

May 27, 2022

“Communications Usage Trend Survey” in 2021 Compiled

The Ministry of Internal Affairs and Communications (MIC, Japan) has compiled its Communications Usage Trend Survey, a survey of the communication services usage by households and businesses at the end of August 2021.

For the highlights and an outline of the survey, please see Attachment 1 and Attachment 2, respectively.

Details of the survey will be posted on the website for the MIC’s Information & Communications Statistics Database and e-Stat, and released in a machine-readable data format (CSV format).

(URL: <https://www.soumu.go.jp/johotsusintokei/statistics/statistics05.html>)

[Highlights of the Survey]

- 1 The smartphone ownership rate stands at 88.6% for households and 74.3% for individuals, posting robust growth. In contrast, the ownership rate for other mobile phones continues a downtrend.
- 2 Individuals who use smartphones for the internet continue to be more than those using personal computers. About 90% of those aged between 20 and 49 use smartphones for the internet. SNS (social networking services) users account for 78.7% of individuals.
- 3 The share for businesses having introduced telework exceeds 50% to 51.9%. The most frequently cited purpose for introducing telework is to respond to COVID-19 (prevention of infections and business continuation), cited by more than 90%.
- 4 The share for businesses having introduced cloud computing services tops 70% to 70.4%. The availability of the services irrespective of location or equipment, outsourcing of assets and maintenance arrangements, and other effects are recognized as advantages of cloud services. Businesses viewing cloud services as “very beneficial” or “somewhat beneficial” account for 88.2% of those having introduced such services.

[Survey Outline]

MIC has conducted the Communications Usage Trend Survey annually since 1990, targeting households (households and household members) and businesses, as a general statistics survey in accordance with the Statistics Act (Act No. 53 of 2007). (Business surveys have been conducted each year since 1993, except for 1994. Surveys of household members started in 2001.) MIC also has conducted the household survey by prefecture since 2010.

	Households	Businesses
Survey period	September 2021	
Survey area	Nationwide	
Scope of attributes / Level of survey	Households headed by someone aged 20 or older (as of April 1, 2021) and household members aged 6 or older	Businesses with 100 or more regular employees in industries other than public affairs

Sample size [Effective mails]	40,592 households [39,430 households]	5,966 businesses [5,123 businesses]
Effective responses [%]	17,365 households (44,133 persons) [44.0%]	2,396 businesses [46.8%]
Survey items	Communication services usage, communication-device ownership, etc.	
Survey method	Survey form sent and collected by postal mail or online (email for households and electronic survey for businesses)	

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Highlights of the Communications Usage Trend Survey in 2021

<Survey Outline>

- MIC has conducted this survey annually since 1990, targeting households (households and household members) and businesses, as a general statistics survey in accordance with the Statistics Act (Act No. 53 of 2007). The survey looks into communication service usage, information and communication equipment ownership, etc. (Survey slips are sent by postal mail and collected by postal mail or online.)
The survey took place in late August 2021.
- The household survey targets households headed by householders aged 20 or older (as of April 1, 2021) and household members aged 6 or older (40,592 households).
- The business survey targets businesses with 100 or more regular employees in industries other than public affairs (5,966 businesses).

Highlights of the Survey

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- 2 Individuals who use smartphones for the internet continue to be more than those using personal computers. About 90% of those aged between 20 and 49 use smartphones for the internet. SNS (social networking services) users account for 78.7% of individuals.
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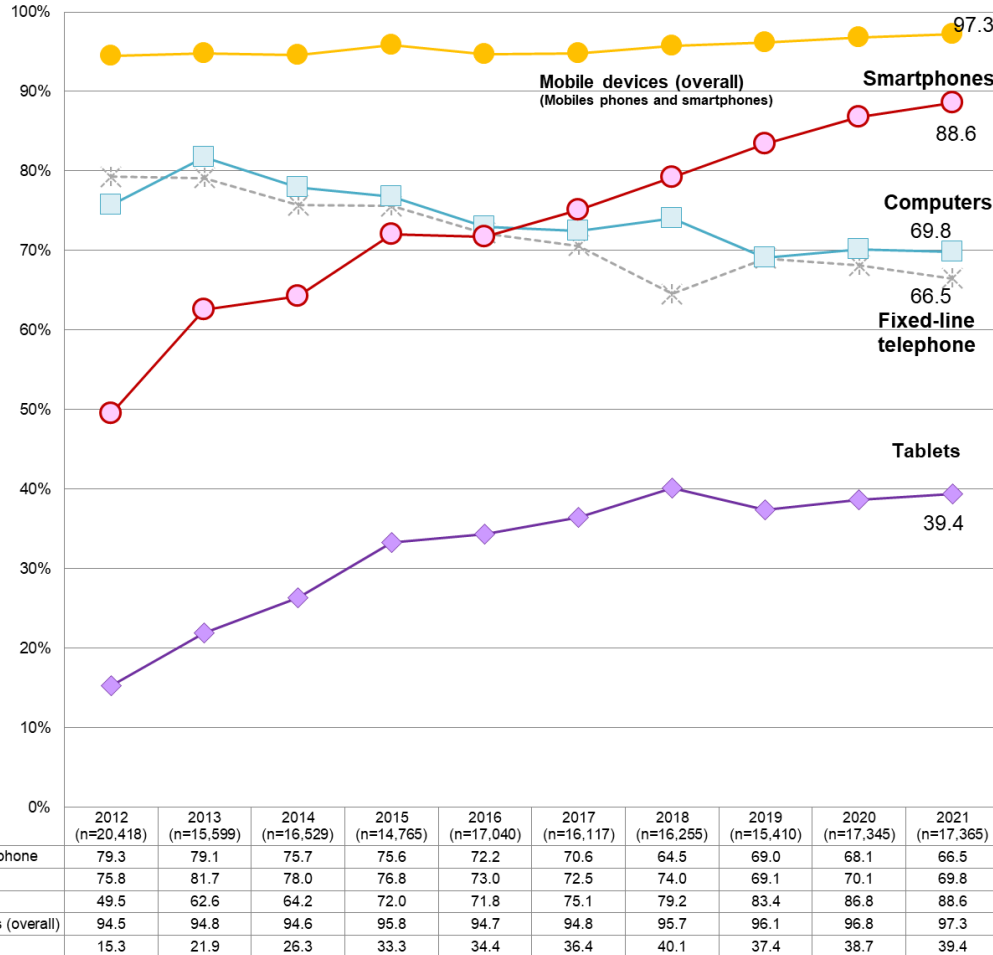
<Notes>

- Graphs with titles including (businesses) are based on the survey of businesses and colored orange. Those with titles including (households) are based on the survey of households, and including (individuals) are based on the survey of household members. Both (households) and (individuals) are colored blue.
- Non-responses were excluded except in the graphs of “1. Proliferation of Communication Devices” in Page 2 and “Introduction of telework” in Page 5.
- Figures in the chart are rounded to the nearest unit, and individual figures may not add up to totals due to rounding.

1. Proliferation of Communication Devices

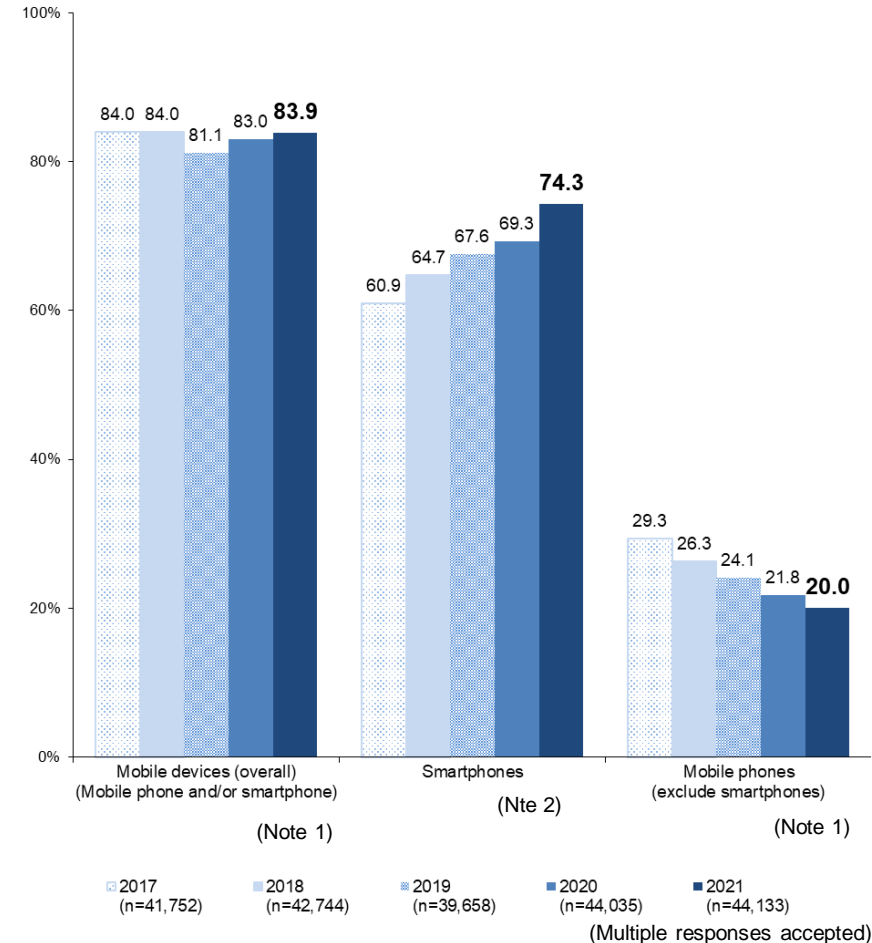
Ownership of common communication devices (households) (2012-2021)

The smartphone ownership rate among households robustly rises to 88.6%, surpassing the personal computer ownership rate of 69.8% and the fixed telephone ownership rate of 66.5%.



Ownership of mobile devices (individuals) (2017-2021)

Ownership is increasing for smartphones while decreasing for mobile phones (excluding smartphones).



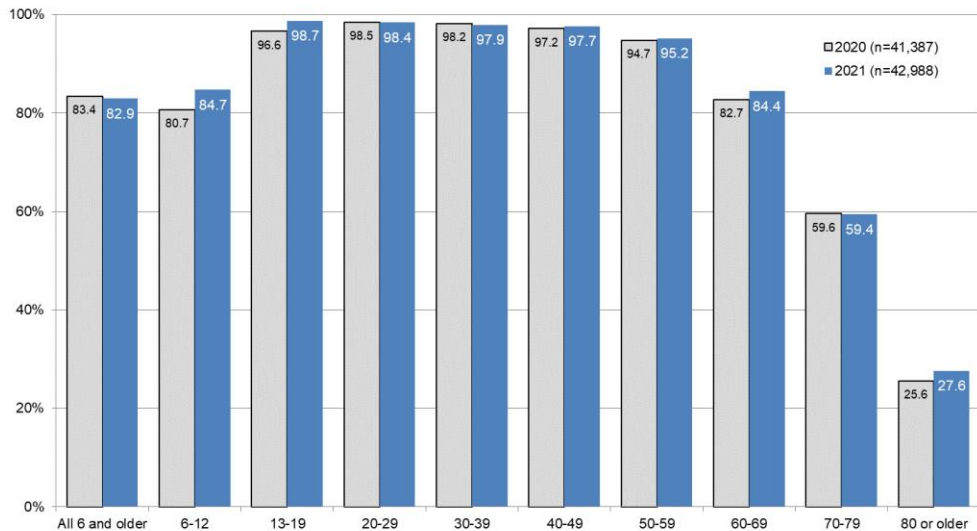
Note: Each figure is the percentage of all households in each year's survey that own the respective communication device.
 "Mobile devices (overall)" include PHS handsets before 2020.
 (Multiple responses accepted)

(Note 1) "Mobile devices (overall)" and "mobile phones (excluding smartphones)" include PHS handsets before 2020.
 (Note 2) "Smartphones" do not include 5G terminals before 2020.
 (Multiple responses accepted)

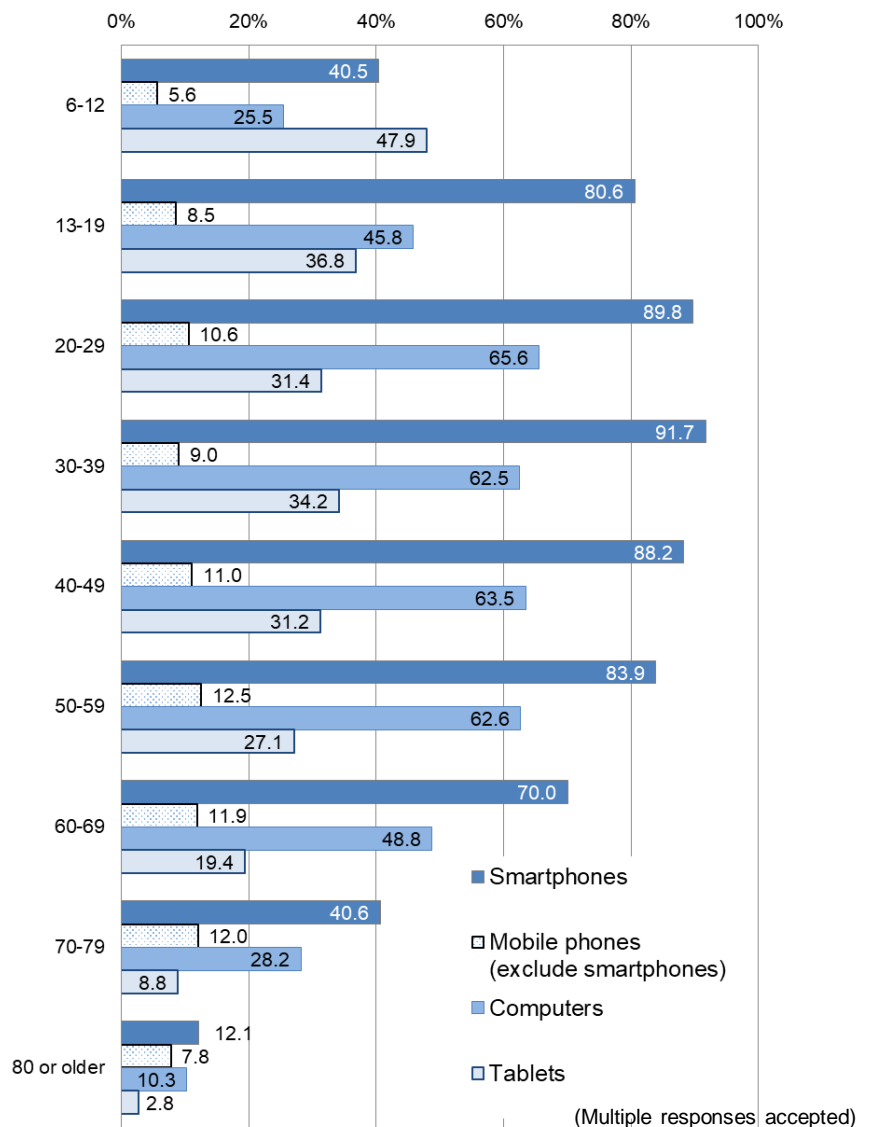
2. Internet Usage Trends

The internet user share tops 90% for individuals aged between 13 and 59. Smartphones are used more frequently than computers for internet access. About 90% of individuals aged between 20 and 49 use smartphones.

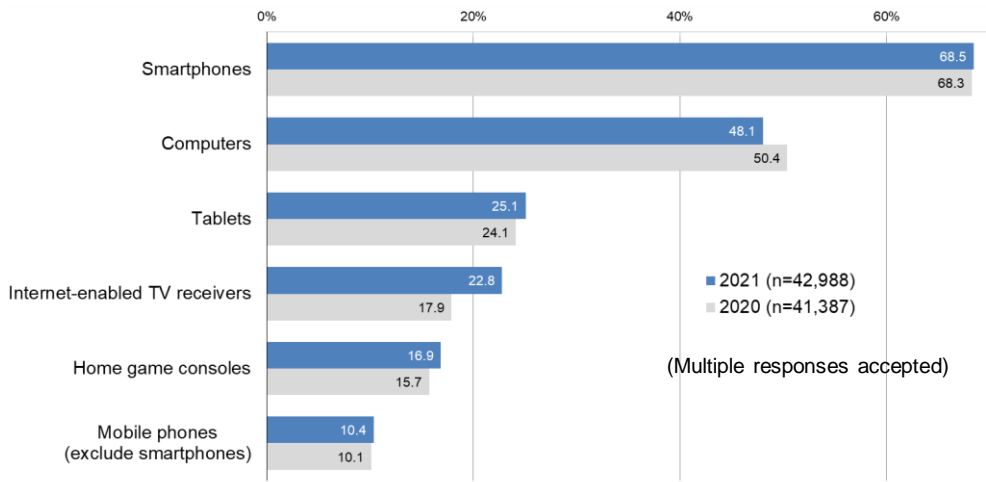
Internet usage (individuals)



Usage of internet access devices by age group (individuals)



Usage of internet access devices (individuals)



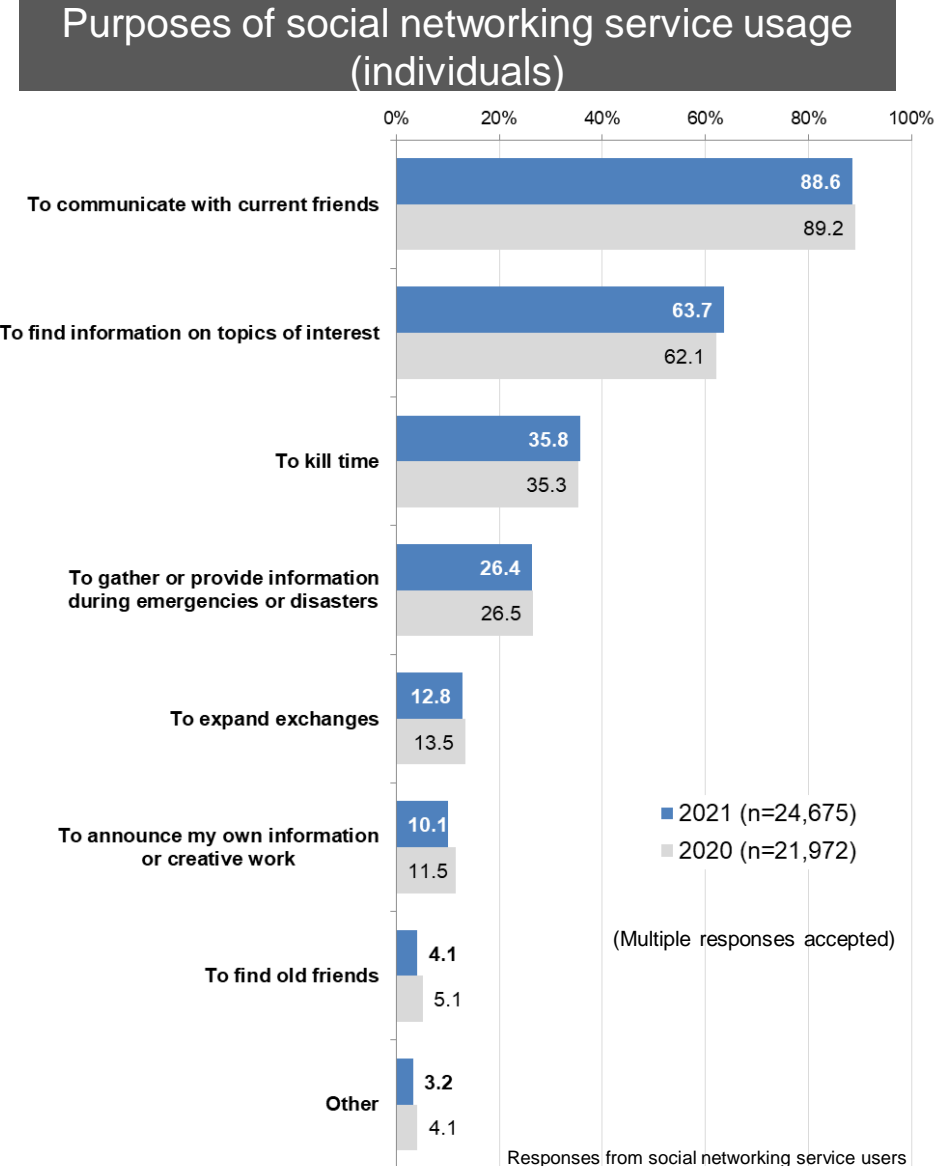
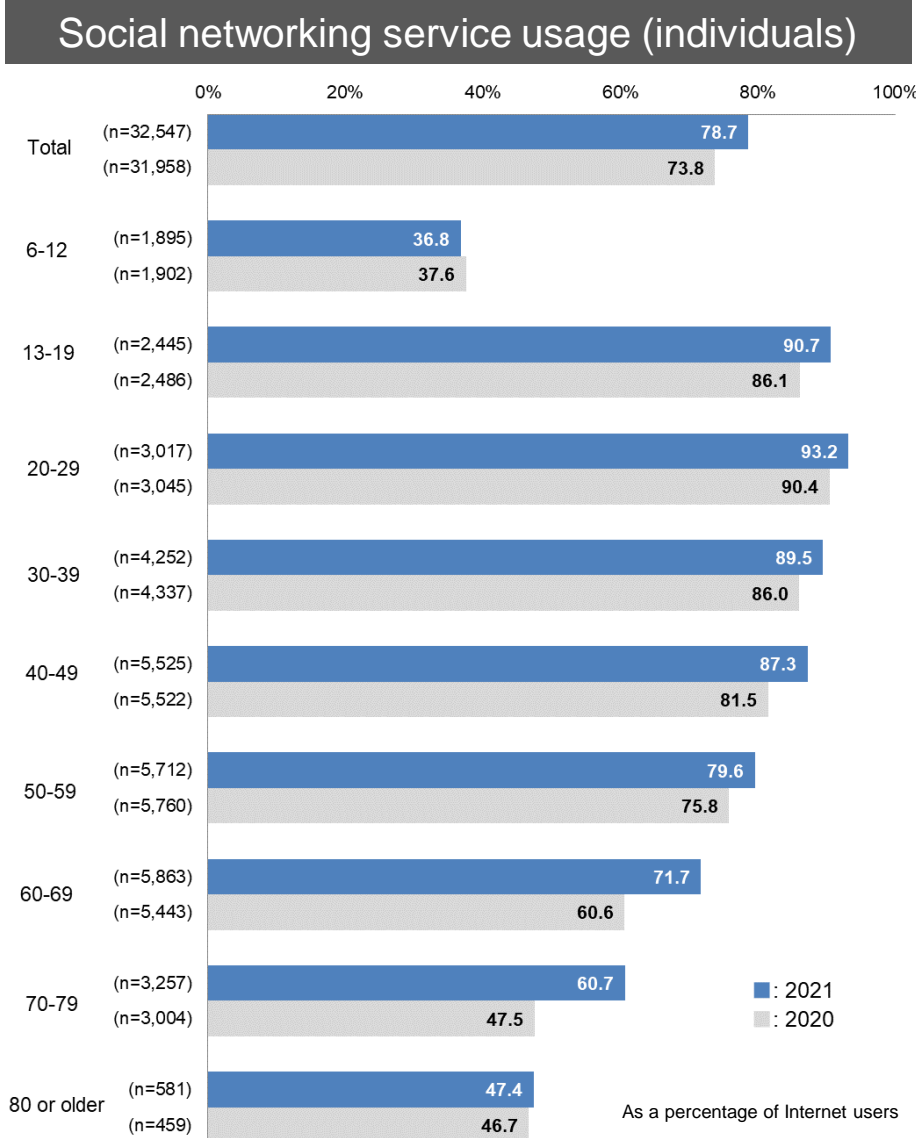
(Note) "Mobile phones (excluding smartphones)" include PHS handsets before 2020.

