

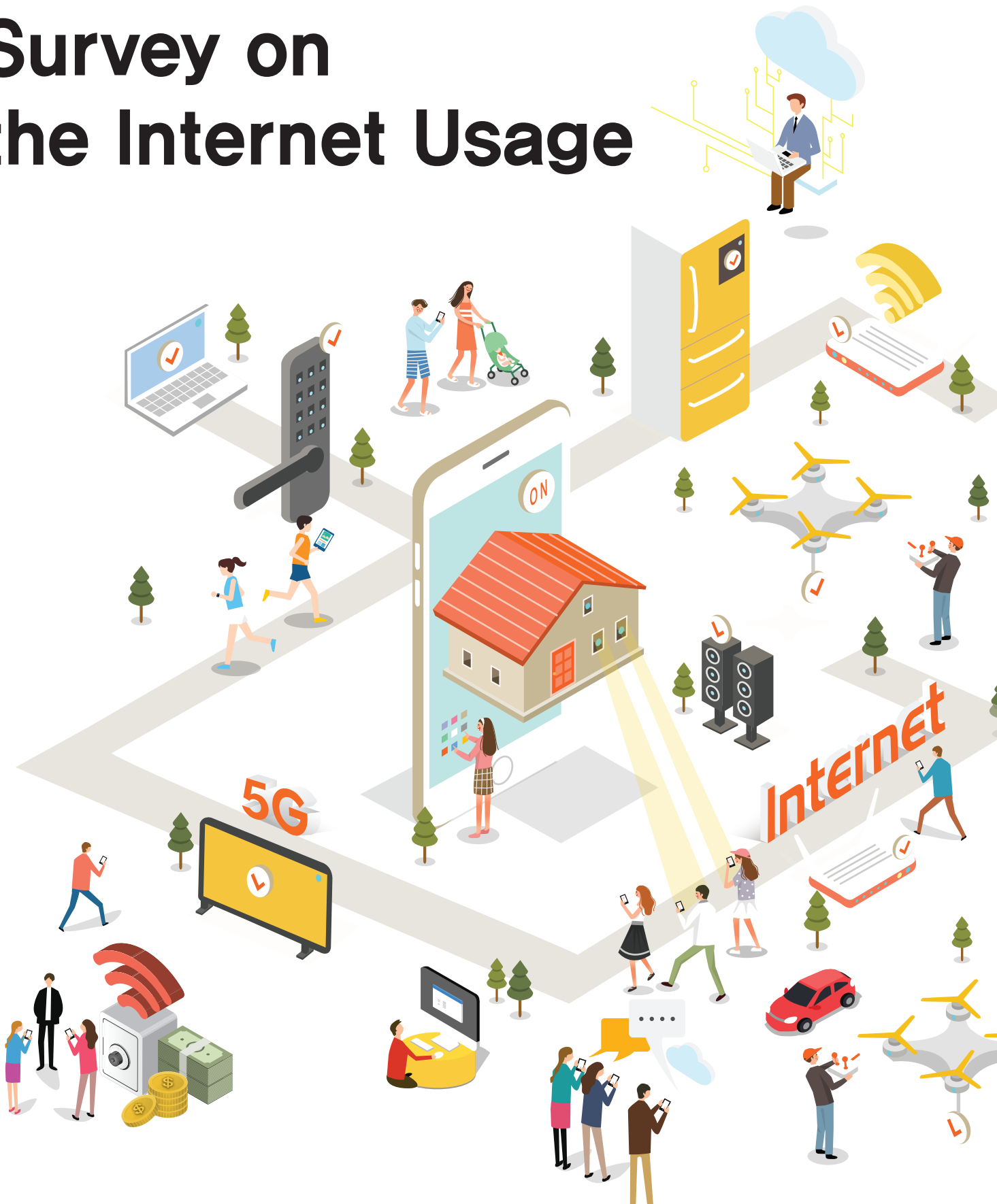


Korea Internet & Security Agency
Ministry of Science and ICT

[illegible]

2017

Survey on the Internet Usage



Note for Readers

1. It is required to identify the MSIT and KISA as reference sources when citing statistical data in this report.
2. As the figures on statistical tables and graphs are rounded off, the sum of individual figures may not be equal to the total.
3. Be aware of using statistics with a large RSE (Relative Standard Error) due to a small sample size. Please refer to Appendix 2.
4. Meaning of codes in statistical tables is as follows:
 - : Missing value or not available
 - 0.0 : Nil or negligible
5. Multiple responses are the result of totaling of one and more answers (select all or three in the order that apply).



**The time has come to break away
from traditional doctrines and
examine our world through
objective facts.**



The connected world we live in is changing at a speed almost impossible to track. There is a hypothesis referred to as the Red Queen effect.

In *Through the Looking Glass*, the sequel to the famous *‘Alice’s Adventures in Wonderland’*, Alice asks the Queen in great surprise after her attempt to running faster but staying in the same place.

“Why, I do believe we’ve been under this tree the whole time! Everything’s just as it was!” Alice asks in puzzlement to which the Queen answers,

“Now, here, you see, it takes all the running you can do, to keep in the same place. If you want to get somewhere else, you must run at least twice as fast as that!”

This is the essence of the Fourth Industrial Revolution as we know it. Internet access is less fixed and more mobile than ever before. It is up to us to examine our world through objective facts so as to best respond to the tremendous changes it is going through.

Herein lies the value of this survey as essential statistics that provide a factual time series observation into the life changes the Internet has had on us.

Our most recent survey results show that the rate of households with Internet access has passed its peak in accelerated growth and in effect entered a state of saturation. There was also a closing of a generational gap among Internet users in which the Internet usage rate of the elderly, aged 65 and over, tripled in the past 5 years. Households with computers which has been on a gradual decline since 2012 dropped to 74.7% in 2017. Contrastingly, household smartphone ownership has hiked to 94.1%, a change that can be interpreted as a shift toward a more mobile-centric Internet environment for its users.

Such changes are also affecting how individuals are using the Internet in their daily lives. Internet shopping and Internet banking are some prime examples of daily activities which only 5 years ago had been desktop based but have now moved onto the mobile platform for many of its users.

This Survey on the Internet Usage is an affirmation of how years of Internet usage and its consistent applications in daily life have established a sound and stable Internet environment driven by artificial intelligence, Internet of Things, cloud computing, big data, and mobile. We expect the survey to play its given role as statistical and objective facts that will guide readers in examining the world and our place in it. We hope as we undergo the Fourth Industrial Revolution, our efforts will provide necessary support to the public sector on policy making, the private sector on business model development, and academia on research.

March, 2018

President, Korea Internet & Security Agency

Kim Seok-hwan



Survey on the Internet Usage

Head of Research Ju Yong–Wan

Researchers Lee Kye–Nam

Choi Young–Jun

Youn Eun–Jung



Ministry of Science and ICT



KISA Korea Internet &
Security Agency



2017 Survey on the Internet Usage

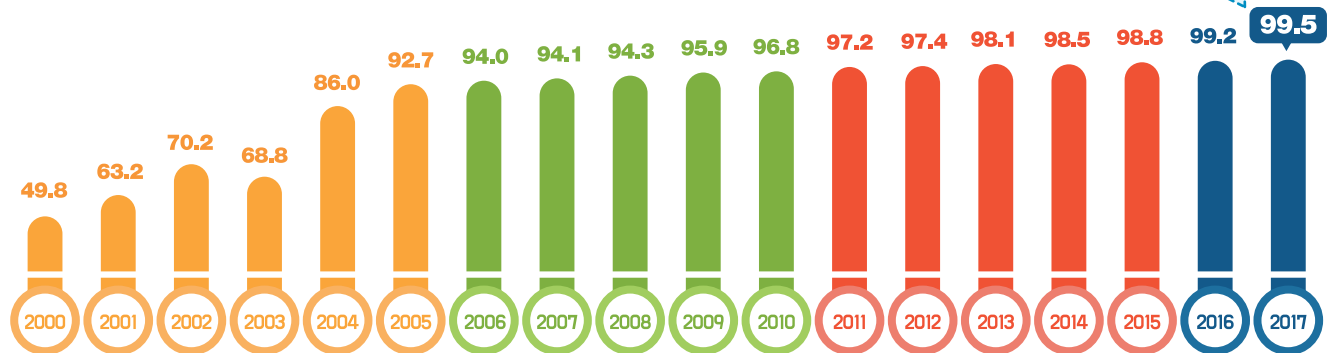
Infographics

Internet Access Pattern of Households

01. Households with Internet Access

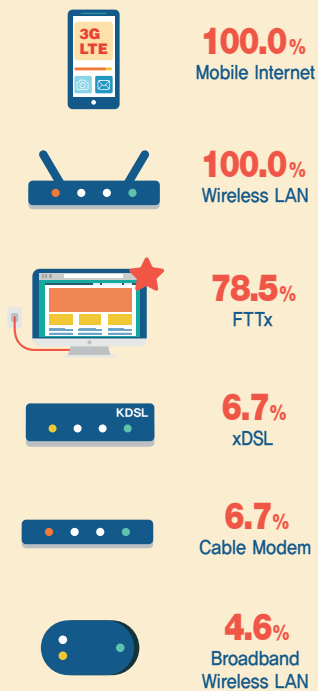
For all households

Among 19.52 million households in Korea, 19.43 million have access to the Internet



02. Internet Access Type

For households with Internet access



03. Internet Access Devices

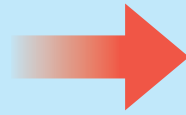
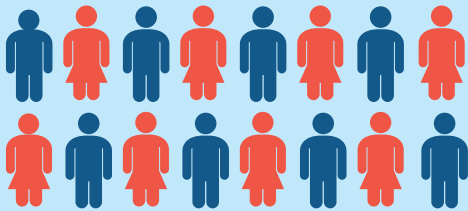
For all households



Internet Users in Korea

01. Number of Internet Users

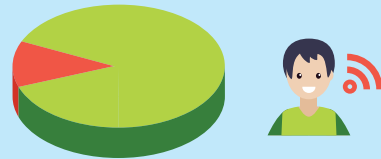
45,283,046 people



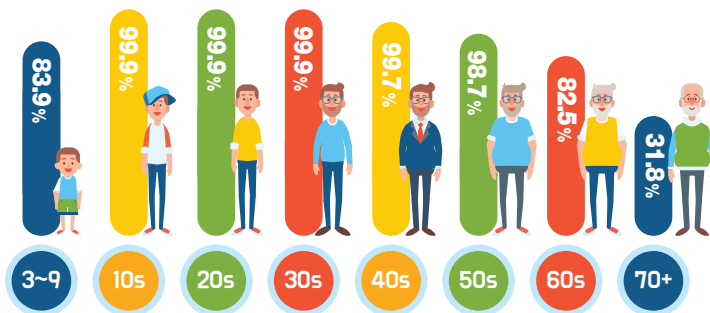
02. Internet Usage Rate

90.3%

of population aged 3 and over



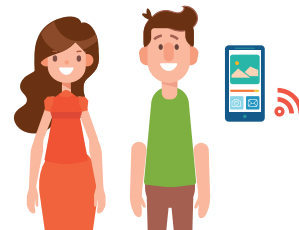
03. Internet Usage Rate by Age



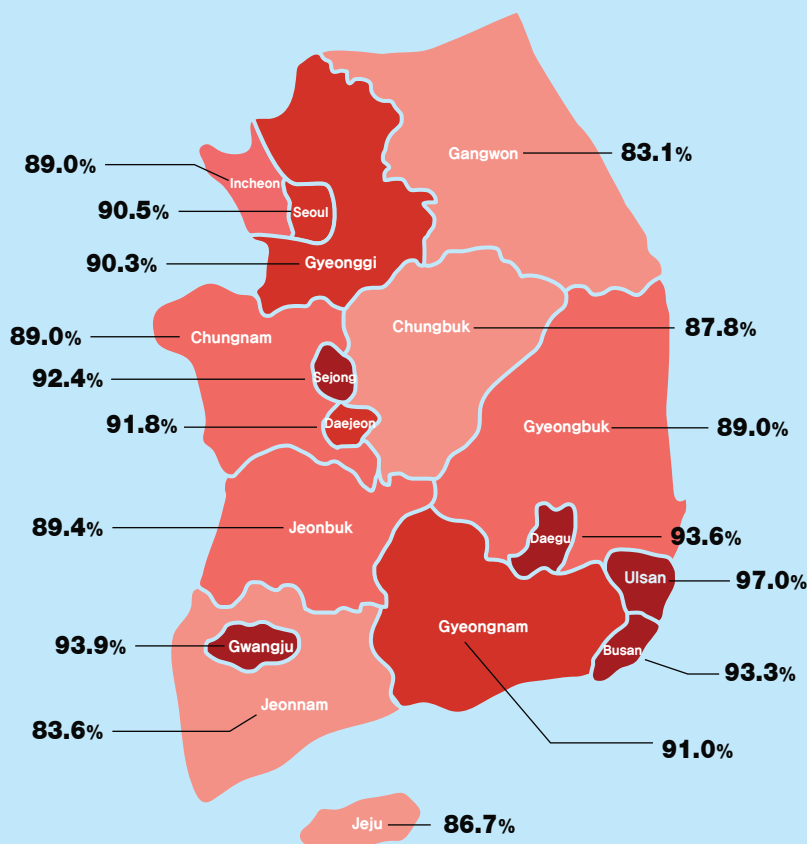
04. Internet Usage Rate by Gender

87.7%
Female

92.7%
Male



05. Internet Usage Rate by Region



06. Internet Access Type

For Internet users aged 3 and over



Activities of Internet Users

Watching Images,
Videos, or Movies

77.5%



Listening to Music

65.2%



Playing Online Games

57.1%



Leisure Activities

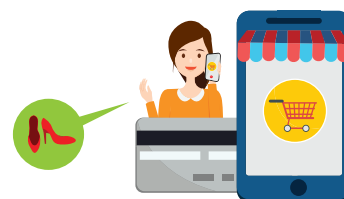
Searching for Goods
or Services Information

79.5%



Internet Shopping

59.6%



Reading Online Newspapers
or News Magazines

89.6%



Consumption
& Financial
Activities

Internet Banking

63.1%



Communication Activities

Using E-mail

60.2%



Using Social
Network Services

68.2%



Using Instant
Messengers

95.1%



Generation Gap in Internet Use

Boomer Kim (in his 50s)

Baby Boom Generation

Generation born around the 1960s.
First encountered the Internet at work.
Lived through rapidly changing ICT environment.

Zed Kim (in his 20s)

Generation Z

Born in the mid-1990s and grew up being exposed to the Internet environment.
Highly interested in and comfortable with new ICT products and social media.

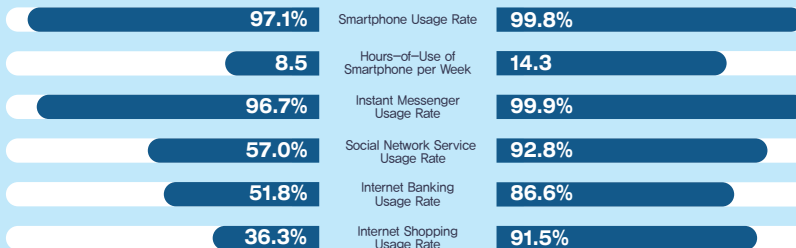
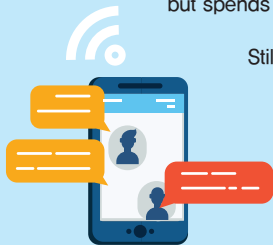
50s

Uses the smartphone as much as people in their 20s, but spends most of that time with the smartphone using instant messengers.
Still prefers offline banking and shopping.

2017

20s

Uses a wide variety of Internet services from instant messengers to online shopping.
Smartphone usage hours are about twice that of a Boomer.



40s

Bought his first smartphone
1.0%

Internet access device for Internet users in their 40s: smartphone



40s

Bought a computer and installed wired Internet

86.1% **73.3%**

Households with computers for householders in their 40s
Households with Internet access for householders in their 40s



30s

Used Internet for the first time at work

※ Commercialization of Internet in Korea begins in 1994

20s

Graduated from high school

22.0%

Advancement rates (high school to tertiary courses)



2013



20s

Began college

70.7%

Advancement rates (high school to tertiary courses)



2007

10s

Asked Boomer to buy his first smartphone

0.7%

Internet access device for teenage Internet users: smartphone



2000

under 10

Became immersed in online gaming

53.4%

Internet use purpose of children 7-9: gaming

1994

Zed Kim was born



1978

1960

Boomer Kim was born

Source

- Advancement rates in 1987: "Educational Statistics Yearbook, Educational Statistics DB", Korean Educational Development Institute
- 2000 statistics: "A Survey on the Number of Internet Users and Internet Behavior, 2000", KISA
- 2007 statistics: "Survey on the Computer and Internet Usage, 2007", KISA
- Advancement rates in 2013: "Educational Statistics Yearbook, Educational Statistics DB", Korean Educational Development Institute

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I . Overview of the Survey



I . Overview of the Survey

1. Survey Objectives

As the Internet spreads its wide wings across all areas of society, there comes a need for statistics that allow analyses of not only the quantitative growth of Internet usage, such as Internet usage rates and user populations, but also specific Internet usage patterns, Internet usage in people's daily lives, and its social impacts.

This survey aims to provide statistical information that can be widely used for governmental policies, business strategies, and academic research activities through its studies on Internet usage environments and behaviors.

The specific objectives of this survey are as follows:

- To provide quantitative measurement of Internet users and Internet usage rates
- To provide statistics for producing global ICT indicators and index of international organizations
- To analyze household ICT environments such as ICT device ownership, Internet access
- To understand Internet usage patterns such as Internet usage hours, frequency, locations, and purposes
- To identify the usage of Internet services such as instant messengers and social networks
- To explore the future prospect of Internet usage

2. Historical Background

◆ October 1999

Conducted the 『Survey on Estimating the Internet Users and Verification of Statistical Techniques』 for 1,403 households nationwide (or 3,445 individuals aged 7 and over)

- An Internet user was defined as 'a person who uses the Internet at least once a month'

◆ March 2000

Conducted the 『Survey on Estimating the Internet Users and Modification of Statistical Techniques』 for 2,623 households nationwide (or 8,491 individuals aged 7 and over)

◆ August 2000 – December 2000

Conducted the 『Survey on the Number of Internet Users and Internet Usage Behavior』

- Established a survey panel for 3,500 households nationwide (about 10,000 persons aged 7 and over)
- Changed the survey method to a telephone survey following the survey panel construction in August 2000

◆ March 2001 – December 2001

Conducted the 『Survey on the Number of Internet Users and Internet Usage Behavior』

- Conducted telephone surveys of the same survey panel households on a quarterly basis

◆ June 2002 – December 2002

Conducted the 『Survey on the Internet Users and Internet Usage Behavior』

- Expanded the survey population to household members aged 6 and over
- Changed the survey periodicity to bi-annual (June & December)

◆ June 2003 – June 2004

Changed the title of the survey to 『Survey on the Computer and Internet Usage』 and was designated as official government statistics (No. 120005)

- Designed sample based on 10% Sample EDs for the ‘2000 Population and Housing Census’ by the Statistics Korea
- Conducted face-to-face interview survey for 7,000 households (approximately 18,000 individuals)

◆ December 2004

Changed the definition of an Internet user

- ‘a person who has used the Internet at least once in the last 1 month’
- Included wireless Internet users who access the Internet through a mobile communication network

◆ December 2006 – December 2007

Revised samples and expanded sample size

- Designed sample based on 90% EDs (excluding the ‘10% Sample EDs’ used by the Statistics Korea) for the ‘2005 Population and Housing Census’
- Surveyed 10,000 households nationwide (approximately 25,000 individuals)
- Expanded the survey population to household members aged 3 and over

◆ June 2008

Changed the title of the survey to 『Survey on the Internet Usage』 and expanded sample size

- Surveyed 17,000 households nationwide (approximately 42,000 individuals)
- Changed the survey periodicity to annual and the survey period to 2 months

◆ May 2009 – May 2010

Expanded sample size and changed the reference date

- Surveyed 30,000 households nationwide (approximately 73,000 individuals)
- Changed the reference date (0 hour, May 1) and the survey period (2.5 months)

◆ July 2011

Changed the reference date (0 hour, July 1)

◆ July 2012

Revised samples

- Designed sample result of 'Household and Housing' DB based on '2010 Population and Housing Census'
- Sample size and survey reference date maintained

◆ July 2014

Reduced sample size

- Surveyed 25,000 households nationwide (approximately 65,000 individuals)
- While maintaining the number of EDs (3,000), reduced the number of households per ED from 10 to 8~9
- Designed sample to include Sejong-si

◆ July 2016

Plans to merge with 『Survey on the Mobile Internet Usage』
(General Statistics No. 32902)

◆ August 2016

Changed National Statistic Approval Number

- Survey on the Internet Usage (No. 12005 becomes No. 120005)
- Survey on the Mobile Internet Usage (No. 32902 becomes No. 329002)

◆ November 2016

Discontinued the 『Survey on the Mobile Internet Usage』
(General Statistics No. 329002)

3. Contents of the Survey

This survey covers Internet usage and Internet usage patterns, ICT environment of households, Internet usage in daily lives, and the social impact of the Internet. It attempts also to forecast future changes through time-series analysis of previous survey results.

The major contents of this survey are as follows:

- Estimation and time-series analysis of Internet users and Internet usage rate
- Estimation of usage rate and users of mobile Internet and smartphones
- Internet usage by gender, age, education, occupation, and region
- Internet usage patterns (e.g., Internet usage time, frequency, locations, purposes)
- ICT environment of households (e.g., ICT device ownership and Internet access)
- Internet communications (e.g., e-mail, instant messenger, social network service)
- Internet economic activities (e.g., Internet shopping, Internet banking)
- Online media usage (e.g., TV, newspaper, radio, movie, magazine/book)
- Internet non-use

4. Outline of the Survey

- Sample eligibility: 25,000 households nationwide and household members aged 3 and over
- Sample size : 62,540 household members aged 3 and over
- Periodicity: Annual
- Survey period : 2017. 8. 1 – 9. 30 (2 months)
- Survey method: Face-to-face interview
- Agencies in charge
 - Ministry of Science and ICT (MSIT)
 - Korea Internet & Security Agency (KISA)
 - NICE R&C
- Legal basis
 - Article 52 of the Act on Promotion of Information and Communications Network Utilization and Information Protection, etc. (Korea Internet and Security Agency)
 - Article 17 of the Statistics Act (Designation of Designated Statistics and Revocation of Designation)

5. Sampling Design

A. Population

- Target population: Nationwide households and population aged 3 and over
- Survey population: As of July 1, 2017, nationwide households and household members aged 3 and over
 - Household: A living unit composed of one or more persons who eat, sleep, and live together
 - Household member: All members of the household who live together regardless of family membership
- ※ Group facility households such as dormitories and special social facilities, and household members who are away from home for an extended time due to military service and long-term stays including overseas are excluded from the survey. Detailed exceptions include:
 - : Dormitory residents of schools, factories, and hospitals; residents of special social service facilities such as senior homes, orphanages, and specialized hospitals; military servicemen; inmates of prisons, juvenile reformatories, and forensic psychiatry hospitals; absentees who are away on business or residency; and temporary residents.

B. Sample Size and Sampling Method

1) Sample size: 25,000 households

2) Sampling unit and frame

- Sampling unit: Households nationwide
 - Primary sampling unit: EDs in each region and dong/eup/myeon
 - Second sampling unit: Households within each ED
- Sampling frame: The list of households in the general ED (1.A) and the relevant ED of 2% household residency in Statistics Korea “2010 Population and Housing Census”

3) Sampling method: Stratified multi-stage cluster sampling

- Stratification and sample allocation
 - Primary: After stratifying the country into 17 cities and provinces, the survey conducted square root proportional allocation of target households (25,000 households) based on the number of households in the cities and provinces (2017 estimate)
- ※ The representations of the sample households may be problematic in the case of proportionally allocating samples for each city and province, as Seoul and Gyeonggi have comparatively large sample sizes compared to Jeju, Ulsan, Gwangju, and other less-populated areas. As such, square-root proportional representation is used.

$$n_h = 25,000 * \frac{\sqrt{NHH_h}}{\sum_{h=1}^{17} \sqrt{(NHH_h)}}$$

- n_h is the number of households calculated via square-root allocation using h (cities and provinces)
- NHH_h is the number of parent group households of h (cities and provinces (number of estimated households in 2017))

- Secondary: After stratifying the 17 cities into dong and eup/myeon, the number of households in these administrative levels (as per the “2015 Population and Household Census”) were used to proportionally allocate the city/province target household numbers in the primary allocation.
- Tertiary: The target household numbers allocated to 17 cities and provinces and dong /eup/myeon were converted to the number of EDs (the number of EDs were calculated based on an average of 8.33 households per ED).

• Cluster

- Based on the characteristics of ED categorization indices provided by the sampling frame, the survey conducted K-means clustering to classify the EDs in each area into 20 types. Clusters with less than 500 EDs were assimilated into similar clusters to form a total of 17 clusters.

※ ED categorization indices: Administrative cities, counties, districts, administrative eup/myeon/dong, ED number, ED characteristics, gender of the householder, age of the householder, relationship with the householder, education level of the householder, household category, household type, type of housing, residence types, housing size, and number of rooms in the house.

- ED characteristics (2): Regular ED, apartment ED
- Gender of the householder (2): Male, female
- Education level of the householder (8): No schooling (including not yet in school), elementary school, middle school, high school, college (under 4-year program), university (4-year diploma program or higher), master’s degree program, PhD program
- Household category (5): Household of a family, household of family and other members, single-person household, 5-person or smaller household of unrelated members, 6-person or larger household of unrelated members
- Household type (1): Regular household
- Type of housing (4): House, apartment, multiplex housing, other
- Housing size (9): 20m² or smaller, 20m²–40m², ... , 165m²–230m², 230m² or larger
- Number of rooms (6): 0, 1, 2, 3, 4, 5 or more
- Square root proportional allocation was conducted on the number of target EDs (3,000), based on the number of EDs in each cluster (2015 Population and Housing Census)

- Selection
 - ED selection: The standard EDs in dong/eup/myeon level of each region and cluster were systematically selected using the proc survey select function of SAS
 - Household selection: Household member lists in the selected EDs were used to systematically select sample households (8–9 households per ED, 8.33 households on average)
 - Household member selection: All members of selected households aged 3 and over were surveyed

6. Fieldwork

A. Outline of the Fieldwork

- Fieldwork period : 2017. 8. 1. – 2017. 9. 30.
- Reference date : 2017. 7. 1.
- Periodicity: Annual
- Sample eligibility: Sample households and its household members aged 3 and over
- Data collection: Face-to-face interviews in which trained interviewers visited each sample household and conducted an interview with a questionnaire
- Fieldwork procedure: Official letters were sent to eup/myeon/dong offices and household members nationwide to ask for cooperation in the survey ⇒ At-home interview by interviewer ⇒ Management and controls by fieldwork supervisors ⇒ Collection of completed questionnaire ⇒ Re-survey or complementary survey ⇒ Verification of final data

B. Sample Management

- ED Management
 - Pre-selected EDs were surveyed in principle. In case of any of the following reasons, replaced households in accordance with alternative principle with the approval of survey manager.
- Household Management
 - Pre-selected households were surveyed in principle. In case of any of the following reasons, replaced households in accordance with alternative principle with the approval of survey manager.
 - Refusal to answer: All the household members strongly refuse to take the survey because they are busy or do not want to be bothered (despite the suggested 3 or more visits to such households).
 - Long-term absence: Residential housing exists but all the household members are absent for a long time due to overseas travel or other domestic reasons (3 visits following absence for unknown reasons).

- Empty household: Members have moved out or have been removed due to housing development projects and other reasons.
 - Housing type change: Change of housing type from residential to commercial or any other, causing the exclusion of the household from the survey target group.
 - Insufficient number of valid household members: Upon rejection of response by additional household member required to satisfy the number of valid household members, household can be eliminated and replaced with another household.
- ※ Replacement rules: Select the closest household located at the northern right of the original household. If an apartment is structured in clusters around a staircase and there are less than 3 units on each floor, replace the household with one that is facing it or any other unit regardless of cardinal direction. When having to move between stairs, move in a downward direction.

7. Data Processing

A. Verification and Imputation

- Verification on the fieldwork
 - Fieldwork supervisors randomly select over 30% of collected questionnaires and make telephone calls to check whether the interview took place as well as the accuracy of answers, among others.
 - Second electronic verification of the validated questionnaires is conducted during data entry or editing process.
 - Third verification of the data is conducted using internal validation program during data processing.
 - Re-survey or complementary survey is done for questionnaires which fail to be verified during the first, second, and third verifications.
- Verification on data processing
 - Time-series comparison and verification of past results and average by group (e.g., gender, age, region, education, occupation).
- Imputation for non-responses
 - Upon the occurrence of unit non-response, the relevant household shall be visited at least 3 times to collect the response, and if it is inevitable, the household shall be replaced in accordance with the standards of sample substitution and then the unit non-response shall be eliminated.
 - Upon rejection of response by additional household member required to satisfy the number of valid household members, household can be eliminated and replaced with another.
 - Since answers are entered by the interviewer, there should not be non-responses to any of the survey questions.
 - Non-response on characteristics of the respondents (e.g., household income) shall not be calibrated.

B. Data Processing and Analysis

- Collected data are computerized by a coding process, and the final verified data are analyzed using statistical package SPSS for Windows.
 - Personal identification information (e.g., name, address, telephone number) is excluded or encoded as a serial number during data entry.
- Unit of analysis: Household and household members
 - Independent variables for household: Householder's age, household income, scale of region, region.
 - Independent variables for each household member: Gender, age, gender X age, youth (9–24 years old), occupation, education, household income, scale of region, region.

8. Estimation and Sampling Error

A. Estimation

- Estimation of Household members

$$\hat{p}_N = \sum_{area=1}^{17} \sum_{sex=0}^1 \sum_{age=3-9}^{70+} w_{area,sex,age} \hat{p}_{area,sex,age}$$

$$\hat{Var}(\hat{p}_N) = \sum_{area=1}^{17} \sum_{sex=0}^1 \sum_{age=3-9}^{70+} w_{area,sex,age}^2 \hat{Var}(\hat{p}_{area,sex,age})$$

$$\hat{Var}(\hat{p}_{area,sex,age}) = \frac{N_{area,sex,age} - n_{area,sex,age}}{N_{area,sex,age}} * \frac{\hat{p}_{area,sex,age} * (1 - \hat{p}_{area,sex,age})}{n_{area,sex,age} - 1}$$

area	17 cities/provinces
Gender	Male(1), Female(0)
age	Age scale of household members: 3–9, 10s, 20s, 30s, 40s, 50s, 60s, 70+
$\hat{p}_N$	Estimate ratio of Nation (Korea)
$N_{area,sex,age}$	Population by region, gender, and age
$n_{area,sex,age}$	Sample size by region, gender, and age
$w_{area,sex,age}$	Weight by region, gender, and age, $w_{area,sex,age} = \frac{N_{area,sex,age}}{N}$
$p_{area,sex,age}$	Estimation of certain region, gender, and age

- Estimation of Household

$$\hat{p}_N = \sum_{area=1}^{17} \sum_{age=20s}^{60+} w_{area,age} \hat{p}_{area,age}$$

$$\hat{Var}(\hat{p}_N) = \sum_{area=1}^{17} \sum_{age=20s}^{60+} w_{area,age}^2 \hat{Var}(\hat{p}_{area,age})$$

$$\hat{Var}(\hat{p}_{area,age}) = \frac{N_{area,age} - n_{area,age}}{N_{area,age}} * \frac{\hat{p}_{area,age} * (1 - \hat{p}_{area,age})}{n_{area,age} - 1}$$

area	17 cities/provinces
age	Householders' age : 20s, 30s, 40s, 50s, 60+
$\hat{p}_N$	Estimate ratio of households
$N_{area,age}$	Population by region and householder's age
$n_{area,age}$	Sample size by region and householder's age
$w_{area,age}$	Weight by region and householder's age, $w_{area,age} = \frac{N_{area,age}}{N}$
$p_{area,age}$	Estimation of certain householder's age in certain region

B. Sampling Error and Confidence Interval

- Sampling error and confidence interval of the estimate rate at a 95% confidence level

$$\pm 1.96 * \sqrt{\hat{Var}(\hat{p}_N)}, \hat{p}_N \pm 1.96 * \sqrt{\hat{Var}(\hat{p}_N)}$$

Table 1-1 • Sampling Error and Estimates for Internet Usage Rate and Internet Users Aged 3 and Over

Sampling error for Internet usage rate	$\pm 0.17\%p$ (95% Confidence Level)
Estimate for Internet usage rate	90.3% $\pm 0.17\%p$
Sampling error for the number of Internet users	± 77 thousand (95% Confidence Level)
Estimate for the number of Internet users	45,283 thousand ± 77 thousand

Table 1-2 • Sampling Error and Estimate for Households with Internet Access

Sampling error for Households with Internet access	$\pm 0.08\%p$ (95% Confidence Level)
Estimate for Households with Internet access	99.5% $\pm 0.08\%p$

9. Publication and Use

- The results of this survey are to be made publicly available through KISA's statistics website (<http://isis.kisa.or.kr>).
- The results of this survey have been used as population data for governmental departments and research organizations including as well as reference data for social indicators at local governments.
- Data files have also been submitted to international organizations and institutions such as the UN, OECD, ITU, and WEF for producing global ICT indicators and indices.

10. Population Distribution

Table 1-3 • Households by Householder's Age and Region

	Total	Householder's age				
		Under 20s	30s	40s	50s	60+
Nationwide	19,523,587	1,437,088	3,173,078	4,442,817	4,658,149	5,812,455
Seoul	3,787,319	375,927	681,385	819,972	845,623	1,064,412
Busan	1,351,166	92,747	179,382	269,754	331,500	477,783
Daegu	939,536	61,836	133,110	218,987	240,445	285,158
Incheon	1,070,384	63,431	186,227	262,649	281,070	277,007
Gwangju	573,359	51,720	99,239	141,469	134,381	146,550
Daejeon	594,615	70,039	98,907	138,342	136,703	150,624
Ulsan	428,652	24,180	76,995	104,797	117,869	104,811
Sejong	102,551	13,799	24,966	26,985	17,156	19,645
Gyeonggi	4,541,136	278,186	833,839	1,187,103	1,132,839	1,109,169
Gangwon	621,044	54,054	74,932	122,816	147,717	221,525
Chungbuk	622,147	47,861	92,349	132,864	147,781	201,292
Chungnam	823,952	67,926	131,501	172,202	176,740	275,583
Jeonbuk	731,051	52,441	93,216	148,662	163,331	273,401
Jeonnam	733,391	34,439	87,100	137,726	164,902	309,224
Gyeongbuk	1,087,679	71,209	144,607	209,133	250,588	412,142
Gyeongnam	1,282,811	64,062	199,028	291,001	312,899	415,821
Jeju	232,794	13,231	36,295	58,355	56,605	68,308

[Source] Statistics Korea, 『Households Projections for Korea』 as of 2017

Table 1-4 • Individuals by Gender, Age and Region

	Total	Gender		Age							
		Male	Female	3-9	10s	20s	30s	40s	50s	60s	70+
Nationwide	50,173,433	25,137,733	25,035,700	3,211,826	5,244,468	6,902,162	7,561,778	8,602,472	8,406,022	5,458,443	4,786,262
Seoul	9,554,467	4,671,495	4,882,972	514,547	870,343	1,480,539	1,589,540	1,609,878	1,560,855	1,089,319	839,446
Busan	3,354,416	1,650,406	1,704,010	184,892	309,728	468,797	468,839	532,154	590,436	452,955	346,615
Daegu	2,408,905	1,197,398	1,211,507	146,973	262,550	335,009	329,480	419,879	420,718	274,345	219,951
Incheon	2,847,955	1,432,474	1,415,481	189,782	299,319	398,333	451,541	503,061	502,182	282,580	221,157
Gwangju	1,463,518	728,876	734,642	101,880	180,539	217,020	217,615	259,191	231,298	137,935	118,040
Daejeon	1,491,698	748,324	743,374	99,426	168,550	244,204	219,763	257,386	238,572	147,323	116,474
Ulsan	1,132,222	588,683	543,539	81,416	128,172	150,305	179,639	204,184	207,515	112,590	68,401
Sejong	264,632	132,848	131,784	27,896	30,265	36,637	51,748	48,974	31,872	19,857	17,383
Gyeonggi	12,462,830	6,298,137	6,164,693	892,228	1,383,259	1,698,445	2,008,388	2,302,120	2,066,155	1,154,322	957,913
Gangwon	1,489,342	753,249	736,093	86,485	155,836	191,364	179,450	235,171	263,594	183,292	194,150
Chungbuk	1,565,475	794,158	771,317	99,974	166,192	215,585	216,298	254,937	264,664	174,292	173,533
Chungnam	2,091,334	1,071,756	1,019,578	141,027	218,678	280,969	308,523	336,758	327,007	227,953	250,419
Jeonbuk	1,788,834	892,750	896,084	111,010	197,916	226,906	219,672	283,523	293,210	215,180	241,417
Jeonnam	1,754,414	879,596	874,818	107,947	186,411	178,922	209,877	270,531	298,337	221,658	280,731
Gyeongbuk	2,617,483	1,320,890	1,296,593	154,469	257,356	318,530	343,164	409,068	451,117	336,371	347,408
Gyeongnam	3,269,057	1,665,419	1,603,638	225,179	355,778	386,542	480,472	565,249	559,327	366,230	330,280
Jeju	616,851	311,274	305,577	46,695	73,576	74,055	87,769	110,408	99,163	62,241	62,944

[Source] Statistics Korea, 『Population Projections for Korea』 as of 2017

11. Sample Distribution

Table 1-5 • Household Sample

	No. of samples (households)	Component ratio (%)
Total	25,000	100.0
[Householder's age]		
20s and under	820	3.3
30s	3,280	13.1
40s	4,781	19.1
50s	5,933	23.7
60+	10,186	40.7
[Household income]		
Less than 1 million won	4,248	17.0
1-2 million won	3,868	15.5
2-3 million won	4,344	17.4
3-4 million won	4,775	19.1
4 million won or more	7,453	29.8
Non response	312	1.2
[Size of region]		
Dong bu	19,324	77.3
Eup/Myeon bu	5,676	22.7
[Region]		
Seoul	2,920	11.7
Busan	1,745	7.0
Daegu	1,463	5.9
Incheon	1,554	6.2
Gwangju	1,148	4.6
Daejeon	1,178	4.7
Ulsan	972	3.9
Sejong	416	1.7
Gyeonggi	3,203	12.8
Gangwon	1,197	4.8
Chungbuk	1,215	4.9
Chungnam	1,422	5.7
Jeonbuk	1,282	5.1
Jeonnam	1,294	5.2
Gyeongbuk	1,591	6.4
Gyeongnam	1,713	6.9
Jeju	687	2.7

Table 1-6 • Household Member Sample

	No. of samples (persons)	Component ratio (%)		No. of samples (persons)	Component ratio (%)
Total	62,540	100.0	Total	62,540	100.0
[Gender]			[Education]		
Male	30,180	48.3	Elementary school graduates and lower (preschoolers)	15,075	24.1
Female	32,360	51.7	(no schooling)	2,104	3.4
[Age]			(current elementary school students)	2,488	4.0
3-9	3,928	6.3	(current middle school students)	3,134	5.0
10s	5,997	9.6	(elementary school graduates)	1,630	2.6
20s	6,467	10.3	Middle school graduates	5,719	9.1
30s	8,257	13.2	(current high school students)	7,392	11.8
40s	9,701	15.5	(middle school graduates)	2,083	3.3
50s	10,979	17.6	High school graduates	5,309	8.5
60s	8,308	13.3	(current college students)	21,435	34.3
70+	8,903	14.2	(high school graduates)	3,487	5.6
[Gender × Age]			College graduates and higher (current graduate school students)	17,948	28.7
Male 3-9	1,920	3.1	(college graduates)	18,638	29.8
Male 10s	3,089	4.9		93	0.1
Male 20s	3,192	5.1	[Income]	18,545	29.7
Male 30s	4,054	6.5	Less than 1 million won	6,210	9.9
Male 40s	4,734	7.6	1-2 million won	7,227	11.6
Male 50s	5,403	8.6	2-3 million won	9,925	15.9
Male 60s	3,922	6.3	3-4 million won	13,699	21.9
Male 70+	3,866	6.2	4 million won or more	24,677	39.5
Female 3-9	2,008	3.2	Non response	802	1.3
Female 10s	2,908	4.6	[Size of region]		
Female 20s	3,275	5.2	Dong bu	49,599	79.3
Female 30s	4,203	6.7	Eup/Myeon bu	12,941	20.7
Female 40s	4,967	7.9	[Region]		
Female 50s	5,576	8.9	Seoul	7,552	12.1
Female 60s	4,386	7.0	Busan	4,389	7.0
Female 70+	5,037	8.1	Daegu	3,408	5.4
[Youth]			Incheon	3,749	6.0
Total	9,874	15.8	Gwangju	3,346	5.4
Male	5,000	8.0	Daejeon	3,051	4.9
Female	4,874	7.8	Ulsan	2,384	3.8
[Occupation]			Sejong	1,174	1.9
Professionals/Managers	1,715	2.7	Gyeonggi	8,620	13.8
Office workers	8,452	13.5	Gangwon	2,524	4.0
Service/Sales	11,737	18.8	Chungbuk	2,958	4.7
Production workers	6,960	11.1	Chungnam	3,411	5.5
Agricultural, forestry, fishery	3,866	6.2	Jeonbuk	3,280	5.2
Unemployed/Other	29,810	47.7	Jeonnam	3,341	5.3
(Students)	10,322	16.5	Gyeongbuk	3,557	5.7
(Housewives)	11,998	19.2	Gyeongnam	4,033	6.4
(Other)	7,490	12.0	Jeju	1,763	2.8



II. Internet Access and Use

II. Internet Access and Use

1. Definition of an Internet User

The term, Internet user, gets defined differently to fit the purpose of different surveys.

Until June 2004, an Internet user, for the purpose of this survey, had been defined as ‘a person who uses the Internet at least once a month on average’ , but in the interest of accommodating the more generalized understanding of the term, both domestic and international, this survey has taken on the definition, ‘a person who has used the Internet at least once in the last 1 month’ beginning December 2004.

In addition, in an effort to reflect the trend of the times with the Internet becoming less fixed to desktops and laptops and becoming more mobile, as in smartphones, users of wireless Internet whose access is through the mobile communication network have been included in the scope of Internet users starting with the December 2004 survey.

Until December 2001, the eligible sampling population included those aged 7 and over. This age was lowered to 6, the age children enter school in Korea, from the June 2002 survey to reflect the broadening base of Internet users. As of December 2006, the sample population is users aged 3 and over.

In sum, this survey defines an Internet user as ‘a person aged 3 and over who has used wired or wireless Internet at least once in the last 1 month’ .



Table 2–1 • Definitions of Internet User by Country

Country	Internet user base		Source	Country	Internet user base		Source
	Age	Period			Age	Period	
Greece	16–74	In the last 3 months	Eurostat	Slovenia	16–74	In the last 3 months	Eurostat
Netherlands	12+		Statistics Netherlands	Singapore	7+	In the last 3 months	IMDA
Norway	16–74	In the last 3 months	Eurostat	Argentina*	10+		Instituto Nacional de Estadística y Censos
New Zealand*	15+	In the last 1 year	Statistics New Zealand	Iceland	16–74	In the last 3 months	Eurostat
Taiwan	12+		National Communications Commission	Ireland	16–74	In the last 3 months	Eurostat
Denmark	16–74	In the last 3 months	Eurostat	Estonia	16–74	In the last 3 months	Eurostat
Germany	16–74	In the last 3 months	Eurostat	United Kingdom	16–74	In the last 3 months	Eurostat
Latvia	16–74	In the last 3 months	Eurostat	Austria	16–74	In the last 3 months	Eurostat
Romania	16–74	In the last 3 months	Eurostat	Ukraine	All ages		KIIS
Luxembourg	16–74	In the last 3 months	Eurostat	Israel*	20+		Israel Central Bureau of Statistics
Lithuania	16–74	In the last 3 months	Eurostat	Italy	6+	In the last 3 months	Eurostat
Malaysia	15+		Department of Statistics Malaysia	India	6+		
Mexico	6+		INEGI	Indonesia	5+	In the last 3 months	BPS–Statistics Indonesia
Mauritius*	5+		Statistics Mauritius	Japan*	6+		Ministry of Internal Affairs and Communications
Malta	16–74	In the last 3 months	Eurostat	Jamaica*	All ages	In the last 3 months	Statistical Institute of Jamaica
United States*	3+		NTIA	China	6+	In the last 6 months	CNNIC
Venezuela*	7+		Instituto Nacional de Estadística	Czech Rep.	16+	In the last 6 months	Eurostat
Belgium	16–74		Eurostat	Chile	5+		SUBTEL
Bulgaria	16–74		Eurostat	Canada	16+	In the last 1 year	Statistics Canada
Brazil*	10+		Brazilian Internet Steering Committee	Peru	6+		Instituto Nacional de Estadística e Informática
Thailand	6+		National Statistical Office of Thailand	Portugal	16–74	In the last 6 months	Eurostat
Turkey	16–74	In the last 3 months	Eurostat	Poland	16–74	In the last 6 months	Eurostat
Cyprus	16–74	In the last 3 months	Eurostat	France	16–74	In the last 6 months	Eurostat
Serbia*	16–74	In the last 3 months	Statistical Office of the Republic of Serbia	Finland	16–89	In the last 6 months	Eurostat
Sweden	16–74	In the last 3 months	Eurostat	Hungary	16–74	In the last 6 months	Eurostat
Switzerland	16–74	In the last 3 months	Eurostat	Australia	15+	In the last 6 months	Australian Bureau of Statistics
Spain	16–74	In the last 3 months	Eurostat	Hong Kong	10+	In the last 1 year	HK statistics
Slovak Rep.	16–74	In the last 3 months	Eurostat				

Source: ITU World Telecommunication/ICT Indicators database and Survey agency in each country (Refer to data from 2015 or before for countries marked with *)

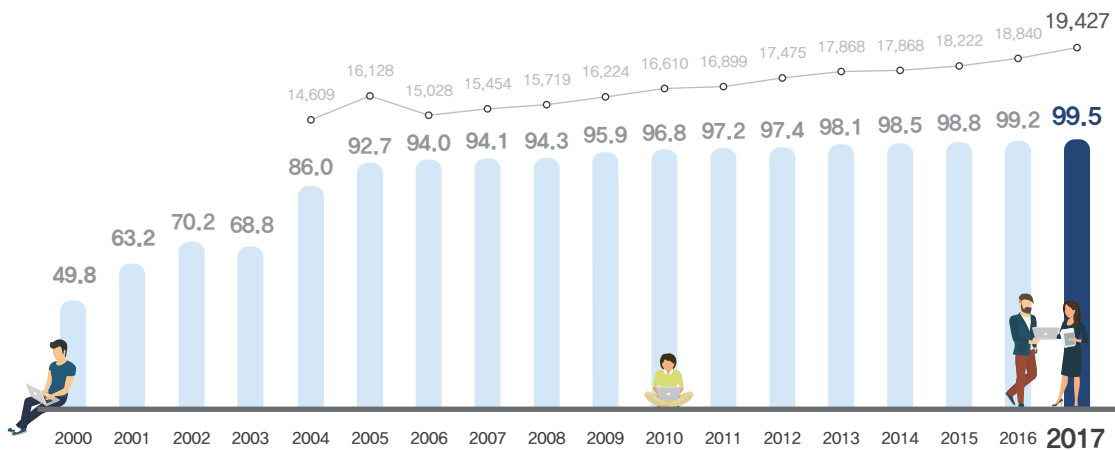
2. Households with Internet Access

Households with Internet access 99.5%

A. Households with Internet Access

As of July 2017, among the 19,524 thousand households in total, 19,427 thousand (99.5% of all households) could access the Mobile Internet, Wireless LAN, FTTx, xDSL, and cable modem. This is an increase of 0.3%p compared to the previous year, and 49.7%p higher compared to 2000.

