Released on June 7, 2024

Attachment 1

Highlights of the Communications Usage Trend Survey in 2023

<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 2023.
- The household survey targets households headed by householders aged 20 or older (as of April 1, 2023) 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 (6,121 businesses)

Highlights of the Survey

- Regarding household ownership of main information and communication devices, the percentage of respondents having smartphones has reached 90.6%, it has continued to rise. While the percentage of respondents having other information and communication devices has generally shown a downward trend.

- The percentage of businesses introducing telework was about 50%, showing a downward trend from last year. “Improvement in the work-life balance of workers” and “Prepare for business continuity in the event of emergencies” have increased as the reasons to introduce telework.

- The percentage of businesses using cloud services is about 80%, and the percentage of those that have introduced IoT and AI is 16.9%, both are showing an upward trend.

- About 70% of Internet users feel some form of anxiety while using the Internet. When asked the reason for anxiety, the number of respondents stating, “Come across illegal / harmful or of uncertain authenticity information” significantly increased by as much as 8.1 points.

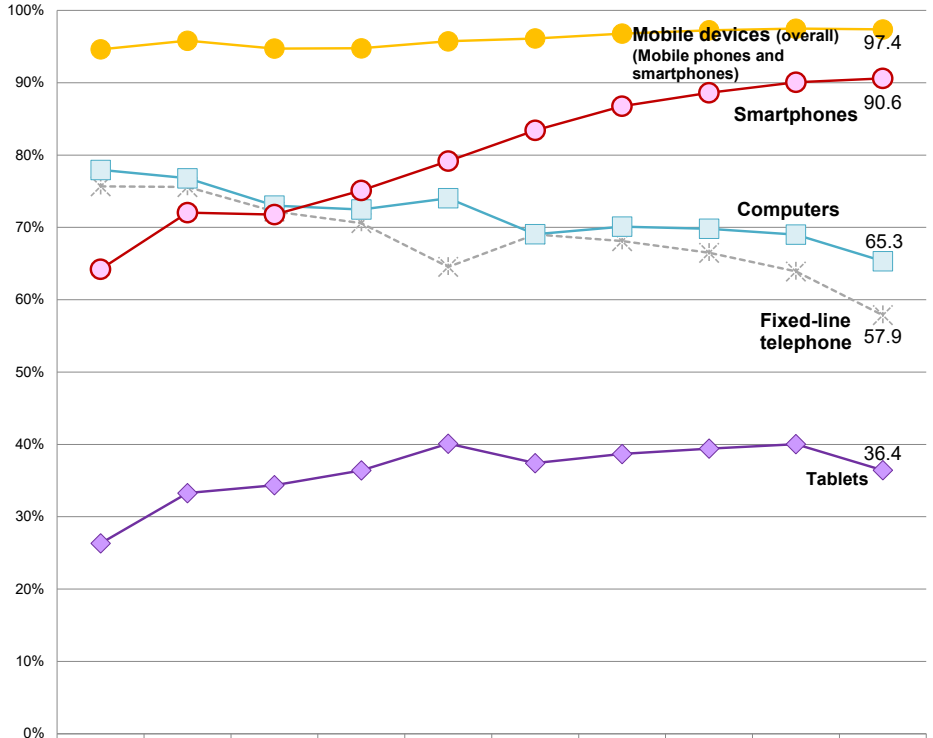
<Notes>

- 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. Dissemination State of Information and Communication Devices

Ownership of common communication devices (households) (2014 - 2023)

The percentage of households with smartphones (90.6%) is over 90% and continues to increase.
On the other hand, personal computers (65.3%), tablets (36.4%), and landline telephones (57.9%) are declining.



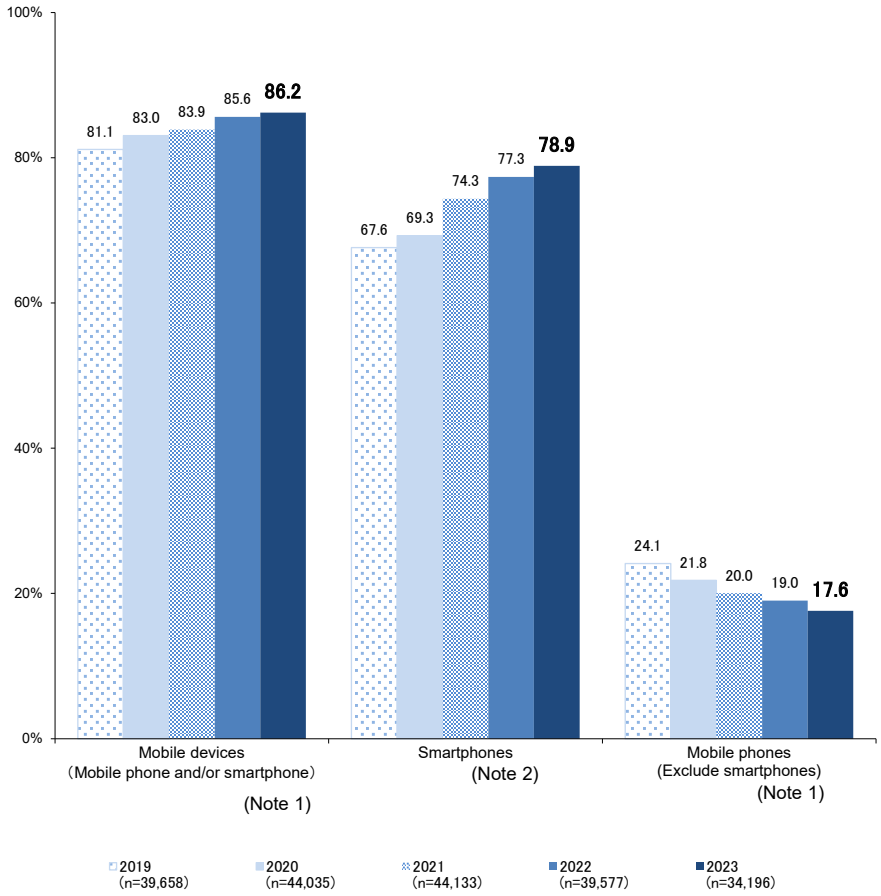
	2014 (n=16,529)	2015 (n=14,765)	2016 (n=17,040)	2017 (n=16,117)	2018 (n=16,255)	2019 (n=15,410)	2020 (n=17,345)	2021 (n=17,365)	2022 (n=15,968)	2023 (n=14,059)
Fixed-line telephone	75.7	75.6	72.2	70.6	64.5	69.0	68.1	66.5	63.9	57.9
Computers	78.0	76.8	73.0	72.5	74.0	69.1	70.1	69.8	69.0	65.3
Smartphones	64.2	72.0	71.8	75.1	79.2	83.4	86.8	88.6	90.1	90.6
Mobile devices	94.6	95.8	94.7	94.8	95.7	96.1	96.8	97.3	97.5	97.4
Tablets	26.3	33.3	34.4	36.4	40.1	37.4	38.7	39.4	40.0	36.4