(Multiple responses accepted)
(Note) Only major devices are covered.

3. Social Networking Service Usage Trends (individuals)

The share for individuals using social networking services* rises in almost all age groups, scoring particularly sharp growth among those aged between 60 and 79. The most frequently cited purpose for using social networking services is “to communicate with current friends.”

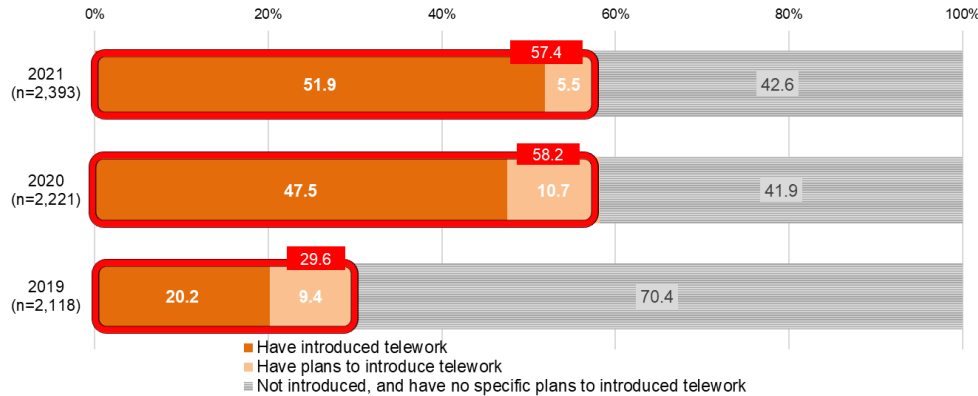
*Social networking services here include Facebook, Twitter, LINE, mixi, Instagram and Skype.



4. Introduction of Telework (businesses)

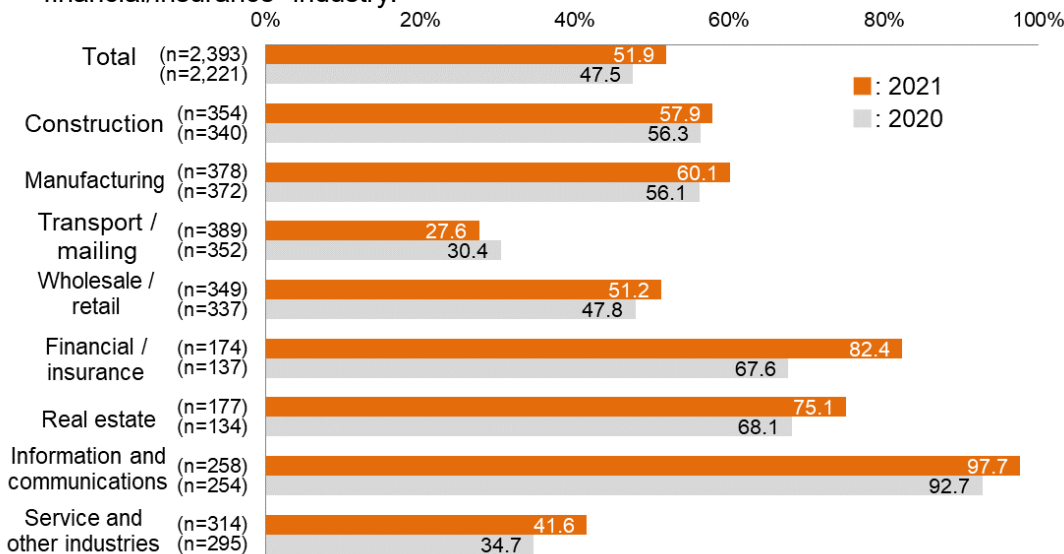
Introduction of telework

The share for businesses having introduced telework rises by 4.4 percentage points, topping 50%. The share for businesses having introduced or planning to introduce telework is close to 60%.



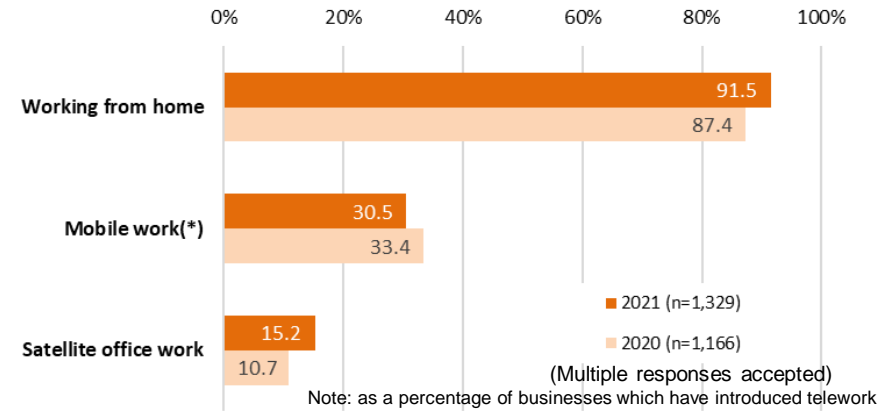
Introduction of telework by industry

The telework introduction rate has increased in many industries. Particularly, the rate tops 90% in the “information and communications” industry and 80% in the “financial/insurance” industry.



Type of telework introduced

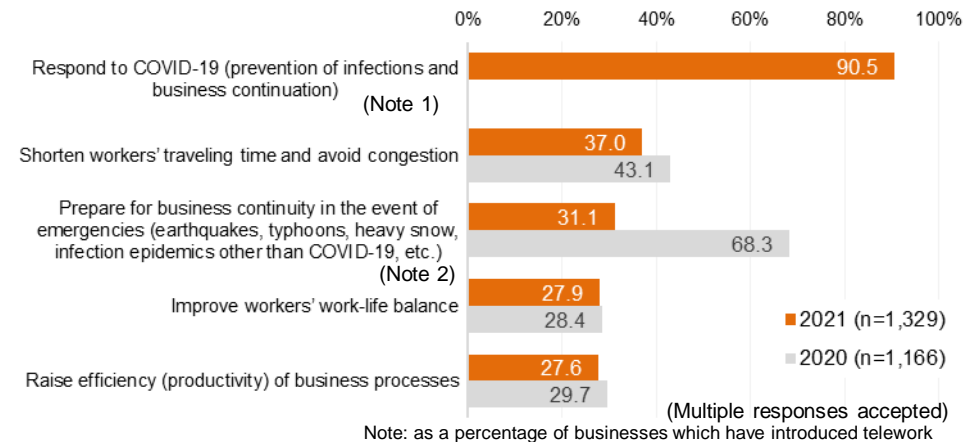
More than 90% of businesses have introduced “working from home.”



*Mobile work refers to sales and other types of work done out of the office, including email and journal creation at transportation facilities or cafes.

Purposes of introducing telework

The most frequently cited purpose for introducing telework is to “respond to COVID-19,” cited by more than 90%. On the other hand, the share declines for businesses citing to “raise efficiency (productivity) of business processes.”



(Note 1) “Respond to COVID-19 (prevention of infections and business continuation)” is a new option adopted for the 2021 survey.

(Note 2) “Prepare for business continuity in the event of emergencies (earthquakes, typhoons, heavy snow, infection epidemics, etc.)” in the 2020 survey

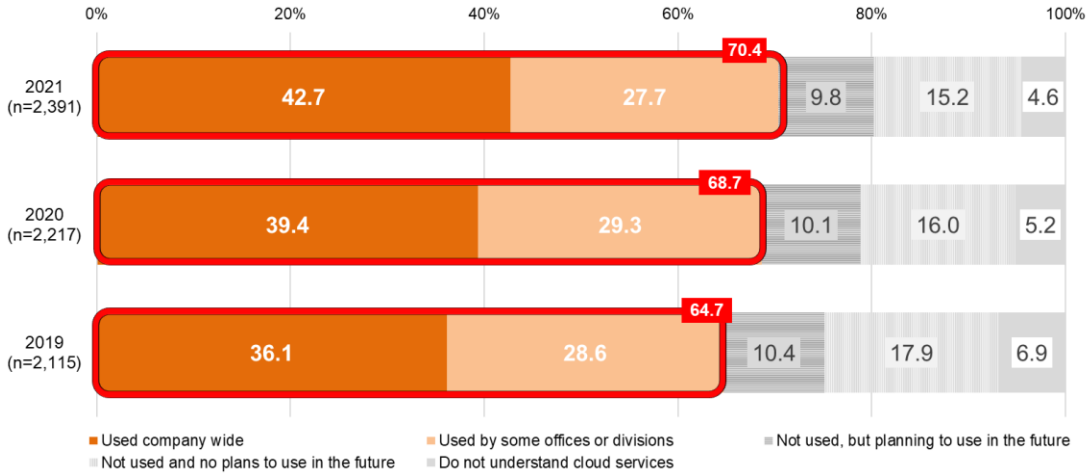
5. Cloud Service Usage (businesses)

The share for businesses using cloud computing service continues an uptrend, rising to 70%.

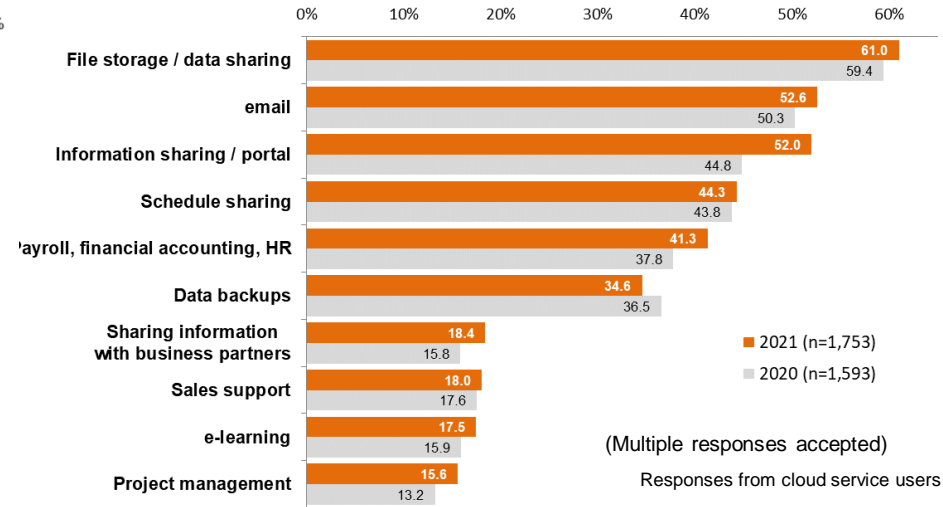
Purposes for using cloud services include “file storage/data sharing” and “email.” The reasons for using cloud services include “the same services are available irrespective of location or equipment” and “there is no need for owning proprietary assets or maintenance arrangements.”

Businesses viewing cloud services as “very beneficial” or “somewhat beneficial” account for about 90% of those having introduced such services.

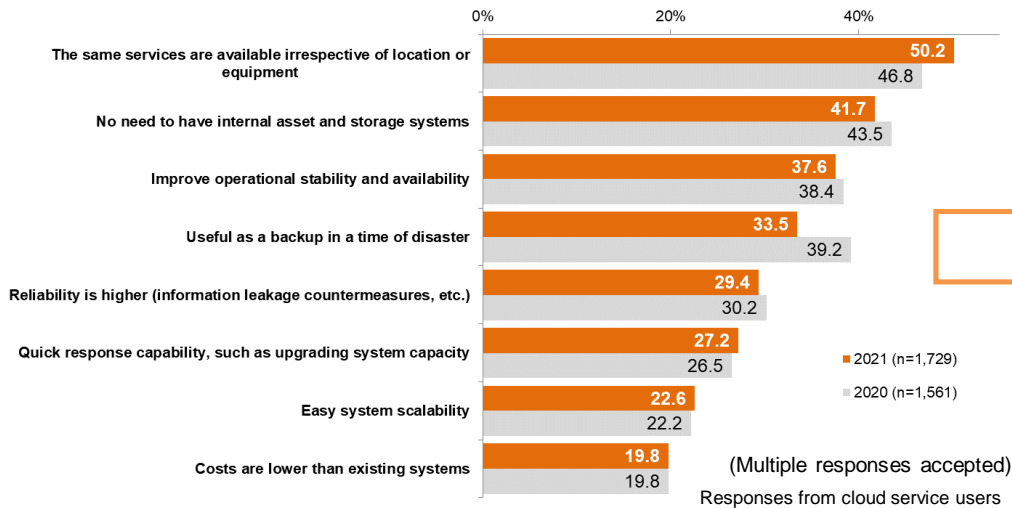
Cloud service usage



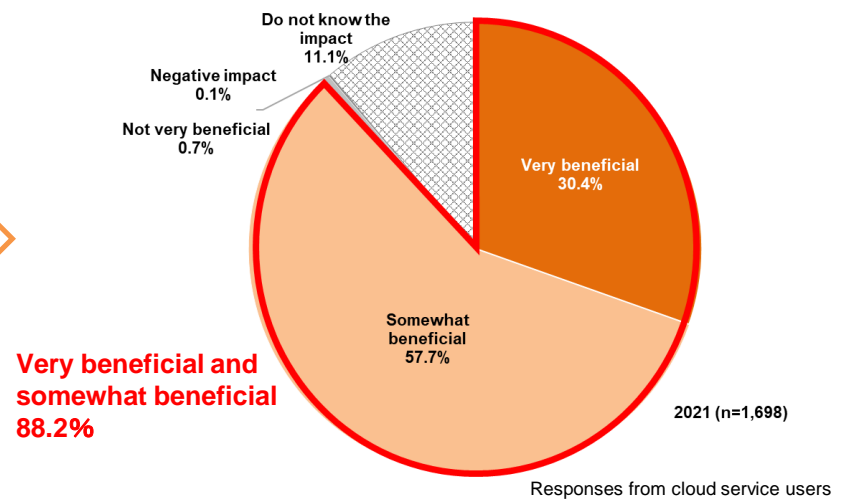
Purposes for using cloud services



Reasons for using cloud services



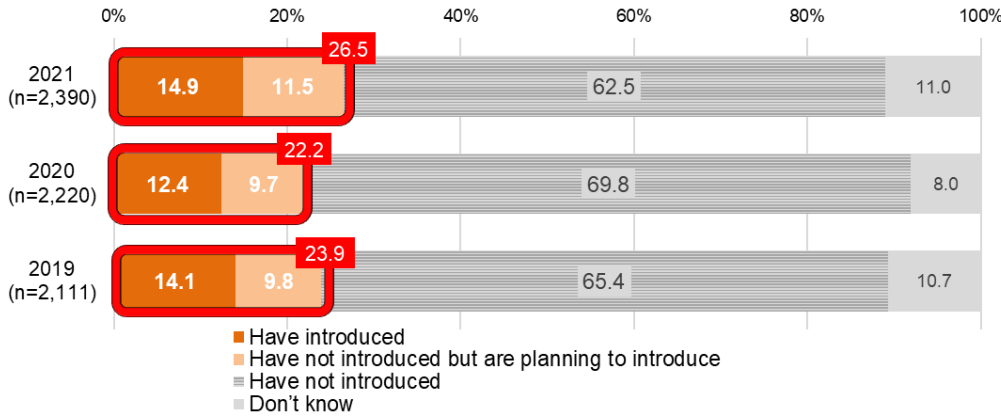
Impact of cloud computing services



6. Collection/utilization of digital data with IoT/AI systems (businesses)

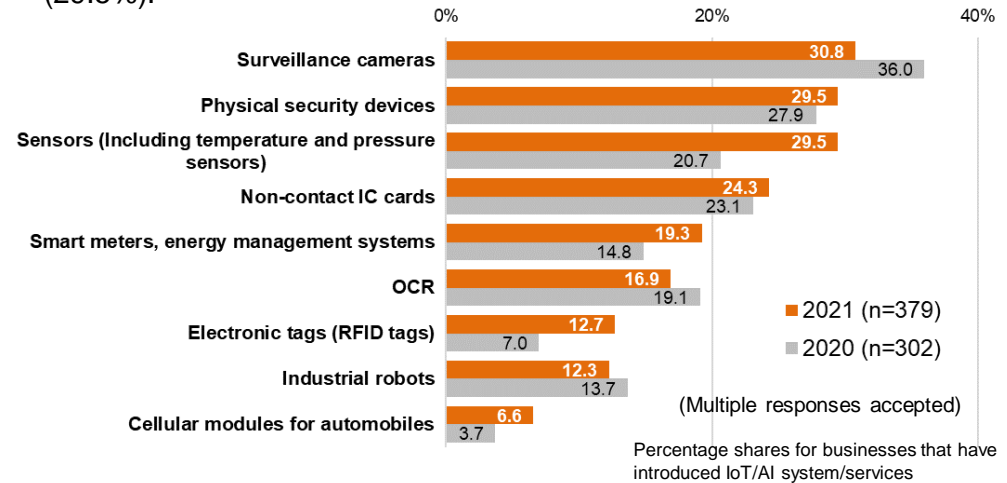
Introduction of IoT/AI systems/services

The share for businesses “having introduced” or “planning to introduce” IoT and AI systems or services to collect and analyze digital data has reached 26.5%.

