

ADDITIONAL NOTES

Annotation 1 Survey on Trends of Use of Digital Technologies in Japan and Abroad

(1) Summary of questionnaire survey

i Daily life of people

Situation of digital technology usage in workstyle, information collection and public services was surveyed targeting general citizens of Japan, the United States, Germany and China.

Item	Description						
Extracting method	Online questionnaire survey						
Survey period	Feb to Mar 2022						
Targets	Extracted from the monitors held by the questionnaire survey company with consideration to age-group balance						
Main survey Number of valid responses		20s	30s	40s	50s	60s	Total
	Japan	265	260	265	155	115	1,060
	US	157	177	171	52	87	644
	Germany	142	173	146	100	39	600
	China	132	144	144	93	36	549
	Total	696	754	726	400	277	2,853
	*People under 20 and over 70 are not included in the scope of this survey.						
Major survey items	-Basic attribute (age) -Telework use situation -Use situation of social networking service (SNS) -Use situation of electronic administrative services						

ii Corporate activities

Situation of digital technology usage in terms of technology/data, organization and human resources was surveyed targeting enterprises of Japan, the United States, Germany and China.

Item	Description			
Extracting method	Online questionnaire survey			
Survey period	Feb to Mar 2022			
Targets	Extracted from the monitors (with citizenship of the respective country and working for a company with more than 10 employees) held by the questionnaire survey company			
Main survey Number of valid responses		Big company	SME	Total
	Japan	798	498	1,296
	US	311	288	599
	Germany	326	261	587
	China	398	147	545
	Total	1,833	1,194	3,027
	*Based on the "definition of SME" of the Small and Medium Enterprise Agency ¹ and the result of a commissioned survey of the last year ² , Enterprises with 300 or more employees are classified as "large enterprise" while enterprises with less than 300 employees are classified as "SME" in "manufacturing," "construction," "electricity, gas, heat supply and water," "finance and insurance," "real estate, goods rental and leasing," "transportation and postal services" and "information and telecommunications"; Enterprises with 100 or more employees are classified as "large enterprise" while enterprises with less than 100 employees are classified as "SME" in "wholesale/retail" and "services and other,"			
Major survey items	-Basic attributes (business type, number of employees) -Data/technologies used for digitalization -Effects of digitalization -Shortage status of digital human resources and efforts to secure them -Challenges of digitalization			

(2) Analysis of digital usage trend in Japan and abroad

i Daily life of people

Situation of digital technology usage in workstyle, information collection and public services was assessed based on the questionnaire result of (1) (i) above, and characteristics and challenges of digital usage in Japan were identified through comparison of the countries.

ii Corporate activities

Efforts for digitalization in terms of technology/data, organization and human resources was assessed based on the questionnaire result of (1) (ii) above, and characteristics and challenges of digital usage in Japanese enterprises were identified through comparison of the countries.

¹ "Definition of small and medium enterprises" (Small and Medium Enterprise Agency) <https://www.chusho.meti.go.jp/soshiki/teigi.html>

² "Survey study on the economic impact of digital transformation" MIC, 2021
https://www.soumu.go.jp/johotsusintokei/linkdata/r03_02_houkoku.pdf

Annotation 2 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 3 Survey on economic analysis of ICT (comparison of nominal and real domestic production values (2019-2020))

The table below compares the nominal and real domestic production values. In the right columns, the “●” symbol signifies that the real value is larger than the nominal value, and the “○” symbol signifies that the nominal value is larger than the real value.

Information Communication of IO77 sector		Nominal values (million yen)		Real values (million yen)		Comparison	
		2019	2020	2019	2020	2019	2020
1	Fixed-line telecommunications	7,942,323	7,880,709	8,227,434	8,088,358	●	●
2	Mobile telecommunications	9,261,603	9,039,258	9,921,823	9,754,105	●	●
3	Services associated with telecommunications	823,607	811,297	854,964	840,512	●	●
4	Public broadcasting	801,450	782,737	801,450	788,255	○	●
5	Private television/multiplex broadcasting	2,070,342	1,876,602	2,086,337	2,141,018	●	●
6	Private radio broadcasting	116,354	101,181	115,948	99,490	○	○
7	Private satellite broadcasting	310,941	291,852	293,895	272,250	○	○
8	Cable television broadcasting	541,443	540,726	531,869	518,433	○	○
9	Cable radio broadcasting	900,708	899,515	893,117	875,015	○	○
10	Software	12,679,392	13,091,893	12,069,864	12,195,522	○	○
11	Information processing service	6,738,527	6,597,812	6,724,268	6,458,433	○	○
12	Information provision service	1,153,808	1,107,482	1,123,963	1,060,988	○	○
13	Internet-related Services	4,164,134	4,450,950	4,069,186	4,439,112	○	○
14	Newspapers	1,717,334	1,582,639	1,648,113	1,501,555	○	○
15	Publishers	1,412,902	1,422,582	1,344,833	1,316,455	○	○
16	News providers	163,270	145,996	160,199	140,990	○	○
17	Video picture, sound information, character information production (excluding news providers)	3,012,404	2,693,680	2,955,747	2,601,325	○	○
18	Personal computer	904,757	699,293	901,077	725,224	○	●
19	Computers (excluding personal computers)	79,477	66,252	81,696	68,489	●	●
20	Peripheral devices of computer	1,070,634	905,667	1,202,397	1,009,944	●	●
21	Cable communication equipment	565,476	426,993	548,299	408,706	○	○
22	Mobile phones	109,137	101,193	127,387	119,604	●	●
23	Wireless communication equipment (excluding mobile phones)	1,502,428	1,278,917	1,608,452	1,361,878	●	●
24	Other telecommunication equipment	474,573	368,175	478,160	366,191	●	○
25	Semiconductor elements	742,097	749,575	741,726	737,710	○	○
26	Integrated circuits	4,182,839	3,801,206	4,684,467	4,306,096	●	●
27	Liquid crystal panels	1,222,719	1,040,657	1,299,369	1,106,874	●	●
28	Flat panels/electron tubes	100,205	89,685	99,156	87,377	○	○
29	Other electronic components	7,497,123	7,042,281	7,418,609	6,861,035	○	○
30	Radio and television receivers	57,347	21,844	64,637	25,845	●	●
31	Video equipment and digital cameras	305,637	183,826	312,327	188,750	●	●
32	Communication cables and optical fiber cables	244,122	301,959	239,011	290,103	○	○
33	Office and business equipment	952,581	1,041,176	1,279,240	1,137,140	●	●
34	Electrical audio equipment and appliances	207,664	229,834	210,116	230,064	●	●
35	Information recording media	256,797	163,460	255,476	160,345	○	○
36	Computer and related equipment leasing	2,122,269	2,031,065	2,200,632	2,118,177	●	●
37	Office and business equipment leasing (excluding computers)	539,556	506,934	550,426	518,823	●	●
38	Communication equipment and appliance leasing	556,673	532,750	549,664	518,154	○	○
39	Advertising	7,386,286	6,405,589	7,074,241	6,482,316	○	●
40	Printing, publishing, binding	4,409,255	4,052,846	4,265,313	3,813,864	○	○
41	Film, theatre and entertainment places	582,029	215,424	573,073	209,376	○	○
42	Telecom facilities construction	168,275	167,325	157,960	155,804	○	○
43	Research	19,232,954	19,034,700	18,892,881	18,698,133	○	○

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	