(Multiple responses accepted)

(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.

Ownership of mobile devices (individuals) (2019 - 2023)

The percentage of individuals owning smartphones (78.9%) is on the rise, while the percentage owning cell phones (excluding smartphones) (17.6%) is on the decline.



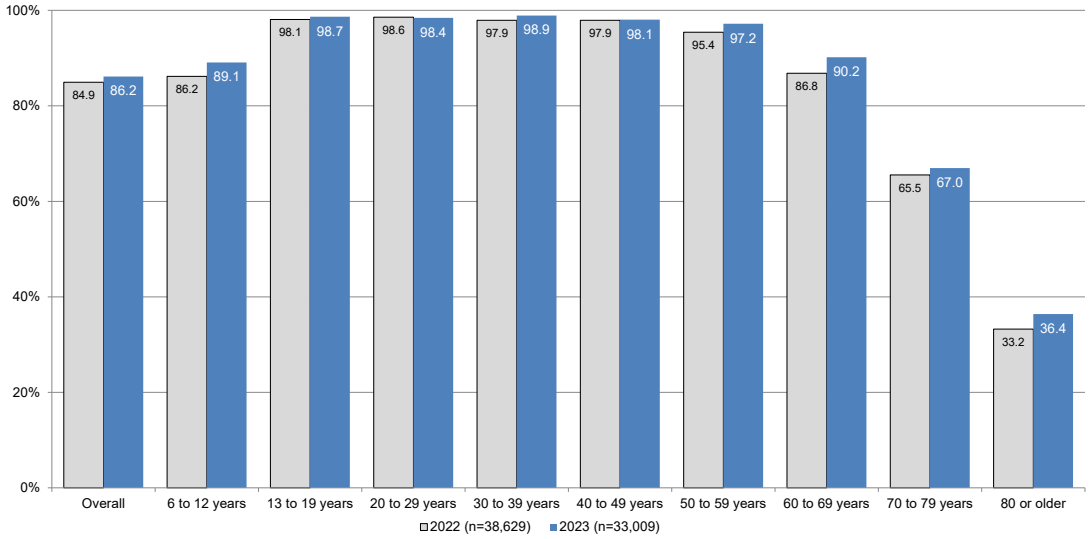
(Multiple responses accepted)

Note 1: "Mobile devices (overall)" and "cell phones (excluding smartphones)" include PHS handsets before 2020.
Note 2: Smartphones do not include 5G devices before 2020.

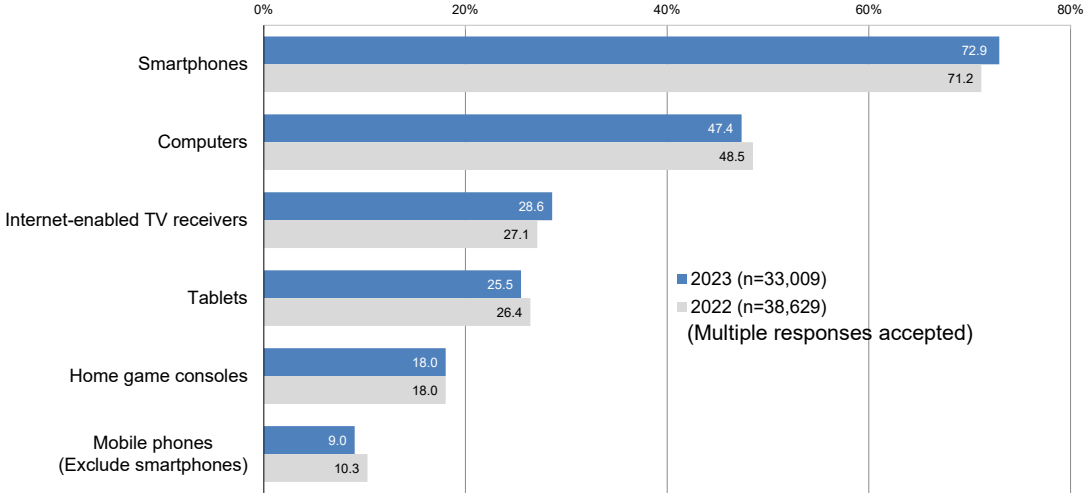
2. Internet Usage Trends (Individuals)

The percentage of individual Internet users exceeds 90% in each age group from 13 to 69 and is also rising in other age groups.
The use of smartphones as Internet access devices by individuals continues to rise, with approximately 90% in each age group from the 20-59 age group using them.