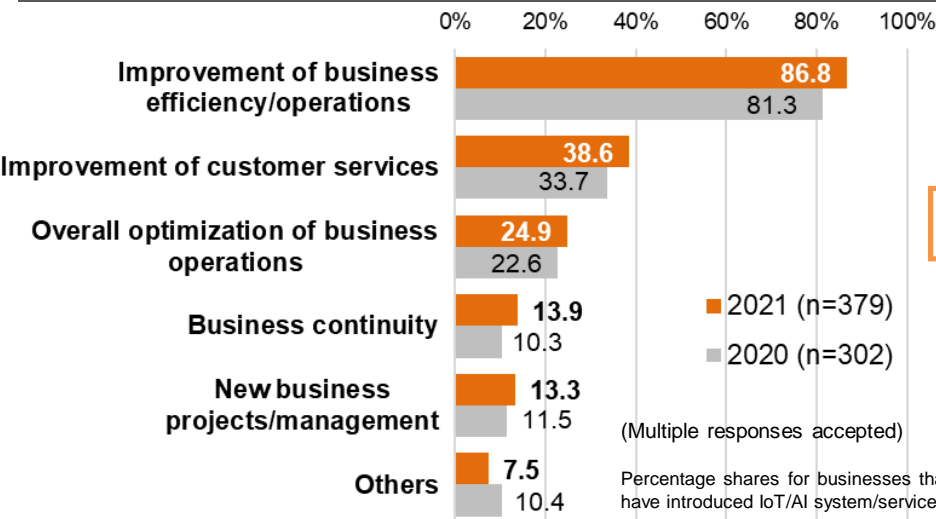


Devices for introduced systems or services

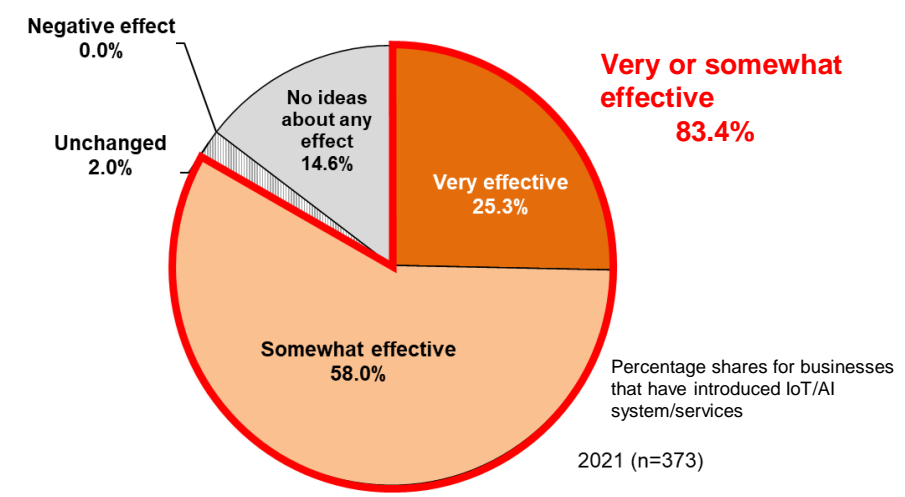
The most frequently cited responses among components of IoT and AI systems or services that have been introduced are “surveillance cameras” (30.8%), followed by “Physical security devices” (29.5%) and “Sensors” (29.5%).



Purposes of IoT/AI digital data collection and analysis



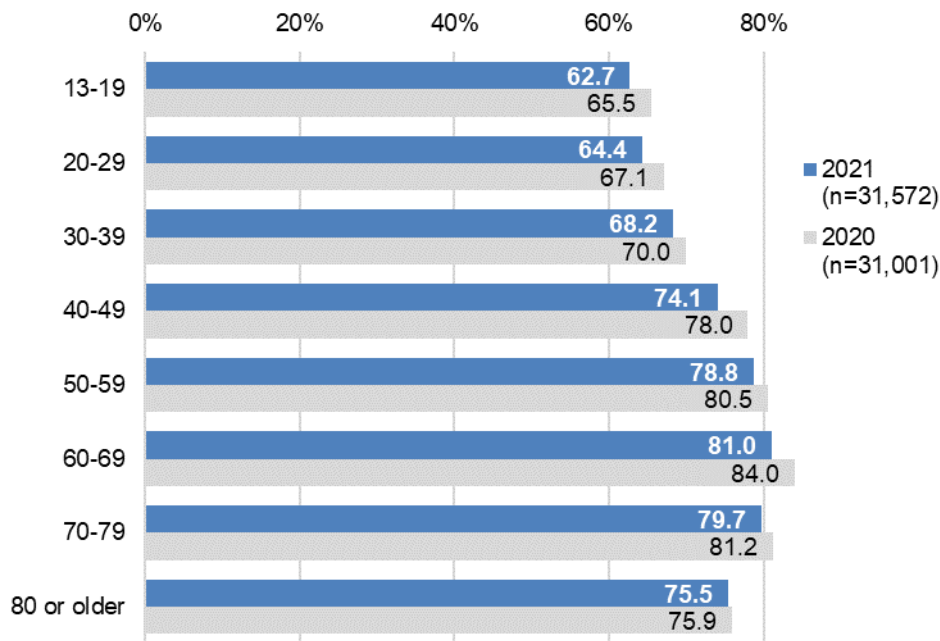
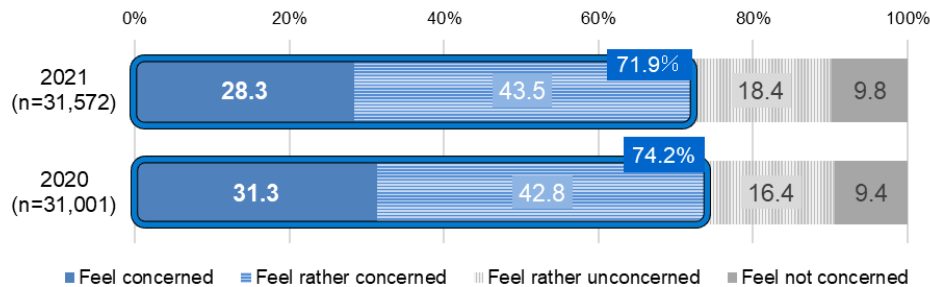
Effects of IoT /AI system/service introduction



7. Concerns about Using the Internet (individuals)

Concerns about using the internet

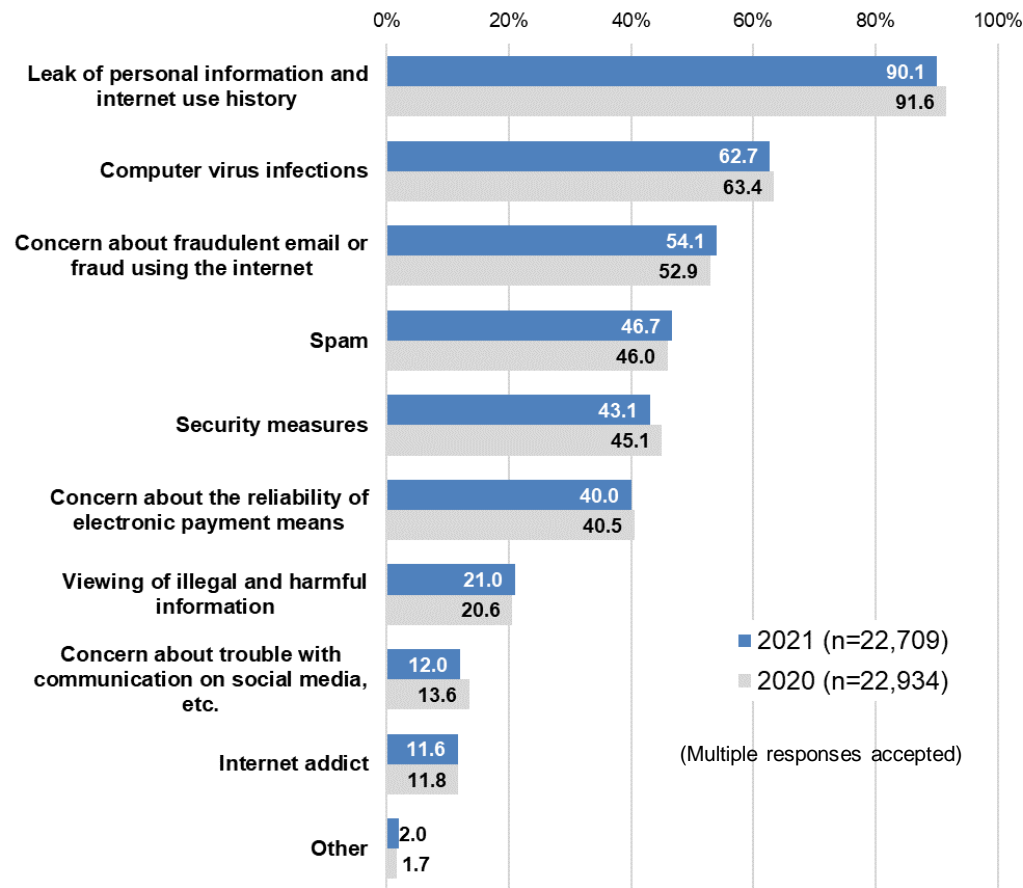
About 70% of internet users feel insecure during internet use. The share for internet users feeling insecure during internet use is high among those aged 40 or more.



Percentage of internet users who “feel concerned” and “feel rather concerned”

Types of concerns about using the internet

The percentage is as high as 90.1% for “leak of personal information and internet use history” among types of concerns about using the internet. The percentage for “computer virus infections” is also high at 62.7%.



(Multiple responses accepted)

Responses from individuals who have used the internet and have concerns about using the internet

Summary Findings of the 2021 Communications Usage Trend Survey

Table of Contents

1. Proliferation of the Internet and Other Networks	1
(1) Ownership of communication devices (households).....	1
(2) Ownership of mobile devices (individuals).....	1
(3) Internet usage (individuals).....	2
(4) Internet usage by device (individuals).....	4
(5) Internet usage by prefecture and region (individuals)	5
(6) Types of internet connections (businesses).....	6
(7) Types of internet connections (households).....	7
(8) Internet connection through TV, etc. (households).....	7
2. Current ICT Usage by Individuals	9
(1) Purposes of using the internet (individuals).....	9
(2) Social networking service usage (individuals).....	10
3. Introduction and Implementation of Telework.....	12
(1) Introduction of telework (businesses)	12
(2) Engagement in telework (individuals).....	16
4. Current ICT Usage by Businesses.....	18
(1) Cloud computing service usage (businesses).....	18
(2) Introduction of IoT/AI systems/services (businesses)	22
5. Safety and Security Efforts	24
(1) State of security measures (households)	24
(2) Concerns about using the internet (individuals)	25
(3) Security breaches against information-communication networks and security measures implemented (businesses).....	27

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<Note>

- Data in this document exclude non-respondents in the survey (unless otherwise specified).

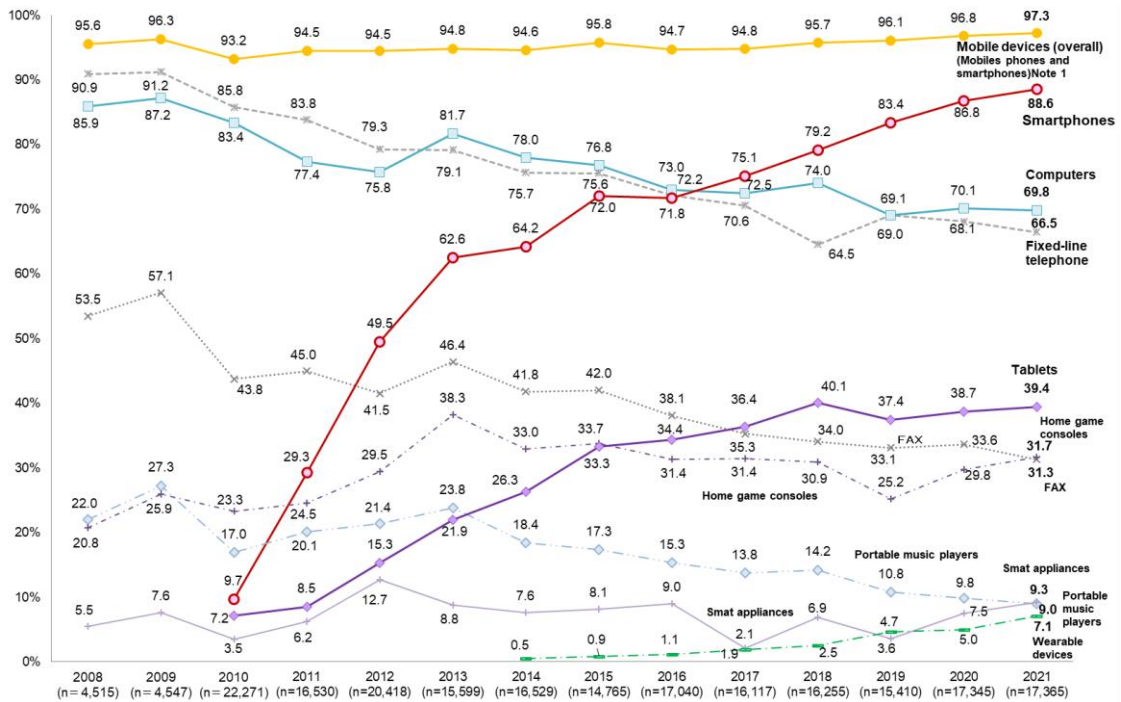
- Figures in the chart are rounded to the nearest unit, and individual figures may not add up to totals due to rounding.

1. Proliferation of the Internet and Other Networks

(1) Ownership of communication devices (households)

Ownership rises to 88.6% for smartphones among communication devices.

Figure 1-1: Transitions in ownership of communication devices



(Note 1) "Mobile devices (overall)" include personal digital assistants (PDAs) between 2009 and 2012, smartphones from 2010 and PHS handsets until 2020.

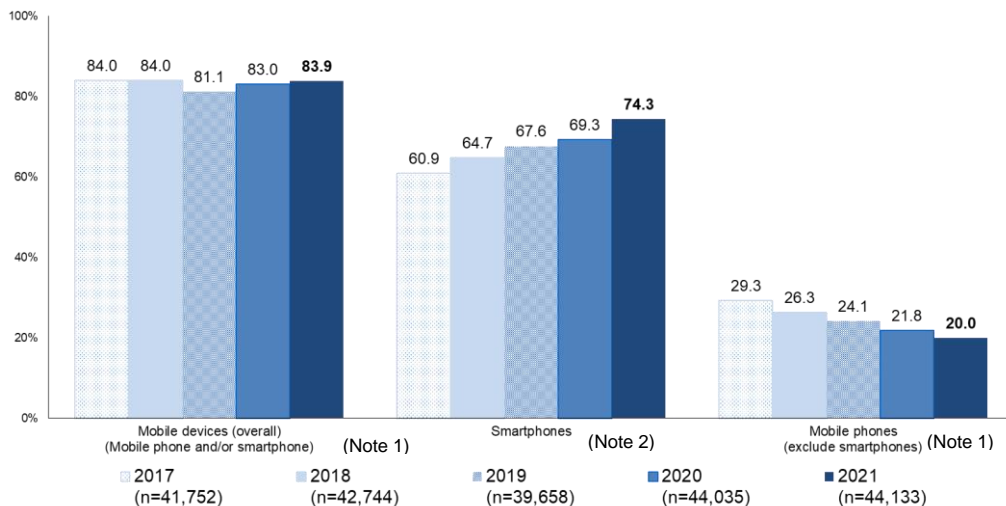
(Note 2) For comparison purposes between years, these calculations do include non-responses.

(2) Ownership of mobile devices (individuals)

Regarding the ownership of mobile devices by individuals, the ownership rate for "smartphones" is 74.3%, 54.3 points higher than the ownership rate for "mobile phones" (20.0%).

By age group, the ownership rate for "smartphones" is higher than the ownership rate for "mobile phones" in the age groups other than "80 or older."

Figure 1-2: Transitions in ownership of mobile devices

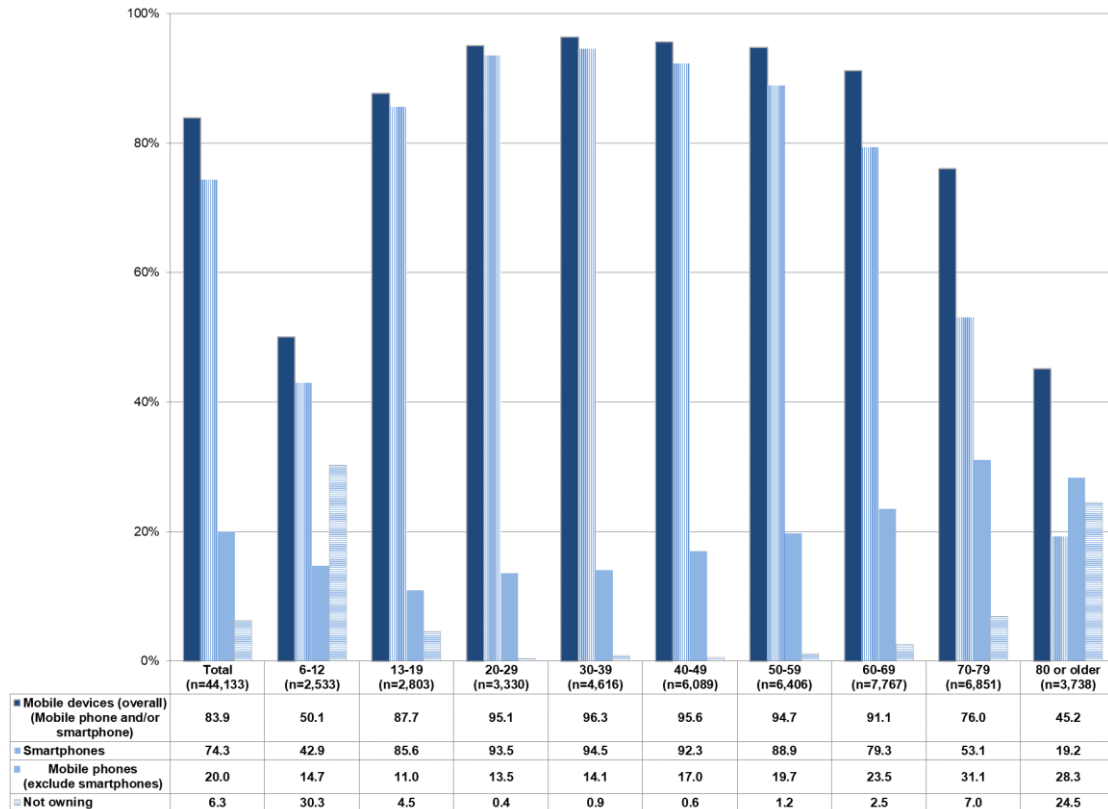


(Note 1) "Mobile devices (overall)" and "mobile phones (excluding smartphones)" include PHS handsets before 2020.

(Note 2) "Smartphones" do not include 5G terminals before 2020.

(Note 3) For comparison purposes between years, these calculations do include non-responses.

Figure 1-3: Ownership of mobile devices by age group (2021)

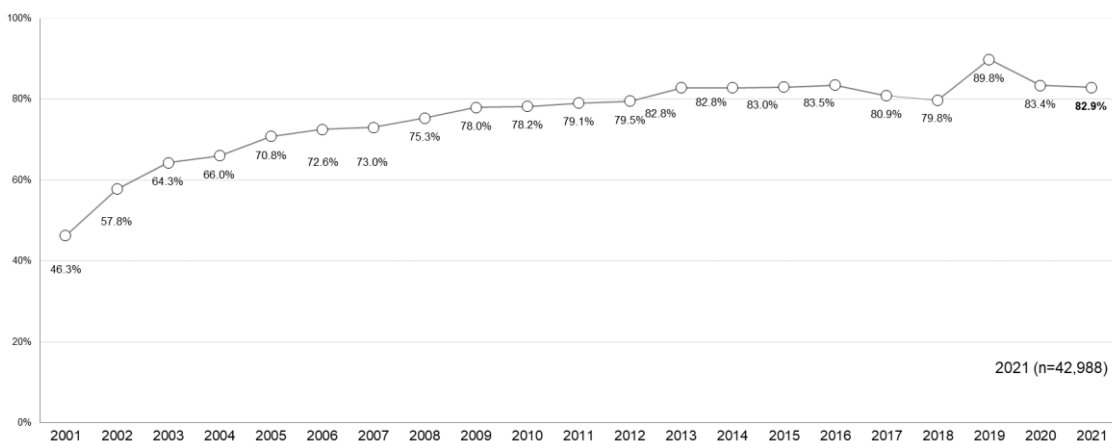


(Note) Including non-respondents.

(3) Internet usage (individuals)

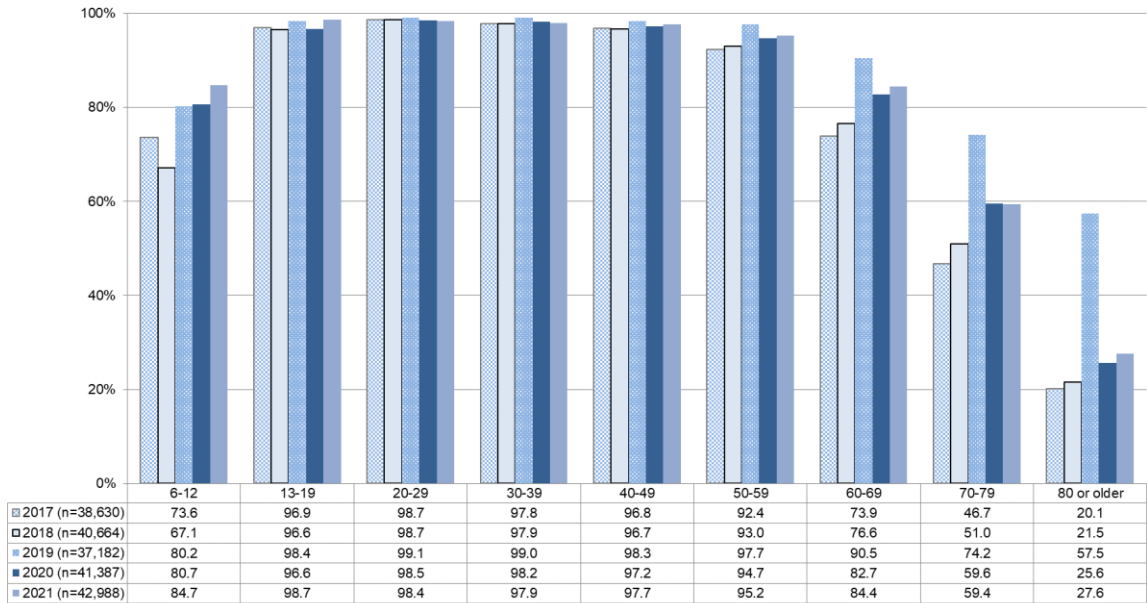
The internet user share is 82.9%. The share tops 90% for individuals aged between 13 and 59.