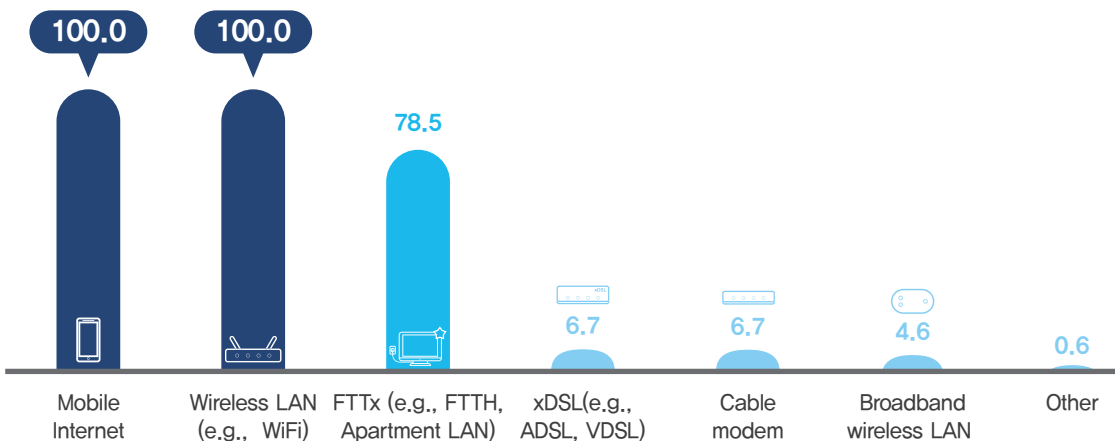
Figure 2-1 • Households with Internet Access (% , thousand) – All households



B. Internet Access Type

All households in Korea (100.0%) could access the Internet through 'Mobile Internet'. This includes 3G and LTE, as well as 'Wireless LAN'. Other possible methods of Internet access include 'FTTx (e.g., FTTH, Apartment LAN)' (78.5%), 'xDSL (e.g., ADSL, VDSL)' (6.7%), 'Cable modem' (6.7%), and 'Broadband wireless LAN' (4.6%).

Figure 2-2 • Internet Access Type (multiple responses, %) – Households with Internet access



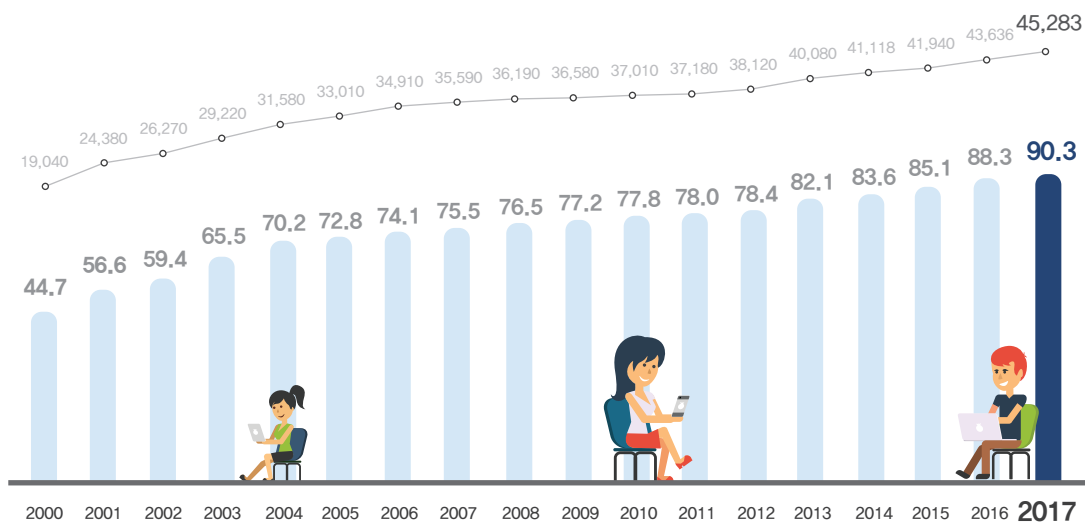
3. Internet Usage Rate

Internet users among the population aged 3 and over 90.3% or 45,283 thousand

As of July 2017, the rate of Internet users (individuals who have used the Internet at least once in the last 1 month) among the population aged 3 and over reached 90.3%, which is a 2.0%p increase from the previous year. The number of Internet users totaled 45,283 thousand (up by 1,647 thousand from the previous year).

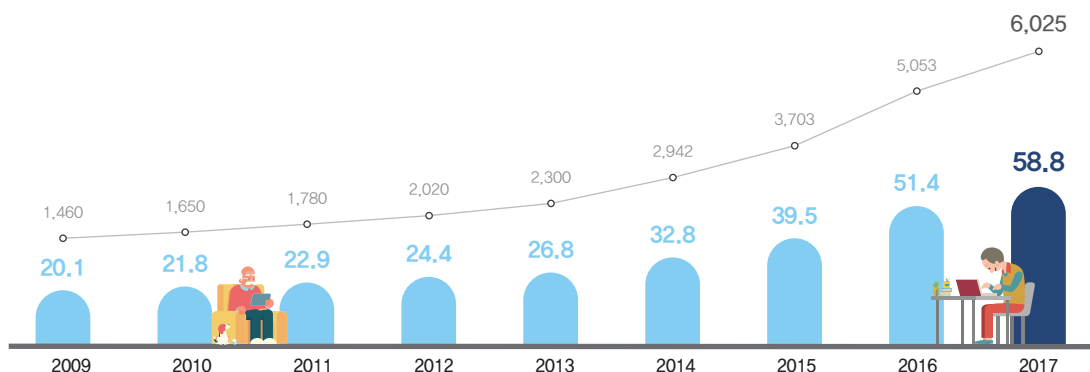
Meanwhile, Internet usage among the elderly aged 60 and over has continued its continuous incline to reach a rate of 58.8% or 6,025 thousand users.

Figure 2-3 • Internet Usage Rate and Internet Users (% , thousand) – Population aged 3 and over



- 1) Since the 2004 survey, wireless Internet through mobile communication network has been included in the scope of the Internet. Also the definition of an Internet user has been changed from 'a person who uses the Internet at least once a month on average' to 'a person who have used the Internet at least once in the last 1 month'
- 2) Since 2006, the sample eligibility has been expanded to include a population aged 3 and over (2000–2001: population aged 7 and over, 2002–2005: population aged 6 and over)

Figure 2-4 • Internet Usage Rate of the Elderly and Internet Users (% , thousand) – Population aged 60 and over



Among the population aged 3 and over, 92.5% are experienced users who have used the Internet at least once in their lifetime. In terms of when they had last used the Internet, 84.5% was online ‘In the last 24 hours’ , while 90.7% and 90.9% have used the Internet ‘In the last 3 months’ and ‘In the last 1 year’ respectively.

Figure 2-5 • Time-of-Use of the Internet (%) – Population aged 3 and over

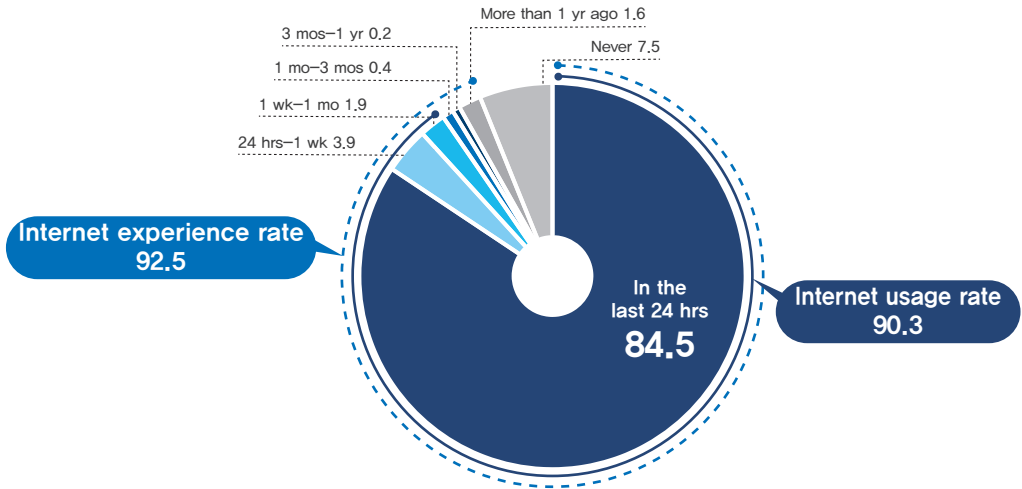


Table 2-2 • Internet Usage Rate and Internet Users by Gender (% , thousand) – Population aged 3 and over

	In the last 1 wk	In the last 1 mo (Internet user)	In the last 3 mos	In the last 1 yr	Experienced users
Usage Rate	88,4	90,3	90,7	90,9	92,5
Users	44,334	45,283	45,493	45,618	46,413

A. Internet Usage Rate and Internet Users by Gender

The Internet usage rates for males and females aged 3 and over are 92.7% (up by 1.7%p from the previous year) and 87.7% (up by 2.1%p from the previous year) respectively. Meanwhile, 23,315 thousand males and 21,968 thousand females are Internet users.

In terms of gender composition, males account for 51.5% of total Internet users and females account for 48.5%.

Figure 2-6 • Internet Usage Rate by Gender (%) – Population aged 3 and over

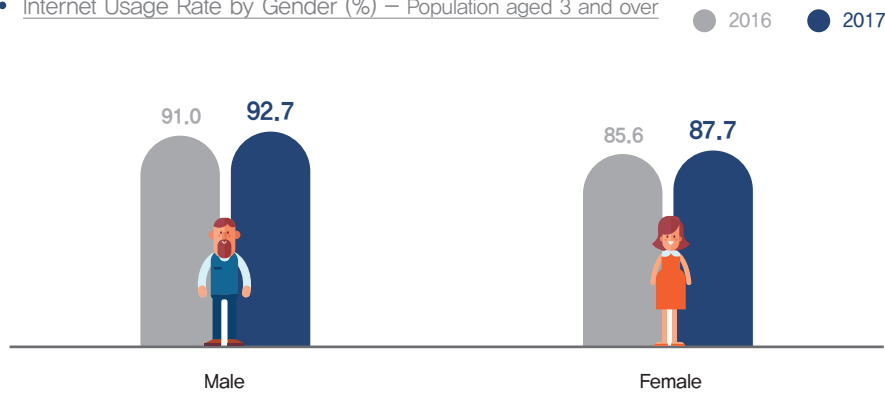


Figure 2-7 • Internet Users by Gender (thousand) – Population aged 3 and over

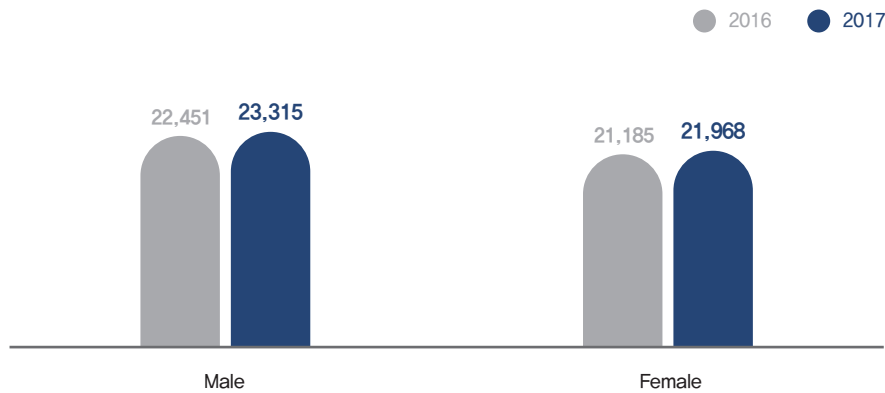
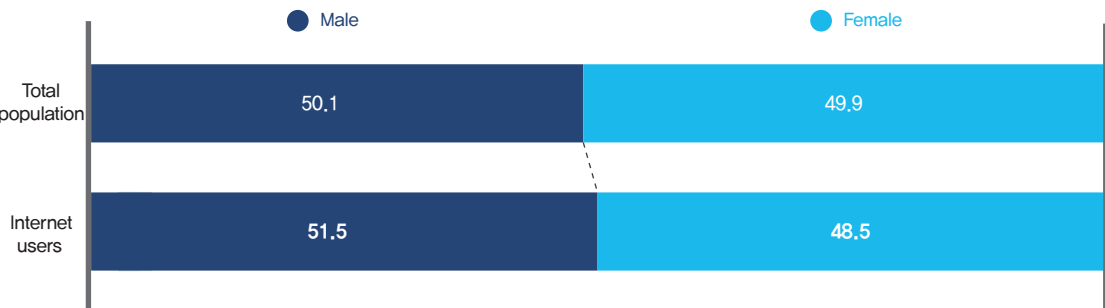


Figure 2-8 • Gender Composition of Internet Users (%) – Internet users aged 3 and over



B. Internet Usage Rate and Internet Users by Age

Most Koreans of the 10s to the 40s age groups (more than 99.7%) are using the Internet, and the Internet usage rate of those in their 50s was also a high rate of 98.7%. The Internet usage rate also increased significantly in higher age groups of those in their 60s (82.5%, a 8.0%p increase compared to the previous year) and their 70s and over (31.8%, a 5.9%p increase compared to the previous year).

In terms of the number of Internet users, the 40s accounted for 8,577 thousand and the 50s were 8,298 thousand in number. The 30s were 7,555 thousand and the 20s were 6,897 thousand. The 10s came in at 5,237 thousand.

Figure 2-9 • Internet Usage Rate by Age (%) – Population aged 3 and over

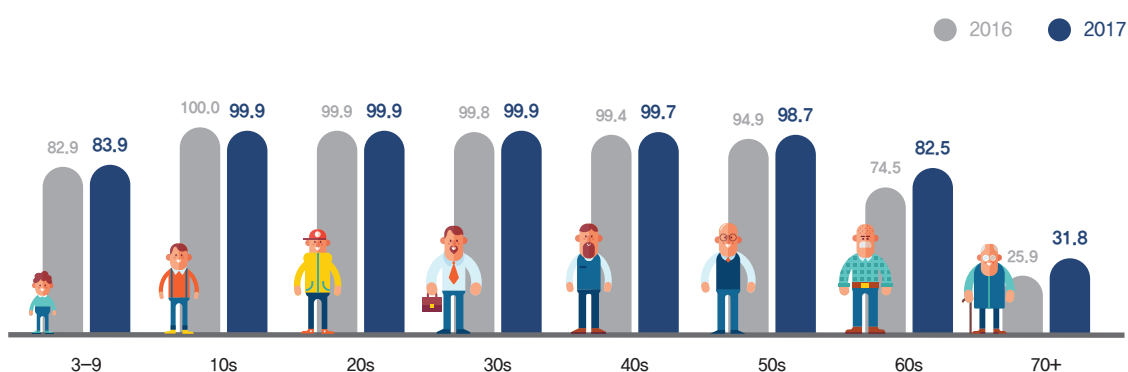
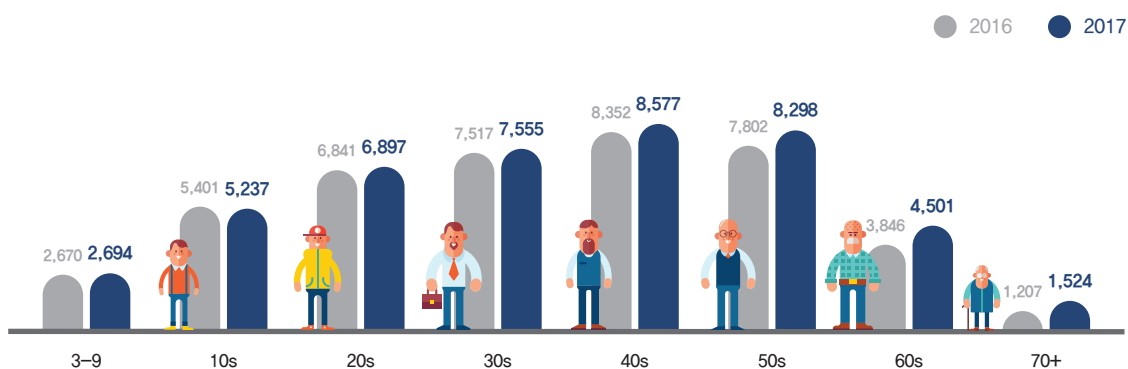


Figure 2-10 • Internet Users by Age (thousand) – Population aged 3 and over

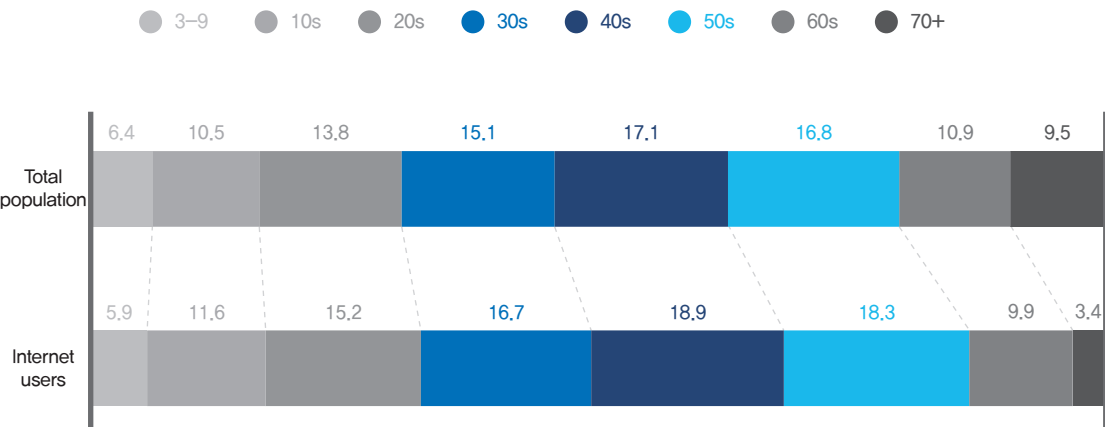


※ The decline in the number of users in the 10s age group is attributed to the comparatively greater decrease in their population out of the total. (Based on the 2017 Population Projections by the Statistics Korea)¹⁾

	3-9	10s	20s	30s	40s	50s	60s	70+
1) 2015	3,202,000	5,711,000	6,781,000	7,764,000	8,752,000	8,173,000	4,856,000	4,436,000
2016	3,231,000	5,457,000	6,841,000	7,663,000	8,683,000	8,316,000	5,206,000	4,550,000
2017	3,212,000	5,244,000	6,902,000	7,562,000	8,602,000	8,406,000	5,458,000	4,786,000

In terms of the composition of age groups, the 40s had the greatest number of users (18.9%), followed by the 50s (18.3%), and the 30s (16.7%). The 10s and the 20s (11.6% and 15.2% respectively) made up 26.8%.

Figure 2–11 • Age Composition of Internet Users (%) – Internet users aged 3 and over

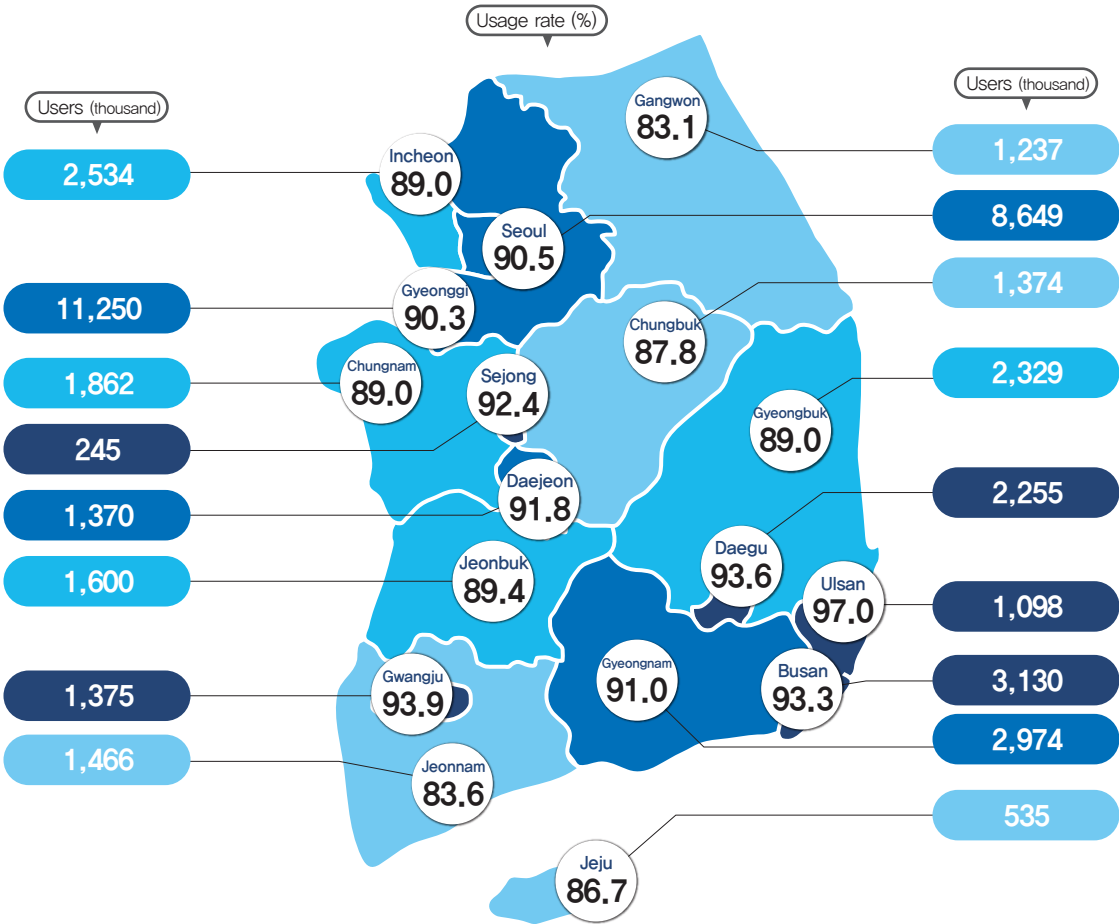


C. Internet Usage Rate and Internet Users by Region

The 5 highest regions in terms of Internet usage rate among the 17 regions surveyed were Ulsan (97.0%), Gwangju (93.9%), Daegu (93.6%), Busan (93.3%), and Sejong (92.4%). Meanwhile, the regions with comparatively lower Internet usage rates were Gangwon (83.1%), Jeonnam (83.6%), Jeju (86.7%), and Chungbuk (87.8%).

The number of Internet users for Gyeonggi was 11,250 thousand, while Seoul accounted for 8,649 thousand, Busan 3,130 thousand, Gyeongnam 2,974 thousand, and Incheon 2,534 thousand.

Figure 2-12 • Internet Usage Rate and Internet Users by Region (% , thousand) – Population aged 3 and over



In terms of the size of the region²⁾, the Internet usage of dong bu showed a rate of 91.8% (up by 2.0%p from the previous year) which was higher than the 82.8% of eup/myeon bu (up by 1.5%p from the previous year). Meanwhile, the gap between dong bu and eup/myeon bu was 9.0%p or an increase of 0.5%p compared to the previous year.

Figure 2-13 • Internet Usage Rate by Size of Region (%) – Population aged 3 and over

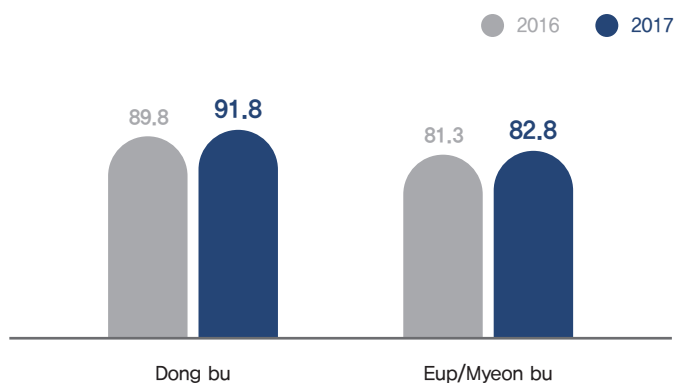


Table 2-3 • Internet Usage Rate by Region and Size of Region (%) – Population aged 3 and over

	Dong bu	Eup/Myeon bu		Dong bu	Eup/Myeon bu
Seoul	90.5	—	Gangwon	88.2	73.5
Busan	93.5	89.7	Chungbuk	92.1	79.5
Daegu	93.8	91.4	Chungnam	93.1	84.9
Incheon	89.5	68.0	Jeonbuk	92.2	80.1
Gwangju	93.9	—	Jeonnam	89.6	77.3
Daejeon	91.8	—	Gyeongbuk	93.4	83.4
Ulsan	97.7	93.9	Gyeongnam	94.3	84.2
Sejong	97.2	86.5	Jeju	89.5	75.5
Gyeonggi	91.2	85.2			

※ (—) : Regions without any accountable eup or myeon bu areas

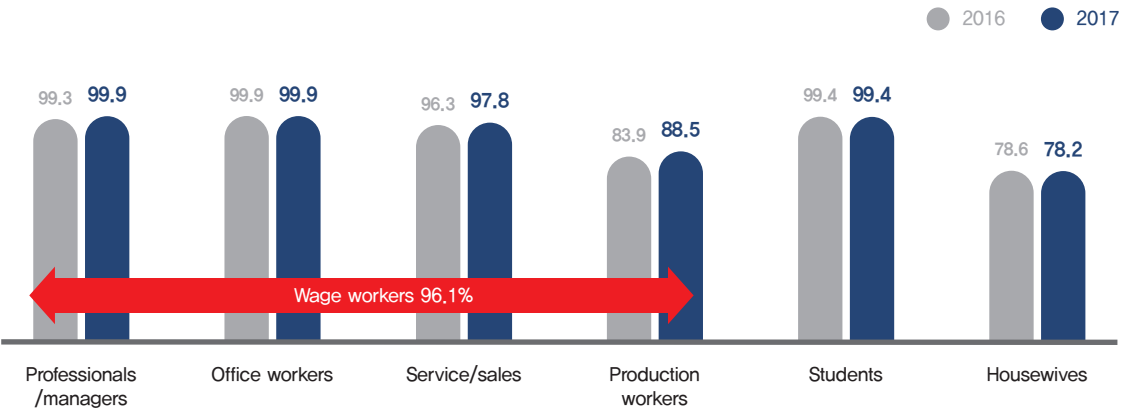
2) 'Dong bu' refers to the administrative area of dong and 'Eup/Myeon bu' refers to eup or myeon areas.

D. Internet Usage Rate by Occupation

By occupation³⁾, the Internet usage rates of professionals or managers and office workers were highest, both reaching 99.9%. This is followed by workers involved in service or sales (97.8%) and in production workers (88.5%). The average Internet usage rate of these wage workers was 96.1%.

Meanwhile, students recorded a usage rate of 99.4% and the rate of housewives was 78.2%.

Figure 2-14 • Internet Usage Rate by Occupation (%) – Population aged 3 and over



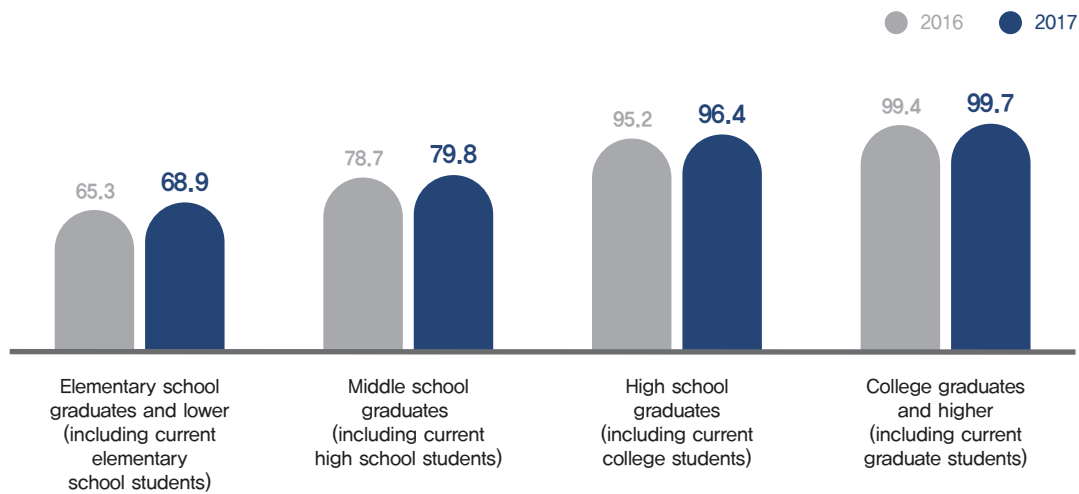
3) Based on KSCO(Korean Standard Classification of Occupations)

Classification	Classification Detail
Professionals/managers	1. Managers; 2. Professionals and related workers
Office workers	3. Clerks
Service/sales	4. Service workers; 5. Sales workers
Production workers	6. Skilled agricultural, forestry and fishery workers; 7. Craft and related trades workers; 8. Equipment, machine operating and assembling workers; 9. Elementary workers
Unemployed/Other	A. Armed forces; students; housewives; unemployed/others

E. Internet Usage Rate by Education

By education, the Internet usage rate of ‘College graduates and higher (including current graduate students)’ was the highest at 99.7%, followed by ‘High school graduates (including current college students)’ (96.4%), ‘Middle school graduates (including current high school students)’ (79.8%), and ‘Elementary school graduates and lower (including current elementary school students)’ (68.9%).

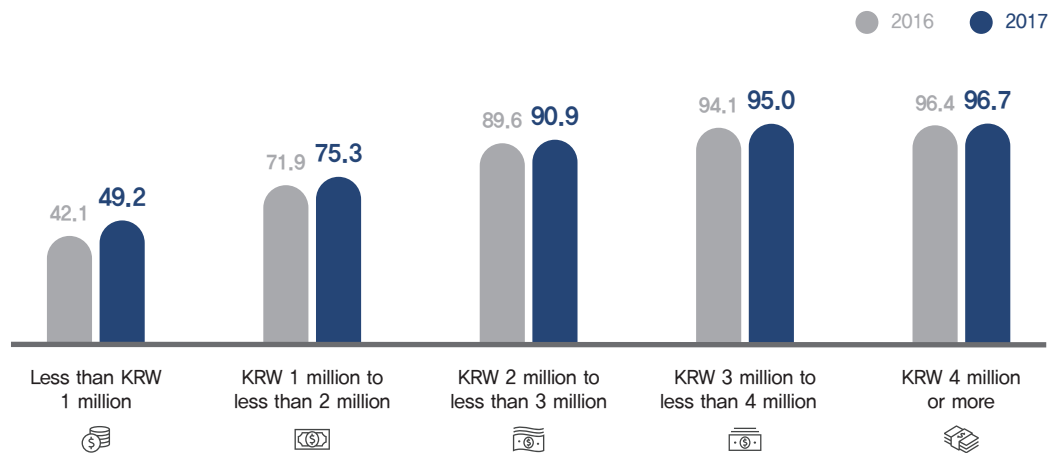
Figure 2-15 • Internet Usage Rate by Education (%) – Population aged 3 and over



F. Internet Usage Rate by Household Income

By household income, households with an income of ‘KRW 4 million or more’ showed the highest Internet usage rate at 96.7%, whereas those with ‘Less than KRW 1 million’ in household income were at a comparatively lower rate for Internet usage of 49.2%.

Figure 2-16 • Internet Usage Rate by Household Income (%) – Population aged 3 and over



4. Internet Usage Pattern

Wireless Internet (99.4%) more popular than wired Internet (71.3%)

A. Internet Usage Type

The survey showed that the wireless method (99.4%) was more popular than the wired method (71.3%) for accessing the Internet. As for the specific type of wireless connection, ‘Mobile wireless phone network (3G/4G LTE)’ was the highest ranked at 99.3%, followed by ‘Fixed wireless (WiFi)’ (98.0%) and ‘Mobile wireless router’ (2.6%).

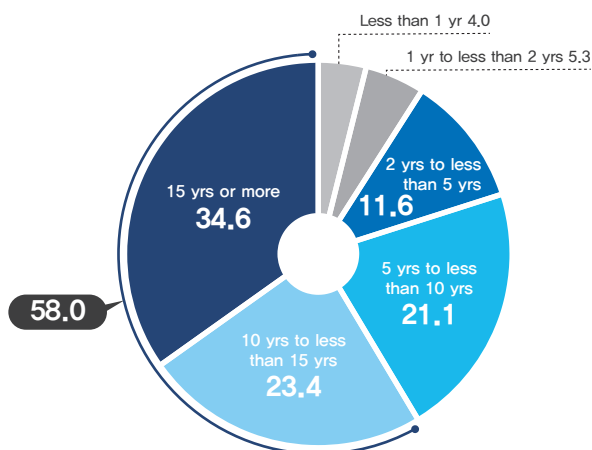
Figure 2-17 • Internet Usage Type (multiple responses, %) – Internet users aged 3 and over



B. Internet Usage Period

Among Internet users aged 3 and over, 58.0% have used the Internet for more than an average of 10 years (23.4% for '10 years to less than 15 years' and 34.6% for '15 years or more'). This is followed by '5 years to less than 10 years' (21.1%) and '2 years to less than 5 years' (11.6%).

Figure 2–18 • Internet Usage Period (%) – Internet users aged 3 and over



Males (38.1%) showed a higher response for '15 years or more' in their period of Internet usage than females (30.8%), and the same variable was higher for users in their 30s (54.9%) and 40s (52.8%).

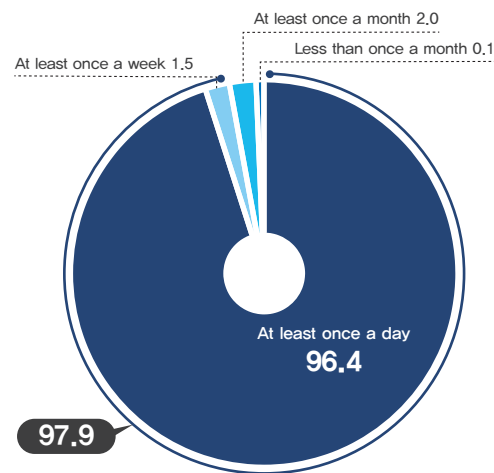
Table 2–4 • Internet Usage Period by Gender and Age (%) – Internet users aged 3 and over

		Less than 1 yr	1 yr to less than 2 yrs	2 yrs to less than 5 yrs	5 yrs to less than 10 yrs	10 yrs to less than 15 yrs	15 yrs or more
Gender	Male	3.9	4.7	10.0	19.7	23.6	38.1
	Female	4.0	6.1	13.3	22.6	23.2	30.8
Age	3–9	34.7	38.2	24.9	2.3	–	–
	10s	2.8	6.5	26.8	43.9	16.0	4.0
	20s	1.7	0.4	3.4	23.5	35.4	35.6
	30s	1.4	0.3	1.4	12.1	30.0	54.9
	40s	1.6	0.6	3.3	15.1	26.7	52.8
	50s	1.8	2.5	11.8	23.7	22.3	37.8
	60s	2.7	9.9	23.7	24.7	17.0	21.9
	70+	6.5	19.3	33.2	18.8	10.1	12.0

C. Internet Usage Frequency

Almost all Internet users aged 3 and over (97.9%) accessed the Internet more than once a week (‘At least once a day’ 96.4%, ‘At least once a week’ 1.5%).

Figure 2–19 • Internet Usage Frequency (%) – Internet users aged 3 and over



As for the age of Internet users, most of those in their 10s to 50s (98.1% for 10s, 100.0% for 20s, 100.0% for 30s, 99.6% for 40s, and 98.0% for 50s) have used the Internet ‘At least once a day’.

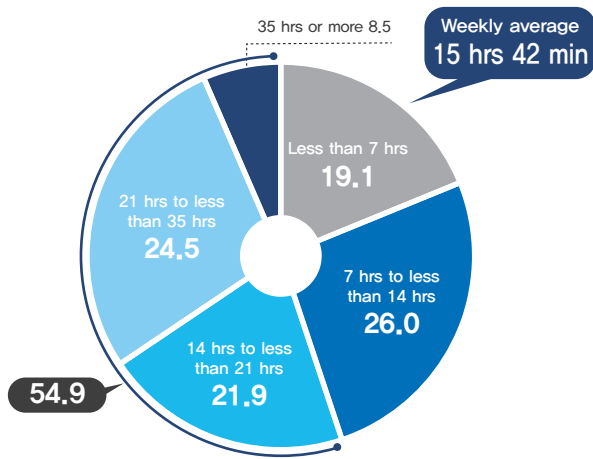
Table 2–5 • Internet Usage Frequency by Gender and Age (%) – Internet users aged 3 and over

		At least once a day	At least once a week	At least once a month	Less than once a month
Gender	Male	96.9	1.4	1.7	0.1
	Female	95.9	1.6	2.4	0.0
Age	3–9	73.1	15.2	11.0	0.7
	10s	98.1	0.9	1.0	–
	20s	100.0	–	0.0	–
	30s	100.0	0.0	0.0	–
	40s	99.6	0.1	0.4	0.0
	50s	98.0	0.4	1.6	0.0
	60s	93.1	1.2	5.6	0.0
	70+	81.0	8.5	10.1	0.3

D. Hours-of-Use of the Internet

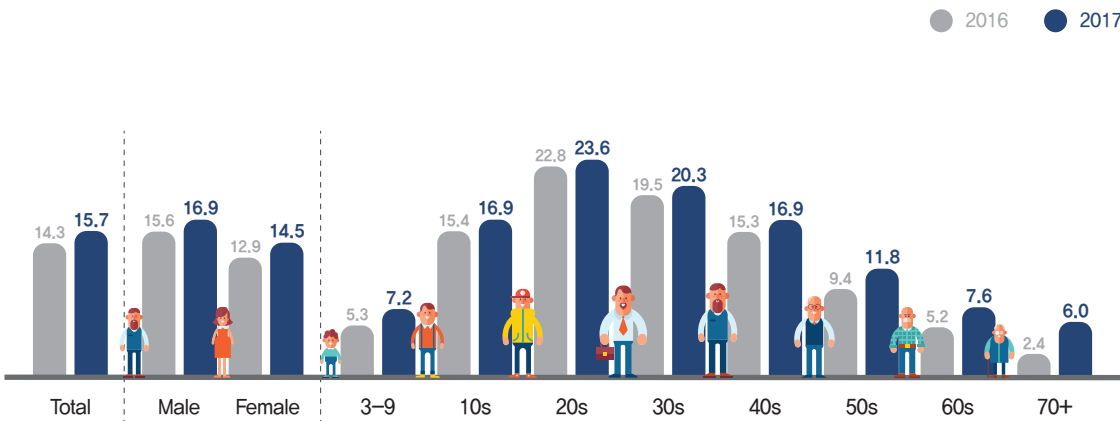
Among Internet users aged 3 and over, 54.9% used the Internet more than 14 hours per week (‘14 hours to less than 21 hours’ 21.9%, ‘21 hours to less than 35 hours’ 24.5%, and ‘35 hours or more’ 8.5%). The average number of hours per week of Internet use was 15 hours and 42 minutes (approximately 2 hours and 14 minutes per day).

Figure 2-20 • Hours-of-Use of the Internet per Week (%) – Internet users aged 3 and over



By gender, the hours of Internet usage of males (16.9 hours) were longer than females (14.5 hours). By age group, the 20s spent 23.6 hours online, the 30s 20.3 hours, the 40s 16.9 hours, and the 10s 16.9 hours.

Figure 2-21 • Hours-of-Use of the Internet per Week by Gender & Age (hours) – Internet users aged 3 and over

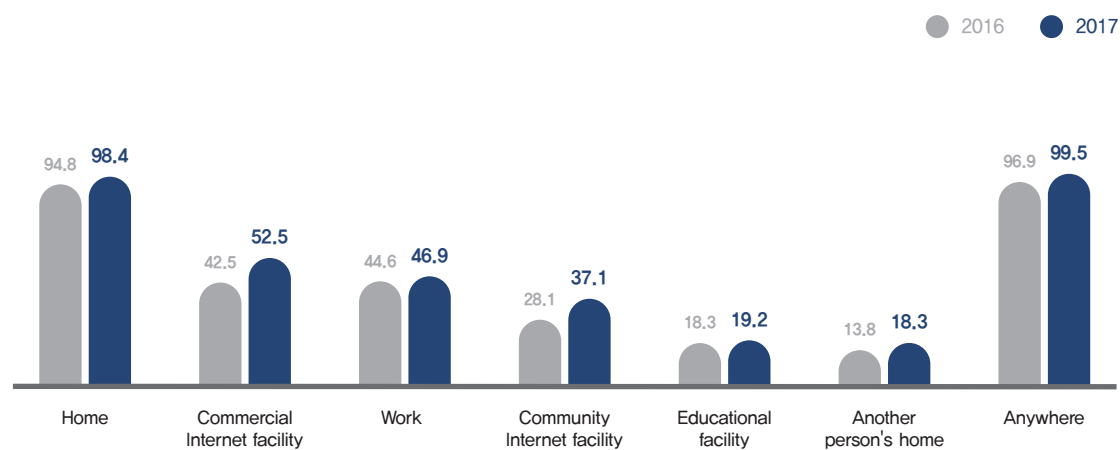


E. Internet Usage Locations

Nine in ten (99.5%) Internet users accessed the Internet anywhere with devices such as smartphones and tablets.

As for where Internet access occurred, 'Home' (98.4%) ranked the highest, followed by 'Commercial Internet facility' (52.5%), 'Work' (46.9%), and 'Community Internet facility' (37.1%).

Figure 2-22 • Internet Usage Locations (multiple responses, %) – Internet users aged 3 and over



By gender, males mostly accessed the Internet at 'Work' (57.6%) while female users did so at a 'Commercial Internet facility' (52.6%). By age, the usage rate was highest at an 'Educational facility' (78.7%) for the 10s, a 'Commercial Internet facility' (70.2%) for the 20s, and 'Work' (70.6%) for the 30s.