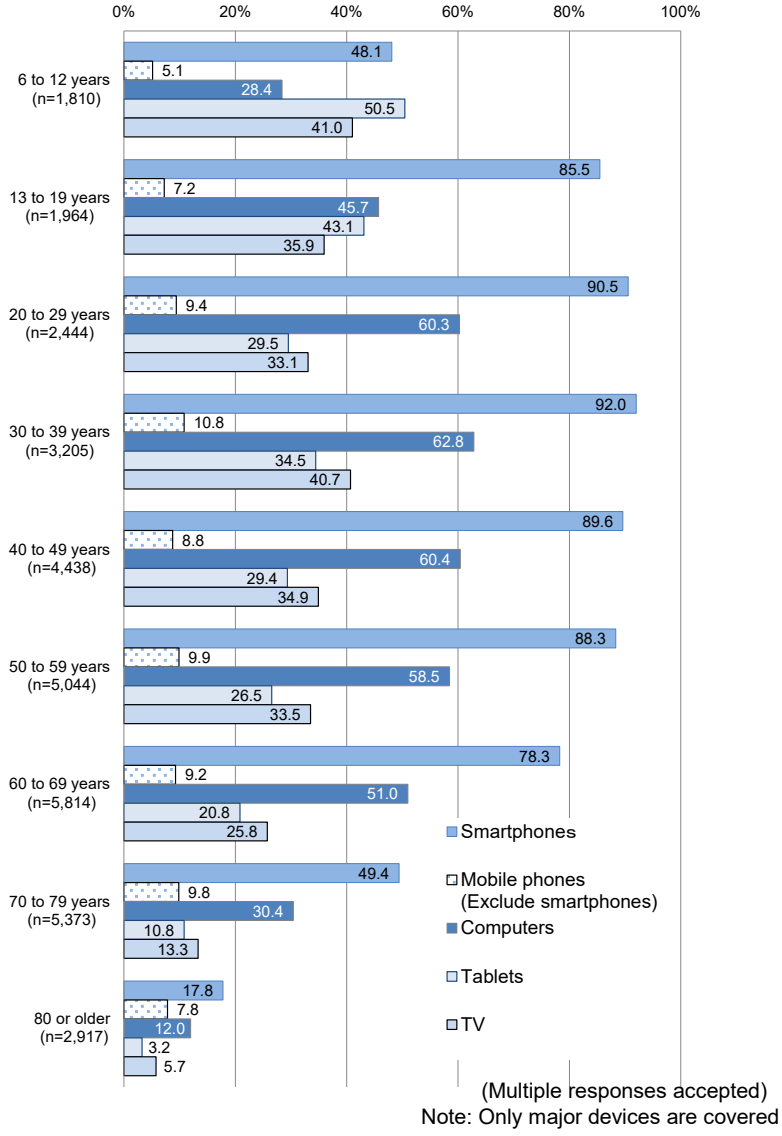
Internet usage state



Usage state of internet access devices



Usage state of internet access devices by age group



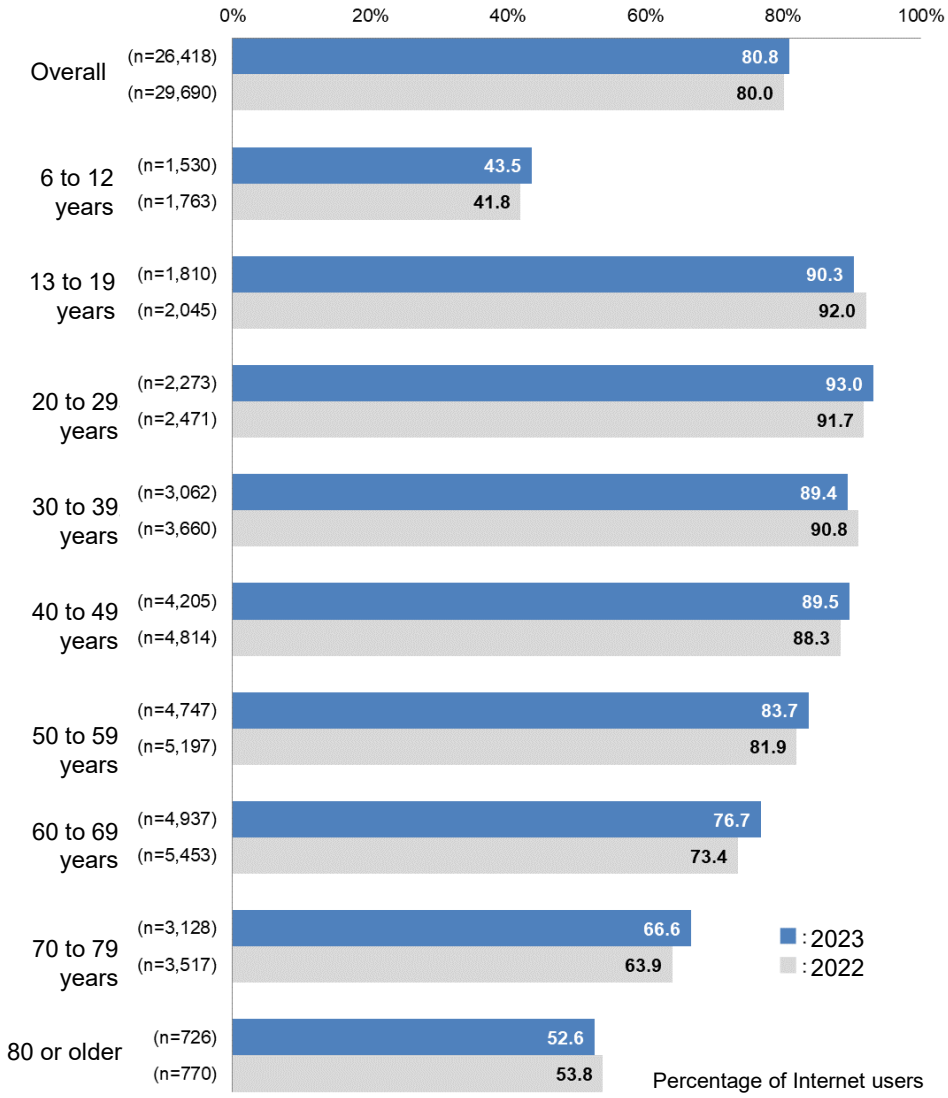
(Multiple responses accepted)
Note: Only major devices are covered

