the survey 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.: 0120-460-383 (toll free) (Between 10:00 and 17:00, on weekdays) Take care not to misdial.

email: r2tsusin@yoron-kagaku.or.jp

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).				

Please go to Question 3 on next page.

### 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

2. No

To companies that answered 1 to	· · · ·		
-		-	f Web content (JIS X 8341-3:2016)
			ople and persons with disabilities
	nitiatives for the acces	sibility of V	Neb content, <u>please circle the one</u>
<u>pest answer.</u>			
1. We have conformed to the st same applies).	andard (including releva	ant internatio	onal standards, hereinafter the
(Please circle one of the two cor	nformity levels — a. Co	nformity level	l at AA or higher b. Conformity level at A)
2. We have failed to conform to standard while remaining una		•	
3. We have implemented some the standard.	accessibility initiatives t	hat are not	necessarily designed to conform to
4. We are aware of the standard initiatives.	d or what the accessibili	ty is, but ha	ive implemented no relevant
5. We had not been aware of th	ne standard or what the	accessibility	/ is.
Does your company use cloud Note: cloud computing services includ		-	<b>ise circle the one best answer.</b> In by application service providers (ASPs)*
1. Used company wide		3. Not used	l, but plan to use
2. Used by some offices or d	ivisions	4. Not used	l, and have no plans to use
		5. Do not u	nderstand cloud services
		PI	
To companies that answered ?		РІ <u>):</u>	ease go to Question 3 (5) on next pa
To companies that answered 7 Which specific cloud computin	ng services does your c	Pi <u>Pi</u> ompany use	e? Please circle all answers that app
To companies that answered 7 Which specific cloud computin 1. File storage / data sharing	ng services does your c	Pi <u>Pi</u> ompany use	lease go to Question 3 (5) on next particular particula
L         To companies that answered f         Which specific cloud computin         1. File storage / data sharing         2. Data backups	ng services does your c	Pi <u>Pi</u> ompany use	<ul> <li>lease go to Question 3 (5) on next particular and the second se</li></ul>
To companies that answered 7 Which specific cloud computin 1. File storage / data sharing	ng services does your co 7. Sharing information w partners	Pi <u>Pi</u> ompany use	<ul> <li>Please go to Question 3 (5) on next particular set of the set of the</li></ul>
To companies that answered ?         Which specific cloud computin         1. File storage / data sharing         2. Data backups         3. Internal information sharing /	ng services does your co 7. Sharing information w partners 8. Sales support 9. R&D related 10. System developmer	Pl ompany use ith business t and	<ul> <li>lease go to Question 3 (5) on next particular set of the set of the</li></ul>
To companies that answered         Which specific cloud computin         1. File storage / data sharing         2. Data backups         3. Internal information sharing / portal	<ul> <li>ng services does your construction with partners</li> <li>8. Sales support</li> <li>9. R&amp;D related</li> <li>10. System development Website construction</li> </ul>	Pl ompany use ith business t and	<ul> <li>Please go to Question 3 (5) on next particular set of the set of the</li></ul>
To companies that answered 7         Which specific cloud computin         1. File storage / data sharing         2. Data backups         3. Internal information sharing / portal         4. email	<ul> <li><b>ng services does your co</b></li> <li>7. Sharing information was partners</li> <li>8. Sales support</li> <li>9. R&amp;D related</li> <li>10. System development Website construction</li> <li>11. e-learning</li> </ul>	Pl ompany use ith business	<ul> <li>lease go to Question 3 (5) on next particular set of the set of the</li></ul>
L         To companies that answered f         Which specific cloud computing         1. File storage / data sharing         2. Data backups         3. Internal information sharing / portal         4. email         5. Schedule sharing	<ul> <li>ng services does your construction with partners</li> <li>8. Sales support</li> <li>9. R&amp;D related</li> <li>10. System development Website construction</li> </ul>	Pl ompany use ith business	<ul> <li>lease go to Question 3 (5) on next particular set of the set of the</li></ul>
L         To companies that answered f         Which specific cloud computing         1. File storage / data sharing         2. Data backups         3. Internal information sharing / portal         4. email         5. Schedule sharing	<ul> <li><b>ng services does your co</b></li> <li>7. Sharing information was partners</li> <li>8. Sales support</li> <li>9. R&amp;D related</li> <li>10. System development Website construction</li> <li>11. e-learning</li> </ul>	Pl ompany use ith business	<ul> <li>lease go to Question 3 (5) on next particular set of the set of the</li></ul>
L         To companies that answered 7         Which specific cloud computin         1. File storage / data sharing         2. Data backups         3. Internal information sharing / portal         4. email         5. Schedule sharing         6. Project management	ng services does your co 7. Sharing information w partners 8. Sales support 9. R&D related 10. System developmer Website construction 11. e-learning 12. Payroll, financial acc	Pl pmpany use ith business t and ounting, HR	<ul> <li>Please go to Question 3 (5) on next particular</li> <li>Please circle all answers that appears and sales</li> <li>13. Order taking and sales</li> <li>14. Purchasing</li> <li>15. Production management, distribution management, store management</li> <li>16. Billing and payment systems</li> <li>17. Authentication systems</li> </ul>