Figure 1-4: Transitions in internet usage



(Note) For historical comparison, it should be remembered that the survey design for 2019 was somewhat different from that for other years.

Figure 1-5: Transitions in internet usage by age group



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Figure 1-6: Internet usage by age and gender (2021)

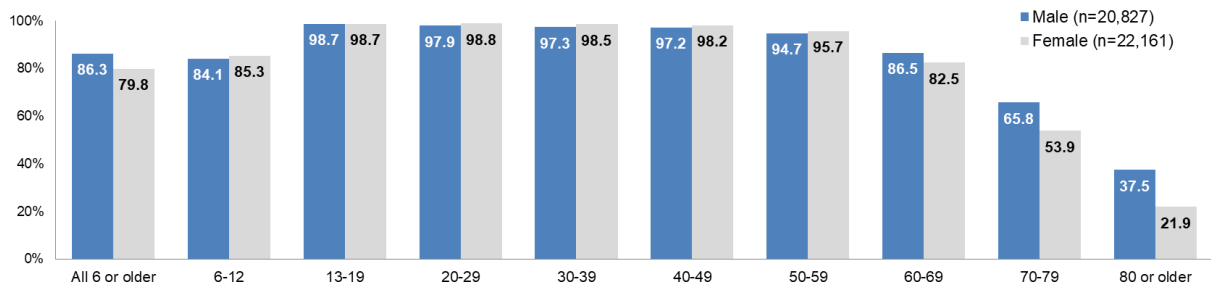
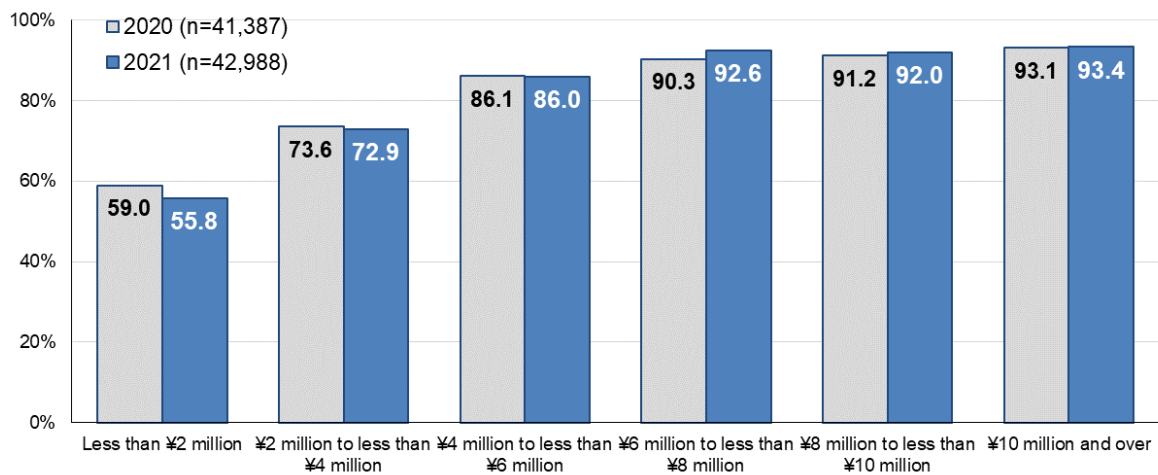


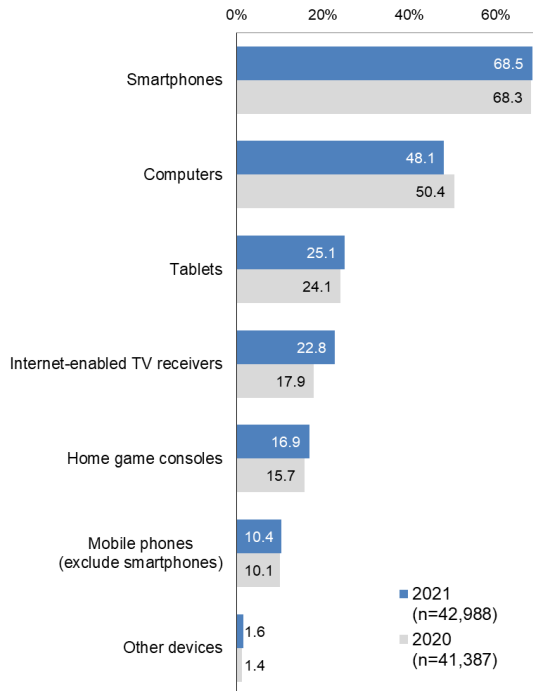
Figure 1-7: Internet usage by annual household income



(4) Internet usage by device (individuals)

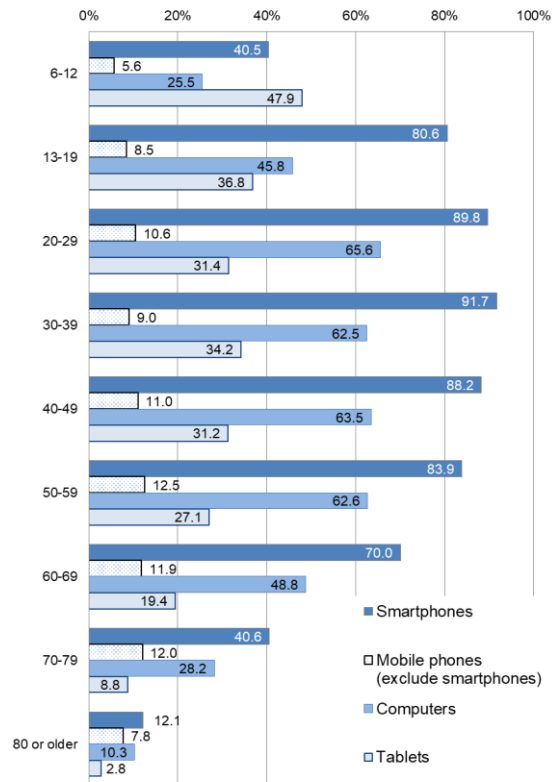
The internet usage by device indicates that the percentage of those using smartphones for internet access is 20.4 points higher than that of those using computer. By age group, the smartphone usage rate is about 90% in the age groups between 20 and 49 years old.

Figure 1-8: Internet usage by device



(Note) "Mobile phones (excluding smartphones)" include PHS handsets in 2020.

Figure 1-9: Use of internet devices by age group



(Note) Only major devices are covered.

(5) Internet usage by prefecture and region (individuals)

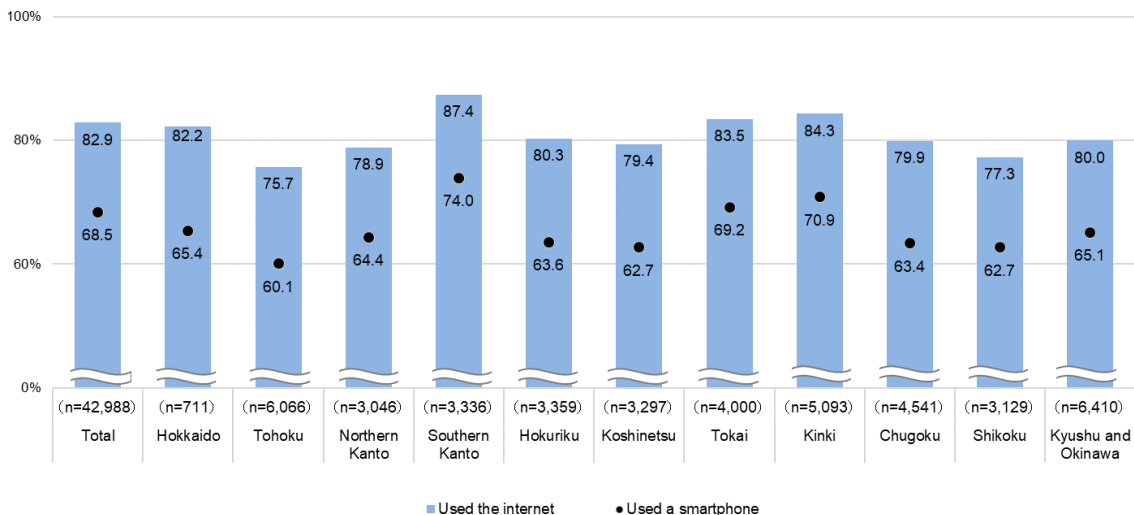
The internet usage by prefecture indicates that Kanagawa posts the highest internet usage rate, followed by Tokyo and Shiga in that order (see the colored parts in Figure 1-10).

By region, the internet usage rate in southern Kanto, Kinki and Tokai is higher than the national average rate.

Figure 1-10: Internet usage by prefecture and device (2021)

Prefecture (n)	Percentage of internet users (%)				
	Total	Computers	Mobile phones	Smartphones	Tablets
Hokkaido (711)	82.2	43.5	9.8	65.4	22.0
Aomori (910)	71.6	31.0	6.4	55.8	14.9
Iwate (1,049)	72.5	34.2	10.2	55.7	15.9
Miyagi (859)	82.1	45.6	8.6	69.1	26.5
Akita (969)	74.7	39.3	9.2	58.1	18.4
Yamagata (1,242)	74.8	37.0	8.9	57.5	14.7
Fukushima (1,037)	73.5	35.4	12.3	56.9	16.1
Ibaraki (847)	78.2	40.4	8.9	64.8	21.2
Tochigi (1,031)	79.7	41.3	9.1	63.9	20.5
Gunma (1,168)	79.0	41.5	10.5	64.2	21.1
Saitama (892)	85.4	48.3	10.2	70.2	27.3
Chiba (845)	85.5	50.6	9.4	72.0	21.6
Tokyo (794)	87.0	59.6	10.3	74.5	33.6
Kanagawa (805)	91.1	62.7	16.2	77.4	32.6
Niigata (1,252)	77.1	40.4	9.8	61.1	19.5
Toyama (1,181)	79.5	45.7	8.8	62.6	20.7
Ishikawa (1,136)	80.5	45.7	5.4	64.0	21.4
Fukui (1,042)	81.1	44.5	10.7	64.3	24.0
Yamanashi (1,056)	80.3	46.5	8.8	63.7	19.7
Nagano (989)	81.5	46.9	9.5	64.0	23.2
Gifu (1,113)	81.6	41.0	8.7	64.8	24.0
Shizuoka (1,026)	80.7	44.0	7.7	65.4	22.6
Aichi (920)	85.6	49.2	9.4	72.6	28.6
Mie (941)	82.0	45.1	11.9	66.9	24.5
Shiga (867)	86.7	49.4	10.3	71.4	24.9
Kyoto (896)	86.1	55.9	10.5	71.4	26.2
Osaka (798)	85.8	53.1	9.7	73.0	26.5
Hyogo (771)	82.1	47.6	10.2	68.7	23.5
Nara (916)	83.3	48.4	10.6	69.4	21.4
Wakayama (845)	76.2	39.1	11.7	63.2	22.7
Tottori (957)	77.6	43.6	10.1	61.0	21.4
Shimane (981)	75.2	38.6	8.7	58.5	21.0
Okayama (874)	80.4	45.5	8.9	64.0	22.7
Hiroshima (917)	80.9	46.2	10.9	64.0	21.6
Yamaguchi (812)	80.3	43.3	8.0	64.7	21.2
Tokushima (755)	76.7	41.1	8.8	60.9	22.0
Kagawa (937)	78.6	44.4	7.9	64.6	22.7
Ehime (736)	78.4	41.8	9.1	64.5	20.2
Kochi (701)	74.4	36.1	7.8	58.5	17.5
Fukuoka (814)	85.7	44.4	15.1	71.7	27.5
Saga (937)	77.9	38.4	10.1	61.1	20.4
Nagasaki (781)	71.4	32.0	7.8	59.3	17.3
Kumamoto (875)	75.5	34.4	9.2	59.2	17.2
Oita (836)	80.0	42.5	11.3	63.5	23.9
Miyazaki (770)	75.2	39.0	9.8	62.3	21.4
Kagoshima (843)	78.0	37.1	8.1	65.7	20.9
Okinawa (554)	79.0	41.1	12.5	58.6	21.8
Total (42,988)	82.9	48.1	10.4	68.5	25.1

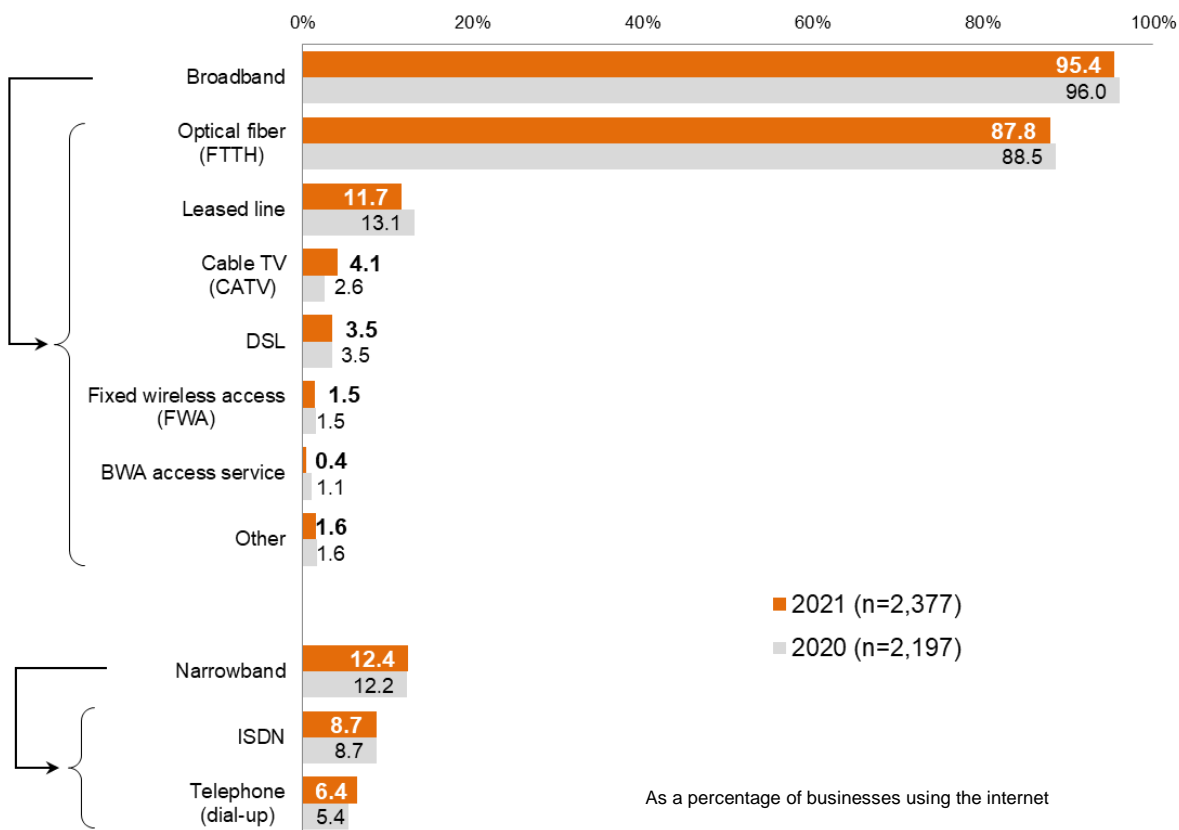
Figure 1-11: Internet and smartphone usage by region (2021)



(6) Types of internet connections (businesses)

Of the surveyed businesses, 95.4% use a broadband connection to access the internet from their premises. Of businesses using a broadband connection, 87.8% use an optical fiber connection.

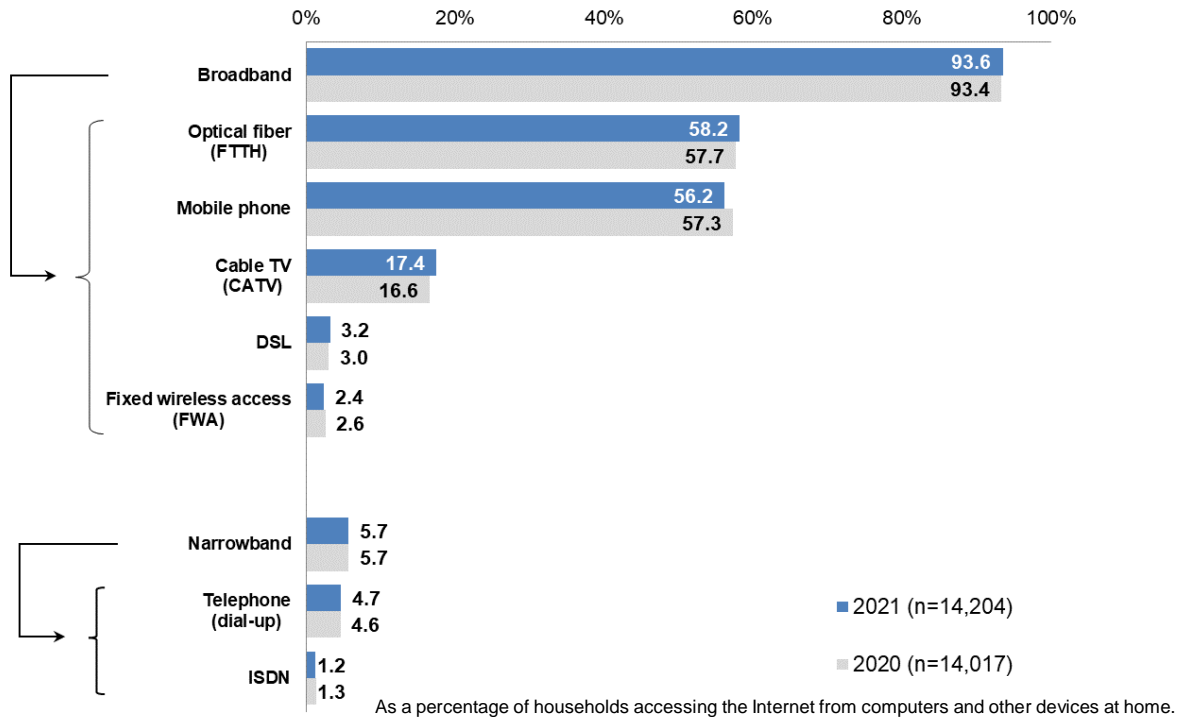
Figure 1-12: Internet connection types (multiple responses accepted)



(7) Types of internet connections (households)

Of households using a broadband connection to access the internet from computers, tablets and other devices at home, 93.6% use a broadband connection.

Figure 1-13: Types of internet connections for computers and other devices at home (multiple responses accepted)

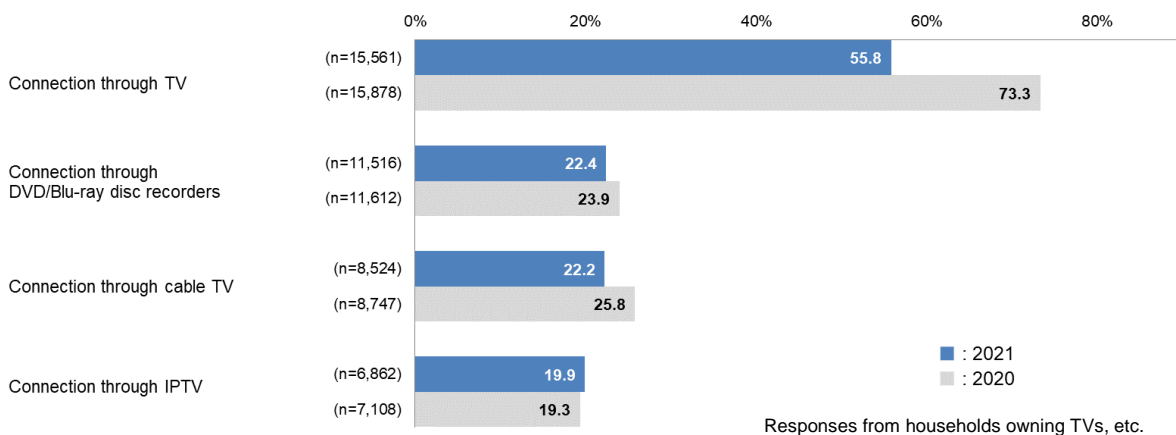


(8) Internet connection through TV, etc. (households)

Of households using an internet connection through a TV, etc., those using a connection through a TV account for the highest share at 55.8%, followed by 22.4% for those using a connection through DVD/Blu-ray disc recorders.