3. Social Networking Service Usage Trends (Individuals)

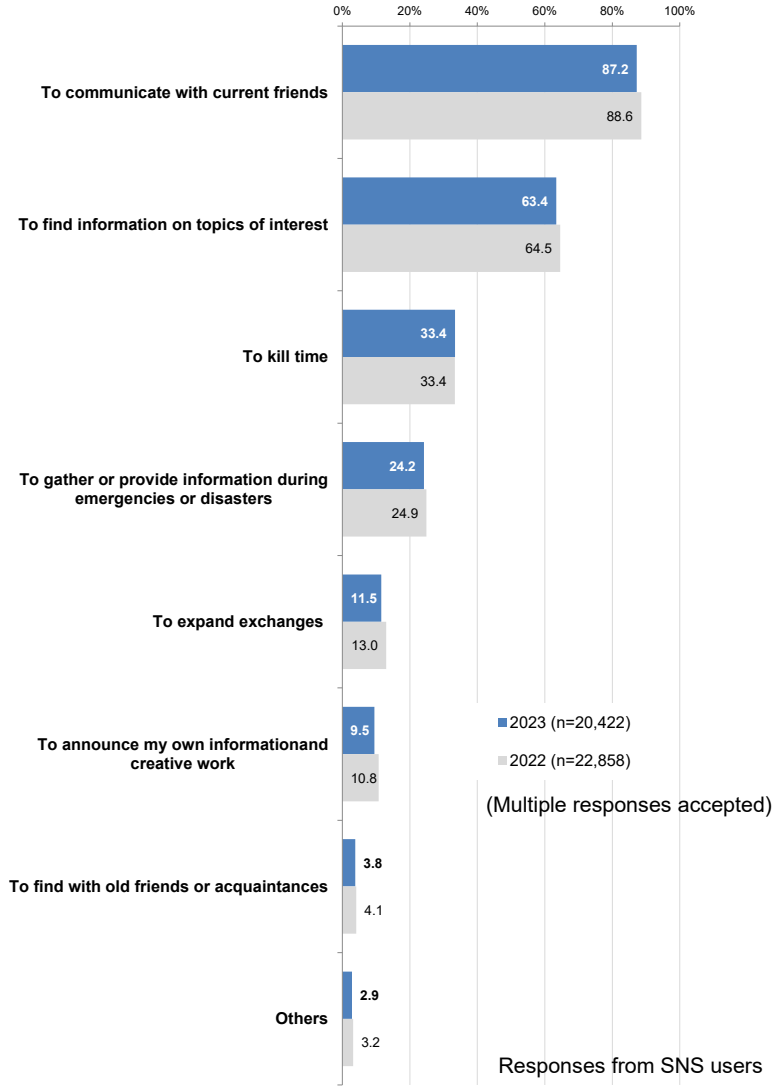
The overall percentage of individuals using social networking services(Note) has remained almost flat.
The usage purpose has not changed significantly since the 2022 survey, with the highest percentage of respondents choosing “to communicate with current friends”.

Note: Social Networking Services (SNS) refer to Facebook, Twitter, LINE, mixi, Instagram, Skype, etc.

Usage state of SNS



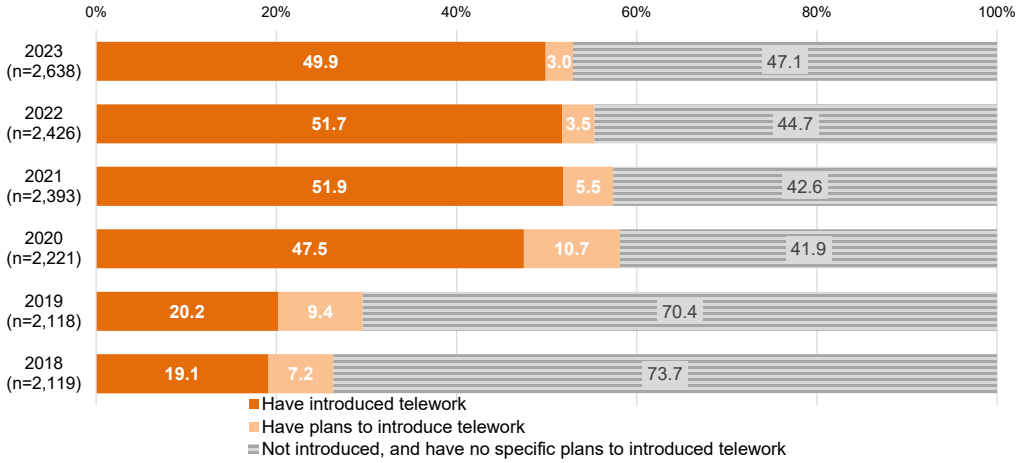
Usage purpose of SNS



4 Introduction State of Telework (Businesses)

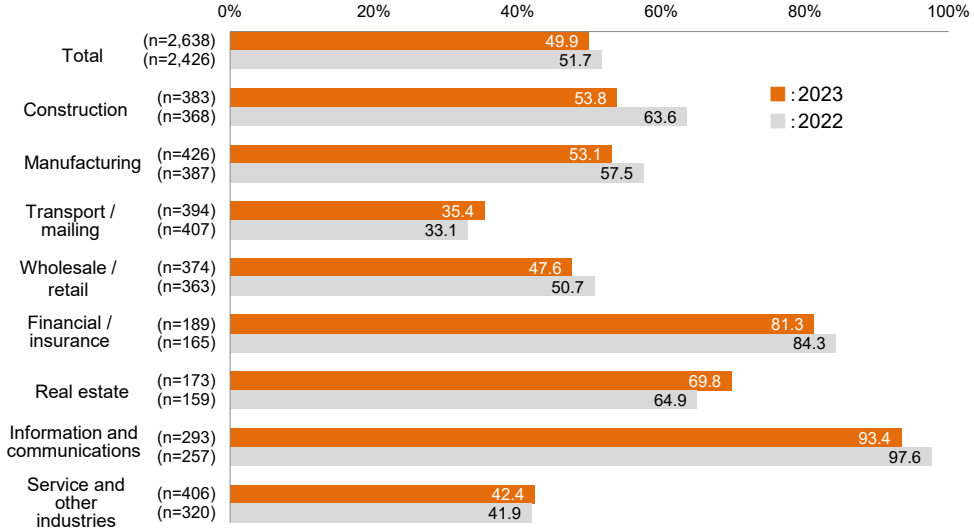
Introduction state of telework

The percentage of businesses that have introduced telework was about 50%, and the number of businesses that responded, “Not introduced, and have no specific plans to introduced telework”, is on the rise