To companies that answered 7         Which specific cloud computin         1. File storage / data sharing         2. Data backups         3. Internal information sharing / portal         4. email         5. Schedule sharing         6. Project management	<ul> <li><b>ng services does your co</b></li> <li>7. Sharing information was partners</li> <li>8. Sales support</li> <li>9. R&amp;D related</li> <li>10. System developmer Website construction</li> <li>11. e-learning</li> <li>12. Payroll, financial acconstruction</li> </ul>	Pl pmpany use ith business t and ounting, HR	<ul> <li>Please go to Question 3 (5) on next particular</li> <li>Please circle all answers that appert of the second seco</li></ul>
L         To companies that answered 7         Which specific cloud computin         1. File storage / data sharing         2. Data backups         3. Internal information sharing / portal         4. email         5. Schedule sharing         6. Project management	<ul> <li><b>ng services does your co</b></li> <li>7. Sharing information was partners</li> <li>8. Sales support</li> <li>9. R&amp;D related</li> <li>10. System developmer Website construction</li> <li>11. e-learning</li> <li>12. Payroll, financial acconstruction</li> </ul>	Pl pmpany use ith business t and ounting, HR	<ul> <li>Please go to Question 3 (5) on next participation (5) on next</li></ul>
To companies that answered 7         Which specific cloud computin         1. File storage / data sharing         2. Data backups         3. Internal information sharing / portal         4. email         5. Schedule sharing         6. Project management	ng services does your co 7. Sharing information w partners 8. Sales support 9. R&D related 10. System developmer Website construction 11. e-learning 12. Payroll, financial acc 1 or 2 to Question 3 (1) uting services? <u>Please</u>	PI pmpany use ith business it and ounting, HR curcle all a	<ul> <li>Please go to Question 3 (5) on next participation (5) on next</li></ul>
L         To companies that answered 7         Which specific cloud computin         1. File storage / data sharing         2. Data backups         3. Internal information sharing / portal         4. email         5. Schedule sharing         6. Project management         To companies that answered 7         Why do you use cloud comp         1. Costs are lower than existing	ng services does your co 7. Sharing information w partners 8. Sales support 9. R&D related 10. System developmer Website construction 11. e-learning 12. Payroll, financial acc 1 or 2 to Question 3 (1) uting services? <u>Please</u> systems	Pl pmpany use ith business t and ounting, HR <u>curcle all a</u> 6. Improv	<ul> <li>Please go to Question 3 (5) on next participation (5) on next</li></ul>
L         To companies that answered 7         Which specific cloud computin         1. File storage / data sharing         2. Data backups         3. Internal information sharing / portal         4. email         5. Schedule sharing         6. Project management         To companies that answered 7         Why do you use cloud companies that answered 7         Why do you use cloud companies that answered 7         1. Costs are lower than existing         2. No need to have internal asset	ng services does your co 7. Sharing information w partners 8. Sales support 9. R&D related 10. System developmer Website construction 11. e-learning 12. Payroll, financial acc 1 or 2 to Question 3 (1) uting services? <u>Please</u> systems et and storage systems	PI pmpany use ith business it and ounting, HR <u>it</u> <u>e circle all a</u> 6. Improv 7. The sa	<ul> <li>lease go to Question 3 (5) on next participation (5) on next</li></ul>
L         To companies that answered 7         Which specific cloud computin         1. File storage / data sharing         2. Data backups         3. Internal information sharing / portal         4. email         5. Schedule sharing         6. Project management         To companies that answered 7         Why do you use cloud comp         1. Costs are lower than existing	ng services does your co 7. Sharing information w partners 8. Sales support 9. R&D related 10. System developmer Website construction 11. e-learning 12. Payroll, financial acc 1 or 2 to Question 3 (1) uting services? <u>Please</u> systems et and storage systems	Pl pmpany use ith business t and ounting, HR <u>counting</u> , HR	<ul> <li>Please go to Question 3 (5) on next particular set of the set of the</li></ul>
L         To companies that answered 7         Which specific cloud computin         1. File storage / data sharing         2. Data backups         3. Internal information sharing / portal         4. email         5. Schedule sharing         6. Project management         To companies that answered 7         Why do you use cloud comp         1. Costs are lower than existing         2. No need to have internal asse         3. Quick response capability, su	ng services does your co 7. Sharing information w partners 8. Sales support 9. R&D related 10. System developmer Website construction 11. e-learning 12. Payroll, financial acc 1 or 2 to Question 3 (1) uting services? <u>Please</u> systems et and storage systems	Pl pmpany use ith business t and ounting, HR <u>counting</u> , HR	<ul> <li>Please go to Question 3 (5) on next participation of the second second</li></ul>
L         To companies that answered 7         Which specific cloud computin         1. File storage / data sharing         2. Data backups         3. Internal information sharing / portal         4. email         5. Schedule sharing         6. Project management         To companies that answered 7         Why do you use cloud comp         1. Costs are lower than existing         2. No need to have internal asse         3. Quick response capability, su capacity	And storage systems https://www.systems https://wwwww.systems https://www.systems https:/	PI pmpany use ith business it and ounting, HR <u>it</u> <u>e circle all a</u> 6. Improv 7. The sa irrespe 8. Usefu	<ul> <li>Please go to Question 3 (5) on next participation of the second second</li></ul>