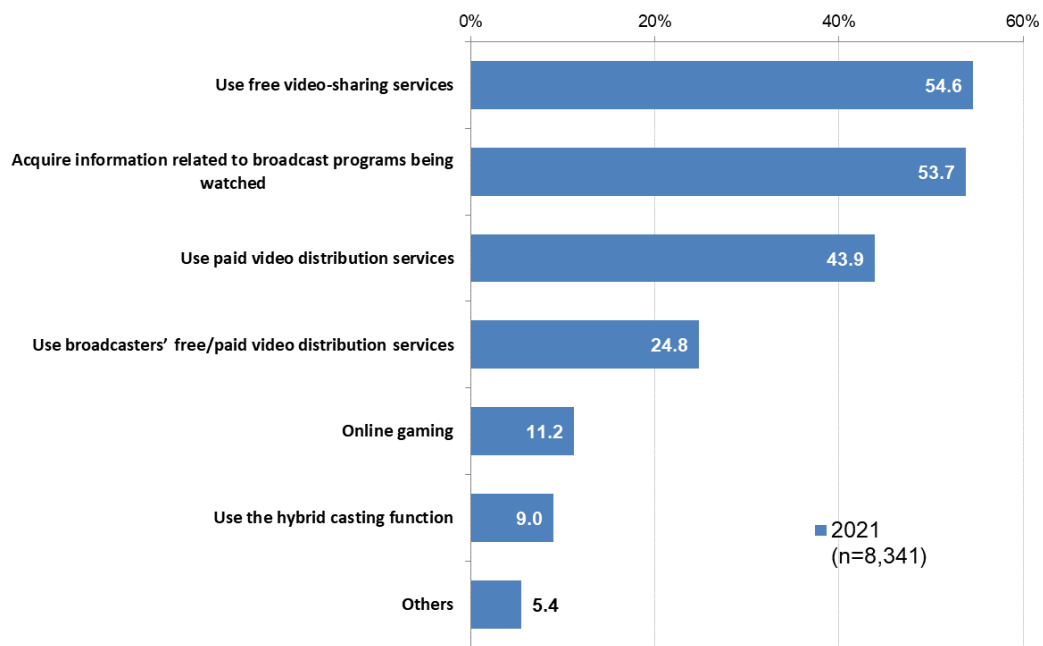
The most frequently cited purpose is to “use free video-sharing services, cited by 54.6%, followed by to “acquire information related to broadcast programs being watched” (53.7%).

Figure 1-14 Internet connection through TV, etc. (multiple responses accepted)



(Note) Comparison between years requires attention because some questionnaire questions were changed in 2021.

Figure 1-15 Purposes for using Internet services through TVs, etc. (multiple responses accepted)



Reponses from households using the Internet through TVs, etc.

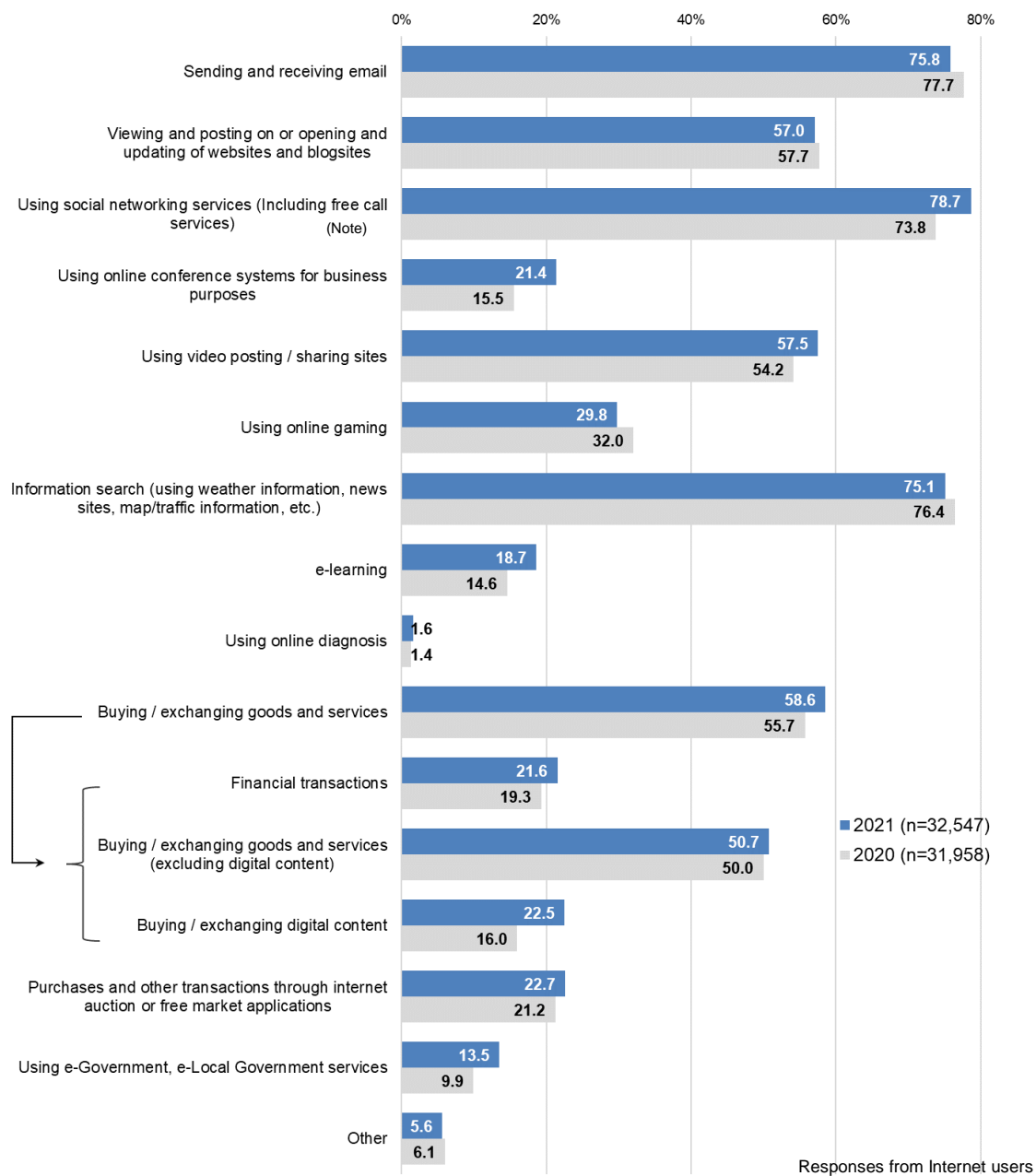
2. Current ICT Usage by Individuals

(1) Purposes of using the internet (individuals)

The most common usage of the internet is “using social networking services (including free call services),” cited by 78.7%. This is followed by “sending and receiving email” (75.8%) and “information search” (75.1%).

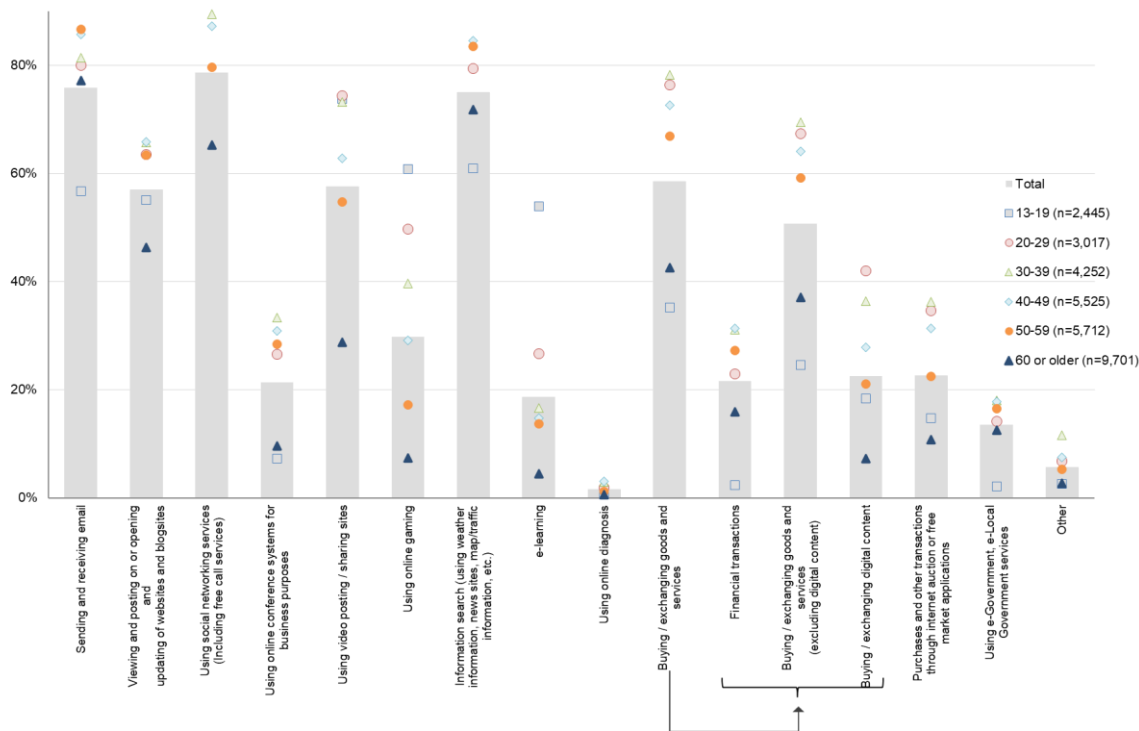
By age group, “using social networking services (including free call services)” and “sending and receiving email” are highly common usages across all age groups, while there are wide differences between age groups with respect to such usages as “e-learning” and “using online gaming.”

Figure 2-1: Purposes of using the internet (multiple responses accepted)



(Note) Using Facebook, Twitter, LINE, mixi, Instagram, Skype, etc.

Figure 2-2: Purposes of using the internet by age group (multiple responses accepted) (2021)



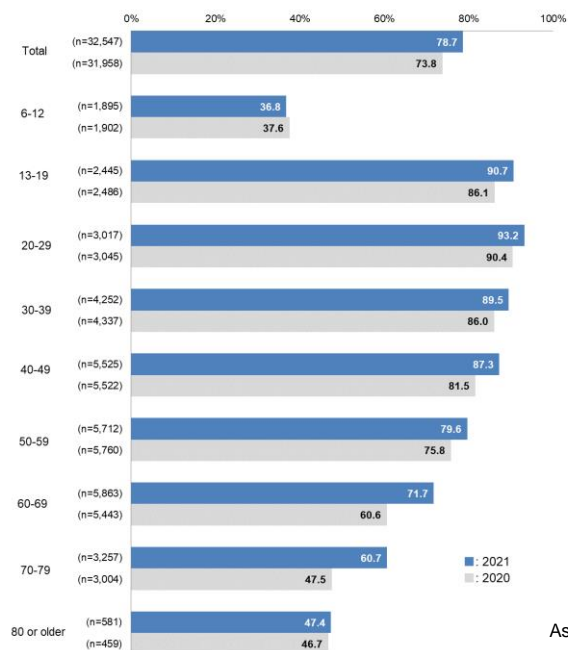
Responses from Internet users

(2) Social networking service usage (individuals)

Of internet users, 78.7% use social networking services, up 4.9 points from the previous year. The share scores particularly sharp growth among individuals aged between 60 and 79.

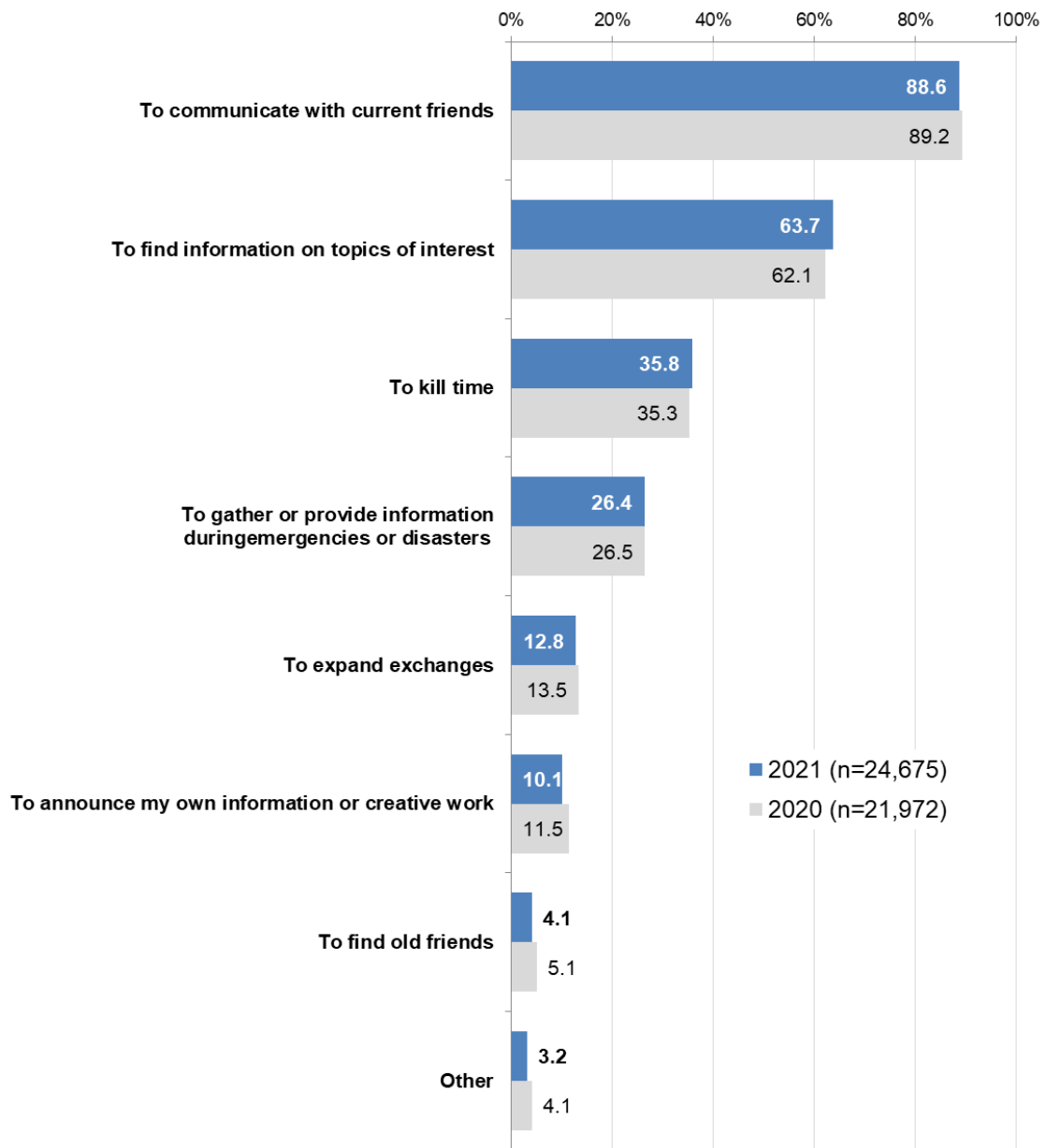
Among purposes of social networking service usage, “to communicate with current friends” (88.6%) is the most frequently cited, followed by “to find information on topics of interest” (63.7%).

Figure 2-3: Social networking service usage



As a percentage of Internet users

Figure 2-4: Purposes of social networking service usage (multiple responses accepted)



Responses from social networking service users

3. Introduction and Implementation of Telework

(1) Introduction of telework (businesses)

The share for businesses having introduced telework comes to 51.9%, up 4.4 points from the previous survey.

Among types of telework that have been introduced, “working from home” is the most frequently cited (91.5%).

The telework introduction rate increases in many industries. Particularly in the “information and communications” industry, most businesses (97.7%) have introduced telework. The rate is also as high as 82.4% in the “financial and insurance” industry and 75.1% in the “real estate” industry.

By capitalization, the rate is the highest at 93.4% for businesses capitalized at 5 billion yen or more. Businesses with teleworking employees’ shares at 80% or more account for 14.8% of responding businesses, up 8.1 percentage points from the previous survey. The percentage for those with such shares below 5% decreases by 10.7 points.

The most frequently cited purpose for introducing telework is to “respond to COVID-19 (prevention of infections and business continuation),” cited by 90.5%. It is followed by to “shorten workers’ traveling time and avoid congestion” (37.0%). Meanwhile, the share falls to 27.6% for to “raise efficiency (productivity) of business processes.”

Concerning the intended effects of telework introduction, 74.3% recognize either “very beneficial” or “somewhat beneficial” effects.

Of businesses that have not implemented telework, “work is not suited to telework” is cited by the largest percentage, 81.7%, as the reason for not introducing telework.

Figure 3-1: Telework introduction

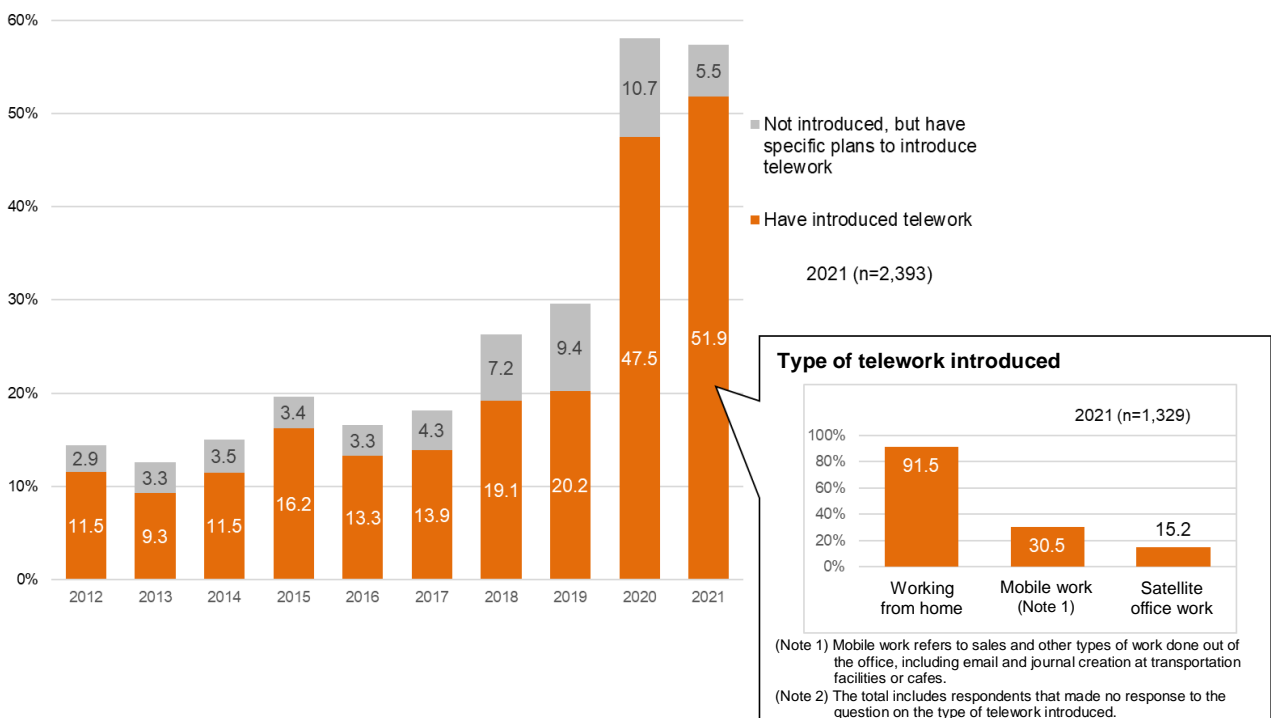
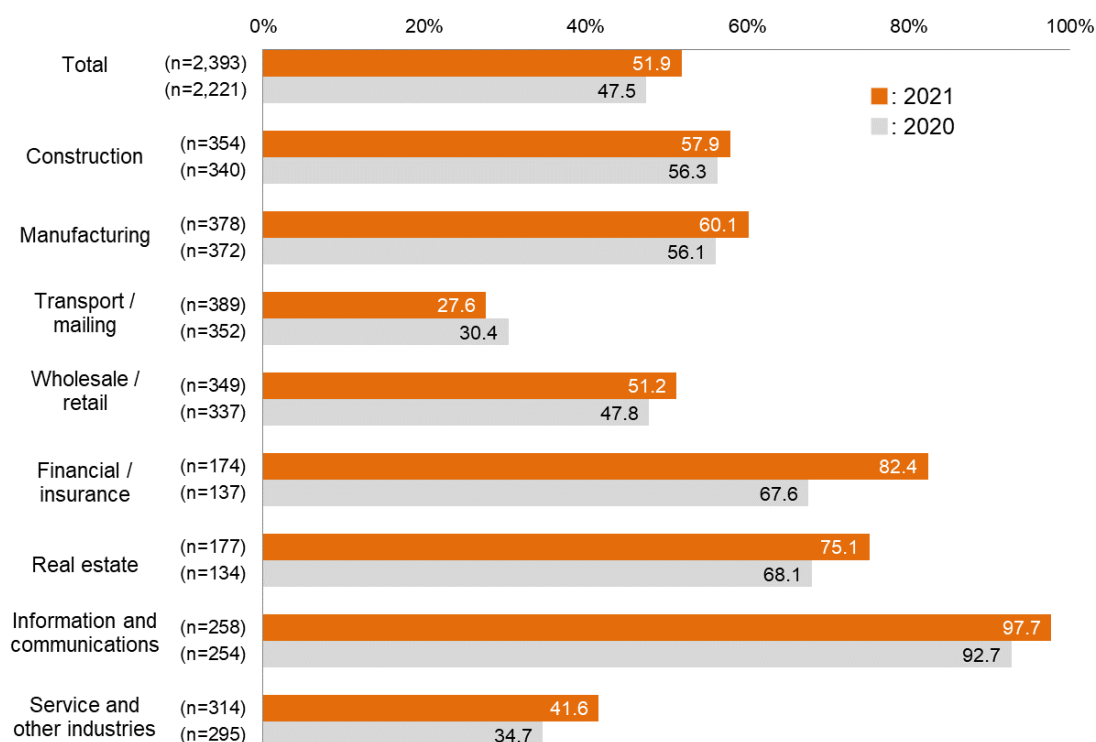