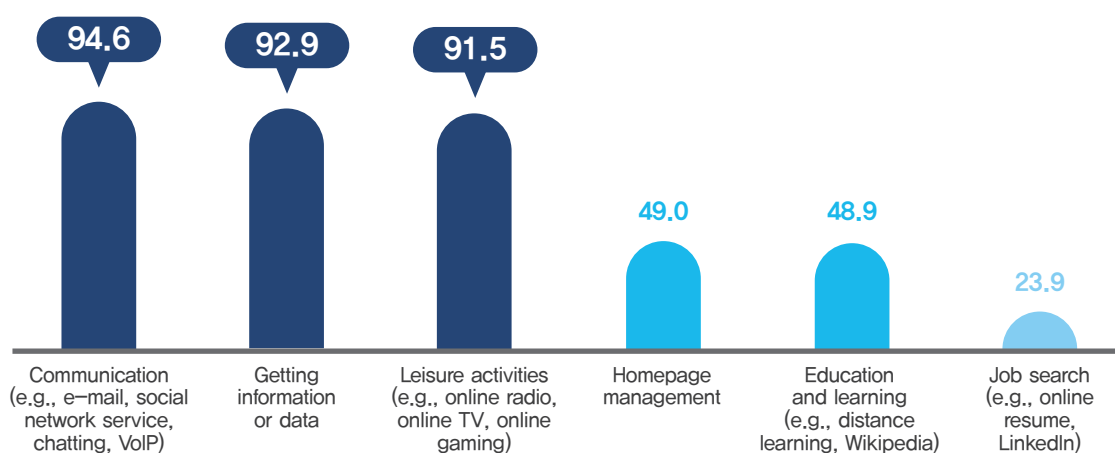
Table 2-6 • Internet Usage Locations by Gender and Age (multiple responses, %) – Internet users aged 3 and over

		Home	Commercial Internet facility	Work	Community Internet facility	Educational facility	Another person's home	Anywhere
Gender	Male	98.3	52.4	57.6	37.8	20.3	17.1	99.5
	Female	98.5	52.6	35.7	36.4	18.0	19.5	99.5
Age	3-9	98.5	18.8	—	9.2	27.3	13.2	94.0
	10s	99.0	49.7	0.5	35.4	78.7	26.9	99.7
	20s	98.5	70.2	44.0	49.3	41.3	24.1	100.0
	30s	98.6	64.3	70.6	44.7	5.6	18.5	100.0
	40s	98.4	57.3	70.7	40.9	3.5	16.0	100.0
	50s	97.9	48.7	59.8	34.2	2.5	15.0	99.8
	60s	98.1	37.5	36.9	28.2	1.1	14.3	99.5
	70+	98.4	21.2	11.5	20.2	0.6	12.7	99.5

F. Purpose of Using the Internet

In terms of the purpose of using the Internet (in the last 1 year), 'Communication' was the highest at 94.6%, followed by 'Getting information or data' (92.9%) and 'Leisure activities' (91.5%). Other reasons for using the Internet included 'Homepage management' (49.0%), 'Education and learning' (48.9%), and 'Job search' (23.9%).

Figure 2-23 • Purpose of Using the Internet (multiple responses, %) – Internet users aged 3 and over



By gender, both males and females ranked 'Communication' (94.7% for males and 94.5% for females) the highest.

Meanwhile, by age, a higher rate of younger age groups in their 10s or younger used the Internet for 'Leisure activities' (97.7% for the 3–9 age group, 98.9% for 10s). For groups in their 20s–50s 'Communication' (100.0% for 20s, 99.9% for 30s, 99.8% for 40s, 98.4% for 50s) was the major purpose of using the Internet.

Meanwhile, purpose of 'Education and learning' ranked relatively high among users in their 10s (73.6%) and their 20s (64.3%), and activity in relation to 'Job search' was high in the 20s (51.3%) and the 30s (42.7%) age groups.

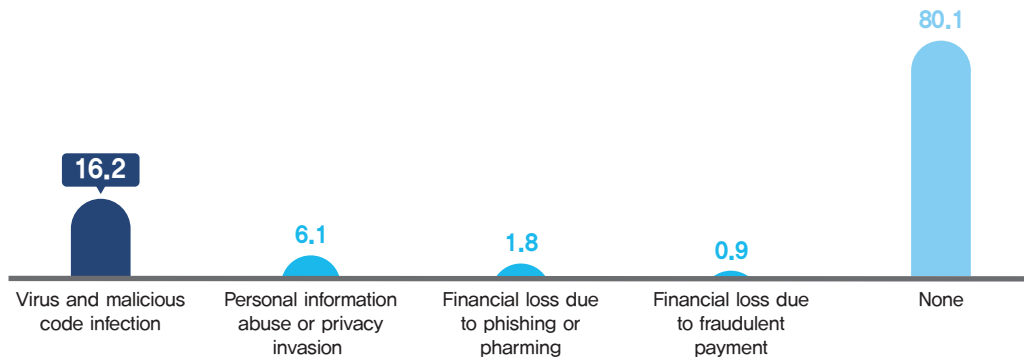
Table 2-7 • Purpose of Using the Internet by Gender and Age (multiple responses, %) – Internet users aged 3 and over

		Communication	Getting information or data	Leisure activities	Homepage management	Education and learning	Job search
Gender	Male	94.7	93.5	91.7	48.8	48.1	26.0
	Female	94.5	92.2	91.3	49.1	49.8	21.7
Age	3–9	42.2	31.5	97.7	5.6	42.9	–
	10s	97.1	92.6	98.9	53.8	73.6	7.8
	20s	100.0	100.0	99.4	78.2	64.3	51.3
	30s	99.9	100.0	98.1	68.6	58.0	42.7
	40s	99.8	99.9	94.0	54.1	49.7	28.2
	50s	98.4	99.3	84.3	37.0	35.4	12.0
	60s	94.4	89.6	74.2	17.9	21.1	4.8
	70+	78.7	70.1	62.9	7.1	10.9	1.4

G. Negative Experience with Internet Usage

‘Virus and malicious code infection’ ranked the highest (16.2%) among negative experiences with Internet use. This was followed by ‘Personal information abuse or privacy invasion’ (6.1%).

Figure 2–24 • Negative Experience with Internet Usage (multiple responses, %) – Internet users aged 12 and over



By gender, male users experienced more such issues upon their Internet use compared to females. By age, people in their 20s and 30s went through more negative experiences compared to those in other age groups.

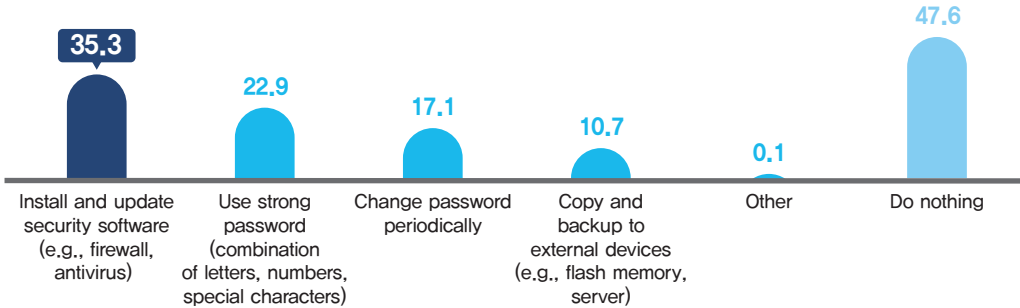
Table 2–8 • Negative Experience with Internet Usage by Gender and Age (multiple responses, %) – Internet users aged 12 and over

		Virus and malicious code infection	Personal information abuse or privacy invasion	Financial loss due to phishing or pharming	Financial loss due to fraudulent payment	None
Gender	Male	18.4	6.5	1.8	0.8	77.7
	Female	13.8	5.7	1.7	0.9	82.5
Age	12–19	15.9	5.1	1.6	0.5	81.3
	20s	23.3	9.1	2.5	1.4	70.6
	30s	23.4	8.9	2.9	0.9	71.4
	40s	18.6	6.9	1.8	1.0	77.7
	50s	9.9	4.2	1.1	0.8	87.1
	60s	5.0	1.9	0.7	0.4	93.7
	70+	2.2	0.6	0.1	0.4	97.1

H. Safe Internet Usage

As a personal measure toward safe Internet usage, ‘Install and update security software (e.g., firewall, antivirus)’ ranked the highest at 35.3%, followed by ‘Use strong password’ (22.9%), and ‘Change password periodically’ (17.1%).

Figure 2–25 • Safe Internet Usage (multiple responses, %) – Internet users aged 12 and over



By age, the 20s were most vigilant about their safety on the Internet (‘Install and update security software’ 53.4%, ‘Use strong password’ 36.3%, ‘Change password periodically’ 24.9%, ‘Copy and backup to external devices’ 17.4%). On the other hand, 84.1% of those in their 60s and 92.6% of users aged 70 and over answered to ‘Do nothing’.

Table 2–9 • Safe Internet Usage by Gender and Age (multiple responses, %) – Internet users aged 12 and over

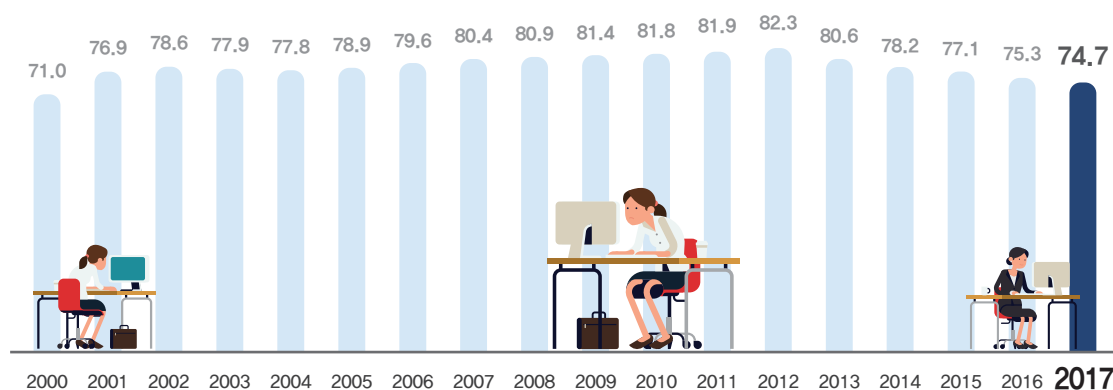
		Install and update security software	Use strong password	Change password periodically	Copy and backup to external devices	Other	Do nothing
Gender	Male	40.0	25.1	18.1	12.1	0.0	43.1
	Female	30.2	20.6	16.0	9.1	0.1	52.5
Age	12–19	36.1	24.9	18.9	9.1	0.1	42.9
	20s	53.4	36.3	24.9	17.4	0.1	24.7
	30s	50.5	32.6	24.1	16.4	0.0	28.2
	40s	38.5	24.1	19.2	12.1	0.1	42.3
	50s	22.5	13.7	10.5	5.8	0.1	64.3
	60s	8.8	6.0	4.8	1.9	–	84.1
	70+	4.2	2.8	2.3	1.0	0.1	92.6

5. Household ICT Environment

A. Households with Computers

As of July 2017, 74.7% of all the households (down by 0.6%p from the previous year) had at home a computer (e.g., desktop, laptop, tablet). The rate of household computer ownership has been showing a decline since 2012.

Figure 2-26 • Households with Computers (%) – All households

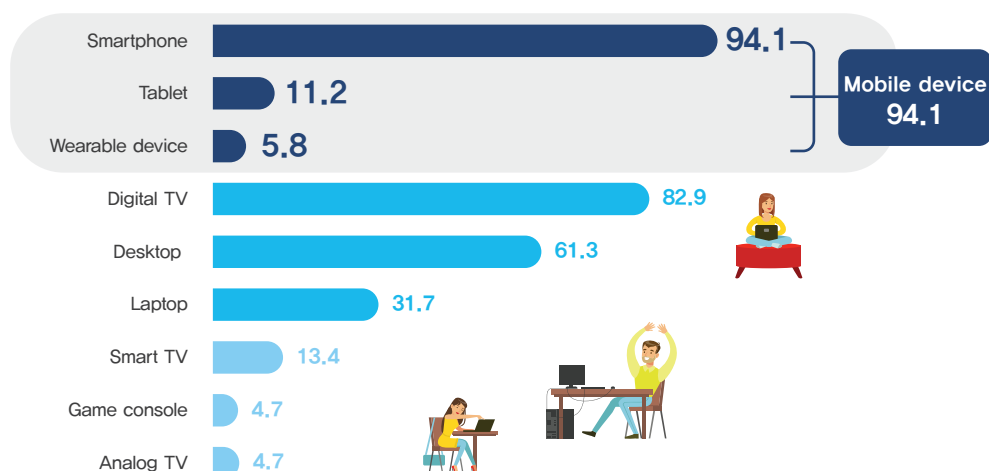


B. Households with ICT Devices

Nine in ten (94.1%) households had one or more mobile device such as a smartphone, tablet, or wearable device at home. Specifically, households with a 'Smartphone' accounted for 94.1%, 'Tablet' for 11.2%, and 'Wearable device' for 5.8%.

Meanwhile, 82.9% of households owned a 'Digital TV', and the rates of households owning a 'Desktop' and a 'Laptop' were 61.3% and 31.7% respectively.

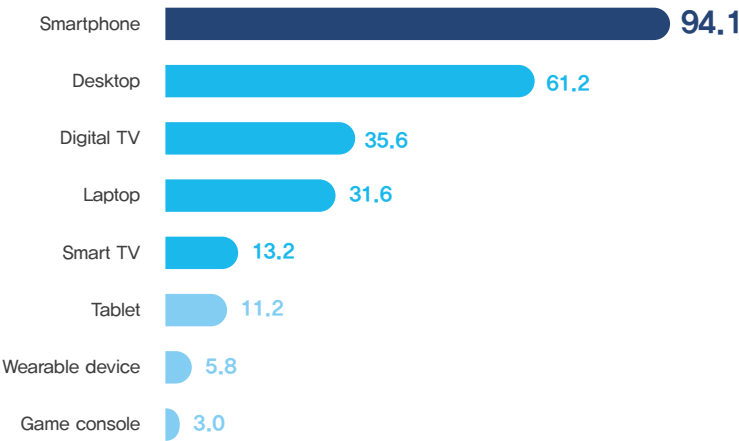
Figure 2-27 • Households with ICT Devices (multiple responses, %) – All households



C. Internet Access Devices

The ‘Smartphone’ ranked the highest (94.1%) in responses for how respondents connected to the Internet at home. Following smartphones were ‘Desktop’ (61.2%), ‘Digital TV’ (35.6%), and ‘Laptop’ (31.6%).

Figure 2–28 • Internet Access Devices (multiple responses, %) – All households

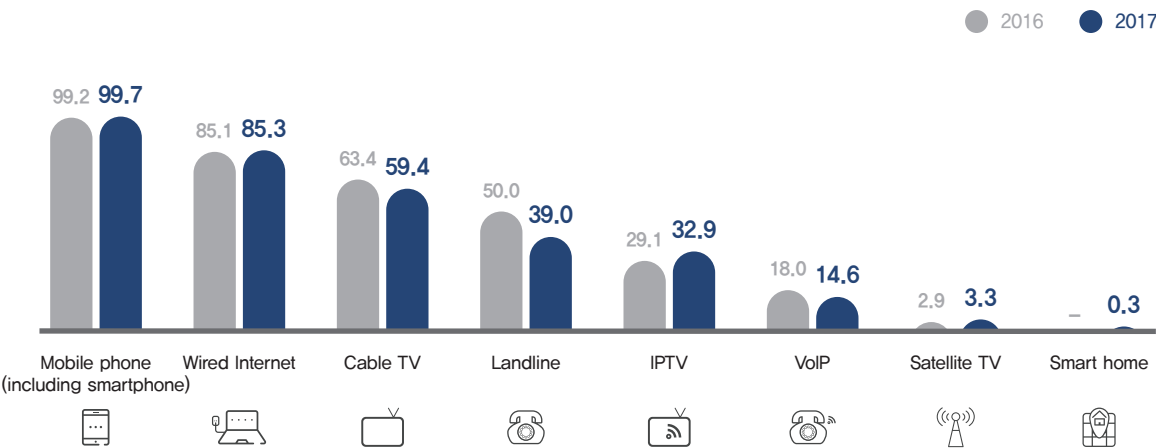


D. Households with ICT Services

The majority of households (99.7%) used a ‘Mobile phone’, an ICT service that includes smart phones. The rate for ‘Wired Internet’ service was 85.3%.

Other responses included ‘Cable TV’ (59.4%), ‘Landline’ (39.0%), ‘IPTV’ (32.9%), and ‘VoIP’ (14.6%).

Figure 2–29 • Households with ICT Services (multiple responses, %) – All households



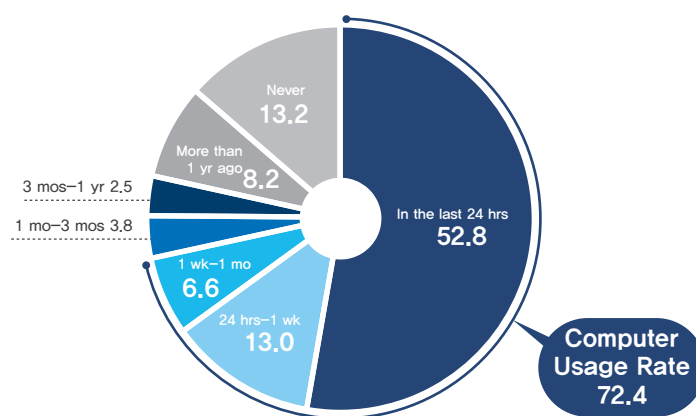
6. Individual ICT Environment

Computer usage rate of the population aged 3 and over 72.4%

A. Computer Usage Rate

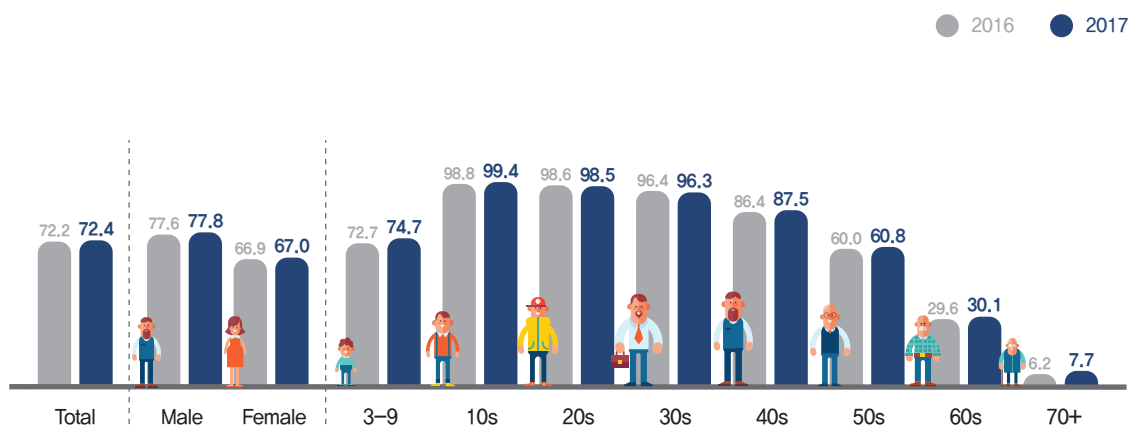
The rate of computer users (individuals who have used a computer such as a desktop, laptop, and tablet at least once in the last 1 month) among the population aged 3 and over was 72.4%. Meanwhile, 52.8% have used a computer in the last 24 hours.

Figure 2-30 • Computer Usage Rate (%) – Population aged 3 and over



The computer usage rate of males (77.8%) was higher than that of females (67.0%) by 10.8p, and by age, the usage rate was above 96% for individuals in their 10s to 30s.

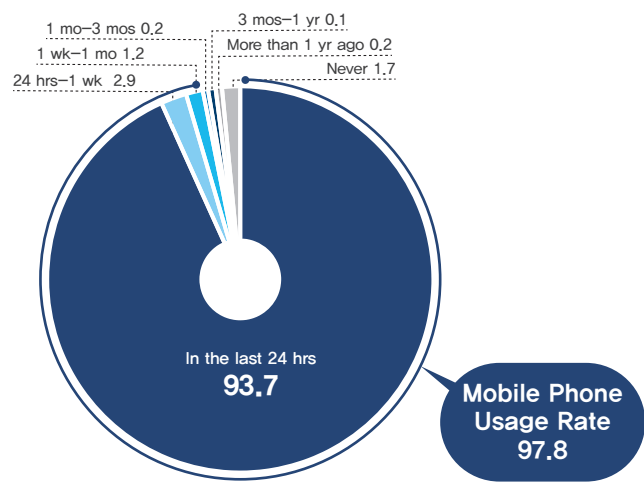
Figure 2-31 • Computer Usage Rate by Gender and Age (%) – Population aged 3 and over



B. Mobile Phone Usage Rate

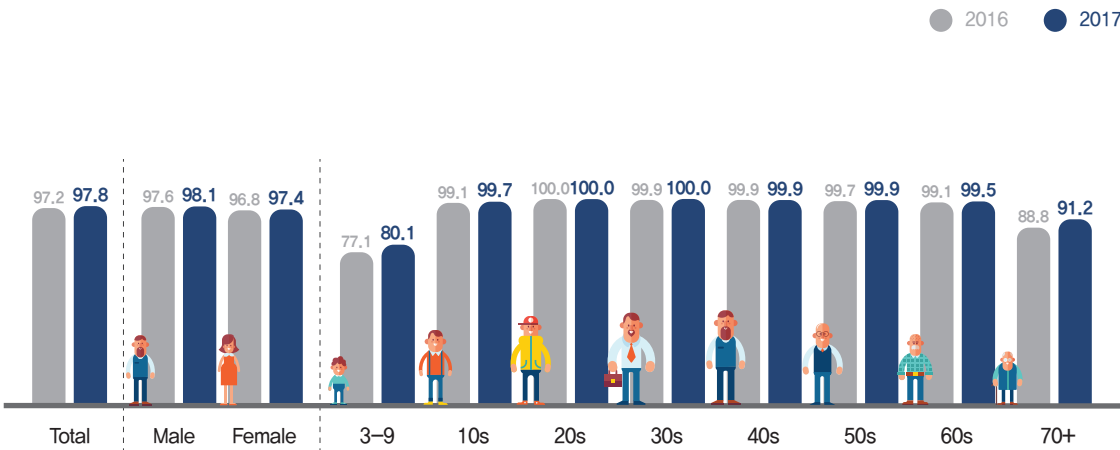
The rate of mobile phone users (individuals who have used a mobile phone at least once in the last 1 month) among the population aged 3 and over was 97.8%. Meanwhile, 93.7% used a mobile phone in the last 24 hours.

Figure 2-32 • Mobile Phone Usage Rate (%) – Population aged 3 and over



The mobile phone usage rates of males (98.1%) and females (97.4%) was of a similar level, and by age, the rates reached a high of more than 99% among age groups from the 10s to the 60s. Meanwhile, the figure was 80.1% in children aged 3 to 9 and 91.2% for individuals 70 years old and over.

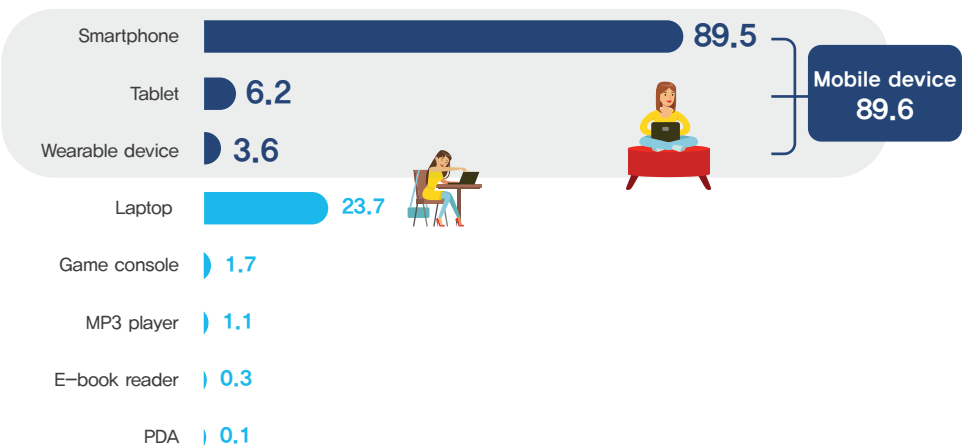
Figure 2-33 • Mobile Phone Usage Rate by Gender and Age (%) – Population aged 3 and over



C. ICT Device Ownership

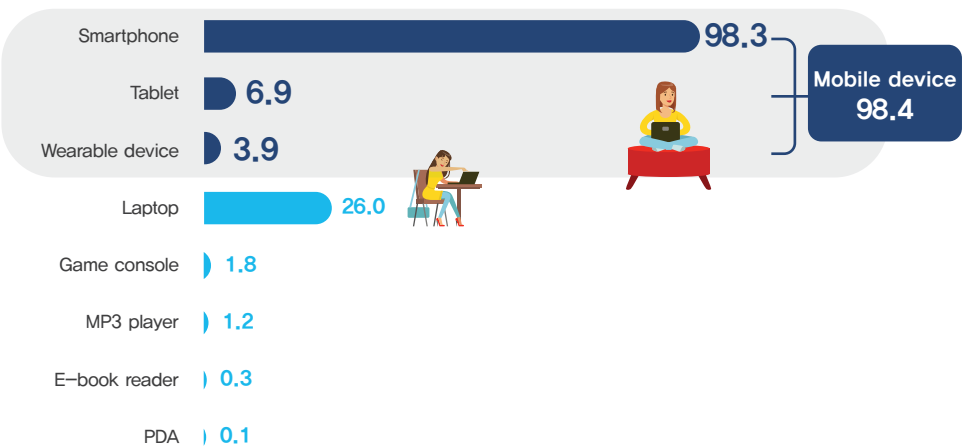
Among the population aged 6 and over, 89.6% owned a mobile device (e.g., smartphone, tablet, wearable device). Smartphone ownership was highest at 89.5%, followed by ‘Laptop’ (23.7%), ‘Tablet’ (6.2%), and ‘Wearable device’ (3.6%).

Figure 2–34 • ICT Devices Ownership (multiple responses, %) – Population aged 6 and over



Of the 98.4% of Internet users aged 6 and over who had a mobile device, the ownership rate was 98.3% for smartphones, 6.9% for tablets, and 3.9% for wearable devices.

Figure 2–35 • ICT Devices Ownership (multiple responses, %) – Internet users aged 6 and over

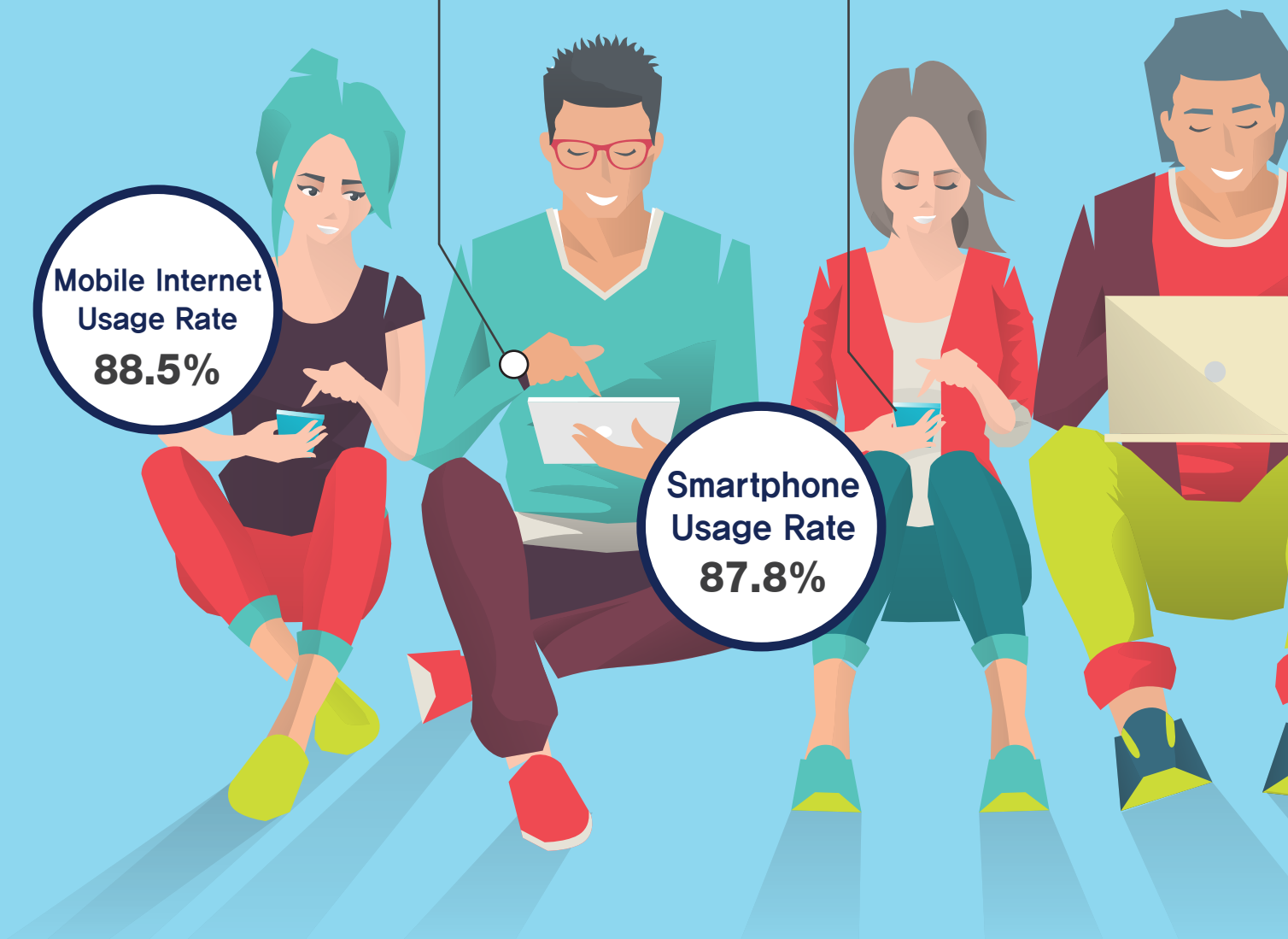


Mobile Internet
Usage Rate
88.5%

Wearable Device
Ownership
3.6%

Smartphone
Ownership
89.5%

Smartphone
Usage Rate
87.8%



III. Internet and Mobility



III. Internet and Mobility

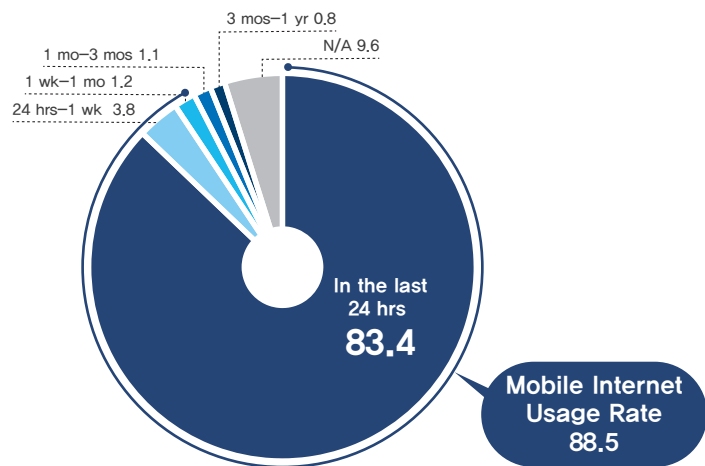
1. Mobile Internet Usage

Mobile Internet usage rate of the population aged 3 and over 88.5%

A. Mobile Internet Usage Rate

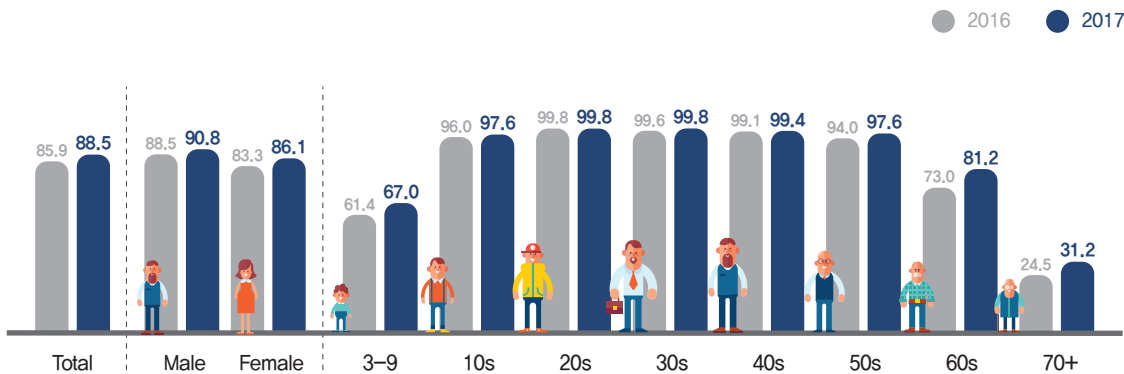
The rate of mobile Internet users (individuals who have used wireless Internet via a feature phone, smartphone, tablet, or wearable device at least once in the last 1 month) among Internet users aged 3 and over reached 88.5%, and 83.4% answered that they have used mobile Internet ‘In the last 24 hours’.

Figure 3-1 • Time-of-Use of Mobile Internet (%) – Population aged 3 and over



Mobile Internet usage rate of males (90.8%) was higher than that of females (86.1%), and the mobile internet usage rates of the 10s to the 50s (97.6% for 10s, 99.8% for 20s, 99.8% for 30s, 99.4% for 40s, and 97.6% for 50s) all hovered above 97%.

Figure 3-2 • Mobile Internet Usage Rate by Gender and Age (%) – Population aged 3 and over



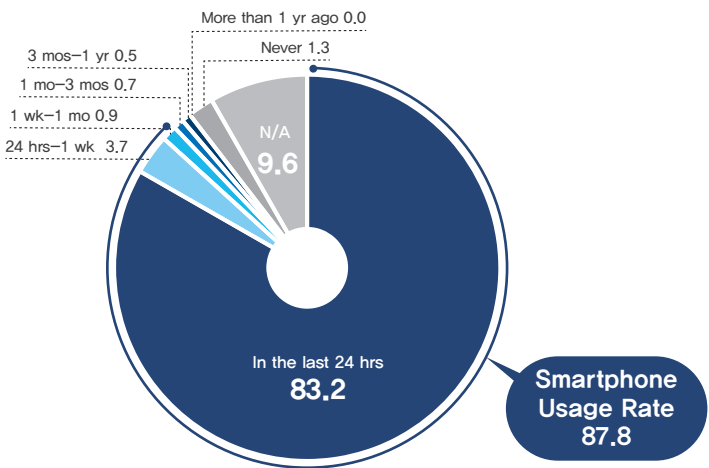
2. Smartphone Usage

Smartphone usage rate of the population aged 3 and over 87.8%

A. Smartphone Usage Rate

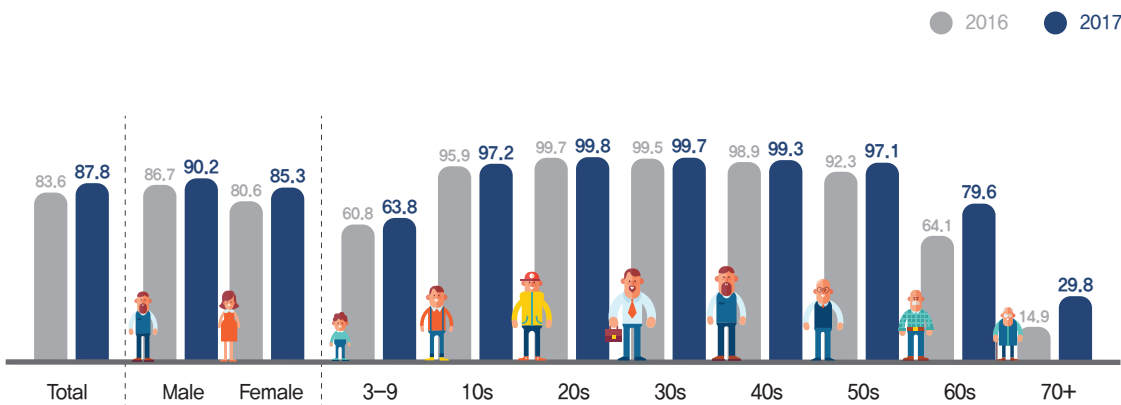
The rate of smartphone users (individuals who have used wireless Internet via smartphone at least once in the last 1 month) among users aged 3 and over was 87.8%, and 83.2% of the surveyed answered that they used a smartphone 'In the last 24 hours'.

Figure 3-3 • Time-of-Use of Smartphones (%) – Population aged 3 and over



By gender, the smartphone usage rate of males (90.2%) was higher than that of females (85.3%), and among those in their 10s to their 50s, more than 97% were smartphone users.

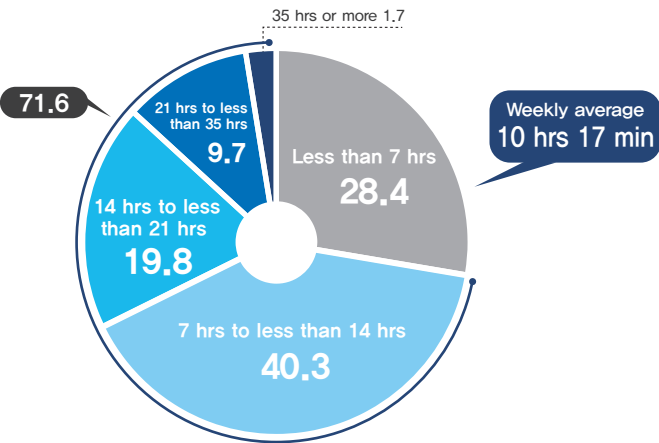
Figure 3-4 • Smartphone Usage Rate by Gender and Age (%) – Population aged 3 and over



B. Hours-of-Use of Smartphones

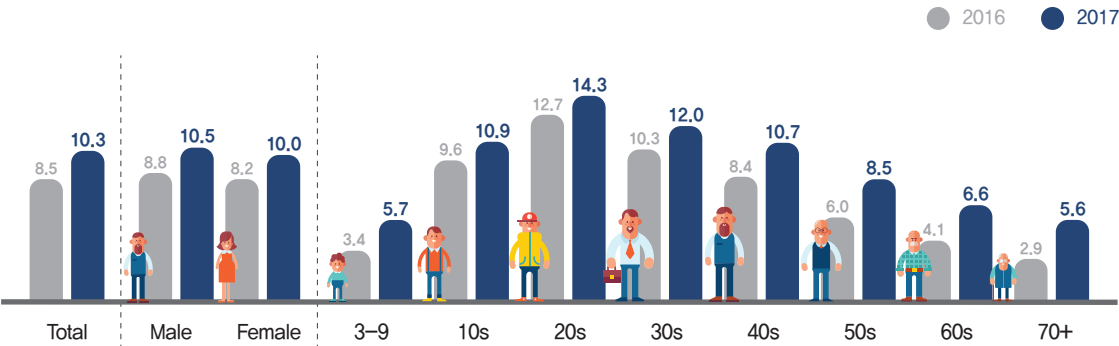
71.6% of smartphone users aged 3 and over used the device 7 hours or more on a weekly basis (40.3% for ‘7 hours to less than 14 hours’ , 19.8% for ‘14 hours to less than 21 hours’ , 9.7% for ‘21 hours to less than 35 hours’ , and 1.7% for ‘35 hours or more’) and the weekly average hours of smartphone use was 10 hours and 17 minutes (approximately 1 hour and 28 minutes per daily).

Figure 3-5 • Hours-of-Use of Smartphones per Week (%) – Smartphone users aged 3 and over



By gender, males (10.5 hours) spent more time on their smartphones than females (10.0 hours), and by age, people in their 20s (14.3 hours) had the longest usage hours, followed by individuals in their 30s (12.0 hours), 10s (10.9 hours), 40s (10.7 hours), 50s (8.5 hours), 60s (6.6 hours), and finally, those aged 70 and over (5.6 hours).

Figure 3-6 • Hours-of-Use of Smartphones per Week by Gender and Age (hours) – Smartphone users aged 3 and over



3. Smartphone Ownership

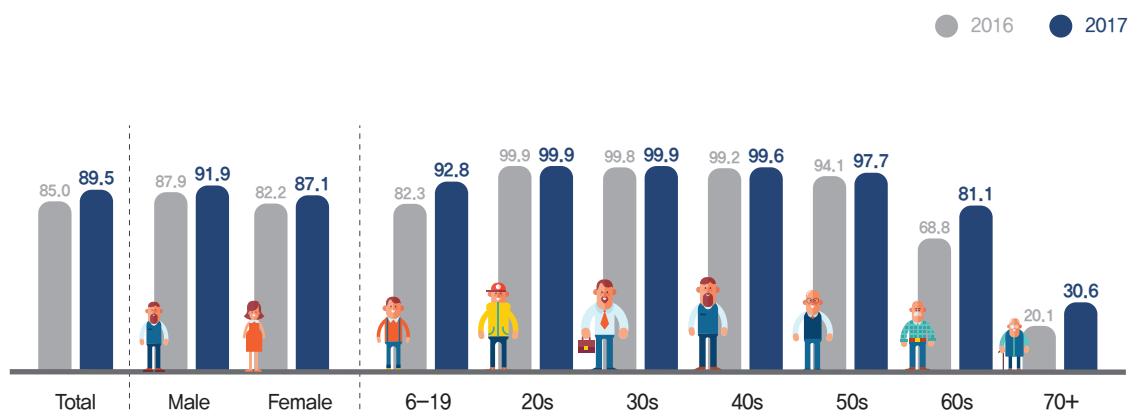
Smartphone ownership of the population aged 6 and over 89.5%

A. Smartphone Ownership

89.5% of the population aged 6 and over owned a smartphone. The ownership rate of males (91.9%) was higher than females (87.1%), and the rate was fairly high at over 97% in the 20s to 50s age groups.

Meanwhile, smartphone ownership rate of the 60s (81.1%) increased by 12.3%p, and 70 and over (30.6%) and 6–19 (92.8%) age groups by 10.5%p from the previous year.

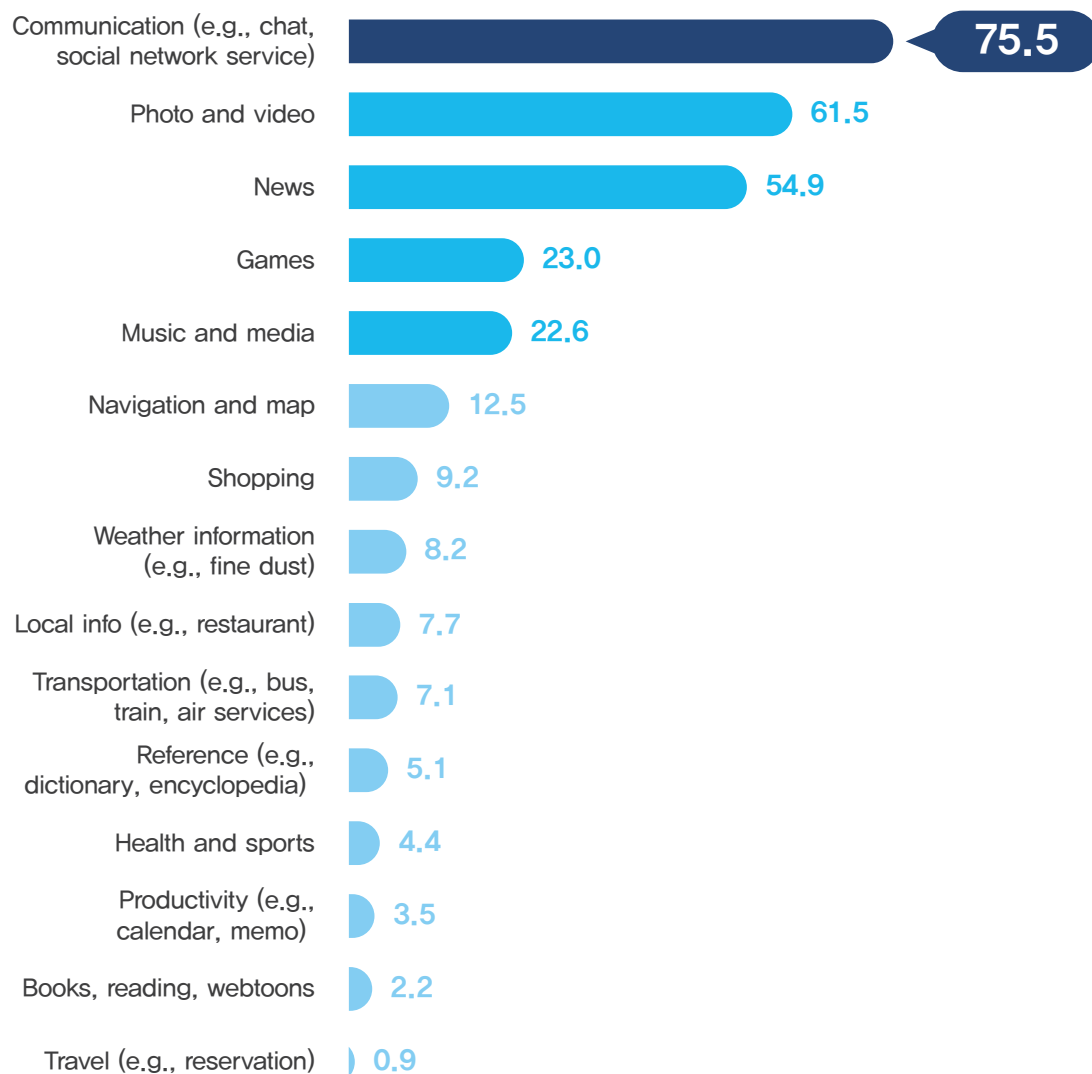
Figure 3–7 • Smartphone Ownership by Gender and Age (multiple responses, %) – Population aged 6 and over



B. Frequently Used Smartphone Application Type

Among various types of smartphone applications, 'Communication' (75.5%) was the most popular, followed by 'Photo and videoz' (61.5%), 'News' (54.9%), 'Games' (23.0%), 'Music and Media' (22.6%), and 'Navigation and map' (12.5%).

