

## Additional notes

### Annotation 1: Contracting of survey research on the advancement of ICT infrastructure and distribution of digital data and information

#### Overview of general public questionnaire survey

This survey of the general public was conducted to understand their usage of platform services and their thoughts on providing personal data to platform services; how they interact with information on the Internet such as disinformation, misinformation, and targeted advertising; and their awareness and intention to use new services such as Beyond 5G/6G, Web3, and generative AI. An overview of the survey is provided below.

Item	Overview																								
Survey method	Internet questionnaire survey																								
Survey period	Early February to late February 2023																								
Target area	Japan, U.S., Germany, and China																								
Selection method	Selected by age group (20s, 30s, 40s, 50s, 60s and older) and gender (male and female) from among questionnaire survey company monitors.																								
Valid responses	<p>A total of 1,000 samples were collected in each country, with 100 each by age (20, 30, 40, 50, 60s and older) and sex (male and female). The number collected in each country is as follows. &lt;Japan, U.S., Germany, China&gt;</p> <table border="1"> <thead> <tr> <th>Age</th> <th>Male</th> <th>Female</th> </tr> </thead> <tbody> <tr> <td>20-29</td> <td>100</td> <td>100</td> </tr> <tr> <td>30-39</td> <td>100</td> <td>100</td> </tr> <tr> <td>40-49</td> <td>100</td> <td>100</td> </tr> <tr> <td>50-59</td> <td>100</td> <td>100</td> </tr> <tr> <td>60-</td> <td>100</td> <td>100</td> </tr> <tr> <td><b>Total</b></td> <td><b>500</b></td> <td><b>500</b></td> </tr> <tr> <td></td> <td><b>1,000</b></td> <td></td> </tr> </tbody> </table>	Age	Male	Female	20-29	100	100	30-39	100	100	40-49	100	100	50-59	100	100	60-	100	100	<b>Total</b>	<b>500</b>	<b>500</b>		<b>1,000</b>	
Age	Male	Female																							
20-29	100	100																							
30-39	100	100																							
40-49	100	100																							
50-59	100	100																							
60-	100	100																							
<b>Total</b>	<b>500</b>	<b>500</b>																							
	<b>1,000</b>																								
Main survey items	<p>[1] Basic attributes (sex, age, occupation, regional characteristics, annual household income)</p> <p>[2] Platform service usage (usage device, usage level, PF service usage status, social login)</p> <p>[3] Use of data with platform providers (awareness of provision and utilization of personal data, concerns about provision, provision conditions, targeted advertising and use of services, device tracking functions, status of countermeasures, etc.)</p> <p>[4] How to interact with information on the Internet (how news is acquired, thoughts on how information is collected, understanding of online service characteristics and personalization, precautions to be taken when posting, trusted online sites, awareness of how personal data is used, impression of targeted advertising, whether the benefits of providing data are considered important)</p> <p>[5] Awareness and usage of emerging services such as 5G/B5G (awareness of related terms such as 5G/B5G, Web 3.0, and generative AI; intention to use various services)</p>																								
Notes	The survey targeted monitors registered with the questionnaire survey company. Factors such as the small number of registered monitors may have biased the characteristics of the subjects and their responses, depending on the country, gender, or age group																								

## Annotation 2: Survey on trends in digital usage in Japan and overseas

### (1) Overview of questionnaire survey

#### a Private life

This survey of the general public in Japan, the U.S., Germany, and China was conducted to ascertain the state of digital utilization in working styles, private services, and public services.