Figure 3-2: Telework introduction by industry and capitalization

By industry



By capitalization

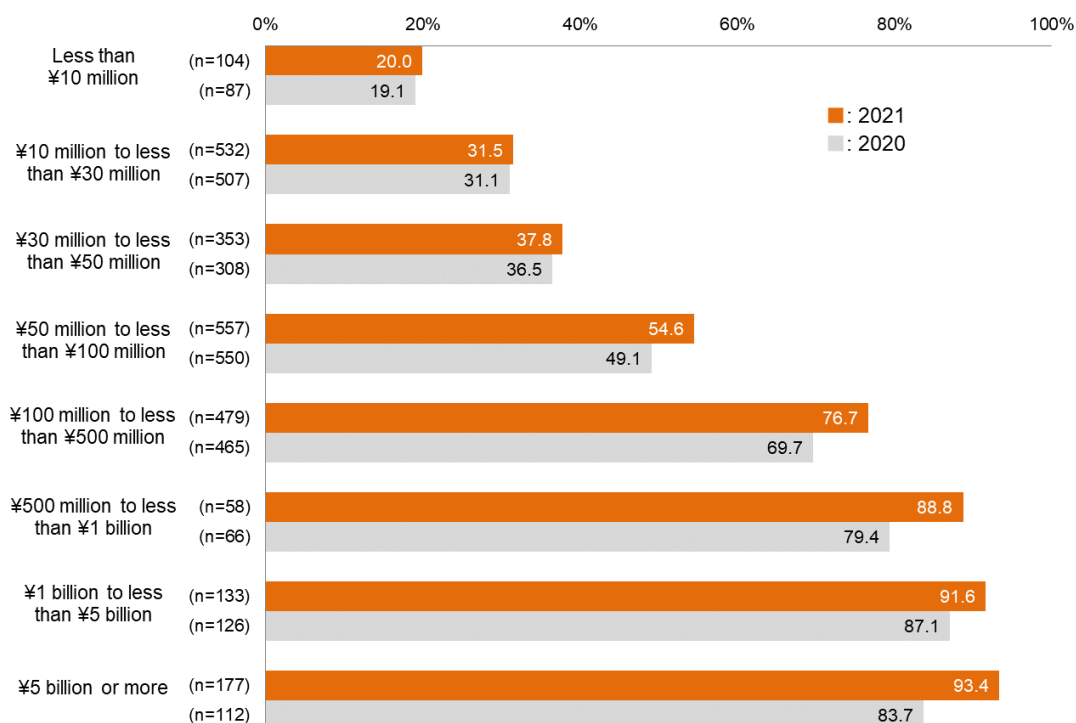


Figure 3-3: Percentage of telework employees

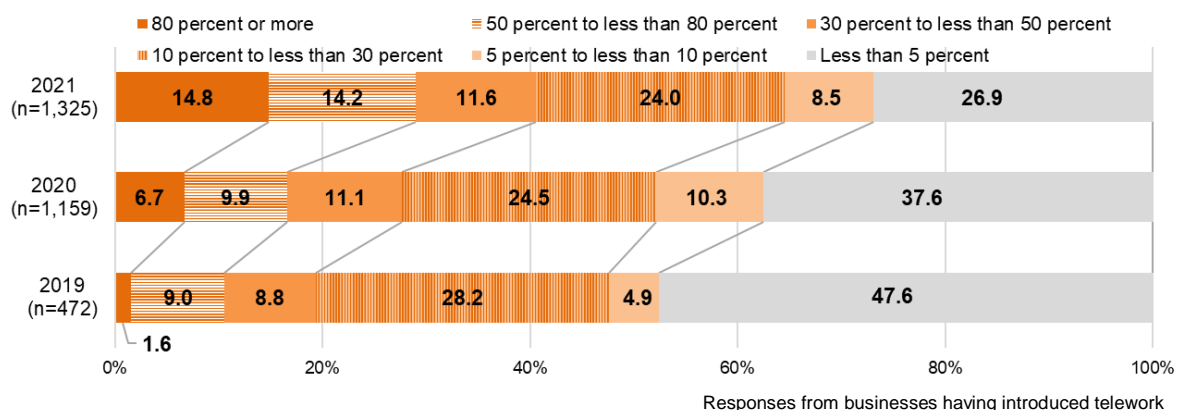
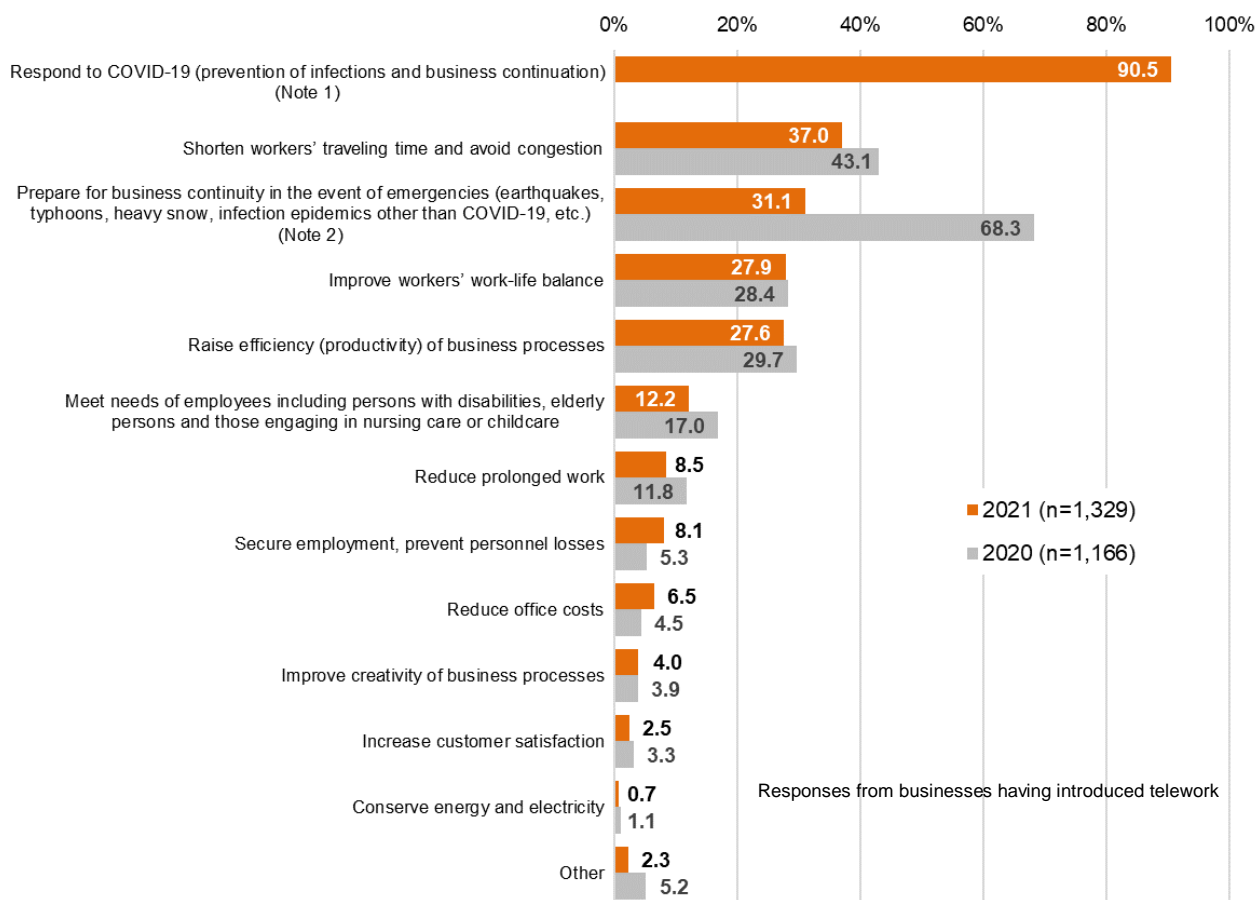


Figure 3-4: Purposes of introducing telework (multiple responses accepted)



(Note 1) "Respond to COVID-19 (prevention of infections and business continuation)" is a new option adopted for the 2021 survey.

(Note 2) "Prepare for business continuity in the event of emergencies (earthquakes, typhoons, heavy snow, infection epidemics, etc.)" in the 2020 survey

Figure 3-5: Telework benefits (2021)

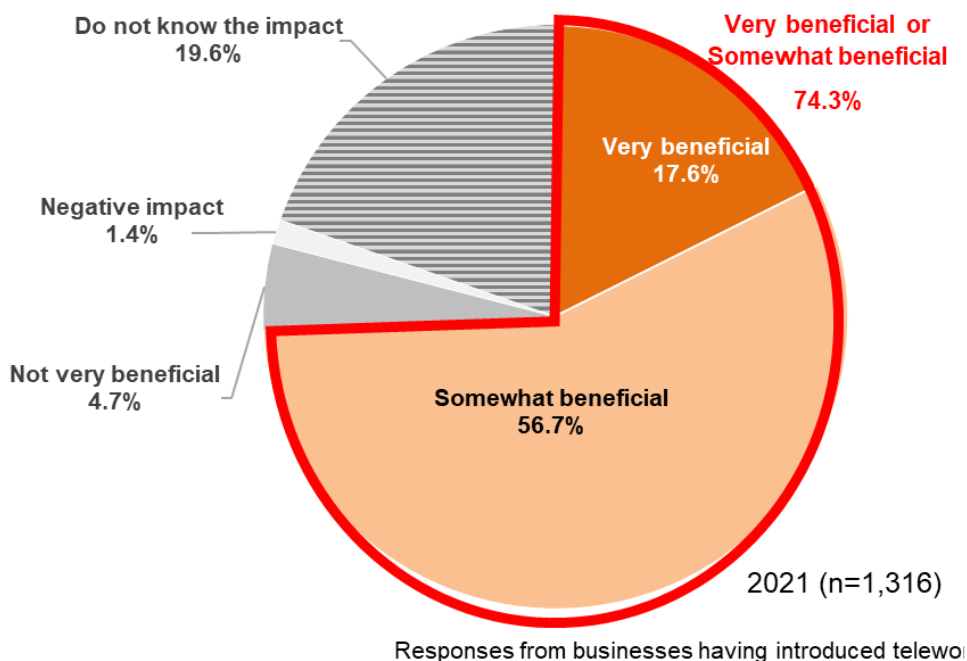
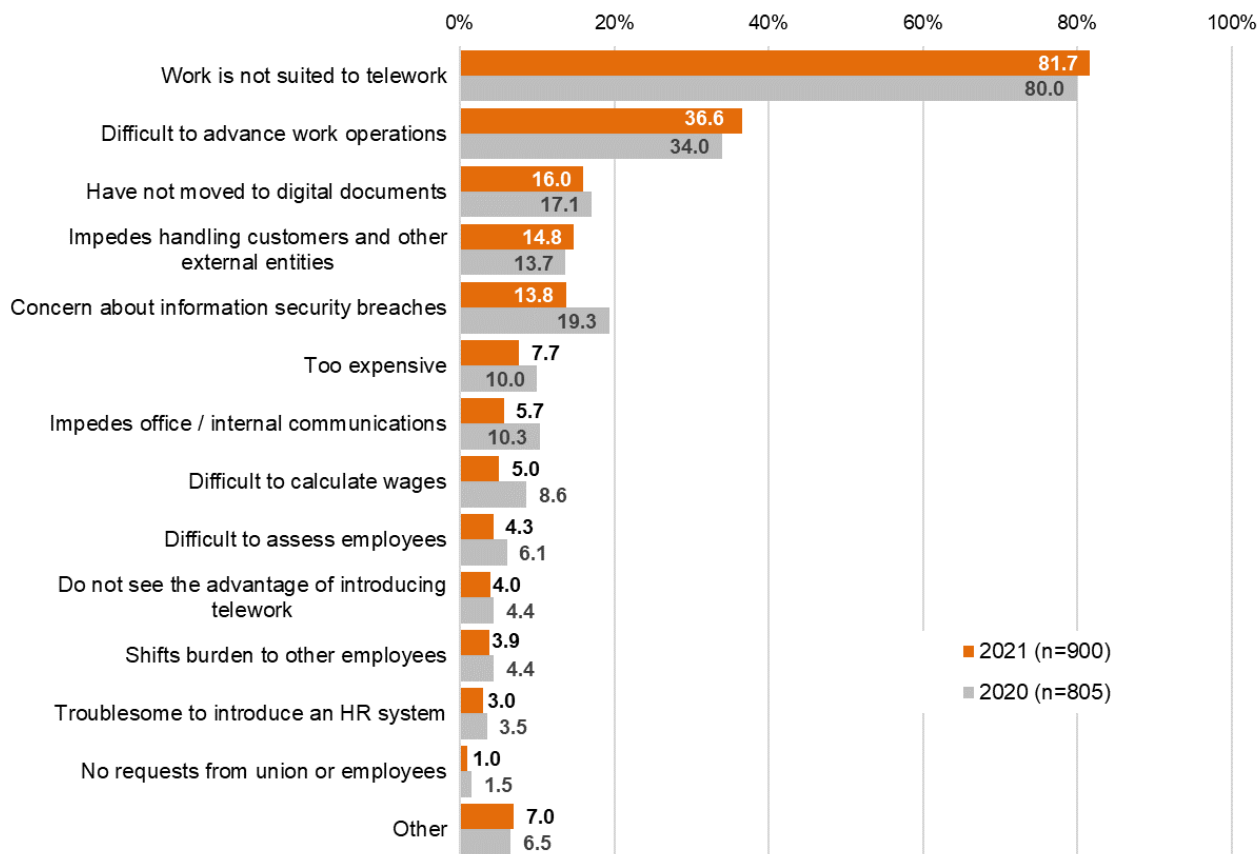


Figure 3-6: Reasons for not introducing telework (multiple responses accepted)



Responses from businesses that have not introduced telework or made plans to do so.

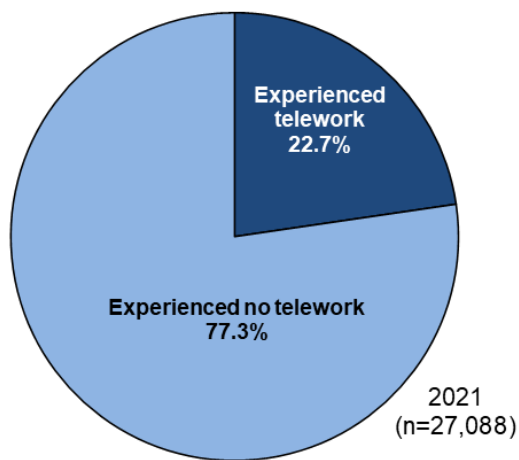
(2) Engagement in telework (individuals)

Of individuals aged 15 or older working for businesses or other organizations, 22.7% have the experience of engaging in telework. The percentage of respondents citing “working from home” among telework types is particularly high at 94.2%.

Of individuals who have not engaged in telework, those hoping to engage in telework account for 17.3%.

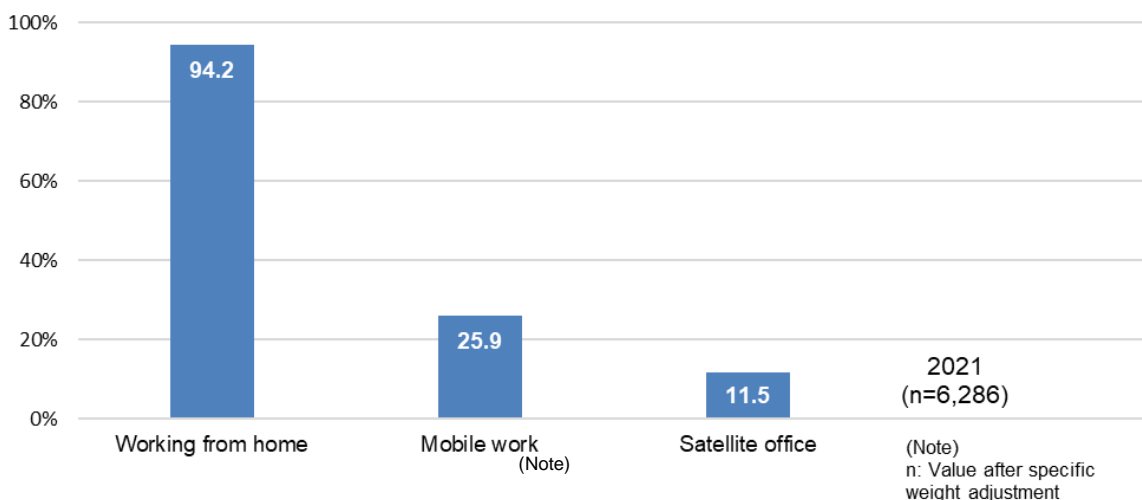
The most frequently cited reason for failing to engage in telework is that “work is not suited to telework” (58.3%), followed by the reason that “there is not a telework system at the employer” (27.8%).

Figure 3-7: Having engaged and hoping to engage in telework



As a percentage of individuals aged 15 or older and working for businesses and other organizations

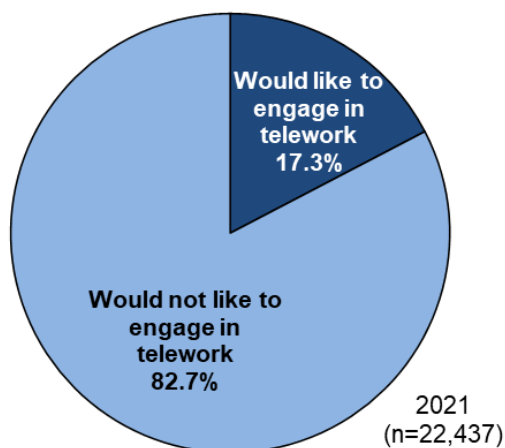
Figure 3-8: Type of telework (multiple responses accepted)



(Note) Mobile work refers to sales and other types of work done out of the office, including email and journal creation at transportation facilities or cafes.

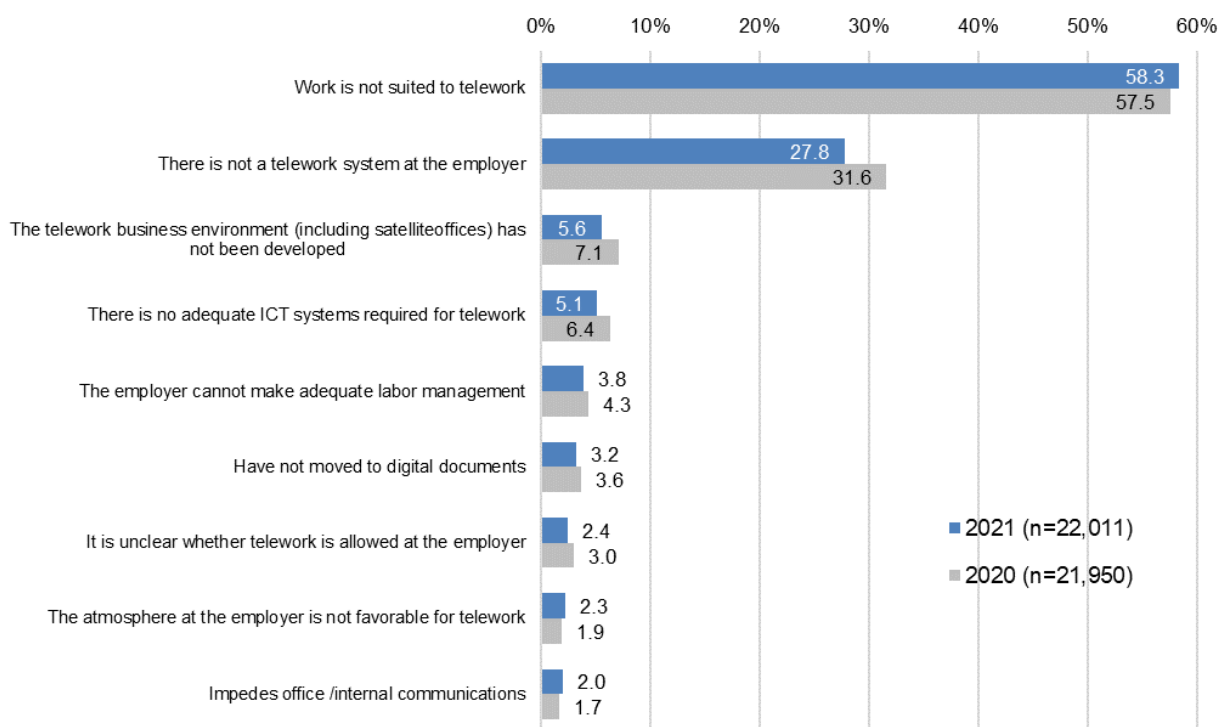
Responses from employees who are aged 15 or more and have engaged in telework.