Figure 3-8 • Frequently Used Smartphone Application Type (3 primary responses, %)
— Smartphone owners aged 12 and over

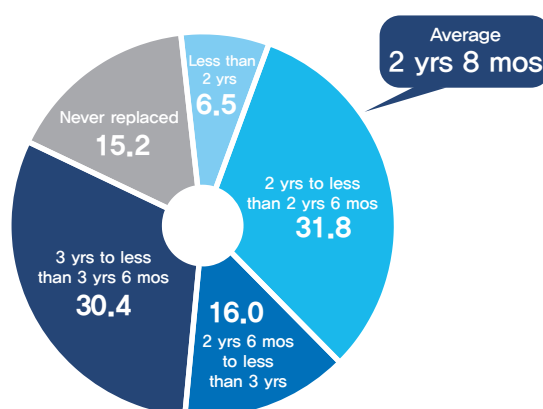


※ For applications that provide various services, such as portals, the survey asked for the type of service mainly received through it.

C. Replacement Cycle of Smartphones

It has been surveyed that the smartphone replacement cycle – changing a device from one to another – of ‘2 years to less than 2 years and 6 months’ (31.8%) and ‘3 years to less than 3 years and 6 months’ (30.4%) showed a similar level. Meanwhile, the average smartphone replacement cycle was 2 years and 8 months.

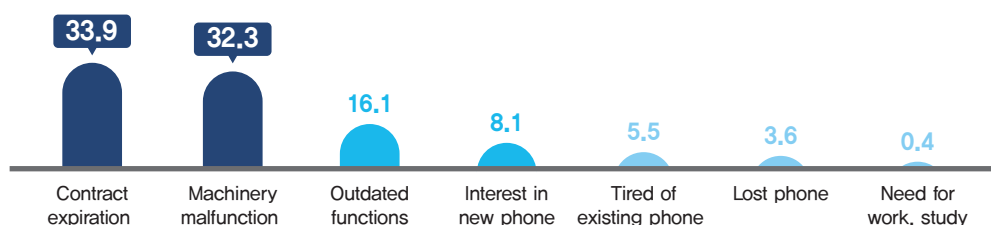
Figure 3–9 • Replacement Cycle of Smartphones (%) – Smartphone owners aged 12 and over



D. Reason for Smartphone Replacement

Smartphone users who have replaced their smartphones answered that the main reason for their replacement was primarily ‘Contract expiration’ (33.9%), ‘Machinery malfunction’ (32.3%), ‘Outdated functions’ (16.1%), and ‘Interest in new phone’ (8.1%).

Figure 3–10 • Reason for Smartphone Replacement (%)
– Smartphone owners aged 12 and over with replacement experience



4. Wearable Device Ownership

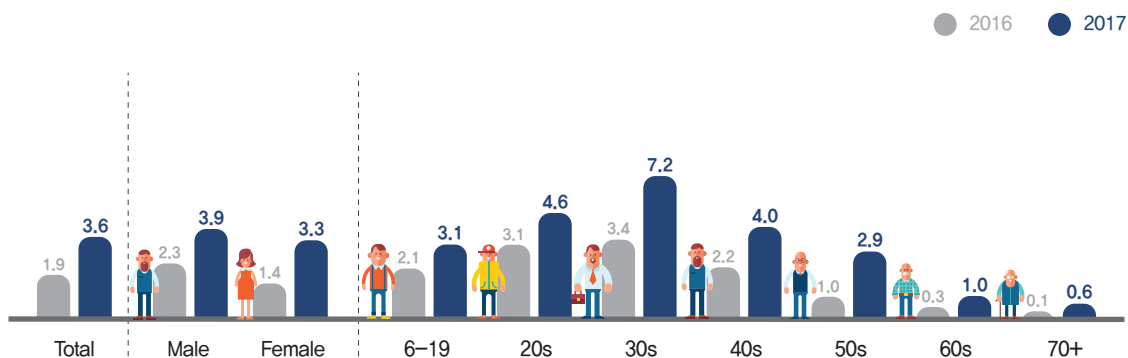
Wearable device ownership of the population aged 6 and over 3.6%

A. Wearable Device Ownership

As of July 2017, the wearable device ownership of the population aged 6 and over was 3.6%, an increase by 1.7%p from the previous year.

By gender, the ownership rate of males (3.9%) was higher than females (3.3%), while by age group, the 30s showed the highest rate at 7.2%, followed by the 20s (4.6%), 40s (4.0%), and the 6 to 19 age group (3.1%).

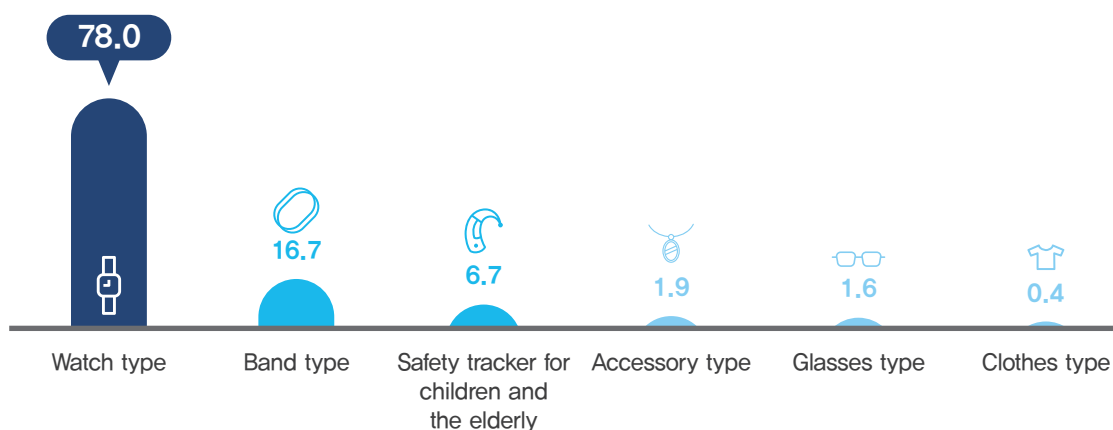
Figure 3-11 • Wearable Device Ownership (%) – Population aged 6 and over



B. Ownership of Wearable Devices by Type

By type of wearable device owned, 'Watch type' was the highest at 78.0%. Other answers include 'Band type' (16.7%) and 'Safety tracker for children and the elderly' (6.7%), and 'Accessory type' (1.9%).

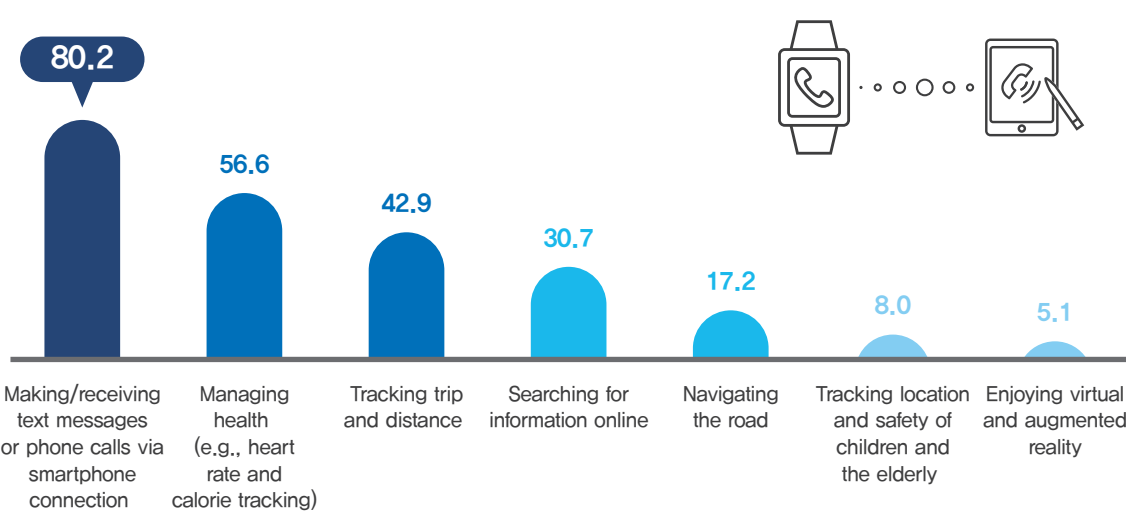
Figure 3-12 • Ownership of Wearable Devices by Type (multiple responses, %) – Wearable device owners aged 6 and over



C. Frequently Used Wearable Devices Functions

‘Making/receiving text messages or phone calls via smartphone connection’ (80.2%), ‘Managing health (e.g., heart rate and calorie tracking)’ (56.6%), and ‘Tracking trip and distance’ (42.9%) were the main functions of wearable devices for its owners.

Figure 3–13 • Frequently Used Wearable Devices Functions (multiple responses, %)
– Wearable device owners aged 6 and over





Instant Messenger
Usage Rate
95.1%

Social Network
Service
Usage Rate
68.2%

E-mail
Usage Rate
60.2%

IV. Internet and Communication



IV. Internet and Communication

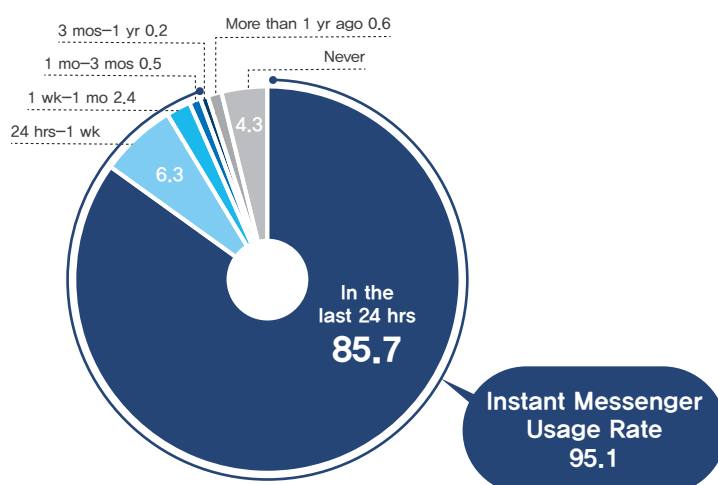
1. Instant Messenger

Instant messenger usage rate of population aged 6 and over 95.1%

A. Instant Messenger Usage Rate

The rate of instant messenger users (individuals who have used instant messengers at least once in the last 1 year) among Internet users aged 6 and over was 95.1%, which is equal to 9 out of 10 of the user base. 85.7% of instant messenger users used the service 'In the last 24 hours'.

Figure 4-1 • Time-of-Use of Instant Messengers (%) — Internet users aged 6 and over



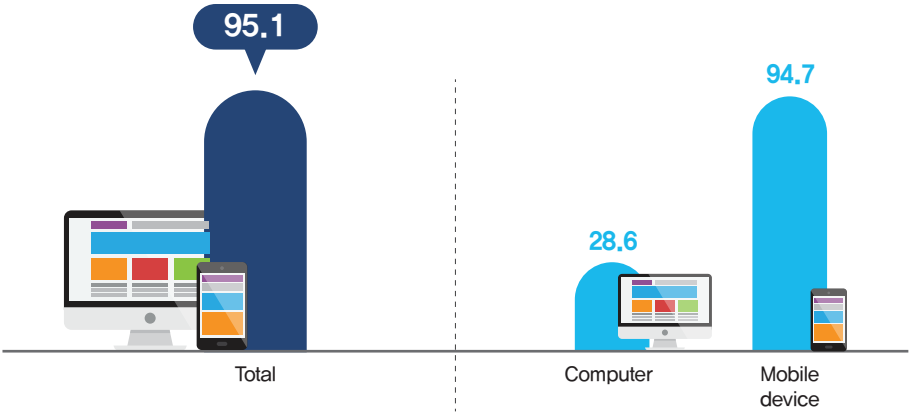
What is an instant messenger?

A service that offers realtime transfer of texts and photos over the Internet using a computer or a mobile device.

E.g., KakaoTalk, LINE, Facebook Messenger, NateOn, Telegram, Between, Wibee Talk, Skype, Google Hangout, WeChat, WhatsApp, BBM, Snow, QQ Mobile, Viber, Snapchat.

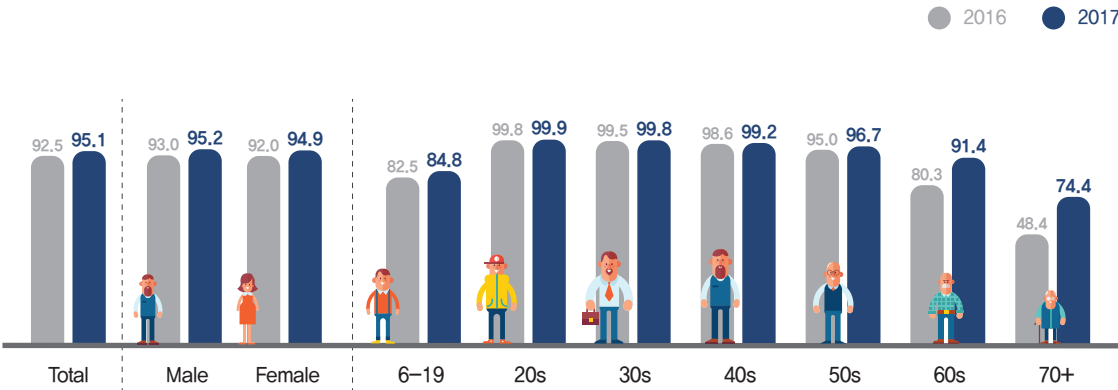
A question on devices for accessing instant messengers revealed that 94.7% used such services with mobile devices, while 28.6% used them with computers.

Figure 4–2 • Instant Messenger Usage Rate by Device (%) – Internet users aged 6 and over



By gender, males (95.2%) and females (94.9%) used instant messengers on a similar level. By age, most individuals in their 20s to 50s used instant messengers (more than 96%), and those in their 60s and 70 and over showed a steep increase in the rate (11.1%p for the 60s, 26.0%p for 70 and over).

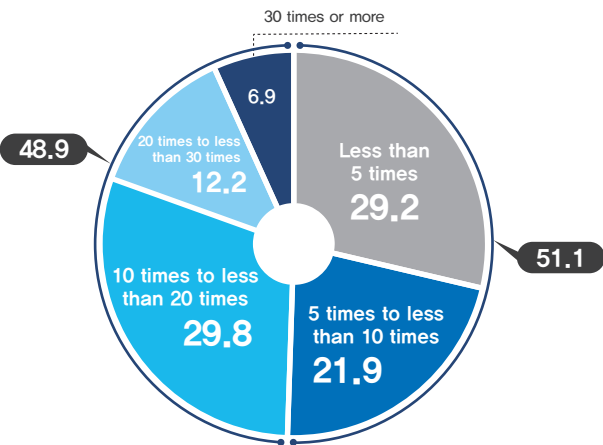
Figure 4–3 • Instant Messenger Usage Rate by Gender and Age (%) – Internet users aged 6 and over



B. Instant Messenger Usage Frequency

In terms of frequency, 51.5% answered that they used instant messengers less than 10 times per day (29.2% for ‘Less than 5 times per day’ , 21.9% for ‘5 times to less than 10 times’). 48.9% said that they used instant messengers 10 times a day or more (29.8% for ‘10 times to less than 20 times’ , 12.2% for ‘20 times to less than 30 times’ , and 6.9% for ‘30 times or more’).

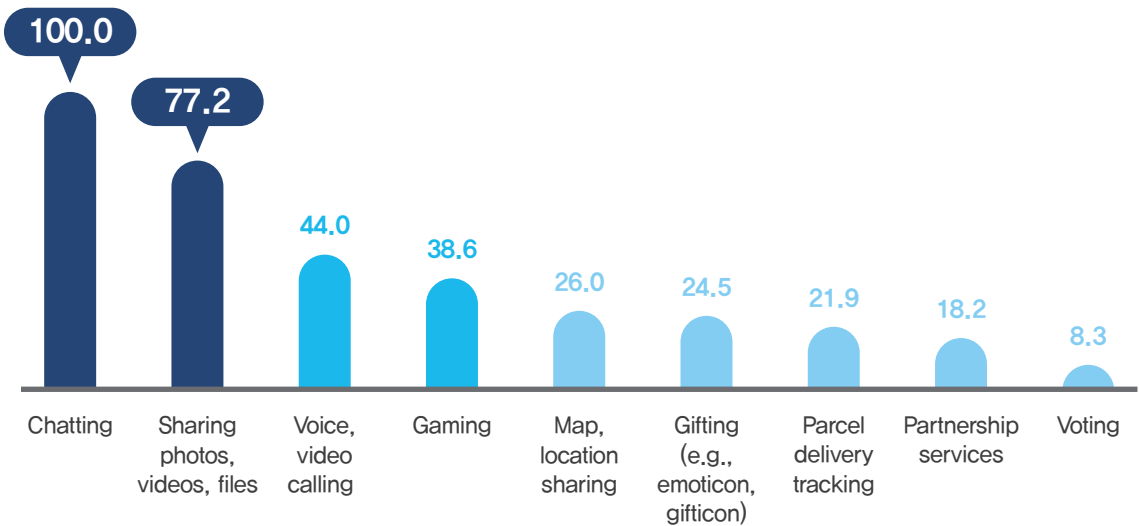
Figure 4-4 • Instant Messenger Usage Frequency per Day (%) – Instant messenger users aged 6 and over



C. Functions of Instant Messengers

Other than ‘Chatting’ (100.0%), instant messenger users used the services for ‘Sharing photos, videos, files.’ (77.2%), ‘Voice, video calling’ (44.0%), and ‘Gaming’ (38.6%), among others.

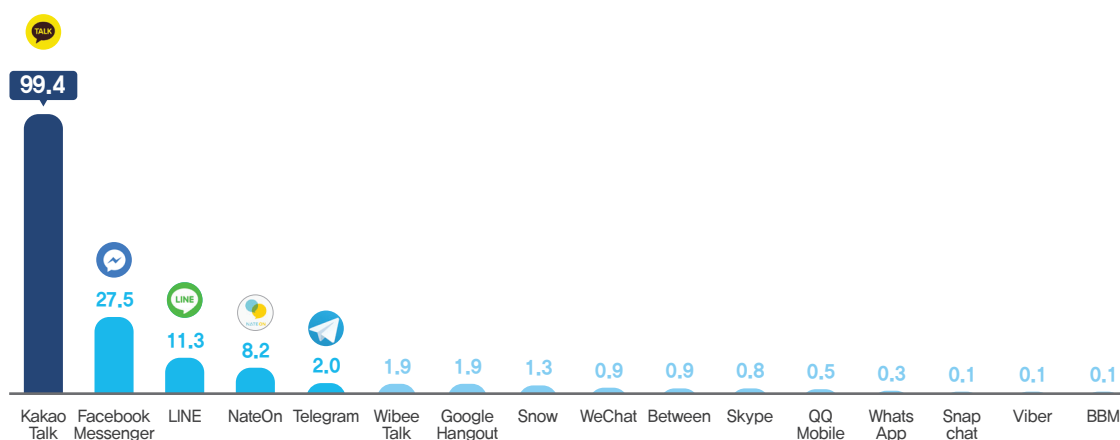
Figure 4-5 • Functions of Instant Messengers (multiple responses, %) – Instant messenger users aged 6 and over



D. Frequently Used Instant Messenger Services

Most of the Instant Messenger users use ‘KakaoTalk’ (99.4%) followed by ‘Facebook Messenger’ (27.5%), ‘LINE’ (11.3%), and ‘NateOn’ (8.2%).

Figure 4-6 • Frequently Used Instant Messenger Services (3 primary responses, %)
— Instant messenger users aged 6 and over



Both males and females used similar instant messenger services. By age, most groups used ‘KakaoTalk’, while people in their 20s and 30s had a high usage rate of ‘Facebook Messenger’.

Table 4-1 • Frequently Used Instant Messenger Services by Gender and Age (3 primary responses, %)
— Instant messenger users aged 6 and over

		KakaoTalk	Facebook Messenger	LINE	NateOn	Telegram	Wibee Talk
Gender	Male	99.4	29.2	12.0	9.2	2.0	1.9
	Female	99.4	25.7	10.5	7.2	1.9	1.9
Age	6-19	99.4	34.2	12.4	7.4	2.3	1.3
	20s	99.0	52.5	19.5	12.9	3.9	2.6
	30s	99.4	36.9	15.6	11.9	2.5	2.6
	40s	99.5	22.6	10.5	8.8	1.6	2.2
	50s	99.6	12.4	6.0	4.3	1.0	1.3
	60s	99.7	5.4	2.5	3.1	0.3	1.4
	70+	99.8	1.9	0.6	1.3	0.8	0.7

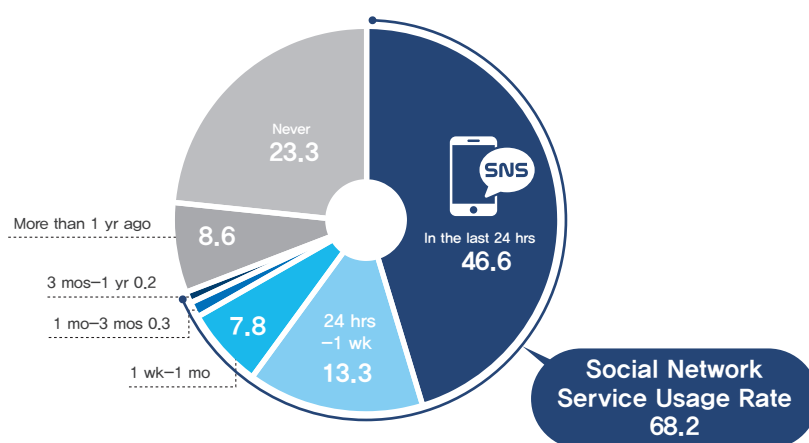
2. Social Network Service (SNS)

Social network service usage rate of Internet users aged 6 and over 68.2%

A. Social Network Service Usage Rate

The rate of social network service users (individuals who have used social network services at least once in the last 1 year) among Internet users aged 6 and over was 68.2%.

Figure 4-7 • Time-of-Use of Social Network Services (%) – Internet users aged 6 and over



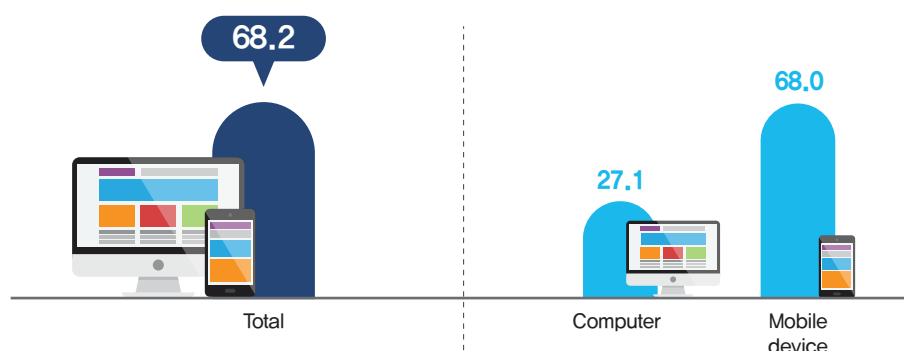
What is a social network service (SNS)?

A service that enhances relationships with friends, colleagues, and acquaintances online or forms new relationships through communication and the sharing of information. It includes activities such as reading or observing contents posted by others.

E.g., Facebook, Instagram, KakaoStory, blogs, Naver BAND, Naver Cafe, Twitter, Google+, Weibo, Tumblr, LinkedIn, Pinterest, Pikicast.

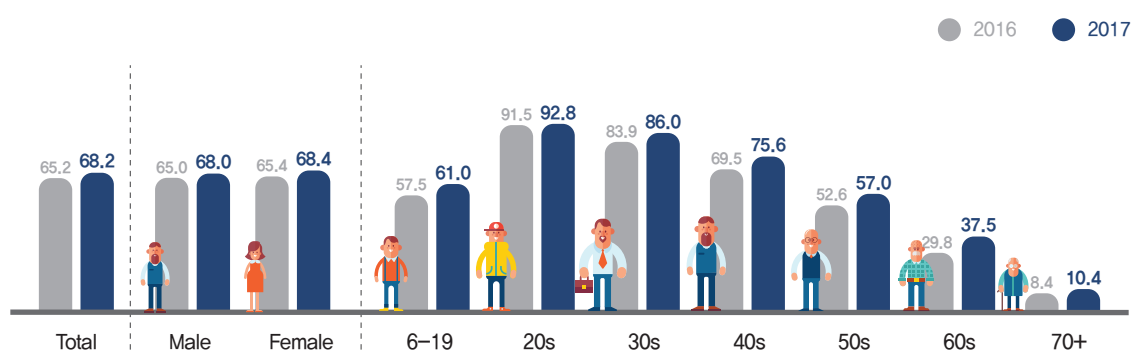
The rate of going on social network service with mobile devices (68.0%) was higher than that of with computers (27.1%).

Figure 4–8 • Social Network Service Usage Rate by Device (%) – Internet users aged 6 and over



The social network service usage rates were similar in both males (68.0%) and females (68.4%). By age group, the 20s (92.8%) had the highest rate followed by the 30s (86.0%), 40s (75.6%), and 6–19 (61.0%), in this order.

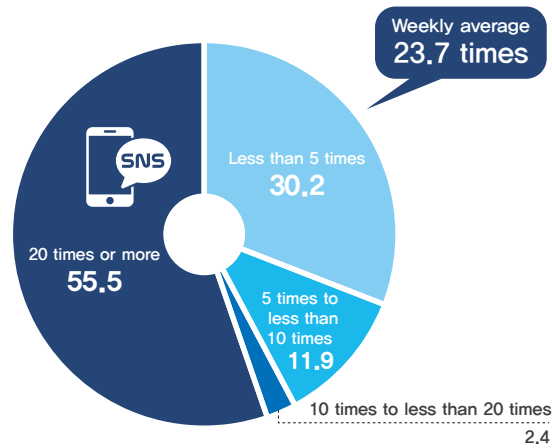
Figure 4–9 • Social Network Service Usage Rate by Gender and Age (%) – Internet users aged 6 and over



B. Social Network Service Usage Frequency and Hours

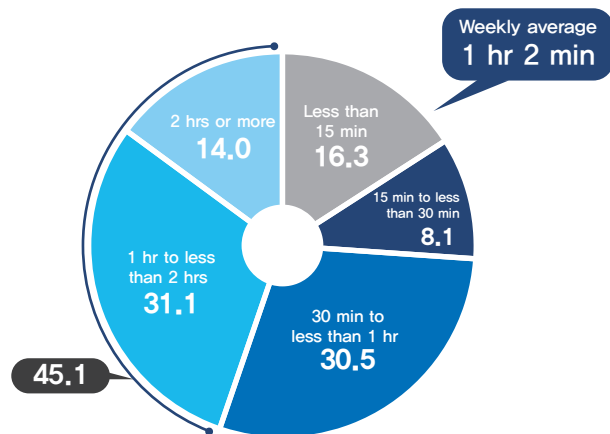
The average social network service usage frequency was 23.7 times per week (about 3.4 times per day). Specifically, the rate was ‘20 times or more’ (55.5%), ‘Less than 5 times’ (30.2%), and ‘5 times to less than 10 times’ (11.9%).

Figure 4-10 • Social Network Service Usage Frequency per Week (%)
— Social network service users aged 6 and over



Meanwhile, the average hours spent per week on social network service was 1 hour and 2 minutes, 45.1% of the users answered that they went on social network service for at least an hour (‘1 hr to less than 2 hrs’ (31.1%), ‘2 hrs or more’ (14.0%)) per week.

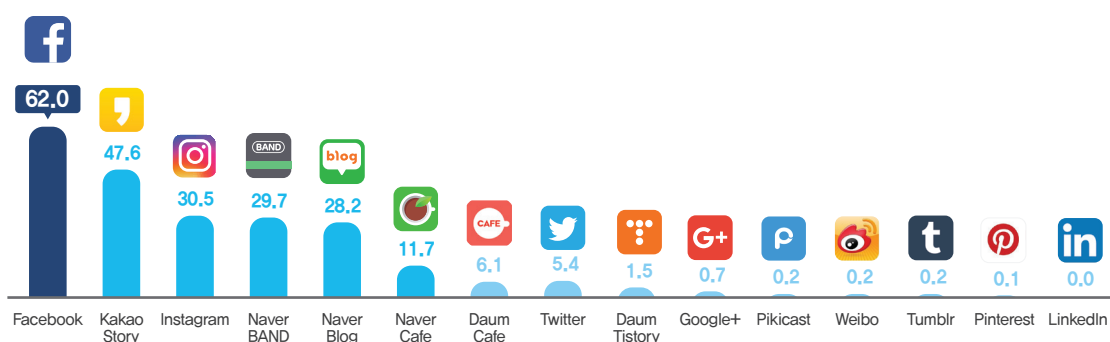
Figure 4-11 • Hours-of-Use of Social Network Services per Week (%)
— Social network service users aged 6 and over



C. Frequently Used Social Network Services

The survey revealed that the most frequently used social network service was 'Facebook' (62.0%), followed by 'KakaoStory' (47.6%), 'Instagram' (30.5%), 'Naver BAND' (29.7%), 'Naver Blog' (28.2%), and 'Naver Cafe' (11.7%).

Figure 4-12 • Frequently Used Social Network Services (3 primary responses, %)
— Social network service users aged 6 and over



Analysis of respondent characteristics showed that the 'Facebook' usage rate of males (66.3%) was higher than that of females (57.4%). On the other hand, the rate of 'KakaoStory' was higher for females (50.1%) than males (45.2%).

By age, 'Facebook' was popular among individuals in their 20s or younger (83.7% for aged 6-19, 86.1% for the 20s), while 'KakaoStory' was relatively more popular among users beyond their 40s (50.3% for 40s, 47.9% for 50s, 37.8% for 60s, 67.7% for 70 and over).

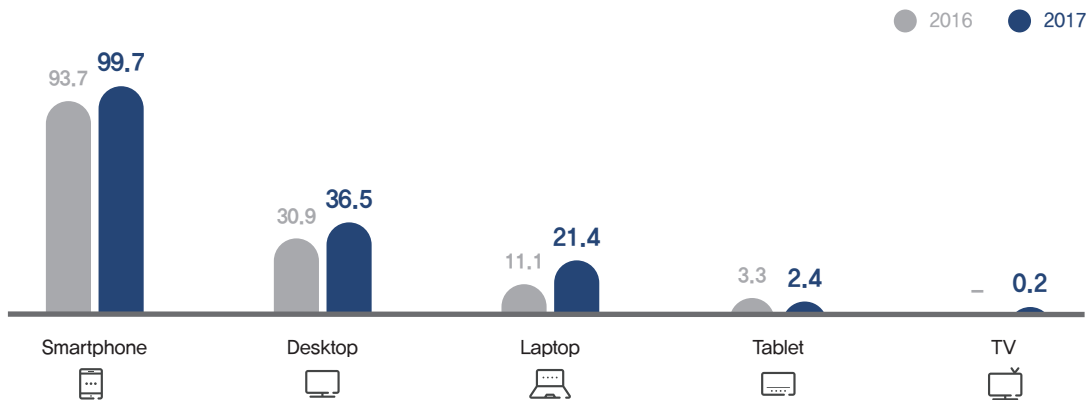
Table 4-2 • Frequently Used Social Network Services by Gender and Age (3 primary responses, %)
— Social network service users aged 6 and over

		Facebook	KakaoStory	Instagram	Naver BAND	Naver Blog	Naver Cafe
Gender	Male	66.3	45.2	30.6	29.9	28.0	11.7
	Female	57.4	50.1	30.5	29.4	28.3	11.7
Age	6-19	83.7	42.2	40.7	17.5	25.1	9.2
	20s	86.1	45.6	52.2	22.1	19.8	12.8
	30s	74.1	52.1	34.4	30.6	25.1	13.9
	40s	47.1	50.3	19.5	37.6	31.7	12.3
	50s	30.5	47.9	11.0	38.7	33.8	10.7
	60s	18.7	37.8	7.1	27.5	51.9	5.4
	70+	22.7	67.7	13.8	45.4	10.4	12.3

D. Devices Used for Social Network Services

The majority of social network service users (99.7%) accessed their social network service on their ‘Smartphone’ , while 36.5% used their ‘Desktop’ .

Figure 4–13 • Devices Used for Social Network Services (multiple responses, %)
— Social network service users aged 6 and over



Social network service usage via smartphone was high regardless of gender (99.6% for males, 99.8% for females), but more males (39.7%) than females went on social network services using desktops (33.2%).

By age, more than 99% of all age groups used smartphones to get on social network services, but the rate of using desktops was relatively higher among those in their 20s (52.5%) and 30s (42.5%).

Table 4–3 • Devices Used for Social Network Services by Gender and Age (multiple responses, %)
— Social network service users aged 6 and over

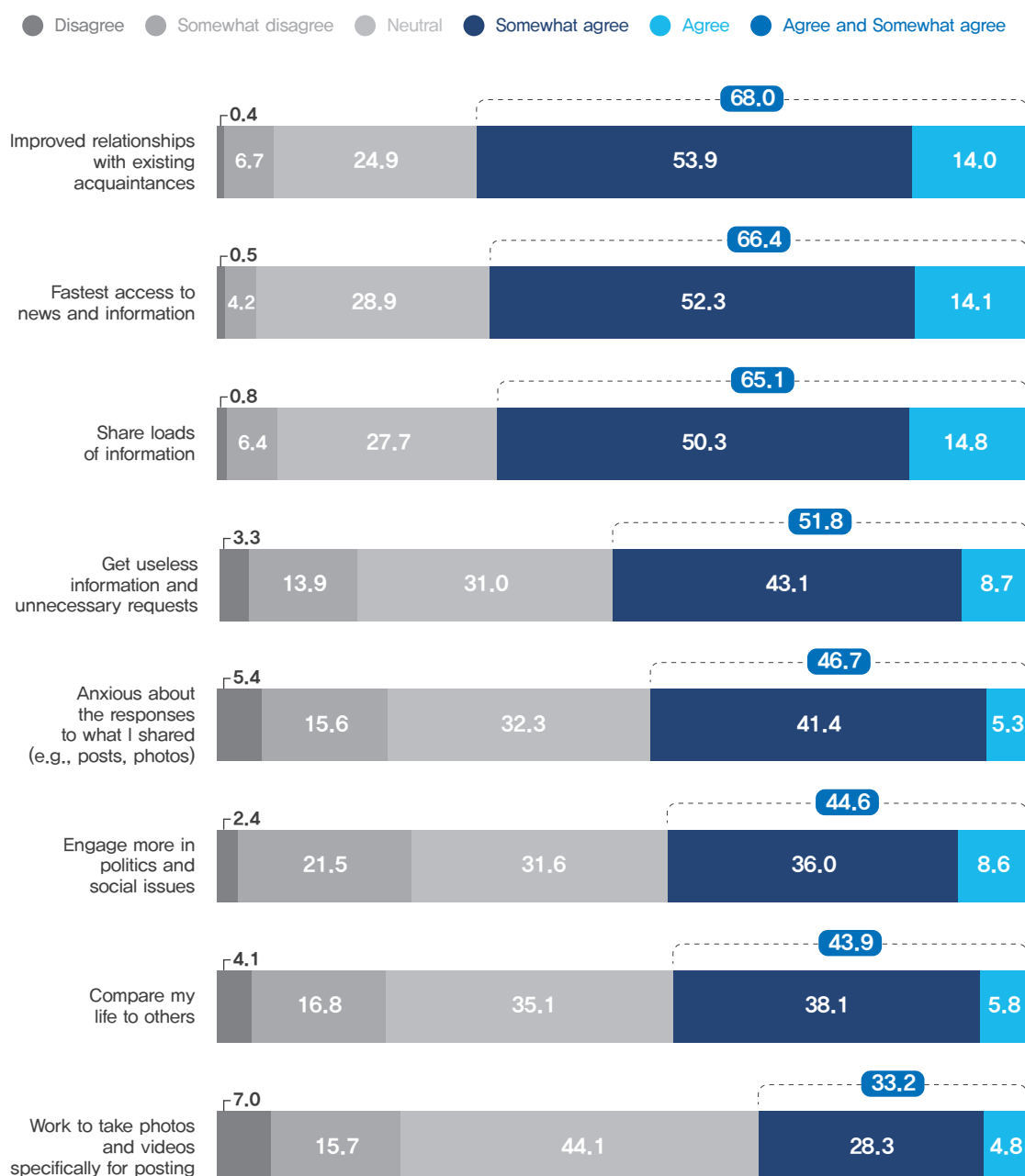
		Smartphone	Desktop	Laptop	Tablet	TV
Gender	Male	99.6	39.7	22.2	2.4	0.2
	Female	99.8	33.2	20.5	2.4	0.2
Age	6–19	99.3	39.3	20.3	2.3	0.2
	20s	99.9	52.5	36.2	3.8	0.2
	30s	99.8	42.5	24.6	3.4	0.3
	40s	99.7	33.1	16.8	1.9	0.1
	50s	99.7	19.3	10.7	0.8	0.1
	60s	99.8	10.0	4.7	0.3	0.0
	70+	99.4	12.7	3.1	—	—

E. Social Network Service Usage Behavior and Perceptions

Social network service users aged 12 and over answered, 'Improved relationships with existing acquaintances' (68.0%) and 'Fastest access to news and information' (66.4%) to the question on how they perceive social network services.

Meanwhile, 'Work to take photos and videos specifically for posting' ranked lowest among answers at 33.2%.

Figure 4-14 • Social Network Service Usage Behavior and Perceptions (%)
— Social network service users aged 12 and over



F. Reasons for Using Social Network Services

Social network service users aged 6 and over used the service 'To socialize and network' (76.5%), followed by 'To check out posts or contents created by others' (55.3%), 'To share personal interests like hobbies and leisure activities' (43.0%), and 'To share information, knowledge, news' (32.2%).

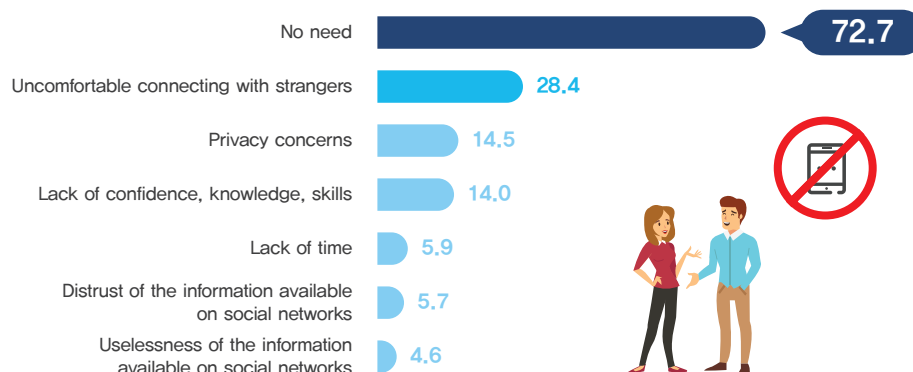
Figure 4-15 • Reasons for Using Social Network Services (3 primary responses, %)
— Social network service users aged 6 and over



G. Reasons for Not Using Social Network Services

7 in 10 (72.7%) non-users of social networking sites felt 'No need' for the service. This was followed by answers that included 'Uncomfortable connecting with strangers' (28.4%), 'Privacy concerns' (14.5%), 'Lack of confidence, knowledge, skills' (14.0%).

Figure 4-16 • Reasons for Not Using Social Network Services (multiple responses, %)
— Social network service non-users aged 6 and over



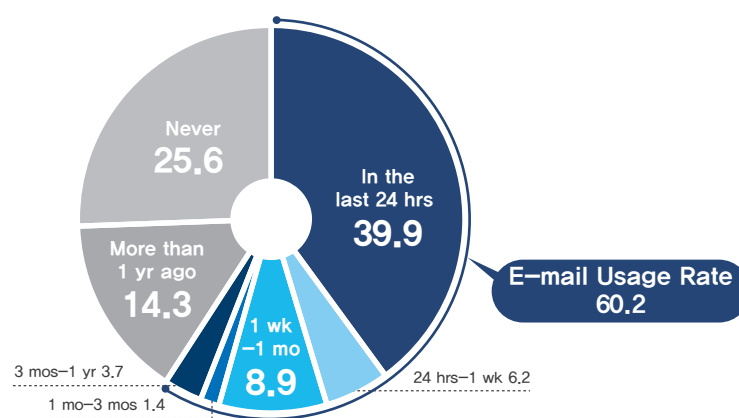
3. E-mail

E-mail usage rate of Internet users aged 6 and over 60.2%

A. E-mail Usage Rate

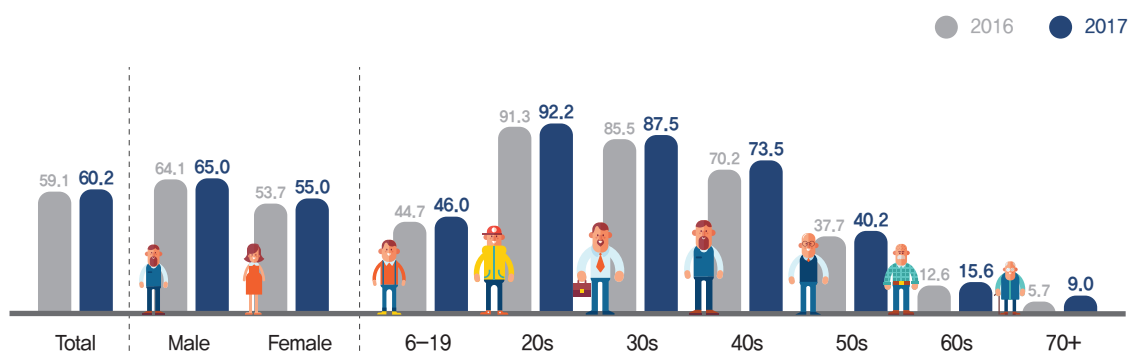
The rate of e-mail users (individuals who have used e-mail services at least once in the last 1 year) among Internet users aged 6 and over reached 60.2%, with 39.9% having used it 'In the last 24 hours'.

Figure 4-17 • Time-of-Use of E-mail (%) – Internet users aged 6 and over



The e-mail usage rate of males (65.0%) was higher than that of females (55.0%). By age, the 20s were the highest at 92.2%, followed by the 30s (87.5%) then the 40s (73.5%).

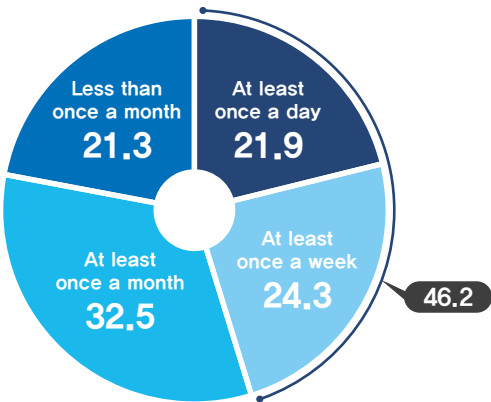
Figure 4-18 • E-mail Usage Rate by Gender and Age (%) – Internet users aged 6 and over



B. E-mail Usage Frequency and Purpose

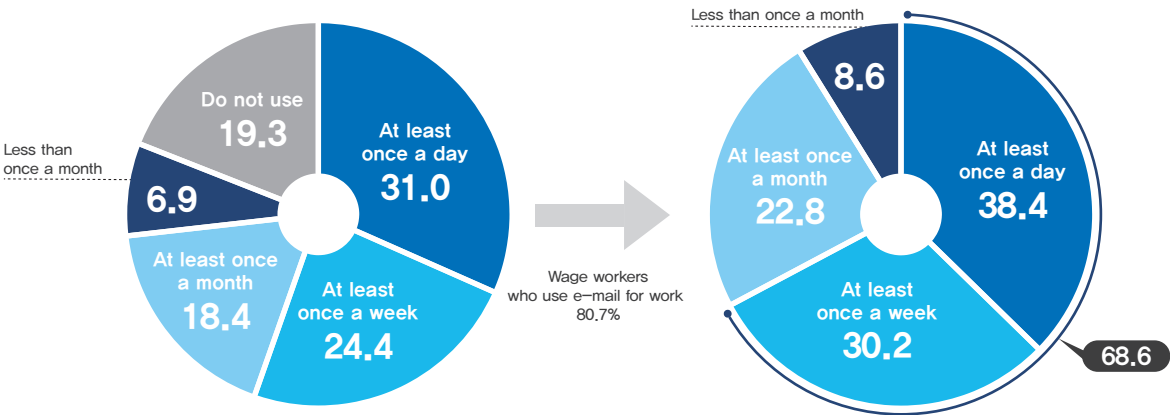
Of e-mail users aged 6 and over, 46.2% used the service at least once a week (‘At least once a day’ 21.9%, ‘At least once a week’ 24.3%) for personal use.

Figure 4-19 • E-mail Usage Frequency for Personal Use (%) – Personal e-mail users aged 6 and over



Meanwhile, 68.6% of officer workers who used e-mail for work accessed the service once or more per week (38.4% for ‘At least once a day’ , 30.2% for ‘At least once a week’).

Figure 4-20 • E-mail Usage Frequency for Business Use (%) – Wage workers among e-mail users

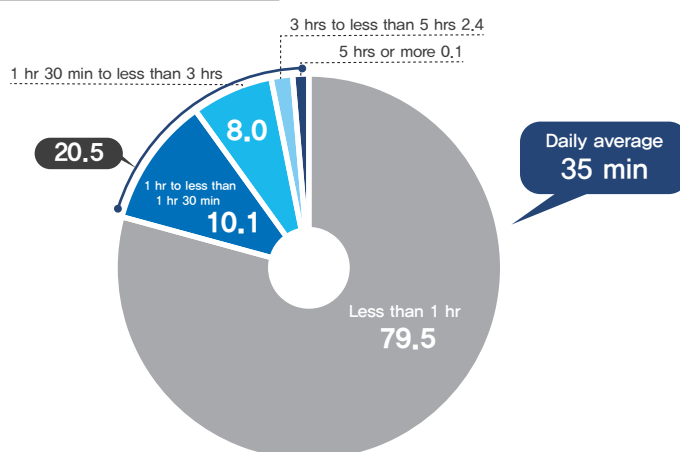


4. Average Time Spent on Communication via Online

Daily online communication time for Internet users aged 3 and over 35 minutes

Online communication users aged 3 and over spent 35 minutes per day communicating online via instant messengers, social network services, e-mail, voice/video calling. In detail, 79.5% of the Internet users surveyed answered that they used 'Less than 1 hour', while 20.5% said that they used 1 hour or more per day on the activity.