Item	Overview						
Selection method	Internet questionnaire survey						
Survey period	December 2022 to January 2023						
Target	Selected without age bias from among questionnaire survey company monitors						
Survey Valid responses		20s	30s	40s	50s	60s	Total
	Japan	206	206	206	206	206	1030
	U.S.	104	104	104	104	104	520
	Germany	104	104	104	104	104	520
	China	104	104	104	104	104	520
	Total	518	518	518	518	518	2590
* Individuals under 20 and over 70 were excluded from this questionnaire							
Main survey items	<ul style="list-style-type: none"> <li>• Basic attributes (age)</li> <li>• Usage of digital services for work, such as remote work</li> <li>• Usage of interactive entertainment services in virtual space</li> <li>• Usage of digital administrative services</li> <li>• Expectations and concerns about the switch to digital for various services</li> <li>• Literacy in and thoughts on digital usage</li> </ul>						

#### b Company activities

This survey of companies in Japan, the U.S., Germany, and China on digital usage, was conducted from the perspectives of technology/data, organizations, and human resources.

Item	Overview			
Selection method	Internet questionnaire survey			
Survey period	December 2022 to January 2023			
Target	Individuals whose job title is section chief or higher were selected from among questionnaire survey company monitors who work for companies with 10 or more employees and who have permanent addresses in each country.			
Survey Valid responses		Large enterprises	Small-to-medium-sized enterprises	Total
	Japan	379	136	515
	U.S.	190	119	309
	Germany	221	88	309
	China	279	30	309
	Total	1069	373	1442
* Based on the SMEA definition of small-to-medium-sized enterprises <sup>1</sup> and the results of a survey commissioned last fiscal year, <sup>2</sup> companies with 300 or more employees were classified as "large enterprises" and those with fewer than 300 employees were classified as "small-to-medium-sized enterprises" in the following categories: "manufacturing," "construction," "electricity, gas, heat supply, and water supply," "finance and insurance," "real estate and leasing," "transportation and postal services," and "information and communications." Companies with 100 or more employees were classified as "large enterprises" and those with fewer than 100 employees were classified as "small-to-medium-sized enterprises" in the following categories: "wholesale and retail" and "service and other."				
Main survey items	<ul style="list-style-type: none"> <li>• Basic attributes (industry, number of employees)</li> <li>• Data and technology used in efforts to switch to digital</li> <li>• Effects of efforts to switch to digital</li> <li>• Organized efforts to promote the switch to digital</li> <li>• Shortage of digital human resources and efforts to secure them</li> <li>• Challenges in promoting the switch to digital</li> </ul>			

<sup>1</sup> "Definition of SMEs and Small Entrepreneurs" (SMEA) <https://www.chusho.meti.go.jp/soshiki/teigi.html>

<sup>2</sup> "Survey Research on R&D on the Latest Information and Communications Technologies and Trends of Use of Digital Technologies in Japan and Abroad" (MIC, 2022) [https://www.soumu.go.jp/johotsusintokei/linkdata/r04\\_03\\_houkoku.pdf](https://www.soumu.go.jp/johotsusintokei/linkdata/r04_03_houkoku.pdf)

**(2) Analysis of digital usage trends in Japan and overseas****a Private life**

(1) From the results of questionnaire (a), the state of digital utilization in working styles, private services, and public services in each country was ascertained, and the characteristics of digital utilization in Japan and associated issues were extracted by comparing with other countries.

**b Company activities**

(1) From the results of the questionnaire (b), the state of digitalization efforts by enterprises in each country was ascertained from the viewpoint of technology, data, organizations, and human resources, and the characteristics and issues with digital utilization in Japanese companies were extracted by comparing with other countries.