1. Very beneficial	3. Not very bene	eficial	5. Do not know the impact
2. Somewhat beneficial	4. Negative imp	oact	0. Do not know the implicit
		U	s? <u>Please circle all</u> answers that ap
		0	
1. Considerable cost to retoo	l existing systems	_	ation theft and other security concerns
1. Considerable cost to retoo when introducing cloud se	0,	6. Informa	
when introducing cloud se 2. Cloud services would hind	rvices	6. Informa	ation theft and other security concerns al system in place
when introducing cloud se	rvices er corporate	6. Informa 7. No lega 8. Not nec 9. Do not	ation theft and other security concerns al system in place cessary see the advantages, not convinced by
when introducing cloud se 2. Cloud services would hind compliance	rvices er corporate n costs	6. Informa 7. No lega 8. Not nec 9. Do not	ation theft and other security concerns al system in place cessary see the advantages, not convinced by rantages

### (1) Has your company introduced telework<sup>Note</sup>? <u>Please circle the one best answer.</u>

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

■1. Have introdu	ced telework (a Working from home b Satellite office work c Mobile work)
2. Not introduce telework	ed, but have plans to introduce 3. Not introduced, and have no specific plans to introduce telework
building but w	a working arrangement where the worker works in a location physically separate from the company's vith nearly the same work environment as in the company's building by means of communication ecific 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.

Please go to Question 4 (5) on next page.

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

#### What percentage of your employees use telework? Please circle the one best answer.

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

#### (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 7. Increase customer satisfaction business processes 8. Secure employment, prevent personnel losses 2. Improve creativity of business 9. Meet needs of employees including persons with processes disabilities, elderly persons and those engaging in nursing care or childcare 3. Improve workers' work-life balance 4. Reduce long working hours 10. Conserve energy and electricity 5. Reduce office costs 11. Prepare for business continuity in the event of emergencies (earthquakes, typhoons, heavy snow, 6. Shorten workers' traveling time and infection epidemics, etc.) avoid congestion 12. Other (4) To companies that answered 1 to Question 4 (1): What impact has the telework introduction had on the purposes given in Question 4 (3)? 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 4 (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 Do not see the advantage of introducing telework 10. Too expensive Difficult to assess employees 11. Troublesome to introduce an HR system 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
- (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.

14. Other

<inhouse initiatives=""></inhouse>	
<ol> <li>Improving labor management</li> <li>Improving work environment</li> </ol>	<ul><li>3. Upgrading information and communication systems</li><li>4. Others</li></ul>
<national government="" initiatives="" local="" or="" sup<="" td=""><td>pport&gt;</td></national>	pport>
<ul> <li>5. Telework diffusion and enlightenment campaigns (holding seminars, distributing leaflets, etc.)</li> <li>6. Support or subsidies for businesses</li> </ul>	<ol> <li>8. Support for developing satellite offices and other telework facilities</li> <li>9. Support for operating satellite offices and other telework facilities</li> </ol>
<ul><li>6. Support or subsidies for businesses adopting telework</li><li>7. Matching between businesses and local governments hosting business locations</li></ul>	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 the internet about their security measures.