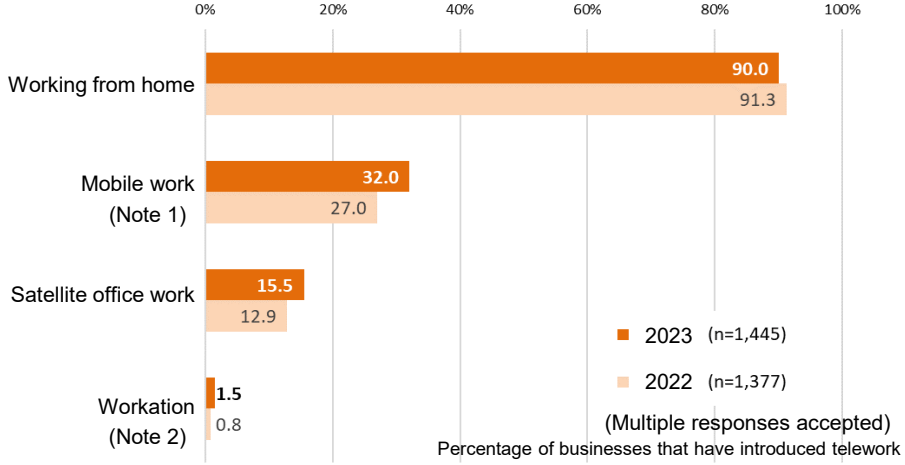
Introduction of telework by industry

Telework has been introduced by 90% or more businesses in the “Information and communications” industry and 80% or more businesses in the “Finance / insurance” industry, however, the introduction rate is on a declining trend. The rate of decrease in the “Construction” industry sector is particularly significant.



Types of telework introduced

Among businesses that have introduced telework, businesses that have introduced telework other than work from home are increasing.

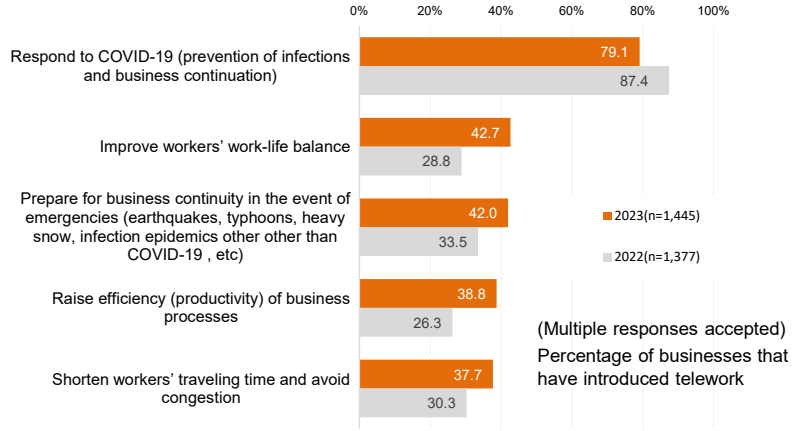


Note 1: Mobile work refers to sales and other types of work done out of the office, including email and journal creation at transportation facilities or cafes.

Note 2: Workation means that workers take advantage of telework to spend time on personal vacation while working at places other than their usual workplaces and homes.

Purpose of introducing telework

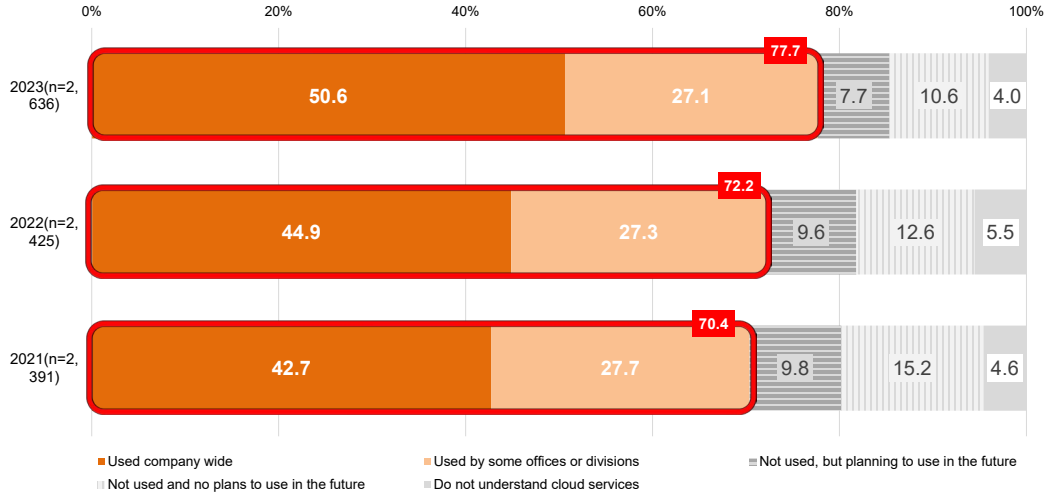
Purpose for introducing telework, while “Responding to COVID-19” decreased from the previous year, “Improve workers’ work-life balance” and “Prepare for business continuity in the event of emergencies” increased as the purpose of introducing teleworking.