### Annotation 3: Survey on Economic Analysis of ICT (Scope of the information and communications industry of Japan)

#### Scope of the information and communications industry of Japan

Scope of the information and communications industry	Sectors of the Input-Output Table of the Information Communications Industry
1. Telecommunications	
Fixed-line telecommunications	Fixed-line telecommunications
Mobile telecommunications	Mobile telecommunications
Services associated with telecommunications	Services associated with telecommunications
2. Broadcasting	
Public broadcasting	Public broadcasting
Private broadcasting	Private television/multiplex broadcasting Private radio broadcasting Private satellite broadcasting
Cable broadcasting	Cable television broadcasting Cable radio broadcasting
3. Information services	
Software	Software
Information processing/provision services	Information processing service Information provision service
4. Internet-related Services	
Internet-related Services	Internet-related Services
5. Video picture, sound information, character information production	
Video picture, sound information, character information production	Video picture, sound information, character information production (excluding news providers)
Newspapers	Newspapers
Publishers	Publishers
News providers	News providers
6. ICT-related manufacturing	
Computer and peripheral device manufacturing	Personal computer Computers (excluding personal computers) Peripheral devices of computer
Cable communication equipment and appliance manufacturing	Cable communication equipment
Wireless communication equipment and appliance manufacturing	Mobile phones Wireless communication equipment (excluding mobile phones)
Other telecommunication equipment and appliance manufacturing	Other telecommunication equipment
Flat panel/electron tube manufacturing	Flat panels/electron tubes
Semiconductor element manufacturing	Semiconductor elements
Integrated circuit manufacturing	Integrated circuits
Liquid crystal panel manufacturing	Liquid crystal panels
Other electronic component manufacturing	Other electronic components
Radio and television receiver / video equipment manufacturing	Radio and television receivers Video equipment and digital cameras
Communication cable manufacturing	Communication cables and optical fiber cables
Office and business equipment manufacturing	Office and business equipment
Electrical audio equipment and appliance manufacturing	Electrical audio equipment and appliances
Information recording media manufacturing	Information recording media
7. ICT-related services	
ICT equipment leasing business	Computer and related equipment leasing Office and business equipment leasing (excluding computers) Communication equipment and appliance leasing
Advertising business	Advertising
Printing, publishing, binding business	Printing, publishing, binding
Film and theatre business	Film, theatre and entertainment places
8. IT-related construction	
Telecom facilities construction	Telecom facilities construction
9. Research	
Research	Research

## Annotation 4: List of domestic production of 77 sector

ICT goods/services		General goods/services	
1	Fixed-line telecommunications	44	Agriculture, forestry and fisheries
2	Mobile telecommunications	45	Mining
3	Services associated with telecommunications	46	Food and beverage
4	Public broadcasting	47	Textile products
5	Private television/multiplex broadcasting	48	Pulp, paper and wood products
6	Private radio broadcasting	49	Chemicals
7	Private satellite broadcasting	50	Petroleum and coal products
8	Cable television broadcasting	51	Plastic and rubber products
9	Cable radio broadcasting	52	Ceramics, stone and clay products
10	Software	53	Steel
11	Information processing service	54	Non-ferrous metals
12	Information provision service	55	Metal products
13	Internet-related Services	56	General-purpose machinery
14	Newspapers	57	Miscellaneous manufacturing products
15	Publishers	58	Production machinery
16	News providers	59	Business-oriented machinery
17	Video picture, sound information, character information production (excluding news providers)	60	Electric machine
18	Personal computer	61	Transportation machine
19	Computers (excluding personal computers)	62	Construction
20	Peripheral devices of computer	63	Electric power, gas and heat supply
21	Cable communication equipment	64	Water
22	Mobile phones	65	Waste treatment
23	Wireless communication equipment (excluding mobile phones)	66	Commerce
24	Other telecommunication equipment	67	Finance and insurance
25	Semiconductor elements	68	Real estate
26	Integrated circuits	69	Transportation and postal services
27	Liquid crystal panels	70	Public administration
28	Flat panels/electron tubes	71	Education
29	Other electronic components	72	Medical care and welfare
30	Radio and television receivers	73	Membership-based associations, n.e.c.
31	Video equipment and digital cameras	74	Business service
32	Communication cables and optical fiber cables	75	Personal service
33	Office and business equipment	76	Office supplies
34	Electrical audio equipment and appliances	77	Not elsewhere classified
35	Information recording media		
36	Computer and related equipment leasing		
37	Office and business equipment leasing (excluding computers)		
38	Communication equipment and appliance leasing		
39	Advertising		
40	Printing, publishing, binding		
41	Film, theatre and entertainment places		
42	Telecom facilities construction		
43	Research		