Figure 3-9: Whether or not individuals would like to engage in telework (2020)



Responses from employees who are aged 15 or more and have not engaged in telework.

Figure 3-10: Reasons for not engaging in telework (multiple responses accepted) (2021)



Responses from employees who are aged 15 or more and have not engaged in telework.

4. Current ICT Usage by Businesses

(1) Cloud computing service usage (businesses)

The share for businesses using at least some cloud computing services (hereafter referred to as “cloud services”) rises to 70.4%.

The most frequently cited among cloud services is “file storage and data sharing” (61.0%), followed by “email” (52.6%) and “Information sharing / portal” (52.0%). Users of advanced services such as “sales support” and “production management” are limited.

The most frequently cited reason for using cloud services is that “the same services are available irrespective of location or equipment” (50.2%), followed by the reason that “no need to have internal asset and storage systems” (41.7%).

As for the effects of the use of cloud services, 88.2% recognized either “very beneficial” or “somewhat beneficial” effects.

Figure 4-1: Transitions in cloud service usage

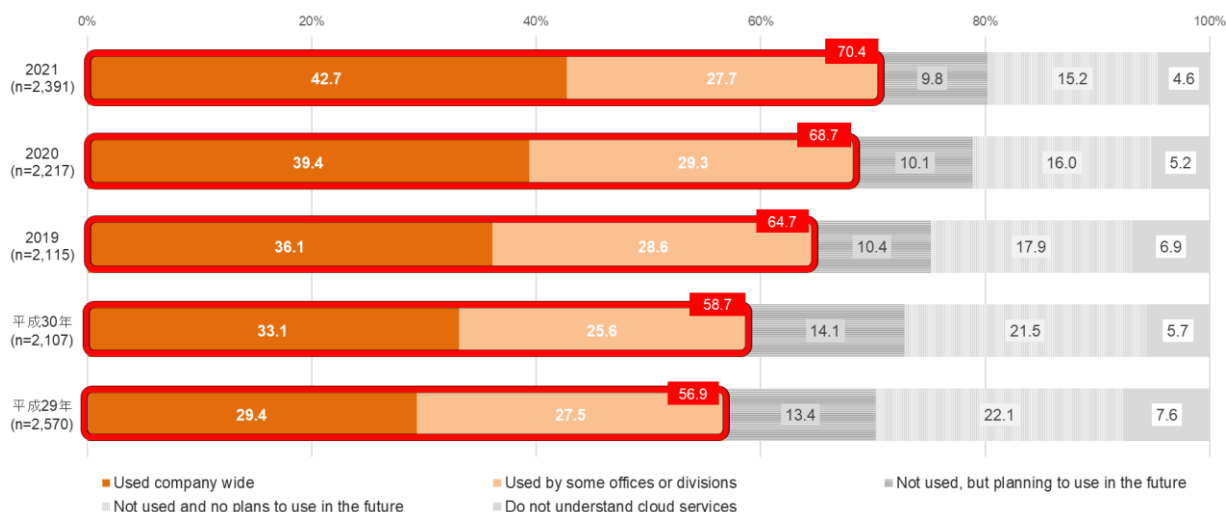


Figure 4-2: Cloud service usage by industry and capitalization

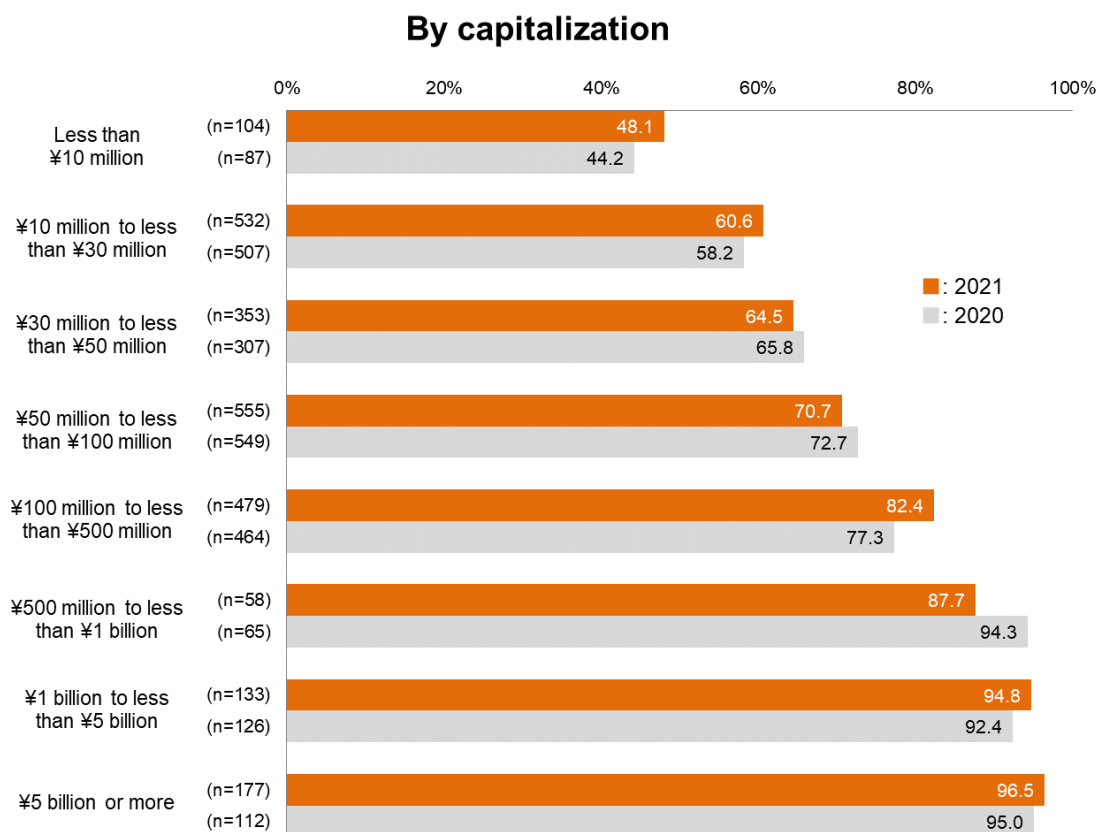
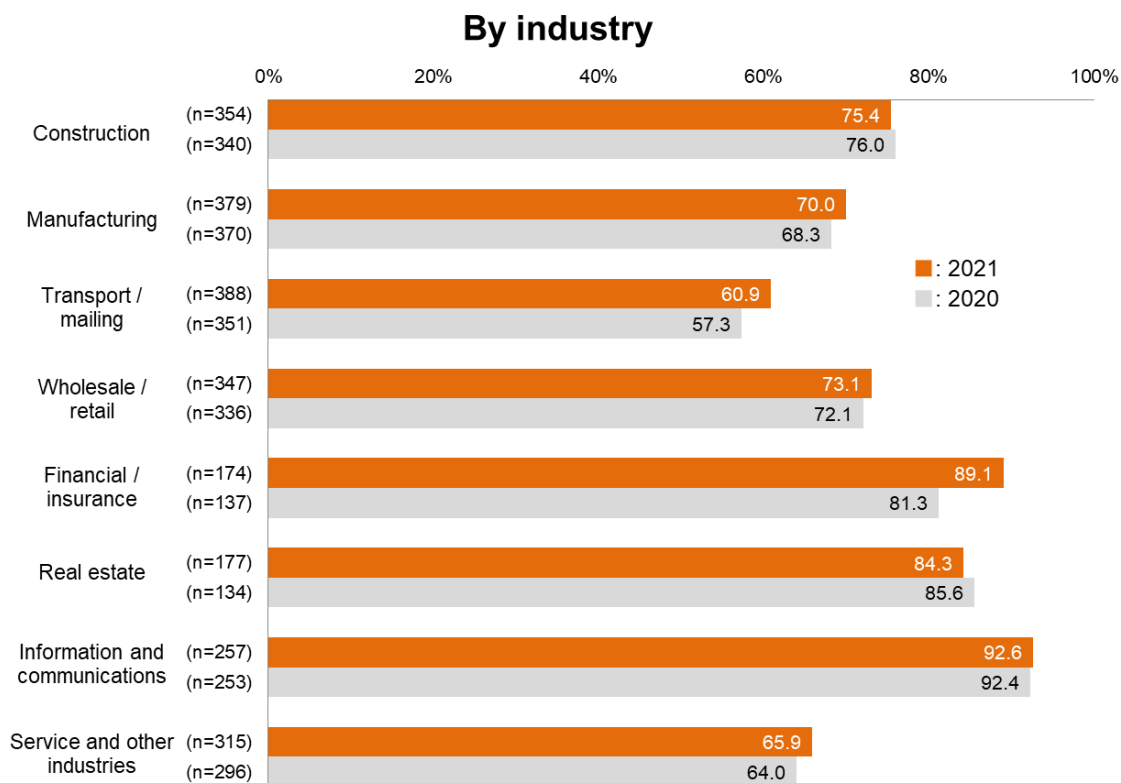
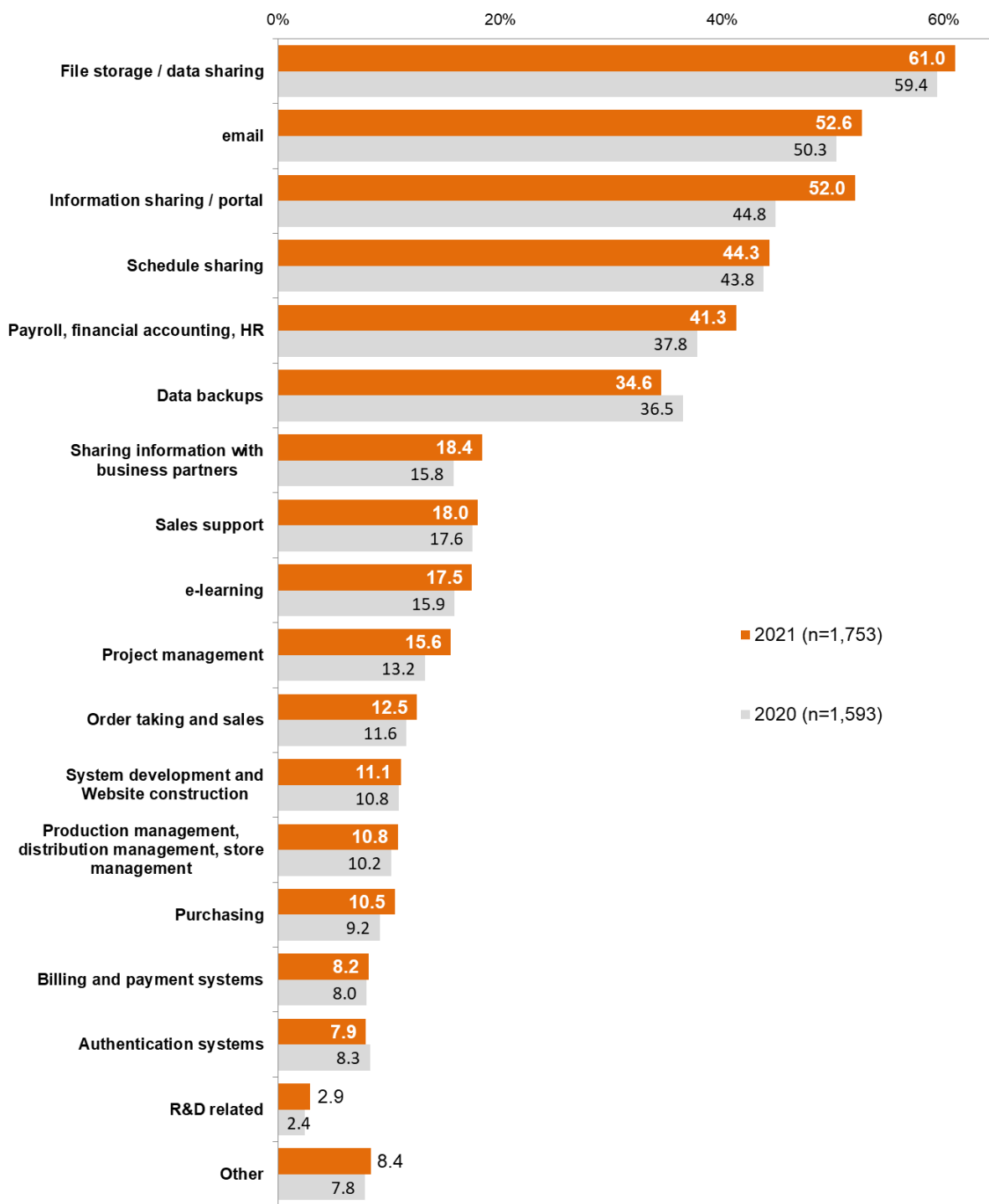
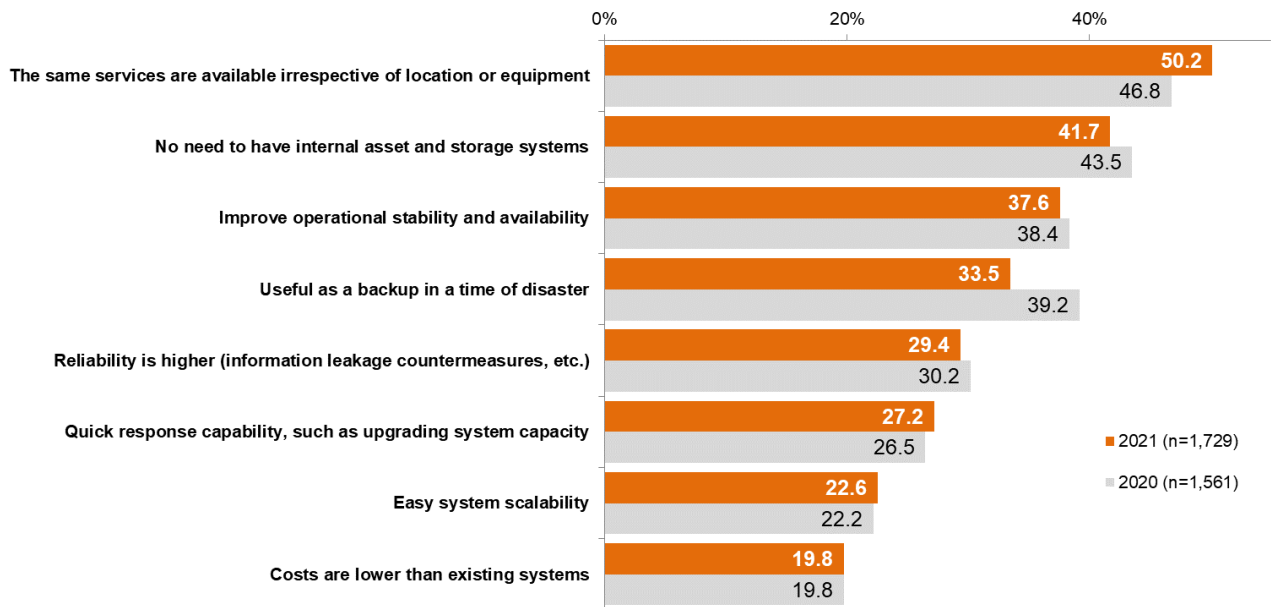


Figure 4-3: Cloud services used by businesses (multiple responses accepted)



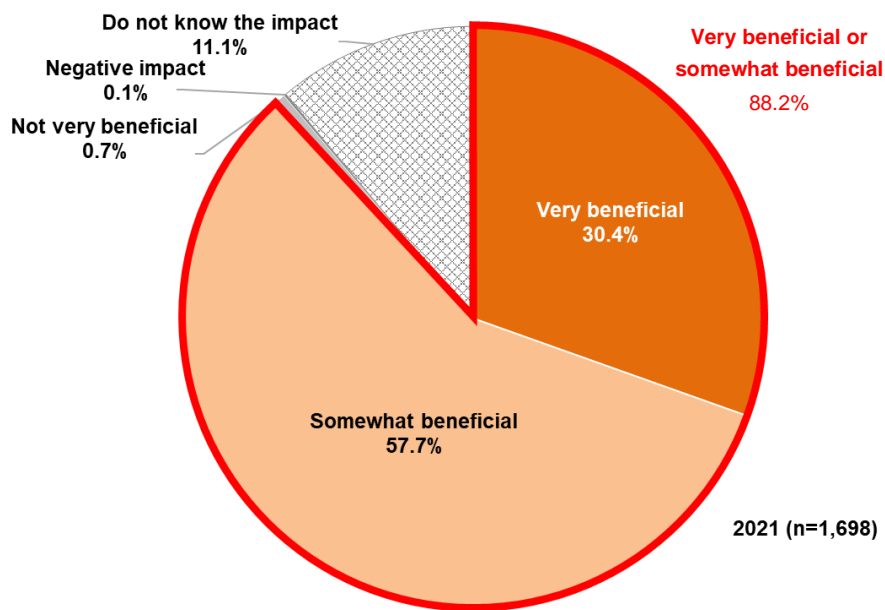
Responses from cloud service users

Figure 4-4: Reasons for using cloud services (multiple responses accepted)



Responses from cloud service users

Figure 4-5: Impact of cloud computing services (2021)



Responses from cloud service users

(2) Introduction of IoT/AI systems/services (businesses)

Businesses that have introduced IoT and AI systems or services to collect and analyze digital data account for 14.9% of respondents. The percentage of those that have done so and are planning to do so is 26.5%.

Among purposes of digital data collection/analysis with IoT/AI systems, “improvement of business efficiency/operations” is the most frequently cited (86.8%), followed by “improvement of customer services” (38.6%) and “overall optimization of business operations” (24.9%).

Those saying that the introduction of IoT and AI systems or services has been “very effective” or “somewhat effective” account for 83.4% of respondents.

The most frequently cited among components of IoT and AI systems or services that have been introduced are “surveillance cameras” (30.8%), followed by “physical security devices” (29.5%) and “sensors (including temperature and pressure sensors)” (29.5%). The most frequently cited among networks for IoT and AI systems is “wired networks,” cited by 68.9%.