## (1) Has your company experienced any of the following cyberattacks <u>in the past year</u>? <u>Please circle all answers that apply.</u>

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

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

1. Establish security policies	11. Maintain access logs
2. Security audits	12. User authentication by means of authentication
3. Outsource security management	technologies
4. Training for employees	13. Encrypt data or networks
5. Install anti-virus programs on computers and	14. Line monitoring
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
8. Construct anti-virus walls at external access	(IDS) <sup>Note 2</sup>
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	4. Don't know
		resources are required	d

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

1. Network engineers	5.	IoT <sup>Note3</sup> system engineers at user companies
2. System development engineers		IoT system and other security engineers
3. Data scientists <sup>Note 1</sup>	7.	Others
4. SDN/NFV (Software Defined N Function Virtualization) human		
useful knowledge among the d	ata and take advantage o rk) and NFV (Network Fur	only collect and process inhouse data but also select f such knowledge for making business decisions. Inction Virtualization) human resources include and install software.
other information and commun	ications equipment, as we s, cars, etc.) with the interr	s (including computers, smartphones, tablets and Il as sensors in general, office equipment, electrical net, LAN and other networks to digitalize their data
To companies that circled 2 to 0	Question 6 (1):	
What measures has your com Please circle <mark>all</mark> answers that ap		ICT human resources?
. Recruiting new graduates	5. Inhouse human re	sources training
. Recruiting mid-career workers	6. Crowdsourcing <sup>Note</sup>	
. Outsourcing (domestic)	•	xible work styles including telework (to mainta
. Outsourcing (overseas)	employment or preve 8. Other	ent employees from leaving jobs)
Note: Crowdsourcing means a system	for using ICT for getting ne	ecessary human resources in a timely manner.
— — — — — — — — — — — — — — — — — — —		
The following questions concer		ization at your company.
In recent years, the collection o	r analysis of digital c	ization at your company. lata has made it possible to create new val
In recent years, the collection o or solve problems. Has your cor	r analysis of digital o npany introduced lo]	ization at your company. lata has made it possible to create new va
In recent years, the collection o or solve problems. Has your cor digital data? Please circle the o	r analysis of digital o npany introduced lo ne best answer.	ization at your company. lata has made it possible to create new va
In recent years, the collection o or solve problems. Has your cor digital data? Please circle the o	r analysis of digital o npany introduced lo ne best answer.	ization at your company. lata has made it possible to create new va or Al systems or services to collect or ana
In recent years, the collection o or solve problems. Has your cor digital data? Please circle the o Please circle the <u>one</u> best answ	r analysis of digital o npany introduced loī ne best answer. <u>er.</u>	ization at your company. lata has made it possible to create new va
In recent years, the collection o or solve problems. Has your cor digital data? Please circle the o Please circle the one best answ 1. Have introduced	r analysis of digital o npany introduced loī ne best answer. <u>er.</u>	ization at your company. lata has made it possible to create new val or AI systems or services to collect or ana 3. Have not introduced
In recent years, the collection o or solve problems. Has your cor digital data? Please circle the or Please circle the one best answ 1. Have introduced 2. Have not introduced, but are	r analysis of digital on npany introduced lo ne best answer. er. planning to introduce	ization at your company. lata has made it possible to create new val or AI systems or services to collect or ana 3. Have not introduced 4. Don't know
In recent years, the collection o or solve problems. Has your cor digital data? Please circle the o Please circle the one best answ 1. Have introduced	r analysis of digital on npany introduced lo ne best answer. er. planning to introduce	ization at your company. lata has made it possible to create new val or Al systems or services to collect or ana 3. Have not introduced 4. Don't know
In recent years, the collection o or solve problems. Has your cor digital data? Please circle the o Please circle the one best answ 1. Have introduced 2. Have not introduced, but are	r analysis of digital on npany introduced lon ne best answer. er. planning to introduce	ization at your company. lata has made it possible to create new val or Al systems or services to collect or ana 3. Have not introduced 4. Don't know
In recent years, the collection o or solve problems. Has your cor digital data? Please circle the o Please circle the one best answ 1. Have introduced 2. Have not introduced, but are	r analysis of digital on npany introduced lon ne best answer. er. planning to introduce to Question 7 (1): ata collection and an	ization at your company. lata has made it possible to create new va or AI systems or services to collect or and 3. Have not introduced 4. Don't know Please go to Question 7 (5) on next page. alysis? <u>Please circle all answers that appl</u>
In recent years, the collection o or solve problems. Has your cor digital data? Please circle the o Please circle the one best answ 1. Have introduced 2. Have not introduced, but are To companies that answered 1 f What are purposes of digital d	r analysis of digital on npany introduced lon ne best answer. er. planning to introduce to Question 7 (1): ata collection and an	ization at your company. lata has made it possible to create new va or AI systems or services to collect or and 3. Have not introduced 4. Don't know Please go to Question 7 (5) on next page.