Figure 4-21 • Average Time Spent on Communication via Online per Day (%)
— Online communication users aged 3 and over



By gender, males and females had similar online communication hours per day (0.59 hours for males, 0.57 hours for females), and by age, the younger groups (0.80 hours for individuals in their 20s, 0.65 hours for 30s, and 0.62 hours for 10s) used more time communicating online than the older groups (0.37 hours for individuals in their 60s, 0.29 hours for those aged 70 and over).

표 4-4 • Average Time Spent on Communication via Online per Day by Gender and Age (%)
— Online communication users aged 3 and over

구분		Less than 1 hour	1 hr to less than 1 hr and 30 min	1 hr and 30 min to less than 3 hrs	3 hrs to less than 5 hrs	5 hrs or more	Daily average (hour)
Gender	Male	78.8	10.5	8.1	2.5	0.1	0.6
	Female	80.2	9.6	7.9	2.2	0.1	0.6
Age	3-9	84.5	12.1	2.9	0.5	0.1	0.4
	10s	77.1	11.4	9.0	2.4	0.1	0.6
	20s	68.3	12.6	14.2	4.8	0.1	0.8
	30s	75.7	11.2	9.8	3.2	0.1	0.7
	40s	79.3	10.3	8.1	2.2	0.1	0.6
	50s	85.6	8.3	4.8	1.2	0.0	0.5
	60s	90.2	6.5	2.6	0.7	0.1	0.4
	70+	94.2	3.8	1.7	0.3	0.0	0.3



V. Internet and Living



V. Internet and Living

1. Online Media

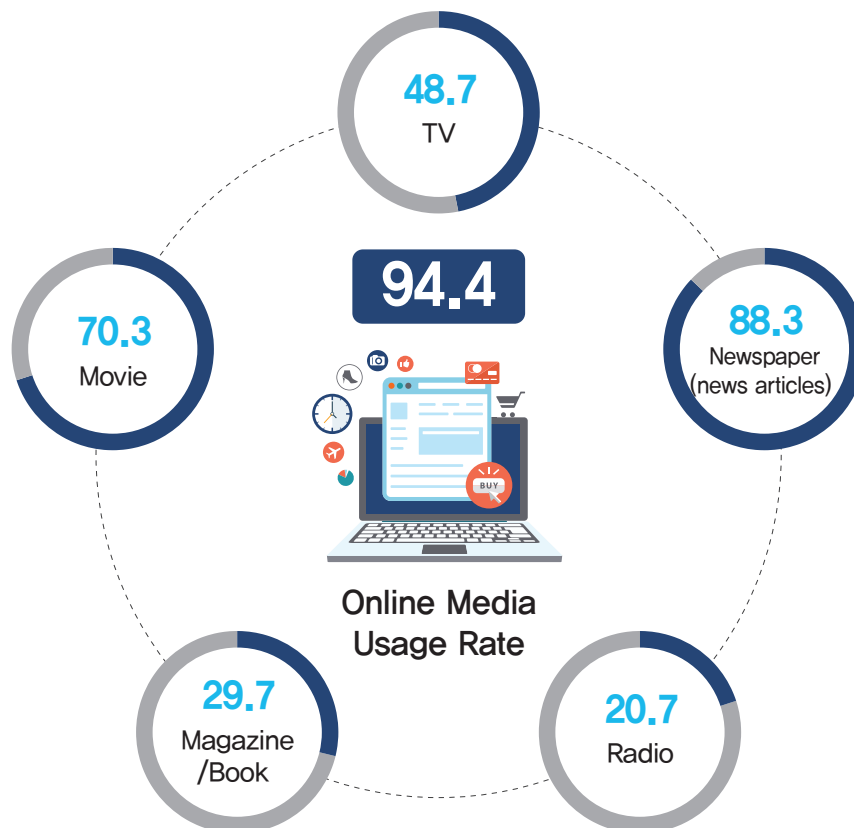
Online media usage rate of Internet users aged 6 and over 94.4%

A. Online Media Usage Rate

The rate of online media users (individuals who have used at least one of the 5 major media via the Internet, i.e., TV, newspaper Refers to reading a news article through the Internet (e.g., on newspaper websites or on portal sites) or watching TV news via the Internet. (news articles), radio, magazine/book, and movie, at least once in the last 1 month) among Internet users aged 6 and over was 94.4%, which is the equivalent of 9 out of 10 Internet users.

By media type, the rate of those who read the 'Newspaper (news articles)' through the Internet was the highest at 88.3%, followed by access of 'Movie' (70.3%), 'TV' (48.7%), 'Magazine/Book' (29.7%), and 'Radio' (20.7%).

Figure 5-1 • Online Media Usage Rate (%) – Internet users aged 6 and over

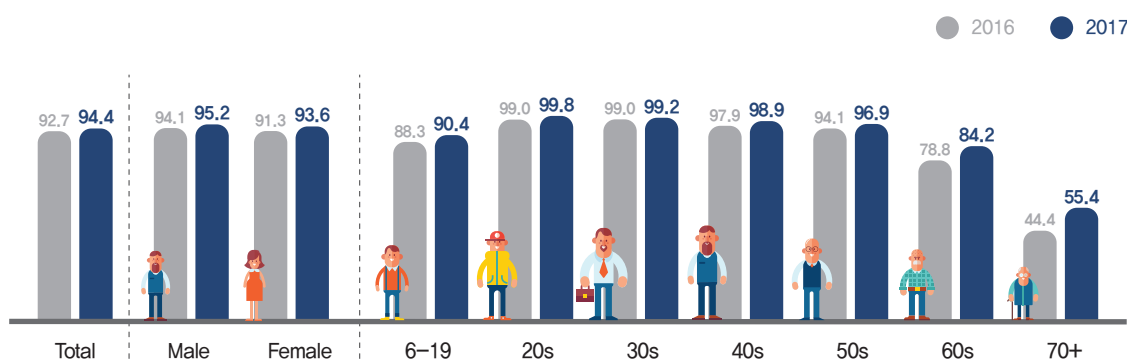


4) Refers to reading a news article through the Internet (e.g., on newspaper websites or on portal sites) or watching TV news via the Internet.

By gender, more males (95.2%) used online media than females (93.6%), and by age, most of those in their 20s to the 50s (96.0% or more) were online media users.

Meanwhile, older individuals in their 60s and 70 and over showed a higher increase rate than the previous year (5.4%p for people in their 60s, 11.0%p for those 70 and over) in their usage of online media.

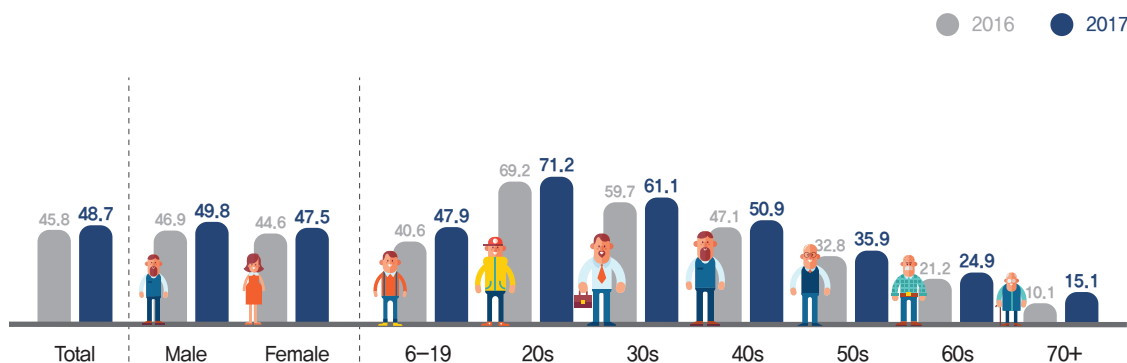
Figure 5-2 • Online Media Usage Rate by Gender and Age (%) – Internet users aged 6 and over



B. TV

Of all Internet users aged 6 and over, 48.7% were viewers of online TV. The rate of males (49.8%) was higher than that of females (47.5%), and by age group, the 20s (71.2%) was the highest, followed by the 30s (61.1%) and the 40s (50.9%).

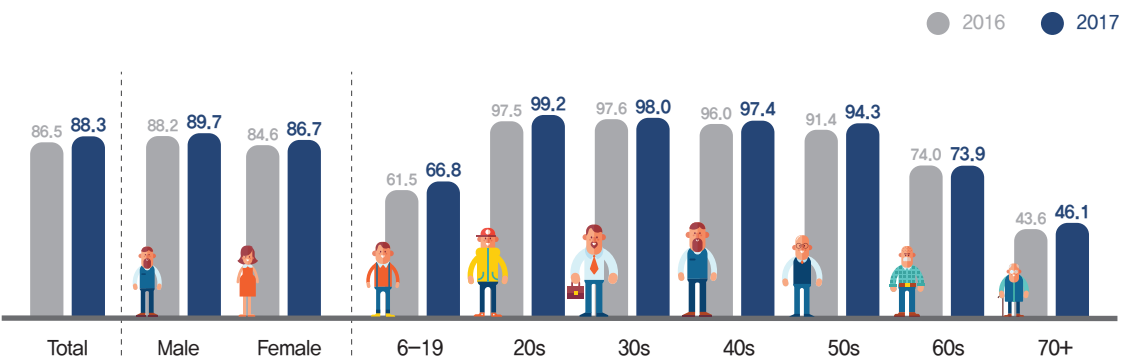
Figure 5-3 • Online TV Watching (%) – Internet users aged 6 and over



C. Newspaper

The rate of online newspaper reading among Internet users aged 6 and over was 88.3%. By gender, the rate of males (89.7%) was higher than that of females (86.7%), and by age group, the rate was over 90% for individuals aged between the 20s and the 50s (20s at 99.2%, 30s at 98.0%, 40s at 97.4%, and 50s at 94.3%).

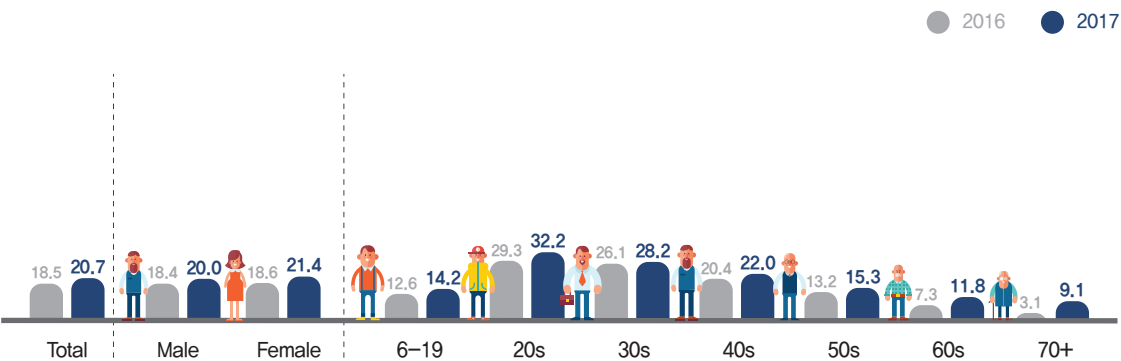
Figure 5-4 • Online Newspaper Reading (%) – Internet users aged 6 and over



D. Radio

2 out of 10 (20.7%) Internet users aged 6 and over listened to the radio. There was little difference (20.0% for males, 21.4% for females) in the gender composition of the listeners. By age group, the rates of the 20s (32.2%) and the 30s (28.2%) were relatively higher than other age groups.

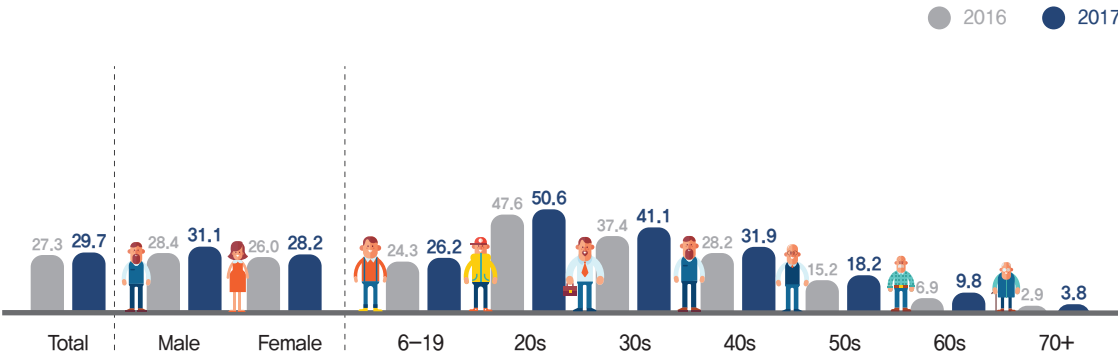
Figure 5-5 • Online Radio Listening (%) – Internet users aged 6 and over



E. Magazine/Book

The rate of Internet users aged 6 and over reading online magazines and books was 29.7%. By gender, the rate of males (31.1%) was higher than that of females (28.2%), while by age, the 20s ranked the highest at 50.6%.

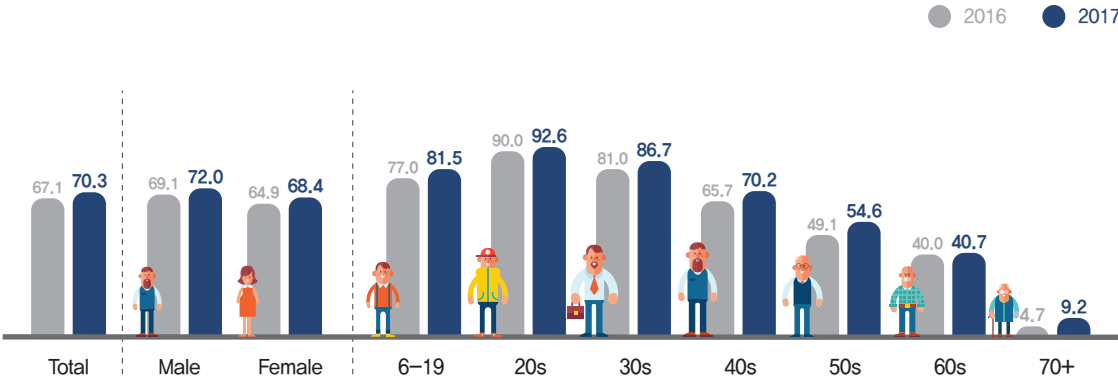
Figure 5-6 • Online Magazine/Book Reading (%) – Internet users aged 6 and over



F. Movie

Of all Internet users aged 6 and over, 70.3% were watching movies online. By gender, males (72.0%) were more likely to watch movies online than females (68.4%), while by age, the 20s ranked the highest at 92.6%, followed by the 30s (86.7%) and those aged 6-19 (81.5%).

Figure 5-7 • Online Movie Watching (%) – Internet users aged 6 and over



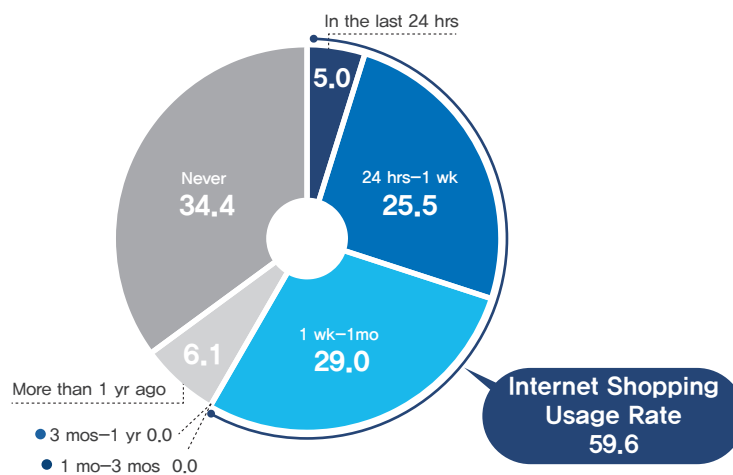
2. Internet Shopping

Internet shopping usage rate of Internet users aged 12 and over 59.6%

A. Internet Shopping Usage Rate

The rate of Internet shopping users (individuals who have used Internet shopping services at least once in the last 1 year) among Internet users aged 12 and over was 59.6%. 25.5% answered they did so between the last 24 hours to the last 1 week.

Figure 5-8 • Time-of-Use of Internet Shopping (%) – Internet users aged 12 and over



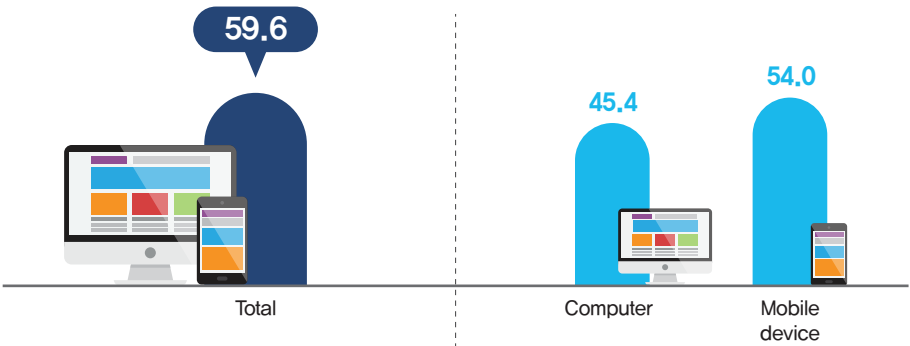
What is Internet shopping?

The act of purchasing products or services over the Internet. Includes both web-based internet shopping using Internet shopping malls, online second-hand shops, social commerce, and mobile-based Internet shopping such as buying paid apps and gifticons.

E.g., Purchases made on web/mobile shopping mall sites (e.g., Auction, Gmarket, emartmall); purchases on social commerce sites (e.g., coupang, TMON.); and purchases of paid apps (e.g., Google Play, Apple App Store)

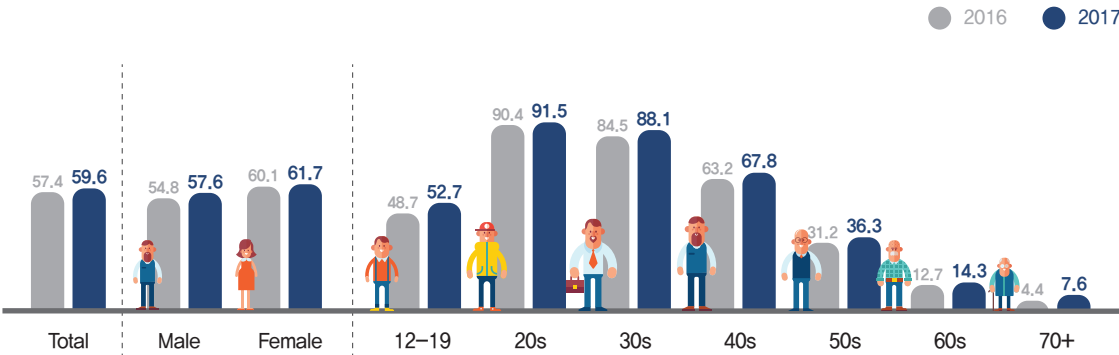
By device, the rate of Internet shopping using ‘Mobile device’ (54.0%) was higher than that of Internet shopping with ‘Computer’ (45.4%).

Figure 5-9 • Internet Shopping Usage Rate by Device (%) – Internet users aged 12 and over



The Internet shopping rate of females (61.7%) was higher than males (57.6%).
By age, the rate of the 20s was the highest at 91.5%, followed by the 30s (88.1%), the 40s (67.8%), and those aged 12–19 (52.7%).

Figure 5-10 • Internet Shopping Usage Rate by Gender and Age (%) – Internet users aged 12 and over



B. Internet Shopping Usage Frequency

48.8% of Internet shopping users aged 12 and over said that they were purchasing products or services (including reservations and bookings) via the Internet at least 3 times per month. Meanwhile, monthly Internet shopping frequency was about 2.7 times.

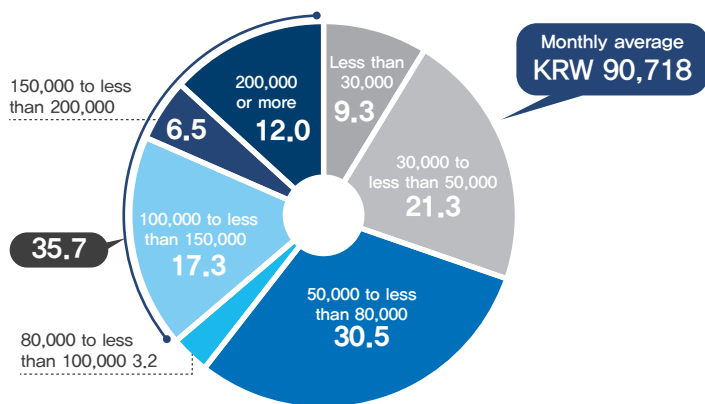
Figure 5-11 • Internet Shopping Usage Frequency per Month (%) – Internet shoppers aged 12 and over



C. Amount Spent on Internet Shopping

The monthly average expenditure on Internet shopping was KRW 90,718. More specifically the highest ranked price range in online spending was 30.5% for '50,000 to less than 80,000'. Meanwhile there was a combined total of 35.7% of Internet shoppers who spent more than 100,000 ('100,000 to less than 150,000' (17.3%), '150,000 to less than 200,000' (6.5%), and '200,000 or more' (12.0%)) on Internet shopping per month.

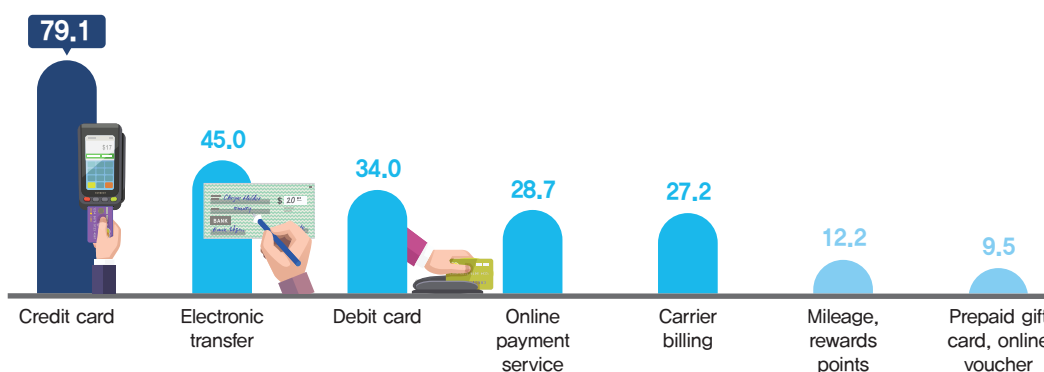
Figure 5-12 • Amount Spent on Internet Shopping per Month (%) – Internet shoppers aged 12 and over



D. Payment Methods for Internet Shopping

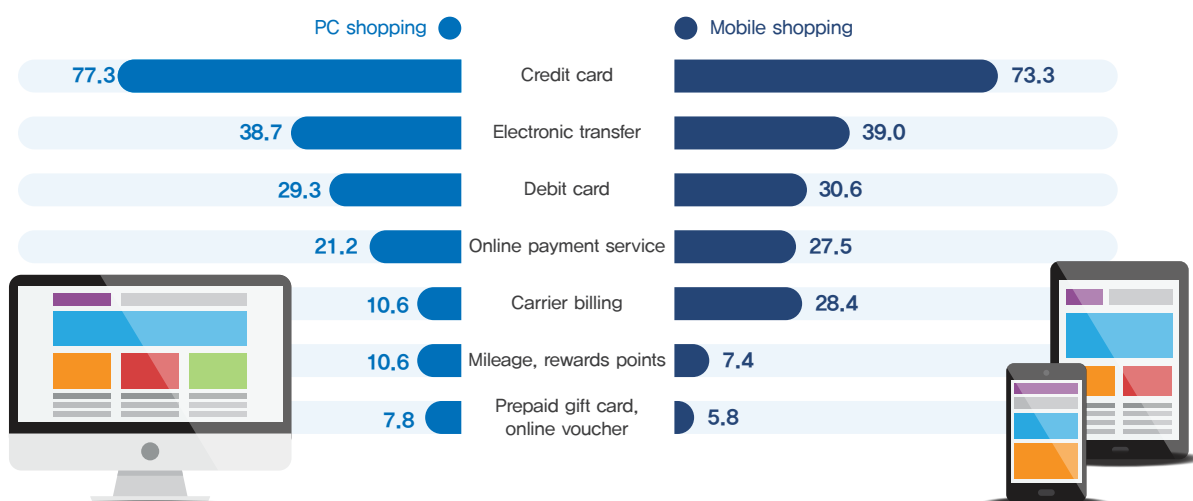
The most popular method of payment for Internet shopping was 'Credit Card' (79.1%), followed by 'Electronic transfer' (45.0%), 'Debit card' (34.0%), 'Online payment service' (28.7%), and 'Carrier billing' (27.2%).

Figure 5-13 • Payment Methods for Internet Shopping (multiple responses, %)
— Internet shoppers aged 12 and over



The major payment method for both PC shoppers and mobile shoppers was the credit card (77.3% and 73.3% respectively). Meanwhile, the rate for 'Carrier billing' was higher for mobile shoppers (28.4%) than for PC shoppers (10.6%).

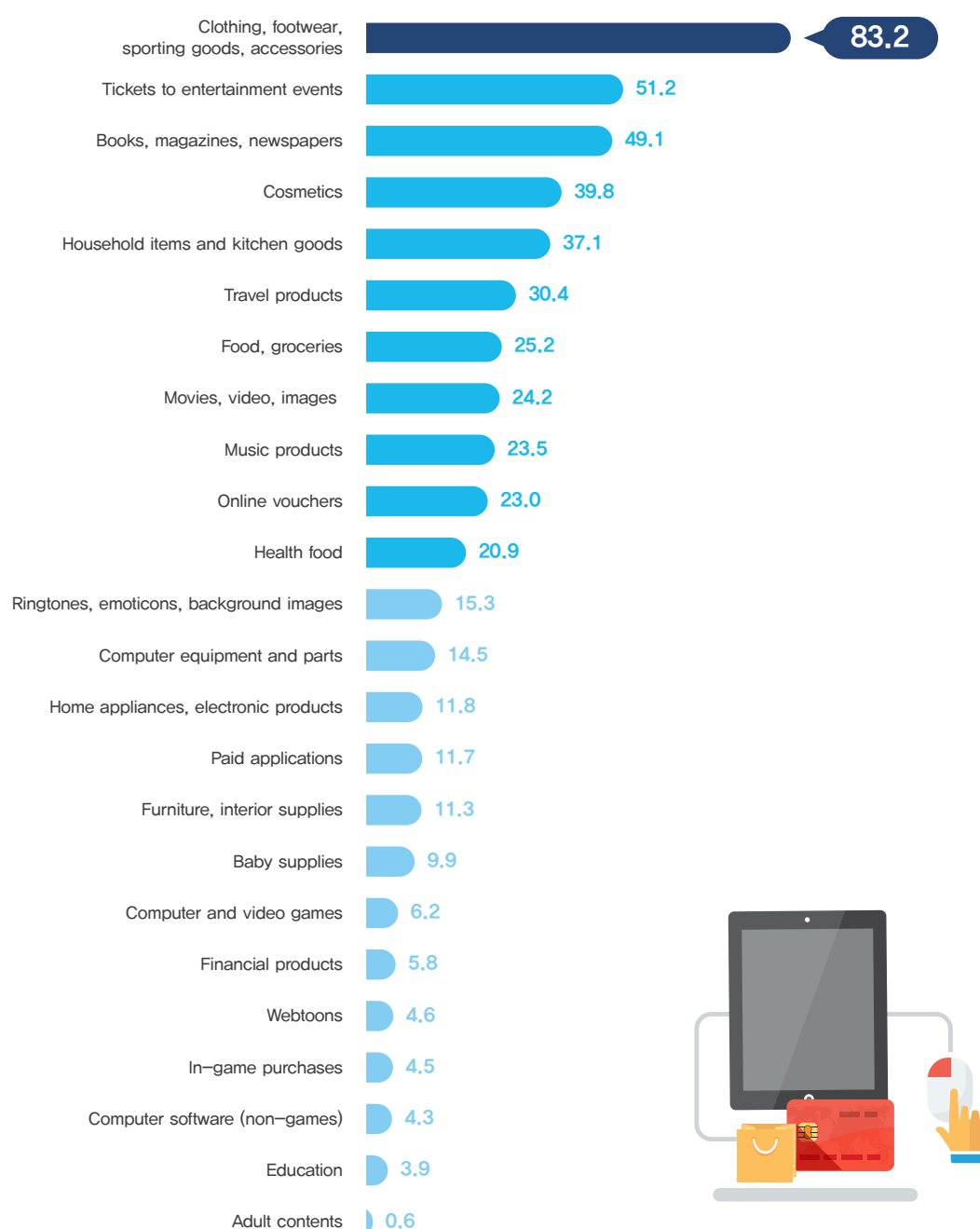
Figure 5-14 • Payment Methods for Internet Shopping (multiple responses, %)
— PC Internet shoppers and mobile Internet shoppers aged 12 and over



E. Items Purchased with Internet Shopping

The most popular items²⁾ to purchase online was 'Clothing, footwear, sporting goods, accessories' (83.2%), followed by 'Tickets to entertainment events' (51.2%), 'Books, magazines, newspapers' (49.1%), and 'Cosmetics' (39.8%).

Figure 5–15 • Items Purchased with Internet Shopping (multiple responses, %)
— Internet shoppers aged 12 and over

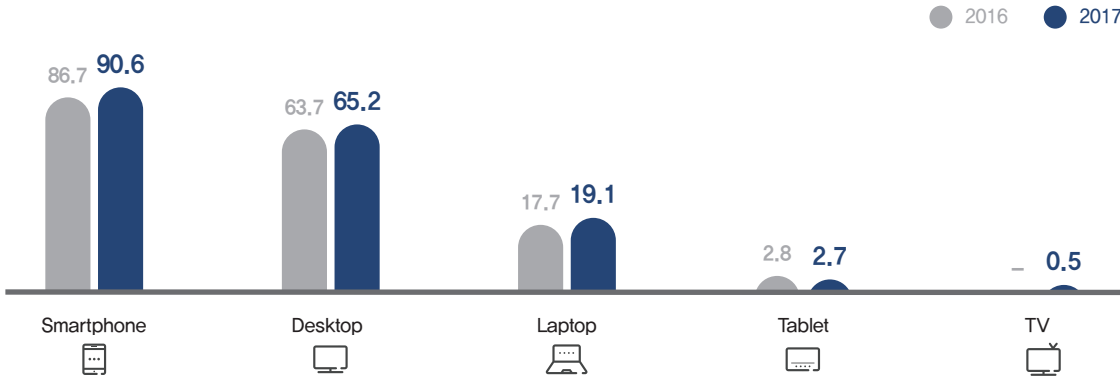


2) Purchases of 'Music products', 'Movies, video, images', 'Books, magazines, newspapers', 'Computer and video games', and 'Computer software' refers to not only the physical delivery through an offline channel such as parcel (delivery) services, but also a digital delivery such as streaming or downloading of the paid contents.

F. Devices Used for Internet Shopping

Internet shopping users aged 12 and over, 90.6% answered that they used their 'Smartphone' for Internet shopping, while 65.5% said they used the service on their 'Desktop'.

Figure 5-16 • Devices Used for Internet Shopping (multiple responses, %)
— Internet shoppers aged 12 and over



While using 'Smartphone' for Internet shopping was higher for females (92.8%) than males (88.5%), the 'Desktop' usage rate of males (68.7%) was higher than females (61.7%).

By age, when using 'smartphone' for Internet Shopping, 20s (94.6%), 30s (93.5%), 40s(90.1%), 12-19 (89.2%) were higher than other age groups.

Table 5-1 • Devices Used for Internet shopping by Gender and Age (multiple responses, %)
— Internet shoppers aged 12 and over

		Smartphone	Desktop	Laptop	Tablet	TV
Gender	Male	88.5	68.7	19.2	2.7	0.5
	Female	92.8	61.7	19.0	2.7	0.5
Age	12-19	89.2	62.1	14.0	2.4	0.4
	20s	94.6	67.9	27.4	3.6	0.4
	30s	93.5	66.5	21.9	3.4	0.5
	40s	90.1	65.6	15.4	2.3	0.5
	50s	79.8	63.6	9.7	0.8	0.6
	60s	85.5	42.8	7.2	0.7	0.9
	70+	81.5	37.6	2.7	0.3	—

G. Negative Experience with Internet Shopping Usage

Out of all Internet shoppers aged 12 and over, 36.9% had experienced dissatisfaction or inconvenience with their Internet shopping.

Among negative experiences, ‘Slow delivery’ (21.0%) ranked the highest, followed by ‘Difficult to return or refund product’ (8.8%) and ‘Wrong or defective product delivery’ (8.6%).

Figure 5–17 • Negative Experience with Internet Shopping Usage (multiple responses, %)
– Internet shoppers aged 12 and over



H. Reasons for Not Using Internet Shopping

More than half of non-Internet shoppers said they avoid shopping online because they have ‘Lack of interest or no need’ (54.0%). Other reasons included ‘Prefer to shop in person’ (52.5%), ‘Inconvenient and complex payment process’ (13.8%), and ‘Distrust about product warranty or delivery’ (10.6%).

Figure 5–18 • Reasons for Not Using Internet Shopping (multiple responses, %)
– Non-Internet shoppers aged 12 and over



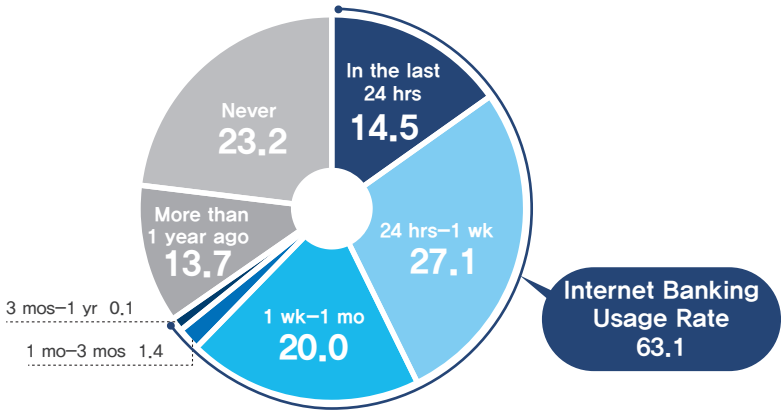
3. Internet Banking

Internet banking usage rate of Internet users aged 12 and over 63.1%

A. Internet Banking Usage Rate

The rate of Internet banking users (individuals who have used Internet banking services at least once in the last 1 year) among Internet users aged 12 and over was 63.1%, with 41.6% having used the service within the last 1 week.

Figure 5-19 • Time-of-Use of Internet Banking (%) – Internet users aged 12 and over



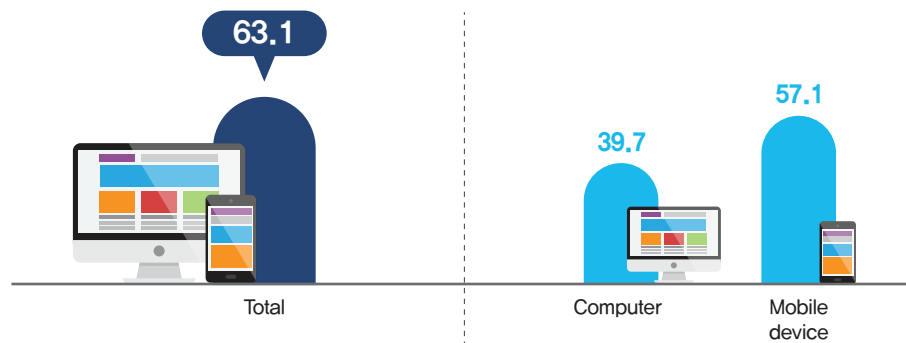
What is Internet banking?

Internet banking includes all online bank transaction activities (e.g., savings, money transfers, investments, asset management). It also includes mobile banking services provided through mobile applications offered by financial institutions.

E.g., PC-based Internet banking services offered by banks and mobile banking services such as KB Star Banking, Shinhan S Bank, NH Smart Banking, KEB Hana Smartphone Banking.

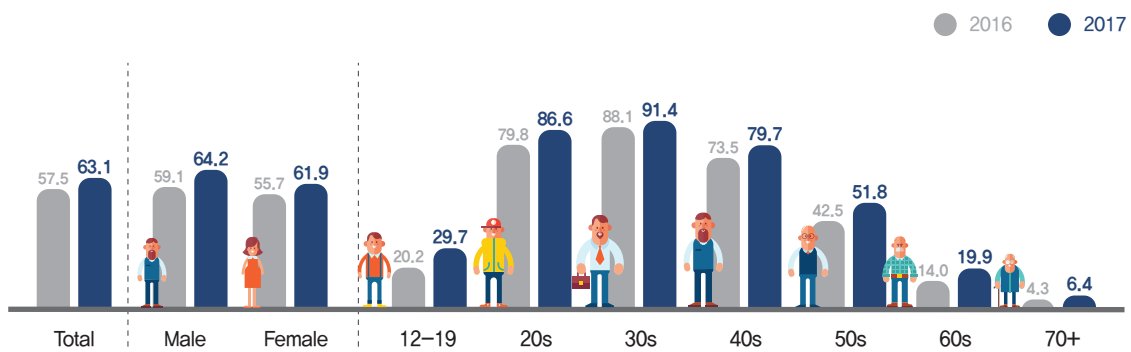
By device, Internet banking using a mobile device (57.1%) was ranked higher than using a computer (39.7%).

Figure 5–20 • Internet Banking Usage Rate by Device (%) – Internet users aged 12 and over



By gender, the Internet Banking usage rate of males (64.2%) was higher than that of females (61.9%), while by age, the usage rate of the 30s (91.4%) was highest among the age groups, followed by the 20s (86.6%) and the 40s (79.7%).

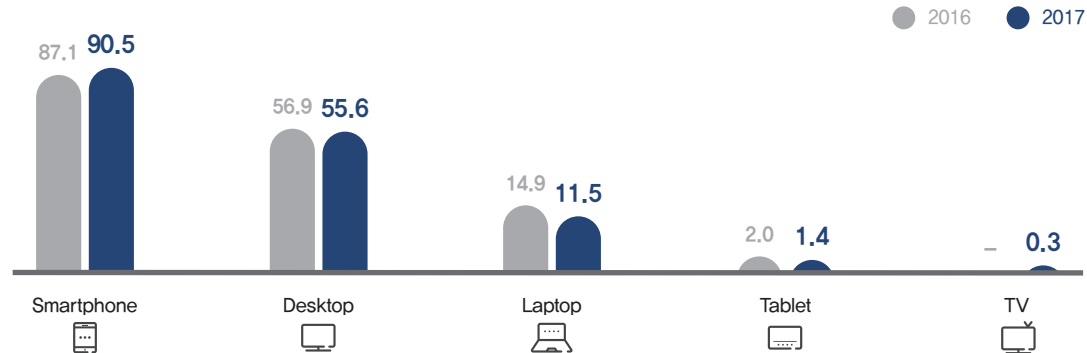
Figure 5–21 • Internet Banking Usage Rate by Gender and Age (%) – Internet users aged 12 and over



B. Devices Used for Internet Banking

Internet banking users aged 12 and over, 90.5% answered that they used their ‘Smartphone’ for Internet banking, while 55.6% said they used the service on their ‘Desktop’.

Figure 5–22 • Devices Used for Internet Banking (multiple responses, %) – Internet banking users aged 12 and over



While using ‘Smartphone’ for Internet banking, females (92.0%) are higher than males (89.2%), ‘Desktop’ usage rate of male (59.5%) is higher than females (51.2%).

By age, when using ‘Smartphone’ for Internet banking, 30s (94.2%) and 20s (93.6%) were higher than other age groups.

Table 5–2 • Devices Used for Internet Banking by Gender and Age (multiple responses, %)
– Internet banking users aged 12 and over

		Smartphone	Desktop	Laptop	Tablet	TV
Gender	Male	89.2	59.5	12.2	1.5	0.2
	Female	92.0	51.2	10.8	1.3	0.3
Age	12–19	76.6	51.7	11.7	1.3	0.2
	20s	93.6	55.8	16.5	2.2	0.3
	30s	94.2	61.0	14.3	1.8	0.3
	40s	90.1	57.4	9.0	1.0	0.2
	50s	86.9	48.5	5.8	0.5	0.2
	60s	84.6	38.0	4.3	0.3	0.2
	70+	72.1	47.5	5.1	–	–

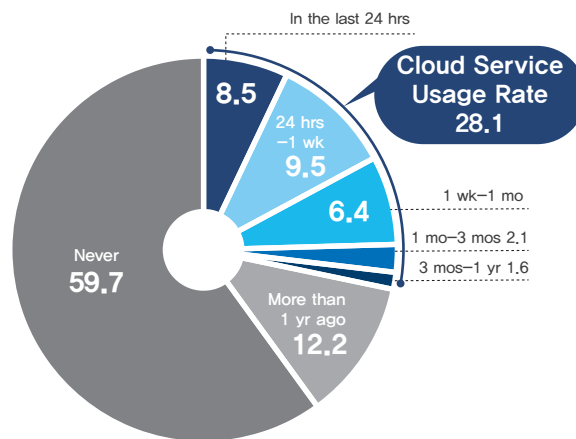
4. Cloud Service

Cloud service usage rate of Internet users aged 12 and over 28.1%

A. Cloud Service Usage Rate

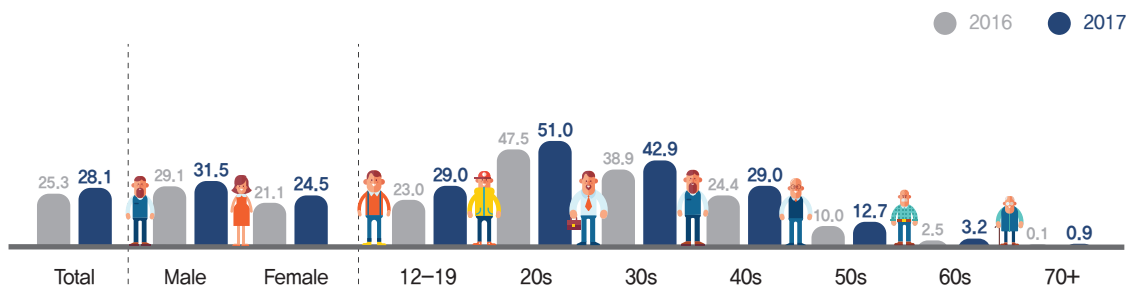
The rate of cloud service users (individuals who have used a cloud service at least once in the last 1 year) among Internet users aged 12 and over reached 28.1%.

Figure 5-23 • Time-of-Use of Cloud Services (%) – Internet users aged 12 and over



The usage rate of males (31.5%) was higher than that of females (24.5%) by 7.0%p. By age, the rate of the 20s was the highest at 51.0%, followed by the 30s (42.9%) then the 12-19 and the 40s (both 29.0%) age groups.

Figure 5-24 • Cloud Service Usage Rate by Gender and Age (%) – Internet users aged 12 and over



What is a cloud service?

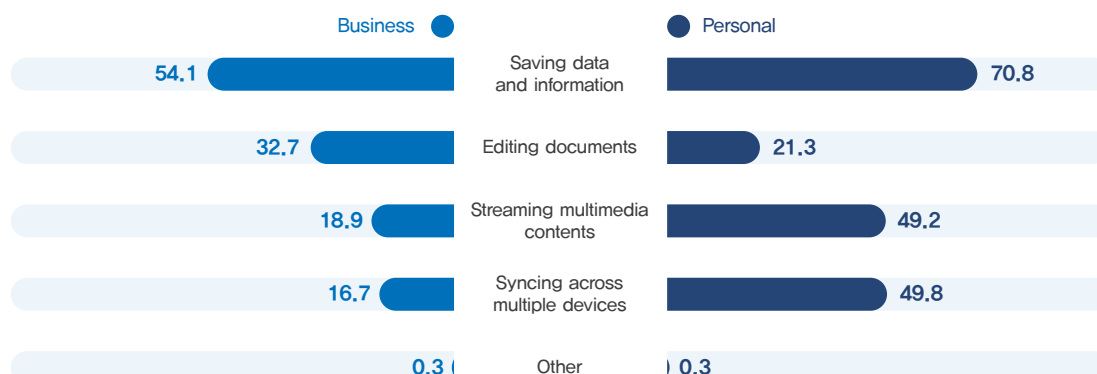
A service that allows users to store photos, music, and other media files as well as personal files (e.g., contact, documents) on not an external storage but a web server. These files can be downloaded and edited on the user's computer or mobile device.

E.g.) Drive (e.g., Naver Cloud, Google Drive, iCloud, Olleh U Cloud, SKT T Cloud, LG U+Box, MS OneDrive, Dropbox), document sharing (e.g., Google Docs, MS Office 365), calendars/contacts (e.g., Google Calendar, Naver Calendar, Naver Address Book)

B. Purpose of Using Cloud Services

As for the purpose of using a cloud service, ‘Saving data and information’ was the biggest reason for both business and personal users (54.1% and 70.8% respectively).