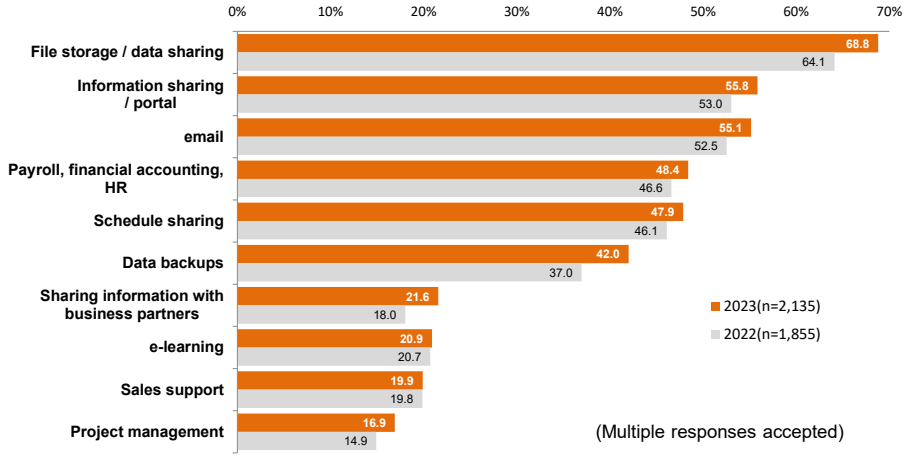
5 Cloud Service Usage (Businesses)

The percentage of businesses using cloud services continues to increase, approaching 80%.
Usage applications included “File storage / data sharing”, “Information sharing / portal”, and “email” for more than 50% of the respondents.
Although this has decreased since last year, approximately 50% of the respondents choose, “The same services are available irrespective of location or equipment” as the reason for using the service.
Businesses that view cloud services as “Very beneficial” or “Somewhat beneficial” account for about 90% of those that have introduced such services.

Usage state of cloud services

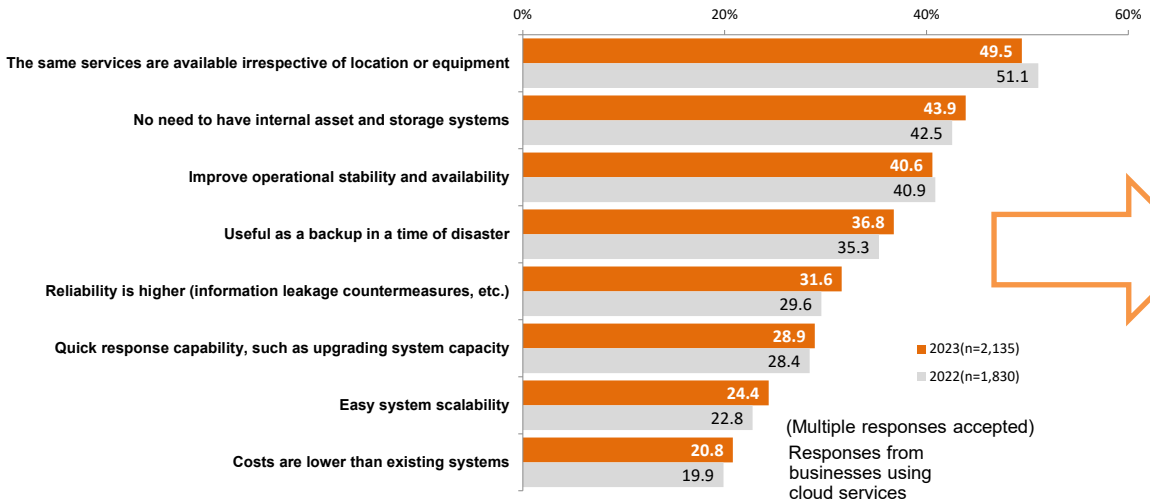


Usage applications of cloud services



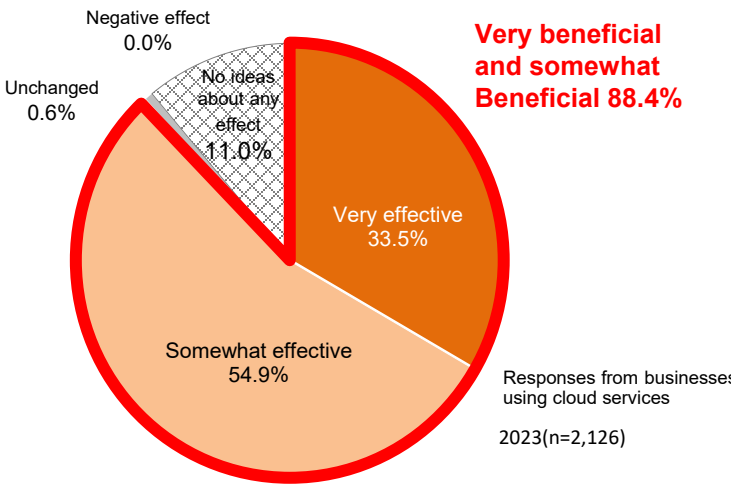
(Multiple responses accepted)
Responses from businesses using cloud services

Reasons for using cloud services



(Multiple responses accepted)
Responses from businesses using cloud services

Impact of cloud services



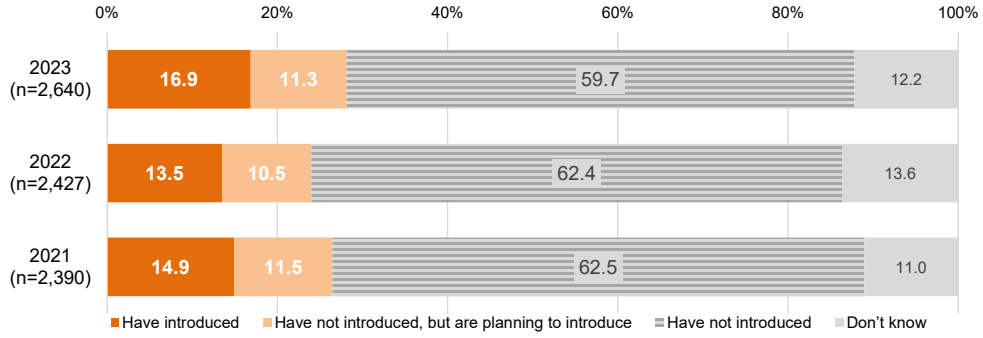
Responses from businesses using cloud services