What are components of AI or le Please circle all answers that app		
1. Smart meters <sup>Note 1</sup> , energy management systems	4. Non-contact IC cards 5. Sensors <sup>Note 3</sup>	8. Cellular modules for automobiles <sup>Note 4</sup>
2. Physical security devices <sup>Note 2</sup>	6. Industrial robots	9. OCR <sup>Note 5</sup>
2 Electronic terre (DEID terre)	7.0 ""	10 Others
<ol> <li>3. Electronic tags (RFID tags)</li> <li>Note 1: Smart meters are power manage communication functions.</li> <li>Note 2: Physical security devices are converification devices, biometric in Note 3: Sensors are devices that sense Note 4: Vehicle-mounted wireless mode Note 5: OCRs are devices that convert</li> </ol>	mponents of access control and vide entification devices and surveillance/s temperatures, pressure, locations, et les for connecting vehicles with netwo	o monitoring systems (including IC card security cameras). c. orks
Note 1: Smart meters are power manage communication functions. Note 2: Physical security devices are converification devices, biometric io Note 3: Sensors are devices that sense Note 4: Vehicle-mounted wireless modu Note 5: OCRs are devices that convert To companies that answered 1 to	ement devices that measure electricit mponents of access control and videe entification devices and surveillance/s temperatures, pressure, locations, et les for connecting vehicles with netwo written text information on paper into e <u>o Question 7 (1):</u> ion of IoT and AI systems or s	ty consumption digitally and have o monitoring systems (including IC card security cameras). c. orks electronic data. <b>ervices on the digital data collect</b>
Note 1: Smart meters are power manage communication functions. Note 2: Physical security devices are converification devices, biometric in Note 3: Sensors are devices that sense Note 4: Vehicle-mounted wireless modu Note 5: OCRs are devices that convert To companies that answered 1 to What impacts has the introduct	ement devices that measure electricit mponents of access control and videe entification devices and surveillance/s temperatures, pressure, locations, et les for connecting vehicles with netwo written text information on paper into e <u>o Question 7 (1):</u> ion of IoT and AI systems or s	ty consumption digitally and have o monitoring systems (including IC card security cameras). c. orks electronic data. <b>ervices on the digital data collect</b>

### 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.	<ol><li>There are no human resources to effectively use IoT or AI systems.</li></ol>
3. Business models after the IoT or Al introduction are uncertain.	<ol> <li>Systems or services to introduce are not decided.</li> </ol>
	7. Others

### Q8 The following questions concern personal data utilization at your company.

(1) Does your company utilize or plan<sup>Note</sup> to utilize personal data (customer information, registered information, etc.) for developing and providing services? <u>Please circle the one best answer.</u>

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

4. No plan to utilize 5. No idea
uestion 8 (1): tilize or want to utilize personal data?
ing existing business operations and models <sup>Note</sup>
ss operations and models <sup>Note</sup>
data, etc.)
;

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

## <u>Please circle all answers that apply</u> about challenges and obstacles assumed at present and for the future regarding the treatment and utilization of personal data.

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

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

### (1) <u>Circle all relevant answers</u> 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
3.	Opening local government data	local government measures
4.	Developing data distribution infrastructure	8. Training and securing human resources
	(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):

I

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?

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

### Q10 Concern general aspects of your company

Thank you for answering the above questions. 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? <u>Please circle the</u> <u>one best answer.</u>

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

	Survey item	Monetary amount or number of peop	ole Unit
F2	Annual sales <sup>Notes1,2</sup>		million yen
F3	Operating profit <sup>Notes1,3</sup>		million yen
F4	Labor costs <sup>Note1</sup>		million yen
F5	Deprecation costs <sup>Note1</sup>		million yen
F6	Amount of fixed assets <sup>Note4</sup>		million yen
F7	Full-time employees <sup>Note5</sup>		employees

- Note 1: Put monetary amounts for FY2019 (April 2019-March 2020). 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 2019. If it is difficult to identify the amount as of the end of FY 2019, 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, 2020 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
Α	ASP	Short for Application Service Provider. An ASP is a business that
		provides customers with business applications over the internet.
В	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.
С	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	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.
0	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.