Figure 5–25 • Purpose of Using Cloud Services (multiple responses, %) – Cloud service users aged 12 and over



In the case of ‘Saving data and information’, both males and females (70.6% and 71.1% respectively) showed a high rate for personal use, but in the case of ‘Editing documents’ for business use, the rate of males (37.6%) was higher than that of females (26.1%).

Table 5–3 • Purpose of Using Cloud Services by Gender and Age (multiple responses, %)
– Cloud service users aged 12 and over

		Saving data and information		Editing documents		Streaming multimedia contents		Syncing across multiple devices	
		Business	Personal	Business	Personal	Business	Personal	Business	Personal
Gender	Male	59.4	70.6	37.6	22.1	20.9	49.7	19.3	51.2
	Female	46.8	71.1	26.1	20.3	16.1	48.5	13.1	47.8
Age	12–19	13.0	73.2	10.3	26.2	8.2	61.6	2.7	38.4
	20s	47.6	74.8	27.8	25.4	17.1	54.4	13.0	46.8
	30s	69.1	67.9	41.7	19.0	24.0	47.6	21.9	51.9
	40s	62.2	69.0	39.6	18.8	21.2	42.2	20.8	53.6
	50s	61.1	67.8	34.1	16.6	17.1	39.6	19.8	57.4
	60s	38.2	71.9	20.0	13.3	12.7	42.3	16.6	51.5
	70+	28.7	61.2	–	–	6.4	25.2	–	28.5

Internet
Non-Users
9.7%

Reasons for
Not Using the Internet
'Lack of interest or no need'
73.9%



VI. Internet Non-Users



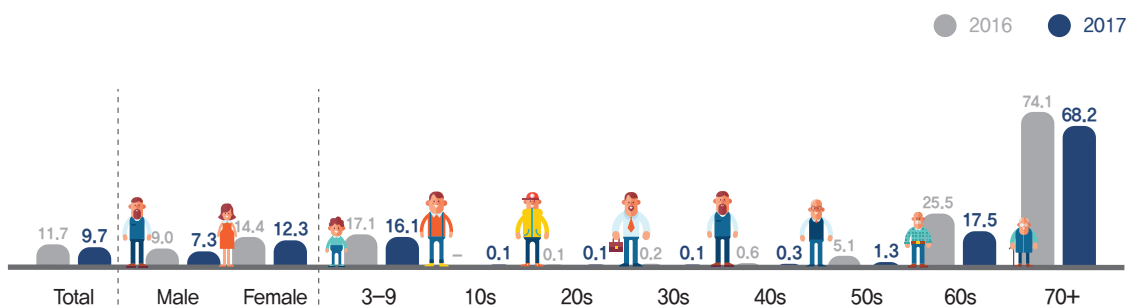
VI. Internet Non-Users

1. Internet Non-Users

One in ten (9.7%) Koreans aged 3 and over 'Internet Non-Users'

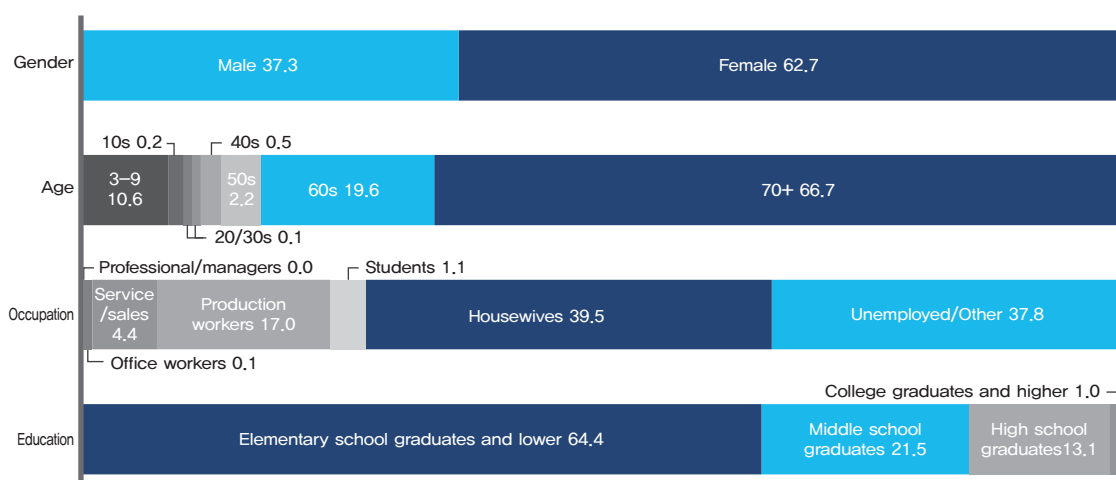
Among the population aged 3 and over, 9.7% (lower by 2.0%p from the previous year) were 'Internet non-users' who have not used the Internet in the last 1 month. The rate of females (12.3%) was higher than that of males (7.3%), while by age, the rate of the elderly, aged 70 and over (68.2%), was highest.

Figure 6-1 • Internet Non-Users by Gender and Age (%) – Population aged 3 and over



In terms of gender composition, females (62.7%) had a higher rate than males (37.3%), and by age, the elderly, aged 60 and over (19.6% for 60s, 66.7% for 70 and over) accounted more than 80%. By occupation, 'Housewives' (39.5%) and 'Unemployed/Other' (37.8%) accounted for more than 70%, and by education, individuals who were 'Elementary school graduates and lower' (64.4%) took up more than half.

Figure 6-2 • Composition of Internet Non-Users (%) – Internet non-users aged 3 and over



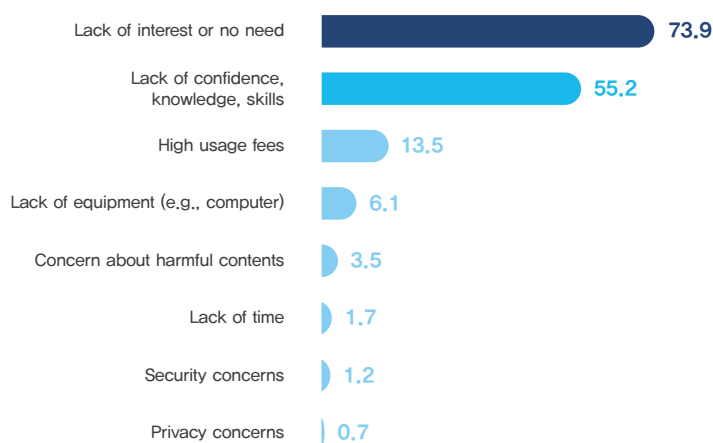
2. Reasons for Not Using the Internet

'Lack of interest or no need (73.9%)' main reason for non-use

As for reasons for not using the Internet, 'Lack of interest or no need' was the highest with 73.9%. Meanwhile, more than half (55.2%) of non-users answered the reason for their non-use to be 'Lack of confidence, knowledge, skills'.

Other reasons included 'High usage fees' (13.5%), 'Lack of equipment (e.g., computer)' (6.1%), and 'Concern about harmful contents' (3.5%).

figure 6-3 • Reasons for Not Using the Internet (multiple responses, %) – Internet non-users aged 3 and over

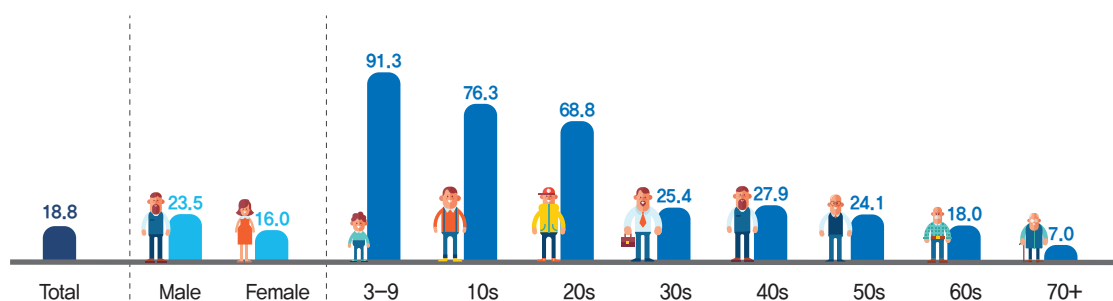


3. Intentions to Use the Internet

Intentions to use the Internet of Internet non-user 18.8%

Among Internet non-users aged 3 and over, one in ten (18.8%) had intentions to use the Internet in the future. By gender, males (23.5%) showed stronger intentions than females (16.0%), while by age, children aged 3 to 9 had the highest intentions of using the Internet in the future at 91.3%.

Figure 6-4 • Intentions to Use the Internet by Gender and Age (%) – Internet non-users aged 3 and over



Appendix 1.

Major Revisions



1. Major Revisions of Survey Items

A. Survey Items for Households

Category	Survey items		Survey period
ICT Environment	ICT device ownership		'04.12-'17
	Households with computers		Every survey
	The type of computer		'03.06-'04.12
	Households with Internet access		Every survey
	Internet access devices		'05.06-'09, '12-'17
	Internet access type		Every survey
	[Households with wireless LAN] Wireless LAN access methods		'10-'13
	Presence of distributed internet signal at home		'14-'17
	[Households without Internet access] Reasons for not accessing Internet		'05.06-'05.12, '06.12, '07.12-'17
	ICT services usage	Internet	Every survey
		Landline, Mobile phone	'04.12-'17
		VoIP, IPTV	'08-'17
		Cable TV, Satellite TV	'11-'17
		Bundled service usage	'09-'12
		Reasons for using VoIP, IPTV	'09-'10
		Smart home	'17
Other	Changed Internet service company, alteration reasons, and complaints when trying to change		'07.06
	Internet connection by many computer and LAN		'04.12-'05.12, '06.12
	LAN construction		'04.12

B. Survey Items for Household Members

Category	Survey items		Survey period
Internet Usage	Internet usage rate and Internet users		Every survey
	Internet usage period		Every survey
	Motivation of using the Internet		'03.06-'06.12, '07.12
	Internet usage frequency		'05.06-'05.12, '06.12, '07.12-'17
	Hours-of-use of the Internet		Every survey
	Internet usage by time of day		'04.12-'06.12, '07.12-'10
	Internet usage locations		Every survey
	Internet access devices		'04.12-'09
	Internet usage type		'04.12-'05.12, '06.12, '07.12-'09, '14-'17
	Purpose of using the Internet		Every survey
	Internet Reliability		'13
	Internet usage behavior and perception		'04.12-'16
	Safe Internet usage		'15-'17
	Negative experience with Internet usage		'03.06-'05.12, '06.12, '07.12-'17
	Perception on Internet-induced Social Problems		'11-'15
	Experience of cyber-bullying		'12-'14
	Changes of time spent on daily lives by using the Internet		'04.12-'05.12, '06.12, '07.12
	Satisfaction with using the Internet		'04.12
	Expenses on using the Internet Cafe or wireless Internet		'03.06-'04.12
	[Internet non-users] Reasons for not using the Internet and intentions to use the Internet		Every survey

Category	Survey items		Survey period
Internet and Communication	E-mail	E-mail usage rate	'07.06-'17
		E-mail account(s) ownership	'03.06-'07.06
		No. of E-mail used at least once a month	'03.06-'07.12
		E-mail usage frequency and purpose	'08-'17
		No. of e-mails sent/received	'04.12-'06.12
		E-mail access devices	'10-'16
		Contents of e-mail sent/received	'07.06-'09
	Instant Messenger	Instant messenger usage rate	'04.12-'06.12, '07.12-'17
		Instant messenger usage frequency by purpose	'04.12, '09-'17
		Instant messenger usage hours	'04.12-'06.12
		Instant messenger access devices	'10-'16
		Purpose of using instant messengers	'04.12-'06.12, '07.12-'09
		Frequently used instant messenger services	'16-'17
		Functions of instant messengers	'16-'17
	Social Network Service	Social network service usage rate	'10-'17
		Social network service usage by service type	'10-'15
		Frequently used social network services	'16-'17
		Social network service usage frequency and purpose	'10-'17
		Social network service usage frequency and hours	'17
		Persons socializing through social network services	'11-'13
		Devices used for social network services	'10-'17
		Reasons for using social network services	'11-'17
		Reasons for not using social network services	'16-'17
		Social network service usage behavior and perceptions	'10-'17
		Range of personal information disclosure on social network services	'12-'13
		Delivery rate of Information from social network services	'12-'13
		Delivery speed of Information from social network services	'12
		Effects of social network services on life	'16
		Negative experiences with social network services	'12-'13
	Online Community (cafe & club)	Online community Usage Rate	'07.06, '08
		No. of online communities used at least once a month	'07.06, '08
		Online community usage frequency	'07.06, '08
		Online community usage hours per visit	'07.06, '08
		Purpose of using online communities	'07.06, '08
	Blog (Mini-hompy)	Other's blog usage rate	'05.06-'05.12, '06.12, '07.12-'12
		Other's blog usage frequency	'05.06-'05.12, '06.12, '07.12-'09
		Other's blog usage hours	'05.06-'05.12, '06.12
		Reasons for using other's Blog	'07.12-'09
		Blog ownership rate	'06.12-'12
		Period of managing blog	'07.06
		No. of blogs managed at least once a month	'07.06
		Blog update frequency	'07.06-'09
		Blog visiting frequency	'05.06-'05.12, '06.12
		Blog usage hours per visit	'07.06
		Blog usage hours	'05.06-'05.12, '06.12
		Blog managing method	'07.06
		No. of visitors to blog	'07.06, '09
		Expenses on managing blog	'07.06-'09
		Reasons for managing blog	'07.06-'09
		Blog managing behavior and perception	'07.06, '08
		Intentions to manage blog	'05.06-'05.12, '06.12
	Others	Average time spent on communication via online	'14-'17

Category		Survey items		Survey period
Mobile game	Mobile game	Mobile game usage rate		'16
		Mobile game usage frequency and hours		'16
		Mobile game types		'16
		Perception towards mobile game		'16
		Frequency/Size of expenditure on mobile game		'16
		Intentions to spend on mobile game		'16
Internet and Economic Activities	Internet Shopping	Internet shopping usage rate		Yearly
		Internet shopping frequency		Yearly
		Internet shopping expenditure		Yearly
		Items purchased with Internet shopping		Yearly
		Devices used for Internet shopping		'10-'17
		Internet shopping sites		'07.06, '08
		Open market usage, frequency, satisfaction, reasons of satisfaction or dissatisfaction		'06.06
		Negative experience with Internet shopping usage		'04.12, '07.06, '08-'17
		Satisfaction with Internet shopping		'03.06-'06.12, '07.12
		Internet shopping usage behavior and perceptions		'07.06, '08
		Reasons for using Internet shopping		'06.06
		Reasons for not using Internet shopping		'04.12-'09, '14-'17
		Intentions to use Internet shopping		'03.06-'06.12, '07.12-'15
		Payment methods for Internet shopping		'14-'17
		Specific usage manner of credit/debit card on Internet shopping		'15
		Location of sellers		'14-'16
	Social Commerce	Social commerce usage rate		'11-'12
		Social commerce usage frequency		'11-'12
		Social commerce users' satisfaction rate		'11
		Negative experience with social commerce uage		'11-'12
		Purchased Items via social commerce		'11-'12
		Intentions to use social commerce by items		'11
		Social commerce usage behavior and perceptions		'11-'12
		Intentions to use social commerce		'12
	Internet Banking	Method of banking		'06.06, '07.06
		Conducted bank transactions		Yearly
		Internet banking usage rate		'04.12-'17
		Internet banking usage frequency		'07.12-'15
		Devices used for Internet banking		'10-'17
		Internet banking service mainly used		'06.06, '07.06
	Internet Stock Trading	Reasons for using the Internet banking		'06.06
		Intentions to use the Internet banking		'05.06-'12
		Method of trading stock		'06.06
		Stock trading		'10-'15
		Internet stock trading usage rate		'04.12-'05.12, '06.12, '07.12-'15
On-Offline Media Usage	Offline Media	Internet stock trading usage frequency		'07.12-'15
		Internet stock trading access devices		'10-'15
		Reasons for using the Internet stock trading		'06.06
		Intentions to use the Internet stock trading		'05.06-'05.12, '06.12, '07.12-'12
		Experience of using charged contents		'03.06-'04.12
		Charged contents usage rate		'07.12
		Charged contents usage by types		'03.06-'12, '05.06-'12, '06.12, '07.12
		Expenses on using charged contents		'03.06-'05.12, '06.12, '07.12
		Payment method for charged contents		'03.06-'05.12, '06.12, '07.12
		Opinion on charging for contents		'03.06-'05.12, '06.12, '07.12
		Intentions to use charged contents		'03.06-'05.12, '06.12, '07.12
		TV	Watching hours	'03.06-'05.12, '06.12, '07.12-'13
			Watching, watching frequency	'03.06-'05.12, '06.12, '07.12-'14
		Newspaper	Reading hours	'07.12-'13
			Reading, reading frequency	'03.06-'05.12, '06.12, '07.12-'12, '14
	Offline Media	Radio	Listening hours	'13
			Listening, listening frequency	'08-'12, '14
		Magazine/Book	Reading hours	'13
			Reading, reading frequency	'08-'12, '14
		Movie	Watching hours	'13
			Watching, watching frequency	'08-'12, '14
	Music		Listening hours	'13
			Listening, listening frequency	'08

Category	Survey items			Survey period
On-Offline Media Usage	Online Media	TV	Usage, usage frequency	'07.06, '08-'12, '15-'16
			Usage	'17
			Usage ways	'07.06, '08-'09
			Usage hours	'13
		Newspaper	Usage, usage frequency	'07.06, '08-'12, '15-'16
			Usage	'17
			Usage ways	'10
			Usage hours	'13
		Radio	Usage, usage frequency	'07.06, '08-'12, '15-'16
			Usage	'17
			Usage ways	'07.06, '08-'09
			Usage hours	'13
		Magazine /Book	Usage, usage frequency	'07.06, '08-'12, '15-'16
			Usage	'17
			Usage hours	'13
		Movie	Usage, usage frequency	'07.06, '08-'12, '15-'16
			Usage	'17
			Usage ways	'07.06, '08-'09
			Usage hours	'13
		Music	Usage, usage frequency, Usage ways	'08
Computer Usage	Ability to use computer			'03.06-'04.12
	Computer usage rate			'03.12-'05.12, '06.12, '07.12-'17
	Computer usage hours			'03.06-'05.12, '06.12, '07.12
	Computer literacy			'03.06-'05.12, '06.12, '07.12, '14-'17
	Level and purpose of using computer			'03.06-'04.12
	Computer usage frequency			'14-'17
Mobile Phone Usage	Mobile phone usage rate			'05.12, '06.12-'17
	Purpose of using mobile phone			'06.12-'16
	No. of SMS sent/received			'04.12-'05.12, '06.12
	Mobile phone Internet usage, usage frequency, usage hours, charged sites usage, products purchase, expenses			'04.12
	Mobile phone usage hours			'14-'16
Mobile Phone Usage	Mobile Internet usage rate			'16-'17
	Mobile Internet usage frequency			'16
	Mobile Internet usage hours			'16
Smartphone Usage	Smartphone usage rate			'16-'17
	Smartphone usage frequency			'16-'17
	Hours-of-use of smartphones			'16-'17
Others	Internet and Daily Life	Channels for getting information		'03.06-'05.12, '06.12, '07.12-'12
		Communication methods		'04.12, '08-'14
		Channels for getting the news		'11-'13
		Leisure activities		'08
		Document transfer method, goods order method, banking method, stock trading method, personal information management method		'04.12
	e-Book	Portable ICT device usage		'10-'17
		e-Book usage rate		'10
		e-Book usage frequency		'10
		e-Book access devices		'10
		e-Book usage and intention by genre		'10
	Cloud service	Perceptions of e-Book		'10
		Perceptions of cloud services		'13
		Cloud service usage		'13-'17
		Purpose of using cloud services		'13-'17
		Intentions to use cloud service		'13
		Cloud service usage devices		'14-'16
		Purpose of using cloud services		'17

Category	Survey items		Survey period
Others	Internet News	Most used news media	'09
		Internet news usage rate	'09
		Internet news usage frequency	'09
		Contents of Internet news	'09
		The ways to use the Internet news	'09
		Internet news usage behavior and perception	'09
	Internet Job Search	Information channel for job search	'09-'12
		The status of Internet job search	'09
		Type of Internet job search activities	'09
		Internet channel for job information	'09
		Internet job seekers' behavior and perception	'09
	Portal Site	Portal site usage rate	'07.12-'08
		Reasons for using portal site	'08
		Reasons to choose mainly used portal site	'07.12
		Portal site usage by service	'07.12
		Portal site usage behaviors and perception	'08
	File-sharing Service	File-sharing service usage rate	'08
		File download and upload frequency	'08
		Type of mainly used files	'08
		File-sharing service usage behavior and perception	'08
	Internet and public opinion	Information channels for social issues	'07.06
		Information channels for social issues via Internet	'07.06
		On-Offline activities related to social issues	'07.06
		Behavior and perception related to social issues	'07.06
	Internet and education/learning	Type and method of education/learning via Internet	'06.06
	New ICT service recognition, usage and intention		'06.06, '07.06, '08-'09
	Internet and Information	Usage by information types	'04.06-'04.12, '07.06
		Information usage behavior and perception	'07.06
	Internet and work	Information channels for work	'04.12, '06.06
		Internet usage hours for work	'06.06
		E-mail usage and frequency for work	'06.06
		Instant messenger usage and hours for work	'06.06
		Internet impact on work	'04.12, '06.06
	Internet and interpersonal relationships	Methods of keeping interpersonal relationships	'06.06
		Keeping interpersonal relationships via Internet	'06.06
		Internet impact on interpersonal relationships	'06.06
	Location Based Service Usage	Location based service usage by type	'16
		Perception towards LBS	'16
		The most helpful location based service	'16
	Smartphone Usage	Frequently used smartphone application type	'16-'17
		Replacement cycle of smartphones	'16-'17
		Reason for smartphone replacement	'16-'17
		Perception towards smartphones	'16
		Appropriate age to use smartphones	'16
	Wearable Device Usage	Ownership of wearable devices by type	'16-'17
		Frequently used wearable device functions	'16-'17
		Wearable device functions that are expected to be useful	'16
	Domain usage	Intentions to buy and use wearable devices	'16
		Method of website access	'17
		Experience of using Hangeul domain to access websites	'17
		Intent to own a Hangeul domain when operating websites	'17
	Social impact of Internet	Necessity of exposing Hangeul domain for web portal search results	'17
		Internet utilization and change in daily life	'06.06
		Internet impact by society fields	'06.06
	Complaints related to using the Internet, consultation or reporting, and satisfaction with results		'06.06
	Perception of informatization		'03.06-'05.12, '06.12, '07.12
	Frequency, hours and purpose of using the Internet cafe		'04.12
	Software purchase experience and type of software, reasons for not purchasing		'04.12
	Informatization education experience, reasons for not taking informatization education		'04.12
	Use of Internet for health related purposes		'14-'15
	An useful function of smart home service and a task to vitalization		'15
	Discomforts or complaints in the process of installing 'Active X'		'15
	Usage of e-government services		'11-'13

2. Major Revisions of Glossary

Glossary	Definition and scope	Survey period
Internet	Internet via desktop and laptop.	'03.06–'04.06
	Internet via mobile phone as well as desktop and laptop.	'04.12–'17
Internet User (Usage rate)	Person aged 7 and over who has used the Internet at least once a month.	'00.09–'02.04
	Person aged 6 and over who has used the Internet at least once a month.	'02.07–'04.06
	Person aged 6 and over who has used the Internet at least once in the last 1 month.	'04.12–'05.12
	Person aged 3 and over who has used the Internet at least once in the last 1 month.	'06.06–'17
Households with Internet access	Households that can access wired or wireless Internet regardless of actual Internet usage.	'06.06–'06.12
Households with Internet access	Proportion of households that can access wired Internet within the home using xDSL, cable modem, wireless LAN, and FTTH.	'07.06
	Proportion of households among the total that can access (wired) Internet using xDSL, cable modem, Apartment LAN, telephone modem, and wireless LAN.	'07.12–'08
	Proportion of households among the total that can access the Internet regardless of actual Internet usage using xDSL, cable modem, broadband wireless LAN (including Apartment LAN, FTTH), and wireless LAN.	'09–'11
	Proportion of households among the total that can access the Internet regardless of actual usage using xDSL, broadband wireless LAN (including Apartment LAN, FTTH), cable modem, and wireless LAN.	'12
	Proportion of households among the total that can access the Internet regardless of actual usage using xDSL, broadband wireless LAN (including Apartment LAN, aFTTH), cable modem, wireless LAN, and mobile Internet.	'13–'17
Computer	Desktop, laptop.	'03.06–'06.06
	Desktop, laptop, tablet (smart pad), etc.	'06.12–'17
Computer User	Person who uses a computer at least once a month on average.	'03.06–'04.12
	Person aged 3 and over who has used a computer at least once in the last 1 month.	'05.06–'17
Households with Computers	Proportion of households among the total that own a computer (e.g., desktop, laptop, PDA, ultra-mobile PC, tablet PC) in their home.	'07.06
	Proportion of households among the total that own a computer (e.g., desktop, laptop (includes tablet and UMPC), PDA (includes PDA phones and smartphones)) in their home.	'07.12–'09
	Proportion of households among the total that own a computer (e.g., desktop, laptop (includes netbook and tablet), PDA, smartphone).	'10
	Proportion of households among the total that own a computer (e.g., desktop, laptop, tablet) regardless of actual use.	'11–'17
Mobile Phone Use (User)	Person who uses a mobile phone.	'05.12–'06.12
	Person aged 3 and over who has used a mobile phone at least once in the last 1 month.	'07.06–'17
Mobile Internet user (Usage rate)	An Internet user aged 3 and over who has used the Internet using a mobile device capable of wireless Internet access (e.g., feature phone, smartphone, tablet, wearable device) in the last 1 month.	'16–'17
Smartphone user (Usage rate)	An Internet user aged 3 and over who has used the Internet using a smartphone in the last 1 month.	'16–'17

Glossary	Definition and scope	Survey period
E-mail usage rate	Person who uses e-mail.	'03.06-'06.12
	An Internet user aged 3 and over who has used e-mail at least once in the last 1 year.	'07.12-'08
	An Internet user aged 6 and over who has used e-mail in the last 1 year.	'07.06, '09-'17
Instant messenger	A service that enables individuals using the same software to chat, send photos, and communicate realtime on an Internet network without connecting to a website.	'04.12-'06.06
	A service that enables individuals using the same messaging software to exchange messages and data realtime online.	'06.12
	A service that enables individuals using the same software to exchange messages and data realtime online.	'07.12-'15
	A service that enables individuals to exchange data (e.g., text messages, photos) realtime online through a computer, smartphone, etc.	'16-'17
Instant messenger usage rate	Person who uses an instant messenger.	'04.12-'06.06
	An Internet user aged 6 and over who has used an instant messenger in the last 1 year.	'07.12-'17
Social Network Service (SNS)	A service that enhances relationships with friends, colleagues, and acquaintances or forms new relationships online to establish a wide social network. Includes blog, microblog, mini-hompy, and online community (cafe, clubs) services.	'10-'12
	A service that enhances relationships with friends, colleagues, and acquaintances or forms new relationships online to establish a wide social network. Includes mini-hompy, blog, microblog, online community (cafe, clubs), and profile-based networking services.	'13-'15
	An act of online communication and information sharing that enhances relationships with friends, colleagues, and acquaintances or forms new relationships. Includes the act of viewing or observing contents posted by others.	'16-'17
Social network service usage rate	An Internet user aged 6 and over who has used social network services in the last 1 year.	'10-'17
Mobile game	A game played realtime using a mobile device (e.g., smartphone, tablet) that is connected to wireless Internet.	'16
Mobile game usage rate	An Internet user aged 6 and over who has played mobile games in the last 1 year.	'16
Blog/mini-hompy	Personal media for expressing one's interests through journals, columns, articles, and other writings along with postings of data, information, photo, video, and more to share with others.	'07.06
Blog/mini-hompy owner	An Internet user aged 6 and over who runs his or her own blog or mini-hompy.	'07.06
Blog	Personal media for expressing one's interests through journals, columns, articles, and other writings along with postings of data, information, photo, video, and more to share with others. Includes what is referred to as mini-hompy.	'07.12
	Personal media for posting and storing to share with others one's interests through journals, columns, knowledge, photos, and such. Includes what is referred to as mini-hompy.	'08-'12
Blog user and blog owner	Person who has visited another person's blog and one's own blog.	'05.06-'06.12
	[Blog user] A person who has used another person's blog in the last 1 year. [Blog owner] A person who has run his or her own blog in the last 1 year.	'07.12-'12
Online cafe /community	An online gathering of individuals with similar hobbies and interests for exchanging information and building relationships.	'07.06
Online cafe/community usage rate	(Proportion of) individuals among Internet users aged 6 and over who have used the online community he or she had joined within the last 1 year.	'07.06
Online community	An online gathering of individuals with similar hobbies and interests for exchanging information and building relationships. Includes services known as cafe or club.	'08
Online community usage rate	An Internet user aged 6 and over who has used an online community in the last 1 year.	'08
Paid content	Digital content (e.g., software, expert knowledge and data, movies, music, games) that are provided online for a fee.	'07.12
Paid content usage rate	(Proportion of) individuals among Internet users aged 6 and over who have used paid content at least once in the last 1 year.	'07.12
File sharing service	Internet-based service that enables users to store or share music, movies, games, and files. Includes P2P and online storage services.	'08
File sharing usage rate	(Proportion of) individuals among Internet users aged 12 and over who have used file sharing services in the last 1 year.	'08

Glossary	Definition and scope	Survey period
Internet shopping	An act of purchasing goods and services using the Internet. Paid content purchasing is also included in the scope of Internet shopping but searches and Internet banking are not.	'03.06–'06.06
	An act of purchasing goods and services (including reservations and booking) using the Internet. Also includes the purchasing of paid content (e.g., movies, music, games). Product search, price inquiries, and Internet banking are not included.	'06.12
	An act of purchasing goods and services (including reservations and booking) using the Internet. Also includes the purchasing of paid content (e.g., movies, music, games). Product search, price inquiries, and various financial transactions are not included.	'07.06–'15
	An act of purchasing products and services using PC and mobile versions of a shopping mall site. Includes the purchasing of gifticons, paid applications, and paid content.	'16–'17
Internet shopping usage rate	Person who has purchased goods or services through the Internet in the last 6 months	'03.06–'04.12
	An Internet user aged 12 and over who has purchased goods or services through the Internet in the last 1 year	'05.06–'17
Online marketplace	Marketplace operator provides only the online space and payment gateway. Buyer and seller conducts direct one-to-one trade.	'06.06
Internet banking	Financial service that enables account inquiry, fund transfer, bill payment and inquiry, loan inquiry and payment, and other banking transactions using the Internet.	'04.12–'07.06
	Financial service that enables account inquiry, fund transfer, bill payment and inquiry, loan inquiry and payment, and other banking transactions using the Internet. Includes mobile banking.	'07.12–'11
	All banking transactions including savings, transfers, investing, and asset management using the Internet. Includes mobile banking services using a mobile application provided by each financial institution.	'12–'17
Internet banking usage rate	Person who uses Internet banking.	'04.12
	An Internet user aged 12 and over who has used Internet Banking in the last 1 year.	'05.06–'17
Internet stock trading	A financial service that enables users to trade stock in realtime online.	'07.12–'09
	A financial service that enables users to trade stock in realtime online. Includes mobile stock trading.	'10–'15
Internet stock trading usage rate	Person who uses Internet stock trading.	'04.12
	An Internet user aged 12 and over who has used Internet stock trading in the last 1 year.	'05.06–'08
	An Internet user aged 18 and over who has used Internet stock trading in the last 1 year.	'09–'15
Social commerce	Internet shopping service that provides users with the option to purchase products and services (includes reservations and booking) at a discounted price when a certain quantity of buyers over a set term is met.	'11–'12
Social commerce usage rate	An Internet user aged 12 and over who has used social commerce in the last 1 year.	'11–'12
Location-based service	Any service provided to users based on the location of the user, including navigation, local information, taxi, custom advertising, and location sharing.	'16
Location-based service usage rate	An Internet user aged 12 and over who has used any kind of location-based service in the last 1 year.	'16
Cloud service	A user-based computing environment or service that stores software and files, originally saved at a user's personal computer or business server, to "the cloud" to offer users ubiquitous access to the data through an application (e.g., PC web browser, mobile web browser).	'13–'15
	A service that enables users to store their media (e.g., photos, music) and personal files (e.g., documents, addresses) to a web server instead of to external hard drives. The stored files can be downloaded to computers or smartphones to be edited.	'16–'17
Cloud service usage rate	An Internet user aged 12 and over who has used cloud service in the last 1 year.	'13–'17
e-Book	Digitalized books, magazines, and other print publications to enable users to see and read its content using a computer, smartphone, PDA, etc.	'10
e-Book usage rate	An Internet user aged 12 and over who has used an e-Book in the last 1 year.	'10
Wearable device	A general term for an IT device which can be worn on the human body in the form of a watch, glasses, or clothes to collect information on surroundings and changes in the body in realtime for sharing and use through the Internet.	'16–'17
Wearable device usage rate	An Internet user aged 12 and over who has owned or used a wearable device in the last 1 year.	'16–'17

Appendix 2.

Sampling Error



A. Internet Usage Rate

(95% confidence level)

	Internet Usage Rate (%)	Sampling error (%p)	Confidence interval (%)		Relative standard error (%p)
			Minimum	Maximum	
Total individuals	90.3	0.17	90.13	90.47	0.10
(Gender)					
Male	92.7	0.20	92.50	92.90	0.11
Female	87.7	0.23	87.47	87.93	0.13
(Age)					
3-9	83.9	1.12	82.78	85.02	0.68
10s	99.9	0.08	99.82	99.98	0.04
20s	99.9	0.07	99.83	99.97	0.03
30s	99.9	0.07	99.83	99.97	0.03
40s	99.7	0.12	99.58	99.82	0.06
50s	98.7	0.22	98.48	98.92	0.11
60s	82.5	0.81	81.69	83.31	0.50
70+	31.8	0.98	30.82	32.78	1.57
(Region)					
Seoul	90.5	0.51	90.02	91.04	0.29
Busan	93.3	0.55	92.77	93.87	0.30
Daegu	93.6	0.61	92.98	94.20	0.33
Incheon	89.0	0.66	88.33	89.65	0.38
Gwangju	93.9	0.50	93.45	94.45	0.27
Daejeon	91.8	0.68	91.17	92.52	0.37
Ulsan	97.0	0.43	96.52	97.38	0.23
Sejong	92.4	1.05	91.39	93.49	0.58
Gyeonggi	90.3	0.39	89.88	90.66	0.22
Gangwon	83.1	0.96	82.11	84.03	0.59
Chungbuk	87.8	0.79	86.99	88.56	0.46
Chungnam	89.0	0.66	88.36	89.67	0.38
Jeonbuk	89.4	0.69	88.74	90.12	0.39
Jeonnam	83.6	0.77	82.81	84.34	0.47
Gyeongbuk	89.0	0.75	88.23	89.74	0.43
Gyeongnam	91.0	0.52	90.47	91.50	0.29
Jeju	86.7	0.88	85.80	87.55	0.52

B. Computer Usage Rate

(95% confidence level)

	Computer Usage Rate (%)	Sampling error (%p)	Confidence interval (%)		Relative standard error (%p)
			Minimum	Maximum	
Total individuals	72.4	0.26	72.14	72.66	0.19
(Gender)					
Male	77.8	0.35	77.45	78.15	0.23
Female	67.0	0.36	66.64	67.36	0.28
(Age)					
3-9	74.7	1.39	73.31	76.09	0.95
10s	99.4	0.22	99.18	99.62	0.11
20s	98.5	0.28	98.22	98.78	0.15
30s	96.3	0.42	95.88	96.72	0.22
40s	87.5	0.70	86.80	88.20	0.41
50s	60.8	0.92	59.88	61.72	0.77
60s	30.1	0.96	29.14	31.06	1.63
70+	7.7	0.49	7.21	8.19	3.27
(Region)					
Seoul	77.3	0.66	76.67	77.98	0.43
Busan	69.7	1.06	68.68	70.80	0.78
Daegu	76.4	1.02	75.41	77.44	0.68
Incheon	77.9	0.92	76.94	78.79	0.60
Gwangju	72.7	1.07	71.65	73.79	0.75
Daejeon	71.3	1.13	70.21	72.46	0.81
Ulsan	76.0	1.20	74.75	77.15	0.81
Sejong	79.9	1.39	78.54	81.33	0.89
Gyeonggi	78.9	0.61	78.28	79.51	0.40
Gangwon	61.3	1.49	59.78	62.75	1.24
Chungbuk	66.1	1.17	64.95	67.30	0.91
Chungnam	64.2	1.13	63.08	65.33	0.89
Jeonbuk	61.3	1.25	60.09	62.59	1.04
Jeonnam	57.5	1.19	56.29	58.66	1.05
Gyeongbuk	62.6	1.11	61.47	63.68	0.90
Gyeongnam	62.3	1.08	61.22	63.38	0.88
Jeju	73.3	1.59	71.68	74.86	1.11

C. Households with Computers

(95% Confidence Level)

	Households with Computers (%)	Sampling Error (%p)	Confidence Interval (%)		Relative standard error (%p)
			Minimum	Maximum	
Total Households	74.7	0.50	74.21	75.20	0.34
(Householder' s age)					
20s and under	86.8	2.24	84.56	89.04	1.32
30s	92.4	0.92	91.48	93.32	0.51
40s	93.5	0.74	92.76	94.24	0.40
50s	83.3	0.98	82.32	84.28	0.60
60+	40.8	0.94	39.86	41.74	1.17
(Region)					
Seoul	81.1	1.38	79.76	82.52	0.87
Busan	73.2	1.88	71.32	75.08	1.31
Daegu	72.4	2.09	70.33	74.51	1.47
Incheon	81.0	1.59	79.36	82.54	1.00
Gwangju	76.4	2.20	74.20	78.59	1.47
Daejeon	79.8	1.76	78.06	81.57	1.12
Ulsan	81.4	2.20	79.24	83.64	1.38
Sejong	79.9	2.87	77.03	82.78	1.84
Gyeonggi	82.0	1.11	80.88	83.09	0.69
Gangwon	56.9	2.59	54.27	59.45	2.33
Chungbuk	69.0	1.86	67.17	70.90	1.38
Chungnam	67.5	1.74	65.78	69.27	1.32
Jeonbuk	65.0	2.31	62.65	67.26	1.81
Jeonnam	58.4	2.30	56.15	60.74	2.00
Gyeongbuk	60.1	2.28	57.79	62.35	1.94
Gyeongnam	66.1	1.87	64.19	67.94	1.45
Jeju	71.6	2.83	68.74	74.39	2.02

D. Households with Internet Access

(95% confidence level)

	Households with Internet access (%)	Sampling error (%p)	Confidence interval (%)		Relative standard error (%p)
			Minimum	Maximum	
Total Households	99.5	0.08	99.42	99.58	0.04
(Householder' s age)					
20s and under	100.0	0.00	100.00	100.00	0.00
30s	100.0	0.00	100.00	100.00	0.00
40s	100.0	0.06	99.94	100.00	0.03
50s	100.0	0.06	99.94	100.00	0.03
60+	98.4	0.26	98.14	98.66	0.14
(Region)					
Seoul	99.8	0.09	99.68	99.86	0.05
Busan	99.3	0.18	99.15	99.52	0.09
Daegu	99.5	0.16	99.38	99.70	0.08
Incheon	99.4	0.17	99.19	99.52	0.08
Gwangju	99.8	0.11	99.67	99.89	0.06
Daejeon	99.9	0.07	99.86	100.00	0.04
Ulsan	99.6	0.17	99.41	99.75	0.09
Sejong	100.0	0.00	100.00	100.00	0.00
Gyeonggi	99.9	0.04	99.89	99.97	0.02
Gangwon	98.0	0.35	97.67	98.37	0.18
Chungbuk	100.0	0.00	100.00	100.00	0.00
Chungnam	99.8	0.10	99.70	99.90	0.05
Jeonbuk	99.4	0.19	99.21	99.59	0.10
Jeonnam	98.7	0.29	98.45	99.02	0.15
Gyeongbuk	98.3	0.29	98.02	98.59	0.15
Gyeongnam	99.0	0.21	98.81	99.23	0.11
Jeju	98.9	0.33	98.56	99.23	0.17

E. Internet Usage Rate by Region, Gender, and Age

(Unit: %)

	Male								Female							
	3-9	10s	20s	30s	40s	50s	60s	70+	3-9	10s	20s	30s	40s	50s	60s	70+
Total	84.5 (0.94)	99.8 (0.06)	99.9 (0.06)	100.0 (0.03)	99.6 (0.10)	98.5 (0.17)	87.6 (0.59)	39.9 (1.93)	83.2 (0.97)	99.9 (0.06)	100.0 (0.03)	99.9 (0.06)	99.8 (0.07)	98.9 (0.15)	77.6 (0.80)	26.5 (2.29)
Seoul	79.8 (3.20)	99.7 (0.31)	100.0 (0.00)	100.0 (0.00)	99.8 (0.16)	99.2 (0.35)	86.7 (1.87)	40.4 (8.54)	77.5 (3.40)	99.7 (0.32)	100.0 (0.00)	100.0 (0.00)	99.8 (0.16)	99.1 (0.36)	78.6 (2.52)	22.9 (12.08)
Busan	92.8 (2.50)	100.0 (0.00)	100.0 (0.00)	100.0 (0.00)	100.0 (0.00)	100.0 (0.00)	98.4 (0.74)	46.9 (7.65)	89.3 (2.94)	100.0 (0.00)	100.0 (0.00)	100.0 (0.00)	99.7 (0.26)	100.0 (0.00)	93.4 (1.43)	45.1 (7.39)
Daegu	95.0 (2.58)	100.0 (0.00)	99.1 (0.64)	100.0 (0.00)	100.0 (0.00)	97.6 (0.83)	95.6 (1.43)	53.5 (7.42)	88.4 (3.93)	100.0 (0.00)	100.0 (0.00)	100.0 (0.00)	100.0 (0.00)	99.0 (0.49)	87.0 (2.56)	48.5 (6.73)
Incheon	70.6 (6.20)	100.0 (0.00)	100.0 (0.00)	100.0 (0.00)	99.3 (0.52)	97.7 (0.87)	84.9 (2.82)	25.9 (12.19)	61.1 (7.54)	99.5 (0.55)	100.0 (0.00)	100.0 (0.00)	99.6 (0.35)	98.8 (0.59)	74.7 (3.82)	14.2 (14.13)
Gwangju	96.9 (1.59)	100.0 (0.00)	100.0 (0.00)	100.0 (0.00)	100.0 (0.00)	99.2 (0.55)	93.3 (1.99)	55.6 (6.08)	91.5 (2.67)	100.0 (0.00)	100.0 (0.00)	100.0 (0.00)	100.0 (0.00)	98.8 (0.72)	87.8 (2.56)	34.6 (9.04)
Daejeon	82.1 (5.11)	100.0 (0.00)	100.0 (0.00)	100.0 (0.00)	99.6 (0.41)	99.3 (0.47)	90.8 (2.59)	36.5 (10.86)	73.5 (6.63)	99.5 (0.51)	100.0 (0.00)	100.0 (0.00)	100.0 (0.00)	99.7 (0.33)	87.1 (3.10)	26.0 (11.72)
Ulsan	98.7 (1.35)	100.0 (0.00)	100.0 (0.00)	100.0 (0.00)	100.0 (0.00)	100.0 (0.00)	96.3 (1.52)	52.7 (9.86)	100.0 (0.00)	100.0 (0.00)	100.0 (0.00)	100.0 (0.00)	100.0 (0.00)	100.0 (0.00)	98.1 (1.12)	56.6 (7.96)
Sejong	86.3 (5.63)	100.0 (0.00)	100.0 (0.00)	100.0 (0.00)	100.0 (0.00)	95.2 (2.48)	83.9 (5.88)	36.5 (15.35)	88.7 (4.25)	100.0 (0.00)	100.0 (0.00)	100.0 (0.00)	100.0 (0.00)	96.1 (2.30)	80.3 (6.12)	31.5 (15.38)
Gyeonggi	82.7 (2.59)	99.5 (0.35)	99.8 (0.22)	100.0 (0.00)	100.0 (0.00)	99.1 (0.35)	82.0 (2.07)	30.5 (7.82)	83.5 (2.44)	100.0 (0.00)	100.0 (0.00)	100.0 (0.00)	100.0 (0.00)	99.4 (0.28)	68.1 (2.88)	15.3 (11.61)
Gangwon	60.7 (10.84)	100.0 (0.00)	100.0 (0.00)	98.4 (1.15)	97.9 (1.08)	97.1 (1.34)	82.1 (3.30)	32.7 (9.12)	76.9 (7.67)	100.0 (0.00)	99.1 (0.94)	99.2 (0.83)	99.6 (0.44)	94.0 (1.79)	60.2 (5.54)	12.7 (14.96)
Chungbuk	79.7 (6.36)	100.0 (0.00)	100.0 (0.00)	100.0 (0.00)	99.1 (0.66)	97.8 (0.93)	72.9 (4.13)	38.6 (8.46)	93.2 (3.19)	100.0 (0.00)	100.0 (0.00)	99.3 (0.74)	99.1 (0.67)	97.9 (0.85)	68.6 (4.51)	28.1 (8.89)
Chungnam	74.1 (6.44)	100.0 (0.00)	100.0 (0.00)	100.0 (0.00)	100.0 (0.00)	100.0 (0.00)	91.4 (2.19)	39.1 (7.06)	76.6 (5.73)	100.0 (0.00)	100.0 (0.00)	100.0 (0.00)	100.0 (0.00)	99.0 (0.57)	91.8 (1.91)	24.8 (8.46)
Jeonbuk	86.3 (4.10)	100.0 (0.00)	100.0 (0.00)	100.0 (0.00)	98.6 (0.81)	97.2 (1.14)	90.3 (2.40)	43.7 (5.80)	88.5 (3.88)	100.0 (0.00)	100.0 (0.00)	99.3 (0.75)	100.0 (0.00)	98.6 (0.83)	88.3 (2.18)	38.9 (5.81)
Jeonnam	91.2 (2.91)	100.0 (0.00)	99.1 (0.86)	100.0 (0.00)	97.4 (1.18)	95.2 (1.49)	90.6 (2.22)	49.0 (4.83)	81.2 (4.46)	100.0 (0.00)	100.0 (0.00)	100.0 (0.00)	100.0 (0.00)	97.5 (1.13)	51.1 (5.81)	21.0 (8.08)
Gyeongbuk	95.7 (2.23)	100.0 (0.00)	100.0 (0.00)	100.0 (0.00)	98.9 (0.66)	94.0 (1.41)	89.5 (1.94)	53.4 (6.07)	89.2 (3.32)	100.0 (0.00)	100.0 (0.00)	98.3 (0.97)	97.8 (0.92)	97.0 (0.93)	76.4 (3.06)	40.9 (6.48)
Gyeongnam	97.8 (1.26)	100.0 (0.00)	100.0 (0.00)	100.0 (0.00)	100.0 (0.00)	99.2 (0.45)	87.0 (2.47)	37.7 (8.52)	96.5 (1.79)	100.0 (0.00)	100.0 (0.00)	100.0 (0.00)	100.0 (0.00)	100.0 (0.00)	82.7 (2.65)	25.8 (8.98)
Jeju	74.6 (7.40)	100.0 (0.00)	100.0 (0.00)	100.0 (0.00)	98.7 (0.90)	100.0 (0.00)	89.4 (3.75)	19.1 (17.65)	81.5 (5.94)	100.0 (0.00)	100.0 (0.00)	100.0 (0.00)	99.4 (0.63)	100.0 (0.00)	65.5 (6.95)	4.4 (34.58)

※ () is RSE(Relative Standard Error), unit: %p

Appendix 3.