2023(n=2,126)

6. Collection / Utilization of Digital Data by IoT / AI Systems (Businesses)

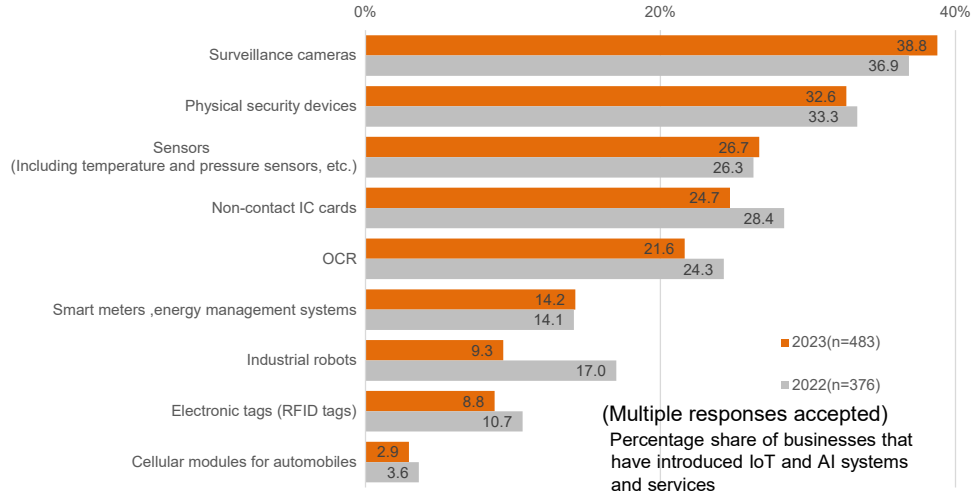
Introduction of IoT / AI systems / services

The share of businesses that “Have introduced” IoT and AI systems or services to collect and analyze digital data is 16.9% and is increasing.



Components for systems or services that have been introduced

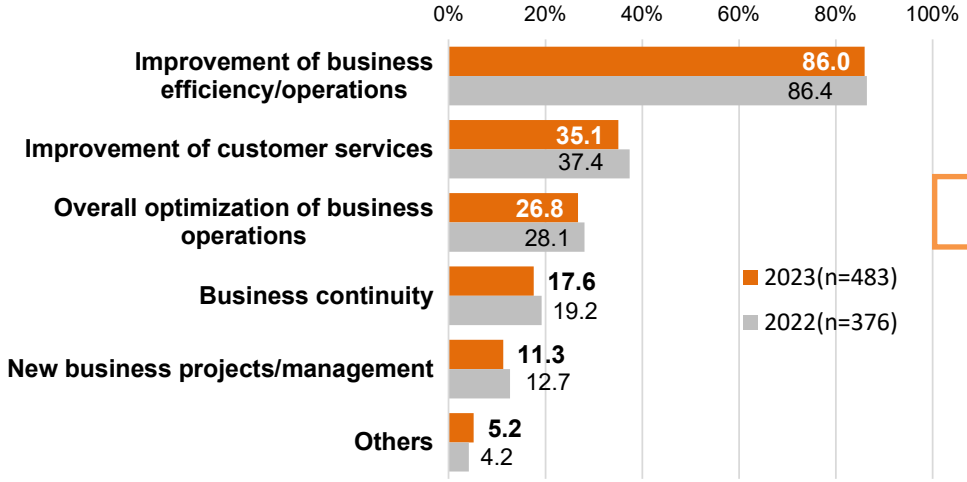
Regarding components of systems or services that have been introduced, the highest percentage, 38.8% of respondents selected “Surveillance cameras”, followed by 32.6% “Physical security devices”, and 26.7% “Sensors”.



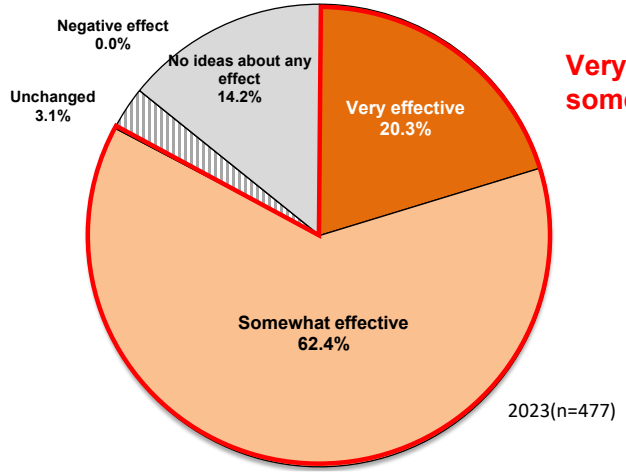
(Multiple responses accepted)

Percentage share of businesses that have introduced IoT and AI systems and services

Purpose of digital data collection and analysis by IoT / AI



Effects of the introduction of IoT / AI systems / services



Very effective and somewhat effective

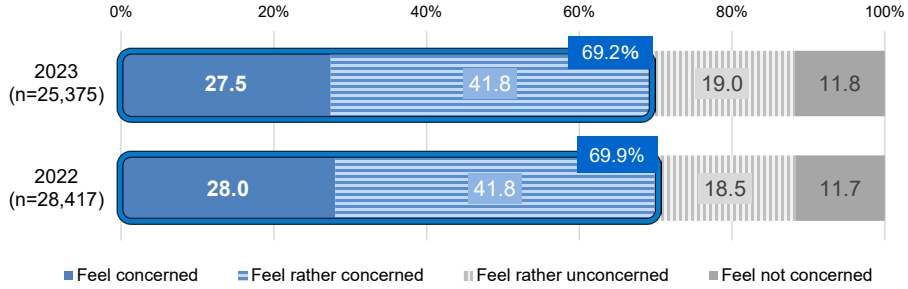
82.7%

Percentage share of businesses that have introduced IoT and AI systems and services