Figure 4-6: Introduction of IoT and AI systems or services

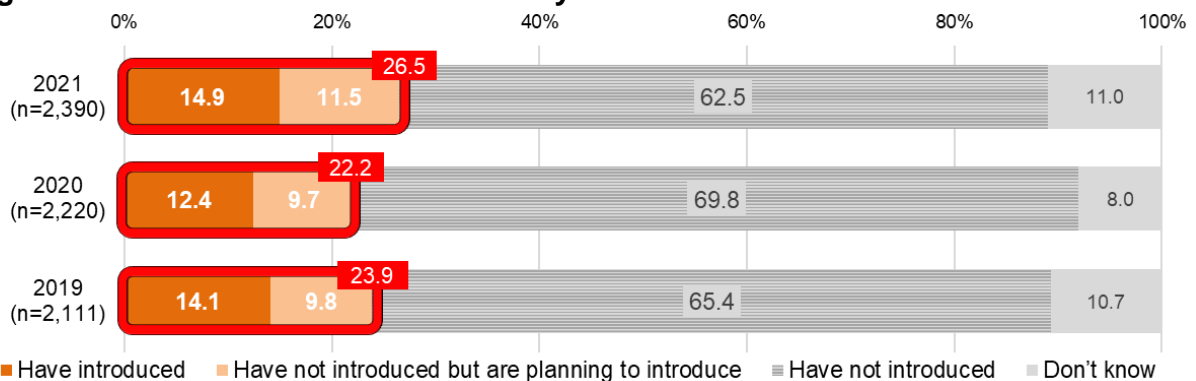
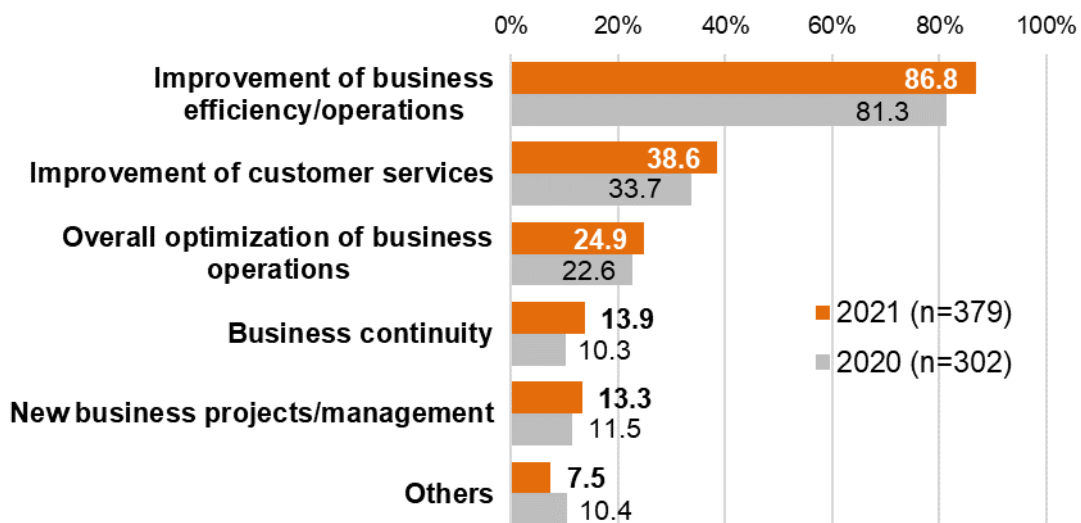


Figure 4-7: Purposes of digital data collection/analysis (multiple answers accepted)



Responses from IoT, AI and other system service users

Figure 4-8: Effects of IoT/AI system/service introduction (2021)

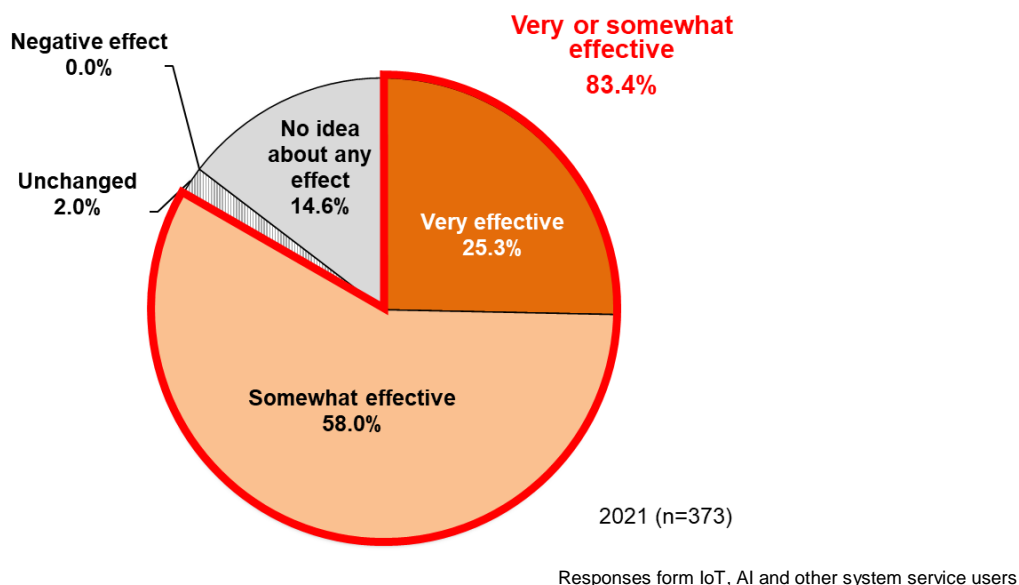


Figure 4-9: Components of AI/IoT systems/services (multiple answers accepted)

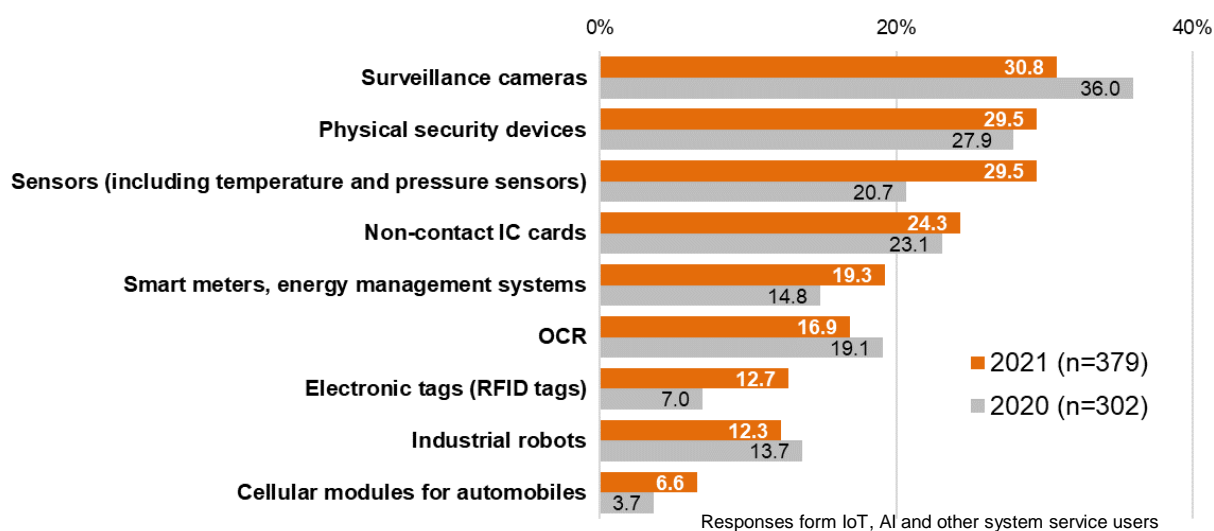
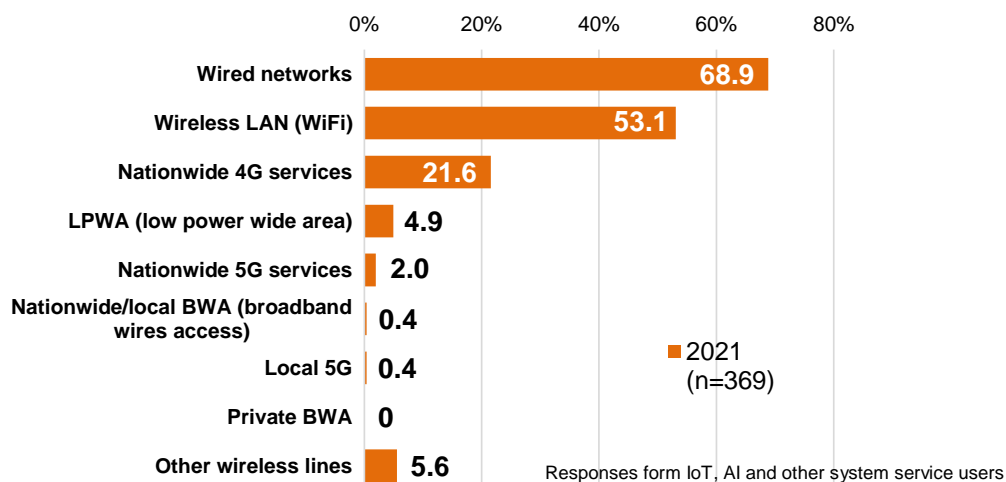


Figure 4-10: Networking IoT and AI systems (multiple answers accepted) (2021)

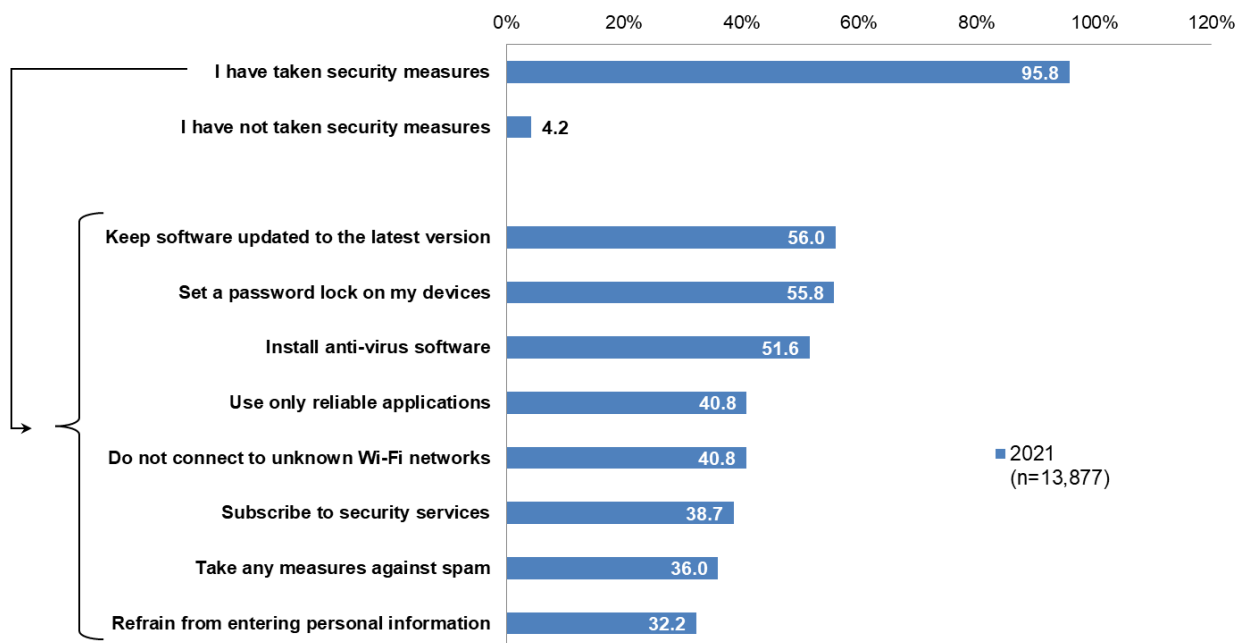


5. Safety and Security Efforts

(1) State of security measures (households)

Of households that use the internet, 95.8% have taken some security measures. The most common security measures taken are “keeping software updated to the latest version,” at 56.0%. This is followed by “setting a password lock on my devices” (55.8%) and “installing anti-virus software” (51.6%).

Figure 5-1: State of security measures (multiple responses accepted) (2021)



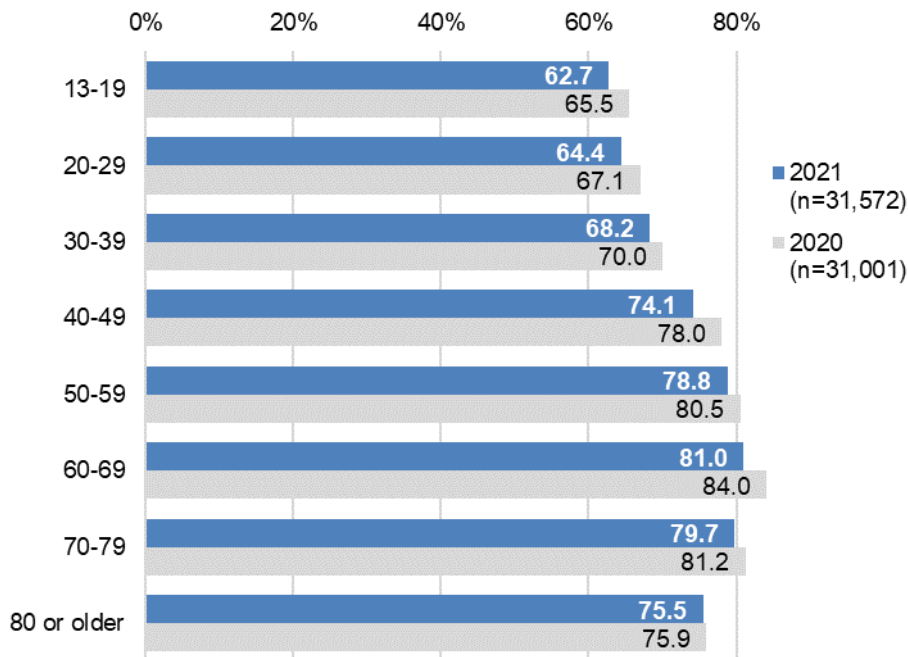
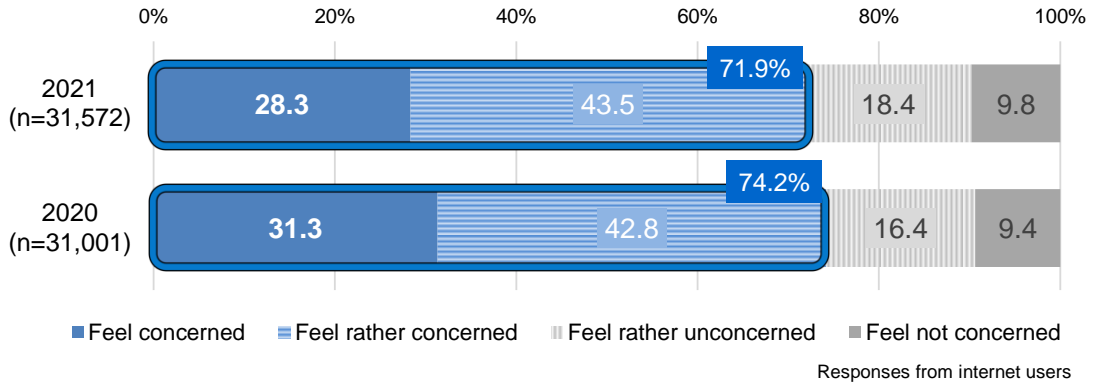
Tabulating responses from households that have at least one member who has used the internet in the past year

(2) Concerns about using the internet (individuals)

The combined percentage of internet users who “feel concerned” and “feel rather concerned” during internet use stands at 71.9%.

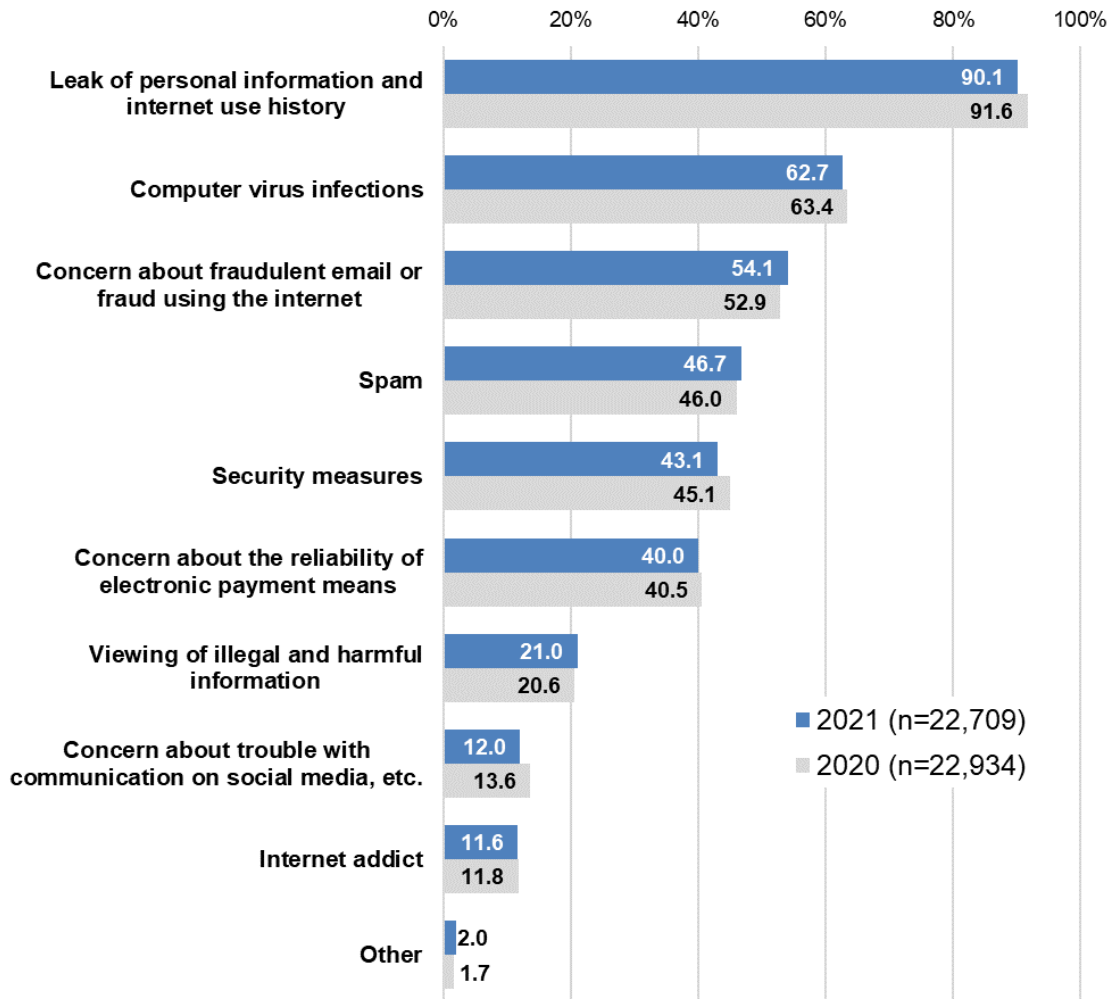
The most frequently cited type of concern about using the internet is “leak of personal information and internet use history” (cited by 90.1%), followed by “computer virus infections” (62.7%) and “concern about fraudulent email or fraud using the internet” (54.1%).

Figure 5-2: Concerns about using the internet



As a percentage of internet users who “feel concerned” and “feel rather concerned”

Figure 5-3: Types of concerns about using the internet (multiple responses accepted)



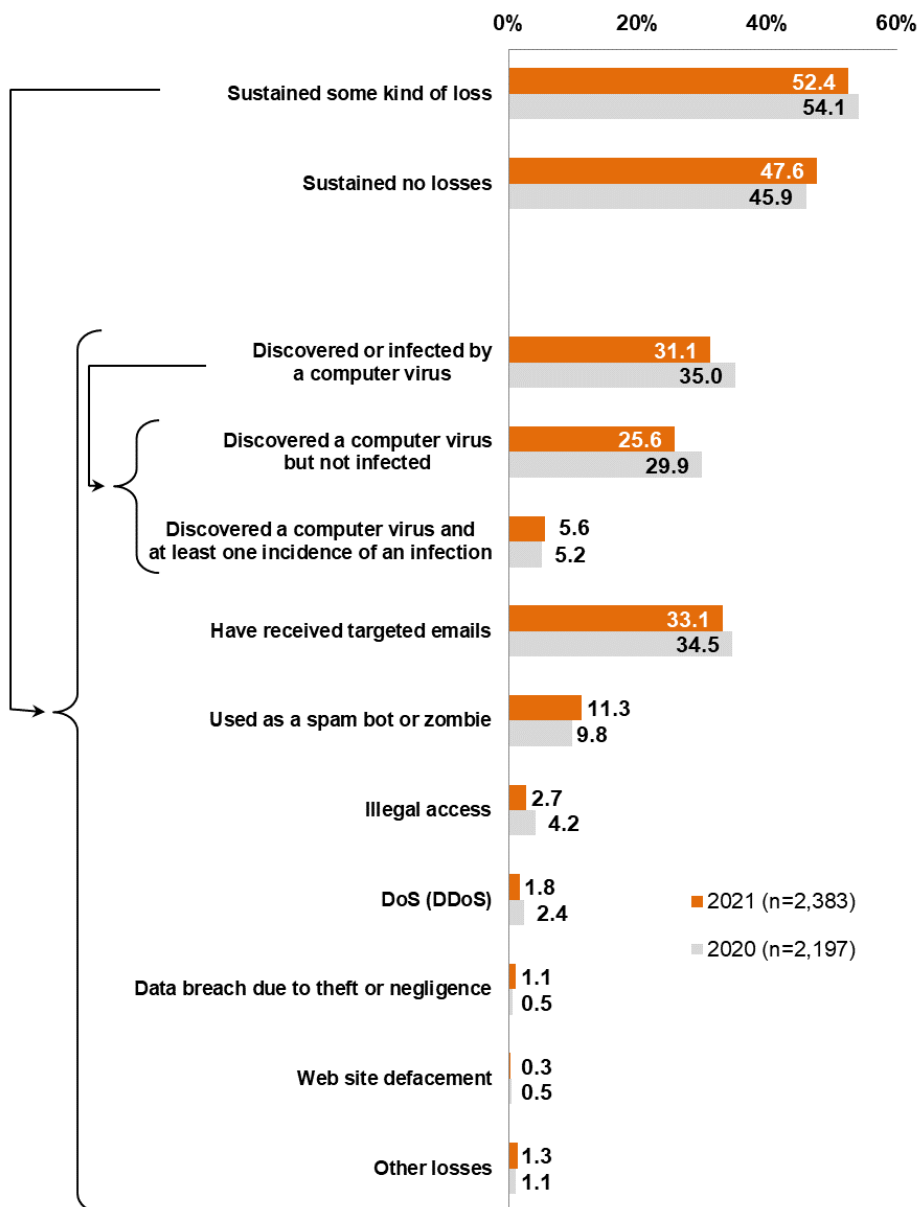
Responses from individuals who have used the internet and have concerns about using the internet

(3) Security breaches against information-communication networks and security measures implemented (businesses)

Among businesses that use information-communication networks, 52.4% report some losses resulting from a security breach during the use of information-communication networks in the past year. The most frequently cited type of security breach is “targeted emails” (cited by 33.1%), followed by “discovery of or infection with a computer virus” (31.1%).

The percentage of businesses that implement some security measures is 98.1%. By type of security measure, the implementation rate is the highest at 83.1% for “installing anti-virus programs on computers and other devices (operating systems, software, etc.), followed by 61.6% for “installing anti-virus programs on servers” and 57.0% for “controlling access with IDs, passwords, etc.”

Figure 5-4: Security breaches that occurred in the past year during the use of information-communication networks (multiple responses accepted)



Responses from businesses using the internet

Figure 5-5: State of security measures (multiple responses accepted)