International Comparison



Country	As of 2016		
	Households with Internet	Households with computers	Individuals using the Internet
Korea (Rep.)	99.2	75.3	92.7*
Bahrain	98.0	94.8	98.0
Japan	97.2	81.0	92.0
Norway	97.1	97.6	97.3
Iceland	97.0	98.5	98.2
Luxembourg	96.4	95.9	97.5
Qatar	95.8	89.0	94.3
Saudi Arabia	94.6	69.0	73.8
United Arab Emirates	94.3	91.0	90.6
Denmark	94.0	95.0	97.0
Netherlands	92.2	89.6	90.4
Sweden	92.0	88.5	91.5
Uruguay	61.8	69.5	66.4
United Kingdom	91.3	89.8	94.8
Singapore	91.1	86.6	81.0
Germany	90.8	91.4	89.6
Canada	89.2	86.8	89.8
Macao, China	88.6	77.9	81.6
Australia	88.5	85.9	88.2
Ireland	87.0	84.1	82.2
Switzerland	86.8	89.3	89.4
Estonia	86.2	89.6	87.2
Oman	86.1	87.5	69.8
France	85.9	81.8	85.6
New Zealand	85.7	86.6	88.5
Austria	85.1	83.2	84.3
Belgium	84.8	82.2	86.5
Finland	84.6	84.5	87.7
Kazakhstan	84.4	76.2	76.8
United States	84.0	87.0	76.2
Andorra	83.3	85.1	97.9
Hong Kong, China	82.0	81.0	87.3
Spain	81.9	77.1	80.6
Malta	81.1	81.6	77.3
Slovakia	80.5	80.9	80.5
Poland	80.4	80.1	73.3
Jordan	79.0	53.1	62.3
Hungary	78.6	76.4	79.3
Slovenia	78.4	78.1	75.5
Monaco	78.3	84.1	95.2
Kuwait	77.7	83.5	78.4
Lebanon	77.7	78.1	76.1
Azerbaijan	77.4	64.3	78.2
Latvia	77.3	78.0	79.9
Croatia	77.2	79.5	72.7
Malaysia	76.9	72.2	78.8
Turkey	76.3	58.0	58.3

*Based on population aged 16–74. Source: ITU, Measuring the Information Society Report 2017(<http://www.itu.int/pub/D-IND-ICTOI-2017>)

Country	As of 2016		
	Households with Internet	Households with computers	Individuals using the Internet
Czech Republic	76.1	75.6	76.5
Moldova	76.0	71.0	71.0
Israel	75.7	81.1	79.8
Uzbekistan	75.4	43.9	46.8
Brunei Darussalam	75.0	93.0	75.0
Russian Federation	74.8	74.3	76.4
Cyprus	74.4	71.8	75.9
Portugal	74.1	72.7	70.4
St. Kitts and Nevis	72.6	71.7	76.8
Romania	72.4	74.0	59.5
Lithuania	71.7	70.5	74.4
Trinidad & Tobago	70.9	71.4	73.3
TFYR Macedonia	70.4	69.8	72.2
Montenegro	69.8	58.2	69.9
Italy	69.2	64.7	61.3
Greece	69.1	71.7	69.1
Morocco	68.5	54.9	58.3
Barbados	67.7	71.7	79.5
Bahamas	66.0	70.7	80.0
Costa Rica	64.8	51.7	66.0
Serbia	64.7	65.8	67.1
Mauritius	63.8	61.2	53.2
Argentina	63.8	67.6	70.2
Bulgaria	63.5	60.2	59.8
Belarus	62.5	67.0	71.1
Iran (I.R.)	62.2	61.4	53.2
Cape Verde	62.0	37.4	48.2
Chile	61.1	63.9	66.0
Armenia	60.5	64.7	62.0
Dominica	60.0	54.0	67.0
Thailand	59.8	28.4	47.5
Antigua & Barbuda	58.6	59.1	73.0
Bosnia and Herzegovina	57.1	49.2	69.3
Palestine	56.5	70.4	61.2
China	55.5	52.5	53.2
Seychelles	55.2	56.7	56.5
Ukraine	54.8	65.1	52.5
Maldives	54.7	71.1	59.1
Panama	53.9	42.5	54.0
South Africa	53.0	24.4	54.0
Brazil	52.4	51.0	59.7
St. Vincent and the Grenadines	51.0	63.9	55.6
Georgia	49.8	52.5	50.0
Indonesia	47.2	19.1	25.4
Mexico	47.0	45.6	59.5
Colombia	45.8	45.2	58.1
Grenada	44.7	52.4	55.9

Country	As of 2016		
	Households with Internet	Households with computers	Individuals using the Internet
Botswana	43.7	28.5	39.4
Syria	43.6	49.9	31.9
Egypt	43.3	53.1	39.2
St. Lucia	43.1	43.7	46.7
Tonga	42.6	38.8	40.0
Suriname	42.4	46.4	45.4
Philippines	39.1	34.0	55.5
Tunisia	37.5	39.3	49.6
Albania	37.0	27.7	66.4
Jamaica	36.7	39.1	45.0
Ecuador	36.0	42.3	54.1
Algeria	34.7	38.4	42.9
Gabon	34.4	31.0	48.1
Venezuela	34.0	42.7	60.0
Sudan	33.6	18.0	28.0
Fiji	33.6	41.7	46.5
Bhutan	33.0	26.0	41.8
Ghana	32.5	20.8	34.7
Micronesia	31.4	24.5	33.4
Belize	30.2	36.0	44.6
Vanuatu	29.5	22.6	24.0
Namibia	29.5	20.0	31.0
Samoa	29.1	24.0	29.4
Guyana	28.2	31.2	35.7
Lesotho	27.9	8.2	27.4
Bolivia	26.6	33.9	39.7
Peru	26.4	33.5	45.5
Dominican Rep.	26.2	32.0	61.3
Paraguay	26.0	30.3	51.3
Cambodia	26.0	10.5	25.6
Vietnam	25.9	23.5	46.5
Honduras	24.6	23.5	30.0
Myanmar	24.4	13.6	25.1
Swaziland	24.0	19.2	28.6
Timor-Leste	23.9	16.2	25.2
Mongolia	23.6	23.6	22.3
Côte d'Ivoire	22.7	10.4	26.5
India	22.6	15.2	29.5
Kenya	22.3	14.8	26.0
Pakistan	22.1	16.1	15.5
Zimbabwe	22.1	12.9	23.1
Libya	22.0	23.5	20.3
Sri Lanka	21.1	25.4	32.1
Guatemala	20.5	23.4	34.5
Iraq	20.1	28.0	21.2
S. Tomé & Príncipe	20.0	16.8	28.0
Senegal	19.9	15.1	25.7

Country	As of 2016		
	Households with Internet	Households with computers	Individuals using the Internet
Kyrgyzstan	18,8	21,4	34,5
Lao P.D.R.	18,7	12,3	21,9
Marshall Is.	18,1	20,7	29,8
El Salvador	16,9	20,8	29,0
Nicaragua	16,2	13,1	24,6
Mozambique	16,2	6,5	17,5
Ethiopia	15,4	5,0	15,4
Nigeria	15,2	10,6	25,7
Nepal	15,0	11,2	19,7
Bangladesh	14,5	9,6	18,2
Zambia	14,3	8,1	25,5
Turkmenistan	13,6	13,4	18,0
Malawi	11,5	6,4	9,6
Mauritania	11,2	5,0	18,0
Gambia	11,2	9,3	18,5
Sierra Leone	10,7	4,2	11,8
Burkina Faso	10,6	5,8	14,0
Cameroon	10,5	13,7	25,0
Tadzhikistan	10,3	13,2	20,5
Angola	10,0	10,5	13,0
Equatorial Guinea	9,4	16,0	23,8
Rwanda	9,3	4,5	20,0
Djibouti	9,1	20,3	13,1
Mali	8,9	3,2	11,1
Uganda	8,9	7,6	21,9
Papua New Guinea	8,8	4,3	9,6
Solomon Islands	8,5	7,4	11,0
Tanzania	8,5	3,9	13,0
Togo	7,7	6,8	11,3
Guinea	7,7	2,8	9,8
Cuba	7,5	15,1	38,8
Madagascar	7,0	6,2	4,7
Kiribati	6,9	7,3	13,7
Benin	6,6	5,8	12,0
Yemen	5,9	7,0	24,6
Comoros	5,1	8,7	7,9
Afghanistan	4,8	3,4	10,6
Haiti	4,7	10,1	12,2
Republic of South Sudan	3,6	4,3	6,7
Burundi	3,5	3,4	5,2
Chad	3,5	3,3	5,0
Niger	3,1	2,9	4,3
Central African Rep.	3,1	2,9	4,0
Liberia	3,0	2,6	7,3
Congo (Dem. Rep.)	2,8	2,7	6,2
Guinea-Bissau	2,2	2,8	3,8

Appendix 4. Questionnaire





Article 33 (Confidentiality, etc.) Statistics Act

- ① Matters belonging to the confidential information of individuals, corporations, organizations, etc. that have become known in the course of collecting statistics shall be protected.
- ② Data belonging to the confidential information of individuals, corporations, organizations, etc. that have been collected for the collection of statistics shall not be used for any purpose other than that of collecting statistics.

Organized by Ministry of Science and ICT

Promoted by Korea Internet & Security Agency

Performed by NICE Research & Consulting

2017 Survey on the Internet Usage (Questionnaire for Household)

Dear Respondent,

The Ministry of Science and ICT and the Korea Internet Security Agency conduct the "Survey on the Internet Usage" to understand the ICT environment of households and the Internet usage of individuals (household members).

This survey, an official designated statistics (No.120005), is the only nationwide research on the Internet usage, and thus is widely utilized as important data for Internet development of Korea.

All of the information you provide for this survey will be used solely for statistics purposes and be strictly protected in accordance with the Statistic Law. We would like to kindly ask you to answer each question as directed by the interviewer. We appreciate your contribution.

August 2017

Ministry of Science and ICT

Only for Interviewer	Region and ED Code				Household Code		Respondent Information		Respondent Sort
							Household Member Code	Respondent's Name	
									☐ ① Same household with same member ☐ ② Same household with different member ☐ ③ New Household

Household Information	Address				Phone Number		
	City/Province	Si/Gun/Gu	Eup/Myeon/Dong		Home	() -	☐ ① No telephone ☐ ② Refused
	Street Number	Apartment Number	Dong	Ho	Mobile	() -	☐ ① No telephone ☐ ② Refused
Residence Type		☐ ① Detached house (including row houses) ☐ ② Apartment ☐ ③ Townhouse ☐ ④ House within a commercial building ☐ ⑤ Other					

Directions
● Please answer the questions as directed by the interviewer. ● This (Questionnaire for Households) should be answered by a householder or his/her spouse. ● Please answer the questions in order of the questionnaire, and select the number(s) that apply or write down your answers directly.

**Household Composition** To be answered by a householder or his/her spouse.

- A 'householder' is a person who represents your household. Please fill out the table of 'Household Composition' below beginning with the householder, and if there are more than 10 persons in your household, please use an additional form to allow all members to be represented.
- A 'household member' includes every member of your family or related persons who has been residing in your house for at least one month or longer as of July 1, 2017.
- Do not include your married children and his/her family or household members who do not reside with you or are away from home for the long-term.

Household Member Code	Name	Relationship to Householder	Gender	Date of Birth	Survey Status
		① Householder ② Spouse ③ Child ④ Spouse of child ⑤ Grandchild or his (her) spouse ⑥ Parent or grand parent ⑦ brother/sister or his (her) spouse ⑧ Other(_____)			① Completed ② N/A (e.g., long-term trip) ③ Refused to answer ④ Unable to reach (Not at home) ⑤ Other (_____)
01		① Householder	☐ ① M ☐ ② F	Yr mo	
02			☐ ① M ☐ ② F	Yr mo	
03			☐ ① M ☐ ② F	Yr mo	
04			☐ ① M ☐ ② F	Yr mo	
05			☐ ① M ☐ ② F	Yr mo	
06			☐ ① M ☐ ② F	Yr mo	
07			☐ ① M ☐ ② F	Yr mo	
08			☐ ① M ☐ ② F	Yr mo	
09			☐ ① M ☐ ② F	Yr mo	
10			☐ ① M ☐ ② F	Yr mo	
Total number of household members		_____ Persons	Total number of household members aged 3 and over		_____ Persons

What is the monthly average income of your household?
(unit: KRW)

- ☐ ① less than 1 million ☐ ② 1 to less than 2 million ☐ ③ 2 to less than 3 million
☐ ④ 3 to less than 4 million ☐ ⑤ 4 to less than 5 million ☐ ⑥ 5 to less than 6 million
☐ ⑦ 6 to less than 7 million ☐ ⑧ 7 million or more



※ Please answer questions as of July 1, 2017

※ In this survey, wireless Internet is included in the scope of the Internet

- 01** Do you have the following ICT devices at home regardless of whether it is used? Write down the number of devices you have and check if you use the Internet with that device.

Item	No. of devices	Internet use (O/X)
(1) Desktop	units	
(2) Laptop	units	
(3) TV		
① Analog TV	units	
② Digital TV (e.g., SDTV, HDTV, UHDTV)	units	
③ Smart TV	units	
(4) Game console (e.g., Playstation, PSP, XBOX, Nintendo 3DS)	units	
(5) Smartphone (e.g., Samsung Galaxy S8, LG G6, Apple iPhone 7, Huawei P9, Xiaomi Mi5)	units	
(6) Tablet (e.g., Galaxy Tab, iPad)	units	
(7) Wearable device (e.g., Samsung Gear S, Apple Watch, Xiaomi Miband, Fitbit)	units	
(8) Other (Please specify: _____)	units	

- 02** Do you have access to the Internet (including wireless internet) at home regardless of device?

☐ ① Yes☐ ② No

⇒ Go to Q5

- 03** What types of Internet access services can be used for Internet access at your home? Please select all that apply. (If uncertain, write down the name of your ISP)

- ☐ ① xDSL(e.g., ADSL, VDSL)
☐ ② Cable modem
☐ ③ FTTx (e.g., FTTH, Apartment LAN)
☐ ④ Wireless LAN (e.g., WiFi)
☐ ⑤ Mobile Internet (e.g., 3G, LTE)
☐ ⑥ Broadband Wireless LAN
(e.g., KT Egg, SKT Bridge, LG U+ Router)
☐ ⑦ Other (Please specify: _____)
☐ ⑧ Don't know (ISP name: _____)

- 04** Can you share your Internet signal with household members at home? Please select all the Internet sharing environment that apply

- ☐ ① Internet wireless router (AP) installed at home
(e.g., Anygate, iptime, AP-capable VoIP)
☐ ② Subscribed to a commercial wireless LAN service
(e.g., EGG, other paid Wibro services)
☐ ③ Mobile hotspot using smartphone or tablet
☐ ④ Pick up nearby wireless LAN signal
☐ ⑤ Rooms separately connected to wired Internet
☐ ⑥ Other (Please specify : _____)
☐ ⑦ N/A

⇒ Go to Q5

- 05** Only for households without Internet access

What are the reasons for not having access to the Internet at home? Please select all that apply.

- ☐ ① Lack of interest or no need
☐ ② Lack of confidence, knowledge, skills
☐ ③ High usage fees
☐ ④ Concern about harmful contents
☐ ⑤ Privacy concerns(e.g., abuse of personal information)
☐ ⑥ Security concerns (e.g., virus)
☐ ⑦ Have access to the Internet elsewhere
☐ ⑧ Other (Please specify : _____)



06 What kinds of ICT services do you use at home?
Please select all that apply.

Items	Usage (✓)
(1) Landline	☐
(2) VoIP (e.g., LG U+070, KT Olleh VoIP, SK Broadband B VoIP)	☐
(3) Mobile Phone (including smartphone)	☐
(4) Wired Internet (e.g., KT Olleh Internet, SK Broadband Internet, LG U+ Internet, CJ Hello Internet)	☐
(5) IPTV (e.g., KT Olleh TV, SK Broadband BTV, LG U+ tvG)	☐
(6) Cable TV (e.g., CJ Hellovision, T-broad, D'LIVE, CMB, Hyundai HCN)	☐
(7) Satellite TV (e.g., KT Skylife)	☐
(8) Smart home (e.g., LG IoT@Home, SKT SMART HOME, KT GIGA IoT)	☐

※ The following <Questionnaire for household members> should be answered by each and every member stated in the 'Household Composition'.

For household members aged 3 to 5, please have the respondent answer the questions under parental guidance if necessary.

For Interviewer	
Items	Enter
Name	
Survey date and time	2017 Month ____ Day ____ Hour ____
Visit count	Total () time(s)
Appraisal	① Positive ② Neutral ③ Negative



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This survey, an official designated statistics (No.120005), is the only nationwide research on the Internet usage, and thus is widely utilized as important data for Internet development of Korea.

All of the information you provide for this survey will be used solely for statistics purposes and be strictly protected in accordance with the Statistic Law. We would like to kindly ask you to answer each question as directed by the interviewer. We appreciate your contribution.

August 2017

Minister of Science and ICT

Only for Management	Region and EDs Code				Household Code	Respondent		Co-Respondent	
						Code	Name	Code	Name

Respondent Information	Gender		Date of birth	
	☐ ① Male ☐ ② Female		_____ (yyyy) _____ (MM) (_____ age)	
	Education		Occupation	
	Level	Completion	Position	Occupation Code
	☐ ① No schooling (→ ☐ ① Kindergarten)		☐ ① Yes ⇒	☐ ① Wage worker ☐ ② Employer ☐ ③ Self-employed ☐ ④ Contributing family worker
☐ ② Elementary ☐ ③ Middle ☐ ④ High ☐ ⑤ College ☐ ⑥ University ☐ ⑦ University (Master's program) ☐ ⑧ University(PhD)	☐ ① currently enrolled in school ☐ ② leave of absence ☐ ③ dropped out ☐ ④ completed ☐ ⑤ graduated	☐ ② No ⇒	Housewife ☐ ① Yes ☐ ② No	☐ ① Yes ☐ ② No
			Student	☐ ① Yes ☐ ② No
			Job search	☐ ① Yes ☐ ② No

Directions
● Please answer the questions as directed by the interviewer. ● This (Questionnaire for Household Members) should be answered by each and every member aged 3 and over (who were born prior to June 30, 2014) who reside in the household. For household members aged 3 to 5, questions can be answered under parental guidance if necessary. ● Please make sure to write down the same 'household member code' based on the 'Household Composition' of (Questionnaire for Household) ● Please answer questions in the order of the questionnaire, and select the number(s) that apply or provide your answers directly to the interviewer.



- ※ Please answer questions as of July 1, 2017
 ※ In this survey, wireless Internet is included in the scope of the Internet

► Computer and Mobile Phone

01 When did you most recently use a computer?
 (e.g., desktop, laptop, tablet)

- ☐ ① In the last 24 hours
☐ ② More than 24 hours to less than 1 week
☐ ③ More than 1 week to less than 1 month
☐ ④ More than 1 month to less than 3 months
☐ ⑤ More than 3 months to less than 1 year
☐ ⑥ More than 1 year ago
☐ ⑦ Never

⇒ Go to Q4

⇒ Go to Q4

02 On average how often do you use a computer?
 (e.g., desktop, laptop, tablet)

- ☐ ① At least once a day
☐ ② At least once a week but not every day
☐ ③ At least once a month but not every week
☐ ④ Less than once a month

⇒ Those under age 12 (born after July 1, 2005) go to Q4

03 Only for age 12 and over What kind of IT tasks can you perform? Please select all that apply.

Tasks	(✓)
(1) Copying or moving file or folder	☐
(2) Using copy and paste tools to duplicate or move information within a document	☐
(3) Sending e-mails with attached files (e.g., document, picture)	☐
(4) Using basic arithmetic formulae in a spreadsheet	☐
(5) Connecting and installing new devices (e.g., a printer, modem, memory card)	☐
(6) Finding, downloading, installing, and configuring software	☐
(7) Creating electronic presentations with presentation software (e.g., MS PowerPoint, Hancorn Office)	☐
(8) Transferring files between PC and other devices (e.g., moving photos from camera to computer)	☐
(9) Writing a computer program using a specialized programming language	☐
(10) Using Internet search engines (e.g., Naver, Daum, Google)	☐
(11) Posting online	☐
(12) Changing software preferences	☐
(13) Changing Internet browser security settings	☐
(14) Creating a website	☐
(15) Installing or replacing an operating system (e.g., Windows)	☐

04 When did you most recently use a mobile phone (including smartphone)?

- ※ Please include all activities that you do with your mobile phone (e.g., calling, texting, gaming, Internet, instant messenger).
 ※ Please select the answer regardless of whether you own the device or pay for its usage.

- ☐ ① In the last 24 hours
☐ ② More than 24 hours to less than 1 week
☐ ③ More than 1 week to less than 1 month
☐ ④ More than 1 month to less than 3 months
☐ ⑤ More than 3 months to less than 1 year
☐ ⑥ More than 1 year ago
☐ ⑦ Never

► Internet (including wireless Internet)

05 When did you most recently use the Internet?

- ※ Includes all internet accessible devices (e.g., mobile phone, smartphone, tablet, IPTV, VoIP)
 ※ For Internet access for any purpose (e.g., personal, business, education) and location (e.g., home, school, work).

- ☐ ① In the last 24 hours
☐ ② More than 24 hours to less than 1 week
☐ ③ More than 1 week to less than 1 month
☐ ④ More than 1 month to less than 3 months
☐ ⑤ More than 3 months to less than 1 year
☐ ⑥ More than 1 year ago
☐ ⑦ Never

⇒ Ages 3 to 5 (born after July 1, 2012), go to Q53.
 Age 6 and over, go to Q47

06 On average how often and how long do you use the Internet?

- ※ Regardless of purpose, location, and device.
 ※ Please select the frequency on the left and write the hours of use on the right.

- ☐ ① At least once a day
 (Average _____ hour _____ min per day)
☐ ② At least once a week
 (Average _____ hour _____ min per day)
☐ ③ At least once a month
 (Average _____ hour _____ min per day)
☐ ④ Less than once a month
 (Average _____ hour _____ min per day)

07 How did you access the Internet in the last 1 year? Please select all that apply.

- ☐ ① Wired Internet
☐ ② Fixed wireless (WiFi)
☐ ③ Mobile wireless router (e.g., KT Egg, SKT Bridge, LG U+ Router.)
☐ ④ Mobile phone network (3G/4G LTE)



08 For how long did you use the Internet?
Please indicate your experience of Internet use.

※ Commercialization of Internet in Korea begins in 1994

- ☐ ① Less than 1 year
☐ ② 1 year to less than 2 years
☐ ③ 2 year to less than 5 years
☐ ④ 5 years to less than 10 years
☐ ⑤ 10 years to less than 15 years
☐ ⑥ 15 years or more

09 At which of these other places did you use the Internet?
Please select all that apply.

- ☐ ① Home
☐ ② Another person's home (e.g., friend, relatives)
☐ ③ Work
☐ ④ Educational facility (e.g., school, kindergarten)
☐ ⑤ Commercial Internet facility
(e.g., Internet cafe, restaurant, cafe, airport, hotel)
☐ ⑥ Community Internet facility
(e.g., post office, public office, library)
☐ ⑦ Anywhere (with mobile, smartphone, tablet, etc.)
☐ ⑧ Other(Please specify: _____)

⇒ Those who answered ① Wired Internet in Q7, go to Q13

10 When was the last time you accessed the Internet using a mobile device and not a wired Internet connection?

※ A mobile device refers to all devices which can use wireless Internet (e.g., feature phone, smartphone, tablet, and wearable device).

- ☐ ① In the last 24 hours
☐ ② More than 24 hours to less than 1 week
☐ ③ More than 1 week to less than 1 month
☐ ④ More than 1 month to less than 3 months
☐ ⑤ More than 3 months to less than 1 year
☐ ⑥ More than 1 year ago ⇒ Go to Q13
☐ ⑦ Never ⇒ Go to Q13

11 When was the last time you accessed the Internet using a smartphone (not a regular mobile phone)?

- ☐ ① In the last 24 hours
☐ ② More than 24 hours to less than 1 week
☐ ③ More than 1 week to less than 1 month
☐ ④ More than 1 month to less than 3 months
☐ ⑤ More than 3 months to less than 1 year
☐ ⑥ More than 1 year ago ⇒ Go to Q13
☐ ⑦ Never ⇒ Go to Q13

12 On average, how often and how long do you use the Internet with your smartphone (not a regular mobile phone)?

※ Please select the frequency on the left and write the hours of use on the right.

- ☐ ① At least once a day
(Average _____ hour _____ min per day)
☐ ② At least once a week
(Average _____ hour _____ min per day)
☐ ③ At least once a month
(Average _____ hour _____ min per day)
☐ ④ Less than once a month
(Average _____ hour _____ min per day)

13 For which of the following activities did you use the Internet?
Please select all that apply. If you used a computer, check (✓) the box on the left. If you used a mobile device (e.g., smartphone, tablet), check (✓) the box on the right.
If you used both, check (✓) both boxes.

Activities	Computer (✓)	Mobile device (✓)
(1) Activities		
① E-mail	☐	☐
② Social Network Service (e.g., Facebook, Instagram, KakaoStory, Naver Blog, Naver BAND)	☐	☐
③ Instant Messenger (e.g., KakaoTalk, Line), chatting, or online discussion boards	☐	☐
④ Interacting with health or education professionals	☐	☐
⑤ Voice/video calling (e.g., Skype, Kakao Voice call, FaceTime)	☐	☐

13-1 Only for Internet users for communication

On average, how often and how long do you use the Internet for Communication?

- ☐ ① 1 Day (Average _____ hour _____ min)
☐ ② 1 Week (Average _____ hour _____ min)
☐ ③ 1 Month (Average _____ hour _____ min)
☐ ④ 6 Months(Average _____ hour _____ min)
☐ ⑤ 1 Year (Average _____ hour _____ min)

Activities	Computer (✓)	Mobile device (✓)
(2) Getting information or data		
① About goods or services	☐	☐
② Reading online newspapers (article) or news magazines	☐	☐
③ About health information	☐	☐
④ About travel, transportation, accommodations, or location information	☐	☐
⑤ Download/upgrade software · application (non-game)	☐	☐
(3) Leisure activities		
① Listening to web radio, watching web television	☐	☐
② Listening to music	☐	☐



Activities	Computer (✓)	Mobile device (✓)
③ Watching images, video, movies	☐	☐
④ Playing network games with other players	☐	☐
(4) Job search		
① Looking for a job or sending a job application (including part time)	☐	☐
② Participating in professional networks	☐	☐
(5) Education and learning		
① Doing an online course	☐	☐
② Consult wikis (e.g., Wikipedia), or any online source (e.g., Naver Jisikin)	☐	☐
(6) Homepage management		
① Managing personal homepage	☐	☐
② Uploading and sharing photos or videos (e.g., Instagram, KakaoStory, YouTube)	☐	☐
③ Blogging	☐	☐
(7) Other		
① Internet banking	☐	☐
② Selling goods or services	☐	☐
③ Using services related to travel or travel related accommodation	☐	☐
④ Other(Please specify: _____)	☐	☐

⇒ There are no more questions for Internet users aged 3 to 5 (born after July 1, 2012) who have used the Internet in the last 1 month (selected '1' to '3' in Q5). All others aged 3 to 5, go to Q53

14 How often do you do the following activities through Internet?

Item	Yes (✓)	No (✓)
(1) TV watching	☐	☐
(2) Newspaper (news article) reading	☐	☐
(3) Radio listening	☐	☐
(4) Magazine/Book reading	☐	☐
(5) Movie watching	☐	☐

⇒ Under age 12 (born after 1st July, 2005) go to Q17

15 Only for age 12 and over How do you protect your computer from security threats? Please select all that apply.

- ☐ ① Install and update security software (e.g., firewall, antivirus)
- ☐ ② Use strong password (combination of letters, numbers, special characters)
- ☐ ③ Copy and backup to external devices (e.g., flash memory, server)
- ☐ ④ Change password periodically
- ☐ ⑤ Other (Please specify: _____)
- ☐ ⑥ Do nothing

16 Only for age 12 and over What negative experiences have you had when using the Internet? Please select all that apply.

- ☐ ① Virus and malicious code infectio
- ☐ ② Personal information abuse or privacy invasion
- ☐ ③ Financial loss due to phishing or pharming
- ☐ ④ Financial loss due to fraudulent payment
- ☐ ⑤ None

► E-mail Usage (Only for age 6 and over)

E-mail?

A method of exchanging digital messages from one user to another user using a computer or mobile device.
e.g.) Sending and receiving e-mail for personal/business use, checking electronic bills, sorting spam.

17 When did you most recently use e-mail?

- ☐ ① In the last 24 hours
- ☐ ② More than 24 hours to less than 1 week
- ☐ ③ More than 1 week to less than 1 month
- ☐ ④ More than 1 month to less than 3 months
- ☐ ⑤ More than 3 months to less than 1 year
- ☐ ⑥ More than 1 year ago
- ☐ ⑦ Never

⇒ Go to Q19

⇒ Go to Q19

18 On average how often do you use e-mail?

Frequency	Business	Personal
(1) At least once a day	☐	☐
(2) At least once a week but not every day	☐	☐
(3) At least once a month but not every week	☐	☐
(4) Less than once a month	☐	☐
(5) Never	☐	☐



► **Instant Messenger Usage**
(Only for age 6 and over)

Instant Messenger?

A service that offers realtime transfer of texts and photo over the Internet using a computer or a mobile device.

e.g.) KakaoTalk, LINE, Facebook Messenger, Nate On, Telegram, Between, Wibee Talk, Skype, Google Hangout, WeChat, WhatsApp, BBM, Snow, QQ Mobile, Viber, Snapchat.

- 19 When did you most recently use instant messenger services? If you used a computer, check (✓) the box on the left. If you used a mobile device, check (✓) the box on the right.

Frequency	Computer (✓)	Mobile device (✓)
(1) In the last 24 hours	☐	☐
(2) More than 24 hours to less than 1 week	☐	☐
(3) More than 1 week to less than 1 month	☐	☐
(4) More than 1 month to less than 3 months	☐	☐
(5) More than 3 months to less than 1 year	☐	☐
(6) More than 1 year ago	☐	☐
(7) Never	☐	☐

Go to Q23 if both Computer and Mobile device are checked for ⑥ or ⑦

- 20 On average, how often do you use instant messenger services per day?

- ☐ ① Less than 5 times
☐ ② 5 times to less than 10 times
☐ ③ 10 times to less than 20 times
☐ ④ 20 times to less than 30 times
☐ ⑤ 30 times or more

- 21 What are the instant messenger services you frequently use?
Please list 3 choices in order of preference.
You can list only one or two choice(s).

1st() → 2st() → 3st()

- ① KakaoTalk ② LINE
 ③ Facebook Messenger ④ NateOn
 ⑤ Telegram ⑥ Between
 ⑦ Wibee Talk ⑧ Skype
 ⑨ Google Hangout ⑩ WeChat
 ⑪ WhatsApp ⑫ BBM (BlackBerry Messenger)
 ⑬ Snow ⑬ QQ Mobile
 ⑮ Viber ⑮ Snapchat
 ⑰ Other(Please specify: _____)

- 22 What kind of function do you use via Instant messenger?
Please select all the functions that you have used.

- ☐ ① Chatting
☐ ② Voice, video calling
☐ ③ Gifting (e.g., emoticon, gif/icon)
☐ ④ Gaming
☐ ⑤ Sharing photos, videos, files
☐ ⑥ Map, location sharing
☐ ⑦ Voting
☐ ⑧ Partnership service
☐ ⑨ Parcel delivery tracking
☐ ⑩ Other (Please specify: _____)

► **Social Network Service (SNS)**
(Only for age 6 and over)

Social Network Service (SNS) ?

A service that enhances relationships with friends, colleagues, and acquaintances online or forms new relationships through communication and the sharing of information. It includes activities such as reading or observing contents posted by others.

e.g.) Facebook, Instagram, KakaoStory, blogs, Naver BAND, Naver Cafe, Twitter, Google+, Weibo, Tumblr, LinkedIn, Pinterest, Plkicast.

- 23 When did you most recently access social network services?
If you used a computer, check (✓) the box on the left.
If you used a mobile device, check (✓) on the right.

Frequency	Computer (✓)	Mobile device (✓)
(1) In the last 24 hours	☐	☐
(2) More than 24 hours to less than 1 week	☐	☐
(3) More than 1 week to less than 1 month	☐	☐
(4) More than 1 month to less than 3 months	☐	☐
(5) More than 3 months to less than 1 year	☐	☐
(6) More than 1 year ago	☐	☐
(7) Never	☐	☐

Go to Q29 if both Computer and Mobile device are checked for ⑥ or ⑦

**24** On average, how often do you use social network services?

- ☐ ① 1 Day
(Average _____ times, _____ min per 1 times)
- ☐ ② 1 Week
(Average _____ times, _____ min per 1 times)
- ☐ ③ 1 Month
(Average _____ times, _____ min per 1 times)
- ☐ ④ 6 Months
(Average _____ times, _____ min per 1 times)
- ☐ ⑤ 1 Year
(Average _____ times, _____ min per 1 times)

25 Please select all the devices that you use to access social network service.

- ☐ ① Desktop
- ☐ ② Laptop
- ☐ ③ Smartphone (e.g., Galaxy, iPhone, G, VEGA)
- ☐ ④ Tablet (e.g., Galaxy Tab, iPad)
- ☐ ⑤ TV (Internet-connected TVs such as Smart TV)
- ☐ ⑥ Other (Please specify: _____)

26 What social network service do you specifically use most often? Please list 3 choices in order of frequency. You can list only one or two choice(s).

1st () → 2st () → 3st ()

- ① Facebook
- ② Instagram
- ③ KakaoStory
- ④ Naver Blog
- ⑤ Daum Tistory
- ⑥ Naver BAND
- ⑦ Naver Cafe
- ⑧ Daum Cafe
- ⑨ Twitter
- ⑩ Google+
- ⑪ Weibo
- ⑫ Tumblr
- ⑬ LinkedIn
- ⑭ Pinterest
- ⑮ Pikicast
- ⑯ Other (Please specify: _____)

27 What are the reasons you use social network services? Please select 3 that apply.

1st () → 2st () → 3st ()

- ① To socialize and network
- ② To check out posts or contents created by others
- ③ To record personal daily life
- ④ To share personal interests like hobbies and leisure activities
- ⑤ To share information, knowledge, news
- ⑥ To express oneself or manage stress
- ⑦ To spend time
- ⑧ To sell products and services, or to advertise
- ⑨ To login to other websites (social login)
- ⑩ Other (Please specify: _____)

⇒ Those under age 12 (born after July 1, 2005) go to Q47

28 Only for age 12 and over To what extent do you agree to each of the below when using social network services?

Items	Disagree	Some what disagree	Neutral	Some what disagree	Agree
(1) Fastest access to news and information	①	②	③	④	⑤
(2) Improved relationships with existing acquaintances	①	②	③	④	⑤
(3) Share loads of information (e.g., location, schedule)	①	②	③	④	⑤
(4) Engage more in politics and social issues	①	②	③	④	⑤
(5) Get useless information and unnecessary requests	①	②	③	④	⑤
(6) Compare my life to others	①	②	③	④	⑤
(7) Anxious about the responses to what I shared (e.g., posts, photos)	①	②	③	④	⑤
(8) Work to take photos and videos specifically for posting	①	②	③	④	⑤

**29 Only for non-users of social network services**

What makes you reluctant to use social network services?
Select all that apply.

- ☐ ① No need
☐ ② Uncomfortable connecting with strangers
☐ ③ Privacy concerns (Abuse or leakage of personal information);
☐ ④ Distrust of the information available on social network service;
☐ ⑤ Uselessness of the information available on social network service;
☐ ⑥ Lack of confidence, knowledge, skills
☐ ⑦ Lack of time
☐ ⑧ Other (Please specify: _____)

⇒ Those under age 12 (born after July 1, 2005) go to Q47

▶ Cloud Service
 (Only for age 12 and over)
Cloud Service?

A service that allows users to store photos, music, and other media files as well as personal files (e.g., contact, documents) on not an external storage but web server. These files can be downloaded and edited on the user's computer or mobile device.

e.g.) Drive (e.g., Naver Cloud, Google Drive, iCloud, Olleh U Cloud, SKT T Cloud, LG U+Box, MS OneDrive, Dropbox), document sharing (e.g., Google Docs, MS Office 365), contacts/calendars (e.g., Google Calendar, Naver Calendar, Naver Address Book)

30 When did you most recently use Cloud services?

- ☐ ① In the last 24 hours
☐ ② More than 24 hours to less than 1 week
☐ ③ More than 1 week to less than 1 month
☐ ④ More than 1 month to less than 3 months
☐ ⑤ More than 3 months to less than 1 year
☐ ⑥ More than 1 year ago
☐ ⑦ Never

⇒ Go to Q32

⇒ Go to Q32

31 What is your purpose for using Cloud services?
 Please select all that apply.

Purpose	Business (✓)	Personal (✓)
(1) Saving data and information (e.g., upload/download file, share folder/file)	☐	☐
(2) Editing documents (e.g., Google Docs, MS Office 365)	☐	☐
(3) Streaming multimedia contents (e.g., music, video)	☐	☐
(4) Syncing across multiple devices (e.g., address, schedule)	☐	☐
(5) Other (Please specify: _____)	☐	☐

▶ Internet Shopping (including paid contents)
 (Only for age 12 and over)
Internet Shopping?

The act of purchasing products or services over the Internet. Includes both web-based internet shopping using Internet shopping malls, online second-hand shops, and social commerce, and mobile-based internet shopping such as buying paid apps and gifticons.

e.g.) Purchases made on web/mobile shopping mall sites (e.g., Auction, Gmarket, emartmall); purchases on social commerce sites (e.g., coupang, TMON); and purchases of paid apps (e.g., Google Play, Apple App Store)

32 When did you most recently purchase goods or services (including reservations) through the Internet? If you used a computer, check (✓) the box on the left. If you used a mobile device, check (✓) the box on the right.

Frequency	Computer (✓)	Mobile device (✓)
(1) In the last 24 hours	☐	☐
(2) More than 24 hours to less than 1 week	☐	☐
(3) More than 1 week to less than 1 month	☐	☐
(4) More than 1 month to less than 3 months	☐	☐
(5) More than 3 months to less than 1 year	☐	☐
(6) More than 1 year ago	☐	☐
(7) Never	☐	☐

Go to Q39 if both Computer and Mobile device are checked for ⑥ or ⑦

33 How often do you purchase goods or services through the Internet on average?

- ☐ ① 1 Day (Average _____ 회)
☐ ② 1 Week (Average _____ 회)
☐ ③ 1 Month (Average _____ 회)
☐ ④ 6 Months (Average _____ 회)
☐ ⑤ 1 Year (Average _____ 회)

34 How much do you spend on purchasing goods or services through the Internet on average?
 (monthly average expenditure from July 2015 to June 2017)

Monthly Average _____ Won



- 35** How did you pay for the goods or services through the Internet in the last 1 year? Please select all that apply and select whether it was PC Internet shopping or mobile Internet shopping.

Items	PC Internet shopping (✓)	Mobile Internet shopping (✓)
(1) Credit card	☐	☐
(2) Debit card	☐	☐
(3) Online payment service - Credit card	☐	☐
(4) Online payment service - Debit card	☐	☐
(5) Carrier billing (telecom billing services)	☐	☐
(6) Internet banking (electronic transfer)	☐	☐
(7) ATM (electronic transfer)	☐	☐
(8) Mobile banking (electronic transfer)	☐	☐
(9) Prepaid gift card, online voucher	☐	☐
(10) Mileage, rewards points	☐	☐
(11) Other (Please specify: _____)	☐	☐

- 36** What types of goods or services did you buy or order over the Internet? Please select all that apply.

Items	PC Internet shopping (✓)	Mobile Internet shopping (✓)
(1) Books, magazines, newspapers (includes downloads and delivery)	☐	☐
(2) Clothing, footwear, sporting goods, accessories	☐	☐
(3) Household items and kitchen goods (e.g., detergent, disposables)	☐	☐
(4) Baby supplies (e.g., diaper, stroller, layette)	☐	☐
(5) Computer equipment and parts	☐	☐
(6) Computer and video games (includes downloads and delivery)	☐	☐
(7) Computer software (non-games) (includes downloads and delivery)	☐	☐
(8) Cosmetics	☐	☐
(9) Financial products (e.g., stock, insurance)	☐	☐
(10) Food, groceries	☐	☐
(11) Health food (e.g., red ginseng, vitamins)	☐	☐
(12) Movies, video, images (includes downloads and delivery)	☐	☐

Items	PC Internet shopping (✓)	Mobile Internet shopping (✓)
(13) Music products (includes downloads, streaming, delivery)	☐	☐
(14) Home appliances, electronic products (e.g., camera, cell phone)	☐	☐
(15) Furniture, interior supplies (e.g., bed, desk, closet)	☐	☐
(16) Tickets to entertainment events (e.g., sports event, theatre, concerts)	☐	☐
(17) Travel products (e.g., travel package, accommodation, vehicle hire)	☐	☐
(18) Education	☐	☐
(19) Online vouchers (e.g., voucher for cafe, convenience store, gifticon)	☐	☐
(20) Paid contents		
① Paid applications	☐	☐
② Ringtones, Emoticons, background images	☐	☐
③ Webtoons	☐	☐
④ In-game purchases (both PC and mobile)	☐	☐
⑤ Adult contents	☐	☐
(21) Other (Please specify: _____)	☐	☐

- 37** Please select all the devices that you use when using Internet shopping. Please select all that apply.

- ☐ ① Desktop
☐ ② Laptop
☐ ③ Smartphone (e.g., Galaxy, iPhone, G, VEGA)
☐ ④ Tablet (e.g., Galaxy Tab, iPad)
☐ ⑤ TV (Internet-connected TV such as Smart TV)
☐ ⑥ Other (Please specify: _____)

- 38** What negative experiences have you had when buying or ordering goods or services through the Internet? Please select all that apply.

- ☐ ① Unable to cancel order
☐ ② Slow delivery
☐ ③ Non-delivery of order
☐ ④ Wrong or defective product delivery
☐ ⑤ Difficult to return or refund product
☐ ⑥ Lack of customer support or service
☐ ⑦ Other (Please specify: _____)
☐ ⑧ No experience

⇒ Go to Q40

**39 Only for Internet shopping non-users**

What are the reasons for not buying or ordering goods or services through the Internet? Please select all that apply.

- ☐ ① Lack of interest or no need
☐ ② Prefer to shop in person
☐ ③ Security concerns (e.g., credit card information)
☐ ④ Privacy concerns (e.g., personal information)
☐ ⑤ Distrust about product warranty or delivery
☐ ⑥ Inconvenient and complex payment process
☐ ⑦ Lack of confidence, knowledge, skills
☐ ⑧ Other (Please specify: _____)

► **Internet Banking (Incl. Mobile Banking) usage**
 (Only for age 12 and over)

Internet Banking?