7. Concerns About Using the Internet (Individuals)

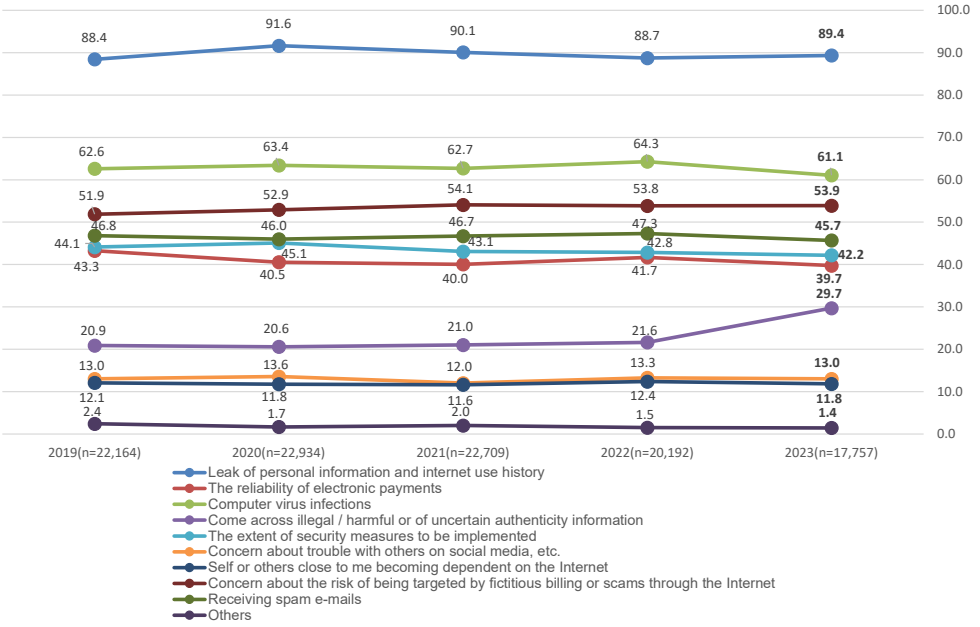
Concerns about using the Internet

About 70% of Internet users feel some form of anxiety while using the Internet.



Types of concerns about using the internet (Changes over the past 5 years)

Although there has been no significant change over the past five years, the percentage of respondents who stated, “Come across illegal / harmful or of uncertain authenticity information”, increased by 8.1 points from 2022 to 2023.



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

Types of concerns about using the Internet (By age group)

Specific concerns by age group, “Leak of personal information and internet use history” was the most common concern for all age groups. The top concern among those aged 6-19 was “Concern about trouble with others on social media, etc.” and among those aged 20-59 was “Concern about the reliability of electronic payments”.

Unit: %

		Total participants (n)	First	Second	Third	Fourth	Fifth
[Overall]		17,757	Leak of personal information and internet use history 89.4	Computer virus infections 61.1	Concern about the risk of being targeted by fictitious billing or scams through the Internet 53.9	Receiving spam e-mails 45.7	The extent of security measures to be implemented 42.2
By age group	6 to 12 years	599	Leak of personal information and internet use history 80.5	Computer virus infections 33.9	Come across illegal / harmful or of uncertain authenticity information 30.9	Concern about the risk of being targeted by fictitious billing or scams through the Internet 28.0	Concern about trouble with others on social media, etc. 27.8
	13 to 19 years	947	Leak of personal information and internet use history 89.0	Computer virus infections 50.2	Concern about the risk of being targeted by fictitious billing or scams through the Internet 37.4	Concern about trouble with others on social media, etc. 30.2	Receiving spam e-mails 28.5
	20 to 29 years	1,320	Leak of personal information and internet use history 92.5	Computer virus infections 62.0	Concern about the risk of being targeted by fictitious billing or scams through the Internet 52.6	Receiving spam e-mails 39.3	The reliability of electronic payments 37.5
	30 to 39 years	1,874	Leak of personal information and internet use history 90.5	Computer virus infections 63.9	Concern about the risk of being targeted by fictitious billing or scams through the Internet 53.2	The extent of security measures to be implemented 45.8	The reliability of electronic payments 42.5
	40 to 59 years	2,802	Leak of personal information and internet use history 93.0	Computer virus infections 64.4	Concern about the risk of being targeted by fictitious billing or scams through the Internet 51.3	The reliability of electronic payments 48.1	The extent of security measures to be implemented 45.0
	50 to 59 years	3,538	Leak of personal information and internet use history 92.1	Computer virus infections 68.1	Concern about the risk of being targeted by fictitious billing or scams through the Internet 58.5	Receiving spam e-mails 50.1	The reliability of electronic payments 47.4
	60 to 69 years	3,877	Leak of personal information and internet use history 89.5	Computer virus infections 63.8	Concern about the risk of being targeted by fictitious billing or scams through the Internet 62.4	Receiving spam e-mails 57.4	The extent of security measures to be implemented 47.2
	70 to 79 years	2,317	Leak of personal information and internet use history 83.6	Concern about the risk of being targeted by fictitious billing or scams through the Internet 58.2	Receiving spam e-mails 56.9	Computer virus infections 55.8	The extent of security measures to be implemented 44.8
	80 or older	483	Leak of personal information and internet use history 72.9	Receiving spam e-mails 56.3	Concern about the risk of being targeted by fictitious billing or scams through the Internet 51.9	Computer virus infections 47.8	The extent of security measures to be implemented 37.8

(Multiple responses accepted)

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