Internet banking includes all online banking activities such as savings, money transfers, investments, and asset management. It also includes mobile banking services provided through mobile applications offered by financial institutions.

e.g.) PC-based Internet banking services offered by banks and mobile banking services such as KB Star Banking, Shinhan S-Bank, NH Smart Banking and KEB Hana Smartphone Banking

40 Have you conducted a banking transaction in the last 1 year?

※ Includes all actual banking transactions both offline and online

- ☐ ① Yes ☐ ② No ⇒ Go to Q43

41 When did you most recently use Internet banking?

If you used a computer, check (✓) the box on the left.
 If you used a mobile device, check (✓) the box on the right.

Frequency	Computer (✓)	Mobile device (✓)
(1) In the last 24 hours	☐	☐
(2) More than 24 hours to less than 1 week	☐	☐
(3) More than 1 week to less than 1 month	☐	☐
(4) More than 1 month to less than 3 months	☐	☐
(5) More than 3 months to less than 1 year	☐	☐
(6) More than 1 year ago	☐	☐
(7) Never	☐	☐

Go to Q56 if both Computer and Mobile device are checked for ⑥ or ⑦

42 Please select all the devices that you use when using Internet Banking. Please select all that apply.

- ☐ ① Desktop
☐ ② Laptop
☐ ③ Smartphone (e.g., Galaxy, iPhone, G, VEGA)
☐ ④ Tablet (e.g., Galaxy Tab, iPad)
☐ ⑤ TV (Internet-connected TV such as Smart TV)
☐ ⑥ Other (Please specify: _____)

► **The following questions are about web domain usage.**
 (Only for age 12 and over)

Domain?

A domain is an Internet address composed of letters (English or Korean), numbers (0–9), or hyphens. It is entered into the address field of a web browser to display the unique access route to a certain website.



e.g.) Hangeul domain: a domain containing at least 1 Korean character
 한국인터넷진흥원.한국, 청와대.한국, 네이버.한국, 삼성.한국

English language domain: a domain composed of only English letters
 kisa.or.kr, president.go.kr, naver.com, samsung.co.kr

43 How do you normally access websites? Please select all that apply.

- ☐ ① By directly entering the domain on the web browser address field (e.g., www.kisa.or.kr)
☐ ② By searching for keywords on the web browser address field (e.g., enter 'KISA' in the web browser address field to access the website recommended by the default search engine of the browser)
☐ ③ By searching for keywords on web portals (e.g., search for 'KISA' on Naver)
☐ ④ By bookmarking frequently visited websites
☐ ⑤ Other (_____)

44 Have you ever directly entered a Hangeul domain on the web browser (e.g., Internet Explorer, Chrome) address field?

- ☐ ① Yes ☐ ② No



45 Do you have the intent to own (register) a Hangeul domain if you operate a website?

- ☐ ① Yes
☐ ② Yes, if available
☐ ③ No

46 Do you think it is necessary for public and educational institutions to use Hangeul domains as their web address and expose them on web portal search results?

예) **NAVER** 과학기술정보통신부

통합검색 뉴스 이미지 사이트 블로그 실시간검색 지식백과

과학기술정보통신부 (과학기술정보통신부.한국
직원/조직도 · 위치 · 뉴스/일일 · 업무/정책 · 소개 · 정보공개 · 정책정보 · 도
과학기술, ICT 융합 4차 산업혁명 선도.

- ☐ ① Yes ☐ ② No ☐ ③ No opinion

► Handheld ICT devices ownership/Internet usage
Please answer regardless of Internet usage

47 Only for age 12 and over Do you have the following portable ICT device (i.e., wireless Internet device) regardless of whether it is used? Please select all that apply.

※ Regarding (2) smartphone, please check (✓) the boxes if the device is subscribed to a cellular service.

Devices	Own (✓)	Internet use (✓)
(1) Laptop	☐	☐
(2) Smartphone (e.g., Samsung Galaxy S8, LG G5, Apple iPhone 7, HUAWEI P9, Xiaomi Mi5)	☐	☐
(3) Tablet (e.g., Galaxy Tab, iPad)	☐	☐
(4) PDA	☐	☐
(5) MP3 player	☐	☐
(6) Game console (e.g., PSP, Nintendo 3DS)	☐	☐
(7) E-book reader (e.g., Crema, iriver sam, Kindle, Kobo)	☐	☐
(8) Wearable device (e.g., Samsung Gear S, Apple Watch, Xiaomi MiBand, Fitbit)	☐	☐
(9) Other (Please specify: _____)	☐	☐

► Wearable devices usage
(Only for age 6 and over)

Wearable Device?

A general term for an IT device that can be worn on the human body as a form of a watch, glasses, or clothes to collect information on the user's surroundings and bodily changes in realtime to share and use it on the Internet.
 e.g.) smart band, smart watch, safety chain for children.

48 What kinds of wearable devices do you have now?
Please select all that apply.

Items	Own (✓)
(1) Watch type (e.g., Samsung Gear S, Apple Watch, LG Watch Urbane, Sony SmartWatch)	☐
(2) Band type (e.g., MiBand, Fitbit, Samsung Gearfit, Sony SmartBand)	☐
(3) Safety tracker for children and the elderly (e.g., LG kizOn, T JOON, Olleh ttok-ttok, Juniver Toki, LINE kids phone, Lineable, GPS tracker)	☐
(4) Clothes type (e.g., Smart clothing, underwear, shoes)	☐
(5) Accessory type (e.g., Swarovski smart bracelet, Logbar ring)	☐
(6) Glasses type (e.g., Google Glass, Intel Recon Jet, Epson BT200)	☐
(9) Other (Please specify: _____)	☐
(8) Do not have a wearable device ⇒ Go to Q40	☐

49 Only for wearable device owners Please select all the functions you use on you wearable device.

- ☐ ① Making/receiving text messages or phone calls via smartphone connection
☐ ② Searching for information online
☐ ③ Managing health (e.g., heart rate and calorie tracking)
☐ ④ Tracking trip and distance
☐ ⑤ Navigating the road
☐ ⑥ Enjoying virtual and augmented reality
☐ ⑦ Tracking location and safety of children and the elderly
☐ ⑧ Other (Please specify: _____)

⇒ There are no more questions for Internet users under age 12 who have used the Internet in the last 1 month (selected '① to '③' in Q5). All others under 12, go to Q53



► **Smartphone usage**
(Only for age 12 and over who own a smartphone)

50 Only for smartphone owners

What kind of apps do you most frequently use?
Please list 3 choices regardless of preference.

(), (), ()

- ① Photo and video
- ② News
- ③ Communication (e.g., chat, social network service)
- ④ Games
- ⑤ Local info (e.g., restaurant)
- ⑥ Music and media
- ⑦ Navigation and map
- ⑧ Shopping
- ⑨ Health and sports
- ⑩ Travel (e.g., reservation)
- ⑪ Reference (e.g., dictionary, encyclopedia)
- ⑫ Transportation (e.g., bus, train, air services)
- ⑬ Weather information (e.g., fine dust)
- ⑭ Books, reading, webtoons
- ⑮ Productivity (e.g., calendar, memo)
- ⑯ Other (Please specify: _____)

51 Only for smartphone owners On average, how long do you usually keep your smartphone, before buying a new one?

On average, _____ Year(s) _____ Month(s)

52 Only for smartphone owners

Why do you buy a new smartphone? Please choose 1 based on your most recent experience.

- ☐ ① Contract expiration
- ☐ ② Machinery malfunction
- ☐ ③ Lost phone
- ☐ ④ Interest in new phone
- ☐ ⑤ Tired of existing phone
- ☐ ⑥ Outdated functions
- ☐ ⑦ Need for work, study
- ☐ ⑧ Other (Please specify: _____)
- ☐ ⑨ Never bought a phone new

⇒ There are no more questions for Internet users who have used the Internet in the last 1 month (selected '① to ③' in Q5).

► **Internet non-users**

※ Only for those who selected '④~⑦' in Q5

53 What are the reasons for never using or not using the Internet in the last 1 month? Please select all that apply.

- ☐ ① Lack of interest or no need
- ☐ ② Lack of confidence, knowledge, skills
- ☐ ③ High usage fees
- ☐ ④ Lack of equipment (e.g., computer)
- ☐ ⑤ Lack of time
- ☐ ⑥ Concern about harmful contents
- ☐ ⑦ Privacy concerns (e.g., abuse of personal information)
- ☐ ⑧ Security concerns (e.g., virus)
- ☐ ⑨ Other (Please specify: _____)

54 Do you have intention to use the Internet in the future?

- ☐ ① Yes
- ☐ ② No

※ Thank you for completing the questionnaire.

For further information
please use our call center.

☎ 070-7178-4133

**Classification of Occupations**

Code	Occupation	Example
1	Managers	• Public and Enterprise Senior Officials, Administrative and Business Support Management Occupations, etc
2	Professionals and Related Workers	• Information and Communication Professionals and Technical Occupations, Engineering Professionals and Technical Occupations, Health, Social Welfare and Religion Related Occupations, Education Professionals and Related Occupations, etc
3	Office Workers	• Administration and Accounting Related Occupations, Finance and Insurance Clerks, Legal and Inspection Occupations, Consulting, Statistical and Information Clerks and Other Clerks , etc
4	Service Workers	• Hairdressing, Wedding and Medical Assistance Service Workers, Transport and Leisure Services Occupations, Cooking and Food Service Occupations • Police, Fire Fight and Security Related Service Occupations
5	Sales Workers	• Sales, Store Sales, Door to Door, Street and Telecommunications Sales Related Occupations
6	Skilled Agricultural, Forestry and Fishery Workers	• Agricultural, Livestock Related Skilled Occupations, Skilled Forestry Occupations, Skilled Fishery Occupations
7	Craft and Related Trades Workers	• Metal Coremakers, Transport and Machine, Electric and Electronic, Construction and Mining, Other Technical Occupations
8	Equipment, Machine Operating and Assembling Workers	• Equipment, Machine Operating and Assembling Workers
9	Elementary Workers	• Construction and Mining Related Elementary Occupations, Transport Related, Production Related, Production Related, Household Chores and Cooking Attendants and Sales Related Elementary Workers
A	Armed Forces	• Armed Forces

Appendix 5.

Summary Report



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I . Introduction

Population

Nationwide households and population aged 3 and over

Sample Eligibility

25,000 nationwide households and its members aged 3 and over

Sampling Size

25,000 households and 62,540 household members

Data Collection

Face-to-face interview

Fieldwork Period

August 1 – September 30, 2017



Sampling Method

Stratified Multi-stage Cluster Sampling

Estimation

Post-stratified estimation (by applying weight)

- Households : based on 'Household Projections for Korea' (by Statistics Korea) as of 2017
- Household members : based on 'Population Projections for Korea' (by Statistics Korea) as of 2017

Sampling Error

Internet Usage Rate $\pm 0.17\%p$ (at the 95% confidence level)

Sample Design

- **Sample Households** : 25,000 households were proportionately distributed using the square root proportional allocation method, based on the number of households in 17 metropolitan cities and provinces ('Household Projection' as of 2017). These households were then proportionately allocated based on the number of households (the Year 2015 Population and Housing Census) in each Dong/Eup/Myeon-bu in the metropolitan cities and provinces.
- **Sample Extraction** : Enumeration District (EDs) of 'the Year 2010 Population and Housing Census (by Statistics Korea)' are used as the sampling frame. 3,000 enumeration districts were classified into 17 clusters using the square root proportional allocation method, the results of which was used to conduct systematic sampling. Ultimately, 8–9 households were extracted for each enumeration district.

* Cluster categorization method within each enumeration district: K-means cluster analysis using enumeration district feature including housing type, housing tenure status, number of rooms in the house, the age of the head of the household, and his/her education level.

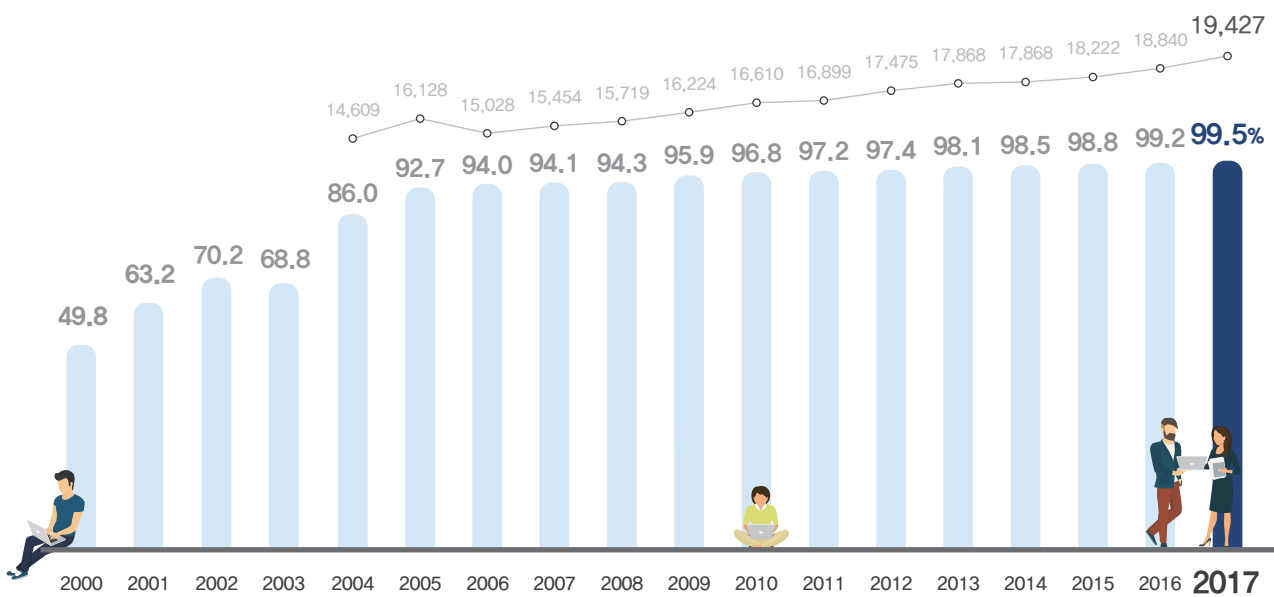
II. Internet Access and Use

1. Households with Internet Access

Almost all households (99.5%) with Internet access

As of July 2017, 99.5% of all households, or 19,427 thousand out of 19,524 thousand households, could access the Internet, which is a 0.3%p increase (587 thousand households) compared to the previous year.

Figure 1 • Households with Internet Access (% , thousand)– All Households

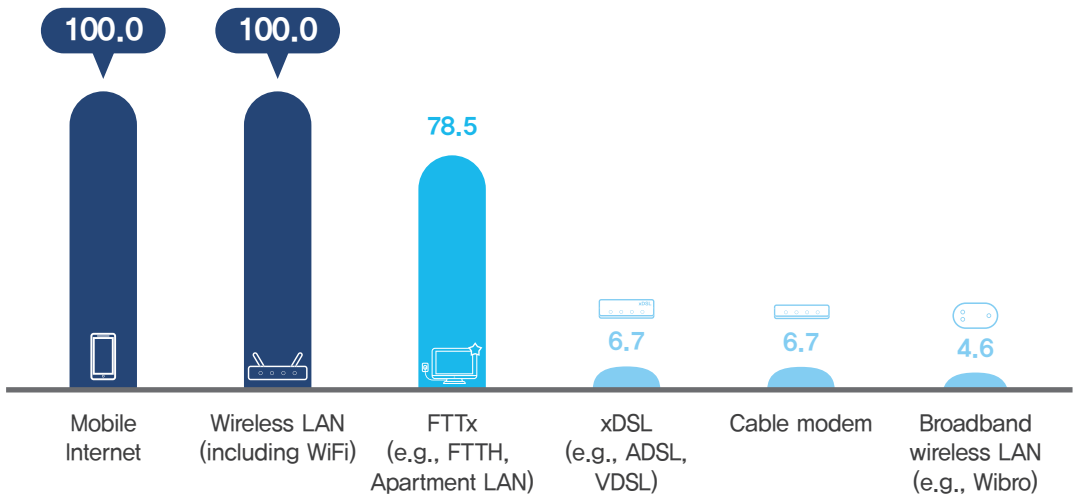


A. Internet Access Type

Households access the Internet ‘Mobile Internet’ (100.0%), ‘Wireless LAN’ (100.0%), and ‘FTTx’ (78.5%)

Among households with Internet access, 100.0% was able to use ‘Mobile Internet’ and ‘Wireless LAN’, 78.5% had ‘FTTx’, 6.7% had ‘xDSL’, 6.7% had ‘Cable modem’, and 4.6% had ‘Broadband wireless LAN’.

Figure 2 • Internet Access Type (multiple responses, %) – Households with Internet access



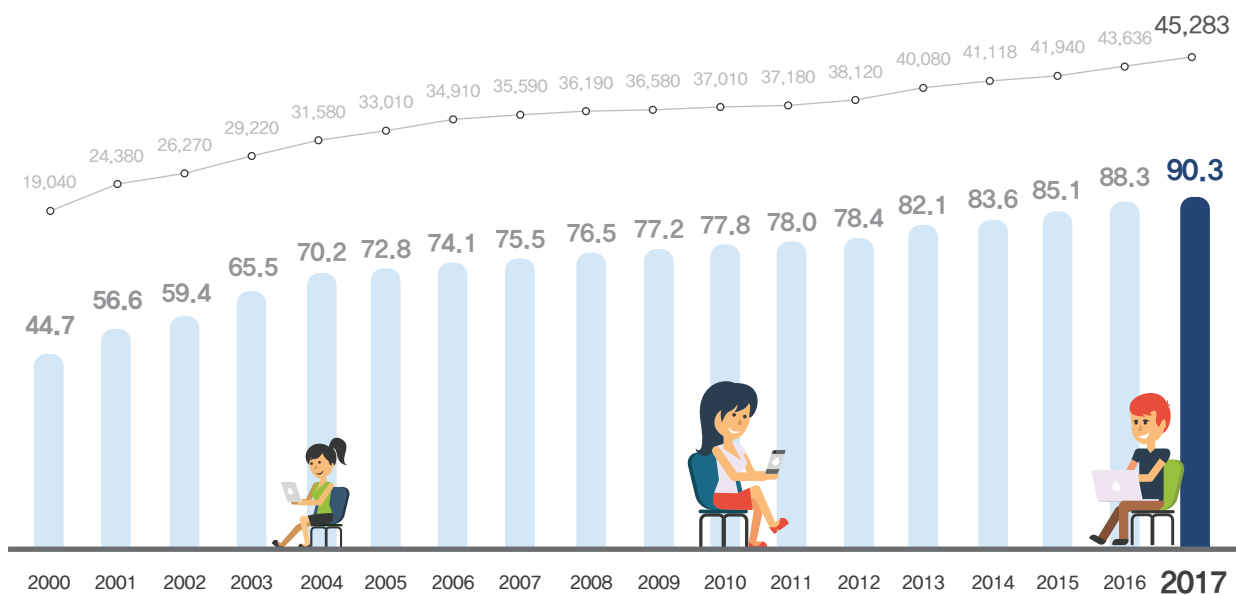
II. Internet Access and Use

2. Internet Usage Rate

9 out of 10 Koreans (90.3%) 'Internet Users'

As of July 2017, the rate of Internet users (individuals who have used the Internet at least once in the last 1 month) among the population aged 3 and over (50,173 thousand in total) was 90.3% (45,283 thousand), which is a 14.8%p (9,693 thousand) increase compared to 10 years ago and an 11.9%p (7,163 thousand) increase from 5 years ago.

Figure 3 • Internet Usage Rate and Internet Users (% , thousand) — Population aged 3 and over

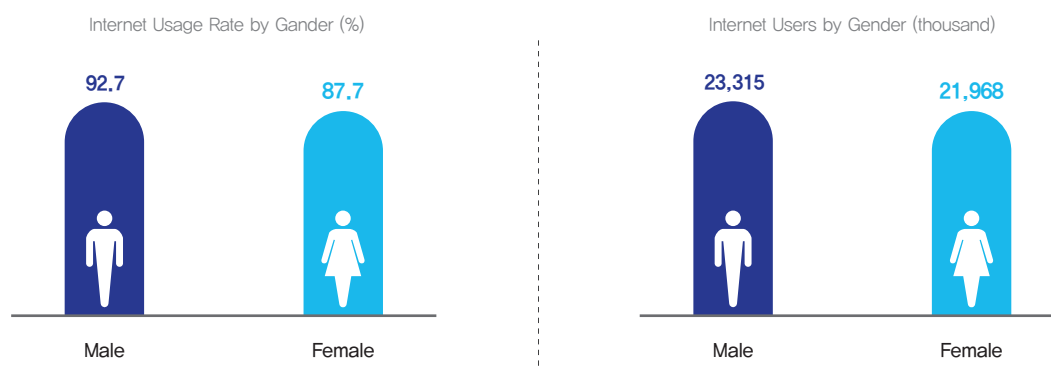


A. Internet Usage Rate by Gender

Internet usage rate higher in males (92.7%) than in females (87.7%)

92.7% of males aged 3 and over (23,315 thousand) were Internet users, which is 5.0%p (1,347 thousand) higher than female Internet users.

Figure 4 • Internet Usage Rate and Internet Users by Gender (% , thousand) — Population aged 3 and over



II. Internet Access and Use

B. Internet Usage Rate by Age

8 out of 10 individuals in their 60s (82.5%) Internet users

Most individuals in their 10s, 20s and 30s (99.9%), 40s (99.7%), and 50s (98.7%) were found to be Internet users, while 8 out of 10 individuals in their 60s (82.5%) reported that they used the Internet. Meanwhile, those aged 70 and over had a lower Internet usage rate (31.8%) compared to other age groups, but their number is rising more rapidly than the younger groups (17.9% in 2015, 25.9% in 2016).

Figure 5 • Internet Usage Rate and Internet Users by Age (% , thousand) – Population aged 3 and over

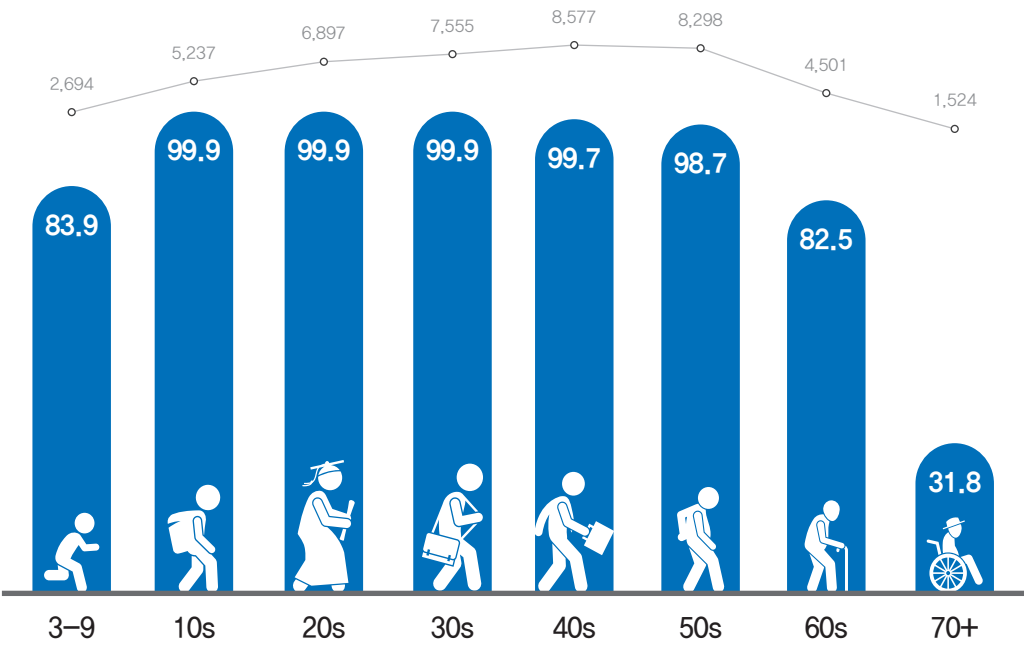
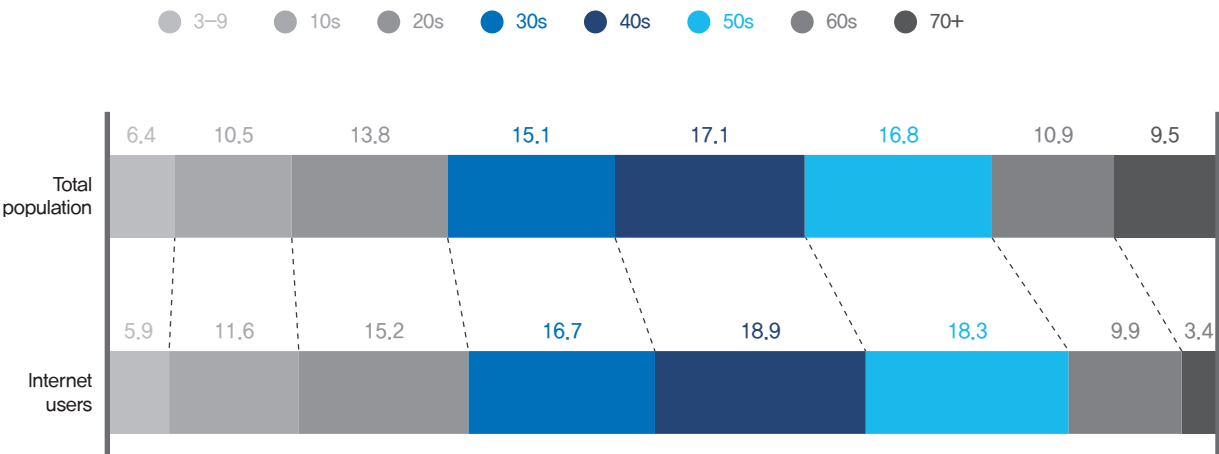


Figure 6 • Age Composition of Internet Users (%) – Internet users aged 3 and over



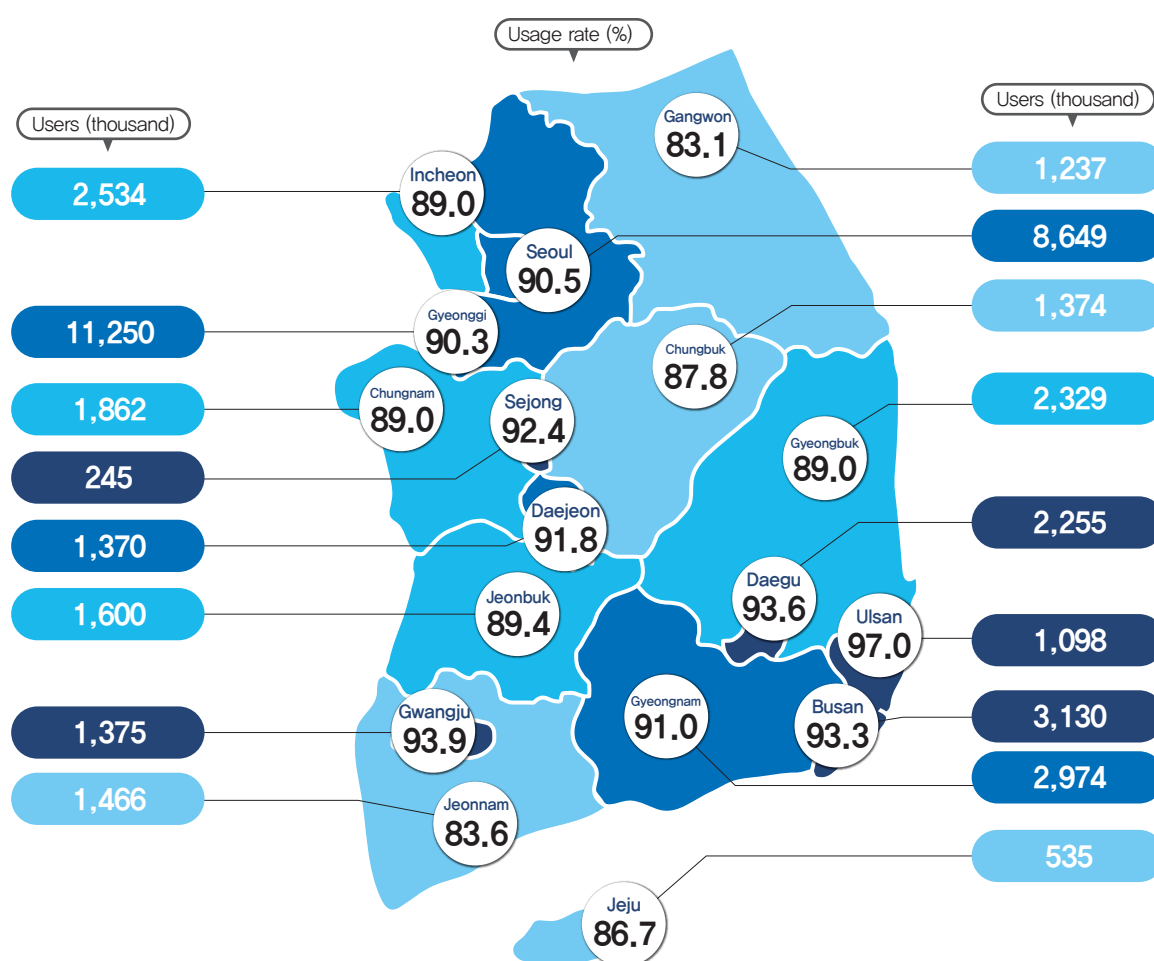
II. Internet Access and Use

C. Internet Usage Rate by Region

Ulsan with the highest Internet usage rate (97.0%) and Gangwon, the lowest (83.1%)

Among the 17 metropolitan cities and provinces in Korea, Ulsan (97.0%), Gwangju (93.9%), Daegu (93.6%), Busan (93.3%), and Sejong (92.4%) had relatively high Internet usage rates, while Gangwon (83.1%), Jeonnam (83.6%), Jeju (86.7%), and Chungbuk (87.8%) displayed lower Internet usage rates.

Figure 7 • Internet Usage Rate and Internet Users by Region (% , thousand) — Population aged 3 and over



II. Internet Access and Use

3. Internet Usage Pattern

A. Internet Usage Frequency and Hours

Internet usage for 96.4% 'At least once a day'

Among Internet users aged 3 and over, 96.4% were found to use the Internet 'At least once a day'. 54.9% used the Internet an average of 14 hours or more per week. Meanwhile, the average hours-of-use of the Internet was 15 hours 42 minutes (or 2 hours 15 minutes per day on average).

Figure 8 • Internet Usage Frequency (%)

— Internet users aged 3 and over

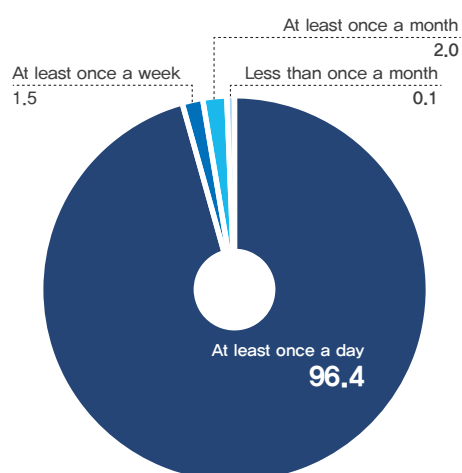
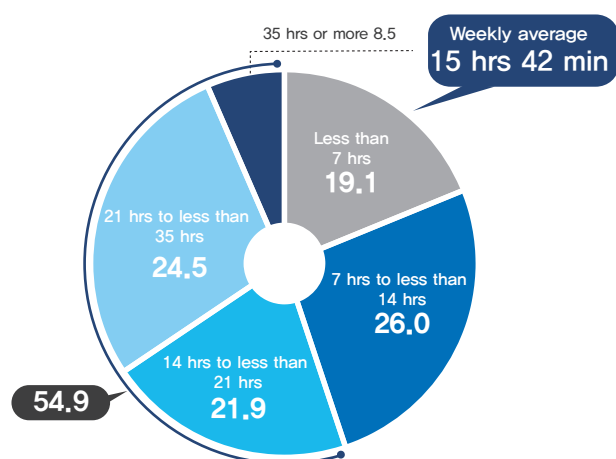


Figure 9 • Hours-of-Use of the Internet per Week (%)

— Internet users aged 3 and over

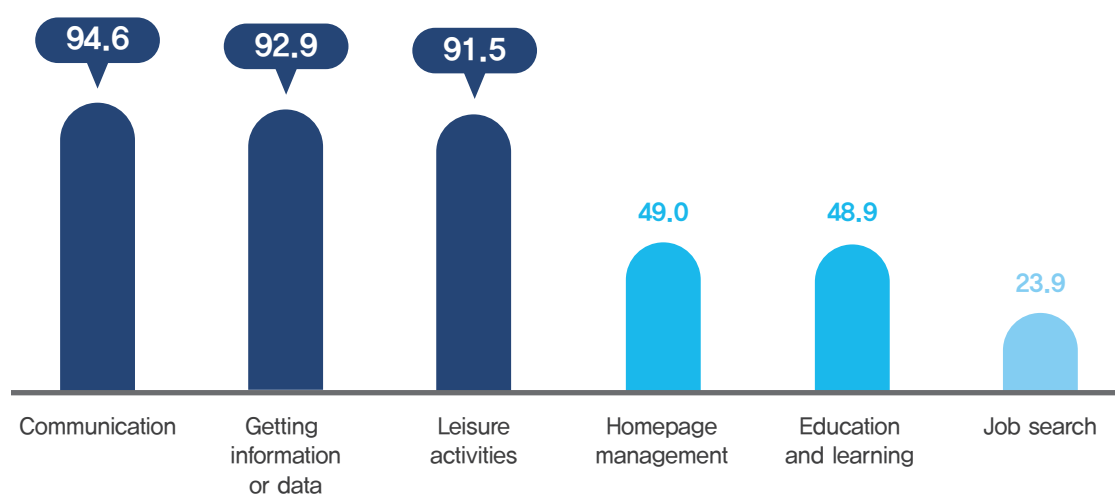


B. Purpose of Using the Internet

Main purpose of Internet usage 'Communication' (94.6%)

Internet users aged 3 and over used the Internet for 'Communication' via instant messenger, social network service, and e-mail (94.6%), 'Getting information or data' via web search and news reading (92.9%) and 'Leisure activities' such as listening to music, watching videos, and playing online games (91.5%).

Figure 10 • Purpose of Using the Internet (multiple responses, %) — Internet users aged 3 and over



III. Internet and Mobility

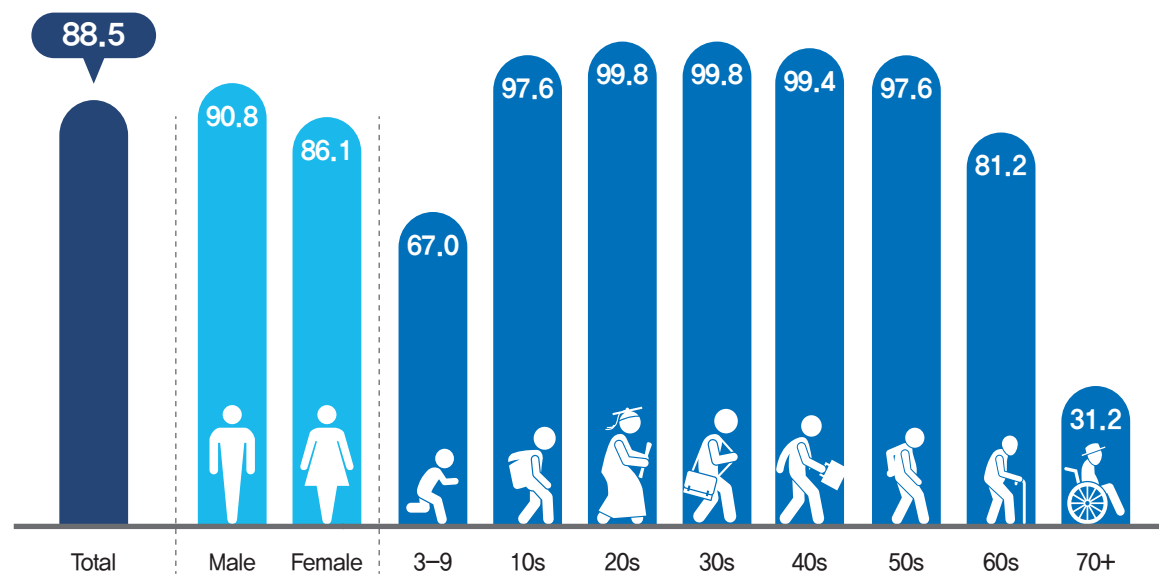
1. Mobile Internet Usage

A. Mobile Internet Usage Rate

88.5% of population aged 3 and over Mobile Internet users

As of July 2017, the rate of mobile Internet users (individuals who have used wireless Internet via a feature phone, smartphone, tablet, or wearable device at least once in the last 1 month) among Internet users aged 3 and over was 88.5%. 4.7p more males used mobile Internet (90.8%) than females (86.1%), and more individuals in their 20s (99.8%), 30s (99.8%), and 40s (99.4%) were Internet users in comparison to those aged 3 to 9 (67.0%) and those 70 and over (31.2%).

Figure 11 • Mobile Internet Usage Rate (%) – Population aged 3 and over



B. Households and Household Members with Mobile Devices

Smartphone ownership for most households (94.1%) and household members (89.5%)

Regardless of their Internet usage, 94.1% of all households owned a smartphone. 89.5% of individuals aged 6 and over owned a smartphone.

Figure 12 • Households with Mobile Devices (multiple responses, %) – All Households

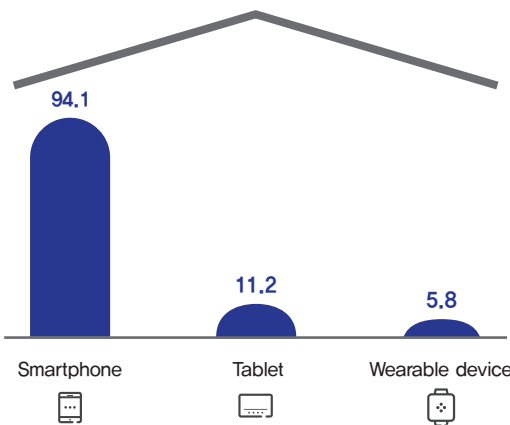
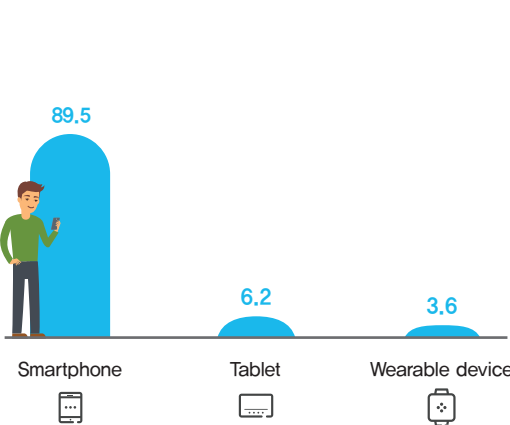


Figure 13 • Household Members with Mobile Devices (multiple responses, %) – Population aged 6 and over



III. Internet and Mobility

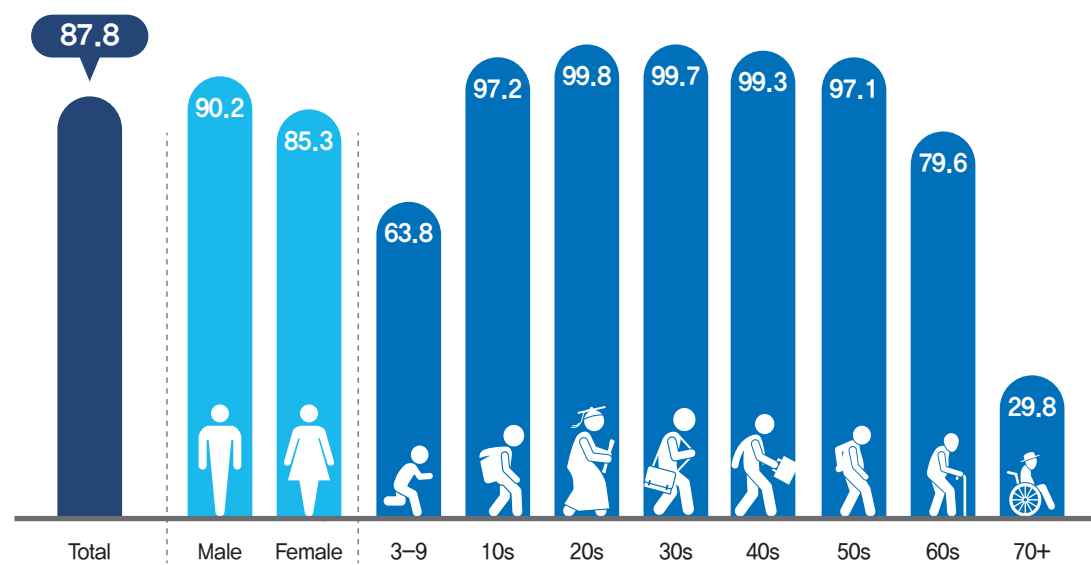
2. Smartphone Usage

A. Smartphone Usage Rate

87.8% of population aged 3 and over are smartphone users

The rate of smartphone users (individuals who have used wireless Internet via smartphone at least once in the last 1 month) among the population aged 3 and over was 87.8%. 4.9%p more males used wireless Internet (90.2%) than females (85.3%), and more individuals in their 20s (99.8%), 30s (99.7%), and 40s (99.3%) were smartphone users in comparison to those aged 3 to 9 (63.8%) and those 70 and over (29.8%).

Figure 14 • Smartphone Usage Rate (%) — Population aged 3 and over



B. Smartphone Usage Frequency and Hours

Smartphone usage for 97.8% 'At least once a day'

The rate of smartphone users aged 3 and over who used the device 'At least once a day' was 97.8%, 31.3% used the device 14 hours or more per week on average. Meanwhile, the weekly average hours of smartphone use was 10 hours 17 minutes (or 1 hour 28 minutes per day on average).

Figure 15 • Smartphone Usage Frequency (%)
— Smartphone users aged 3 and over

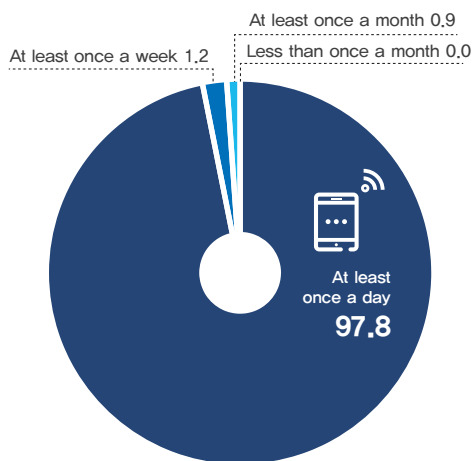
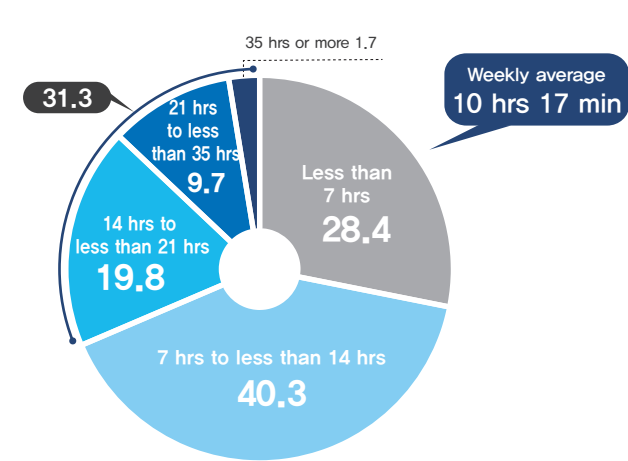


Figure 16 • Hours-of-use Smartphones Use per Week (%)
— Smartphone users aged 3 and over



III. Internet and Mobility

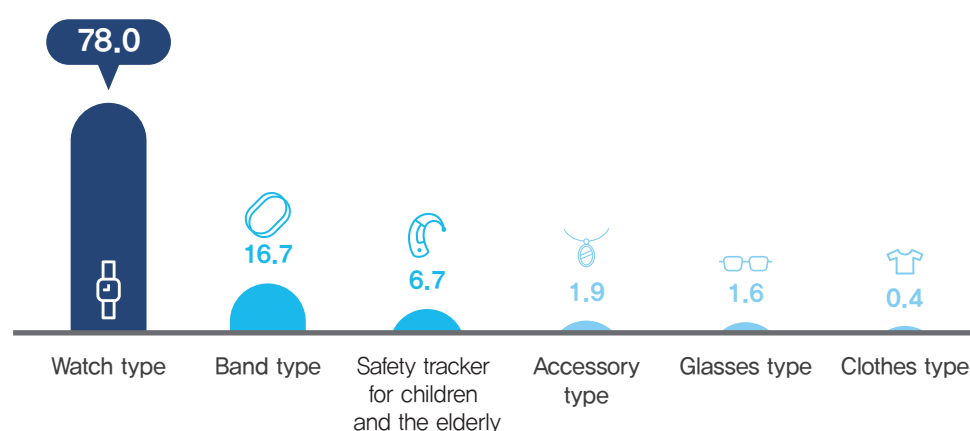
3. Wearable Device Ownership

A. Ownership of Wearable Devices by Type

Most wearable devices a 'Watch type' device (78.0%)

Among owners of wearable devices aged 6 and over, 78.0% were found to have a 'Watch type' device, while 16.7% had a 'Band type' device, 6.7% had a 'Safety tracker for children and the elderly' device, and 1.9% had an 'Accessory type' device.

Figure 17 • Ownership of Wearable Devices by Type (multiple responses, %) — Wearable device owners aged 6 and over

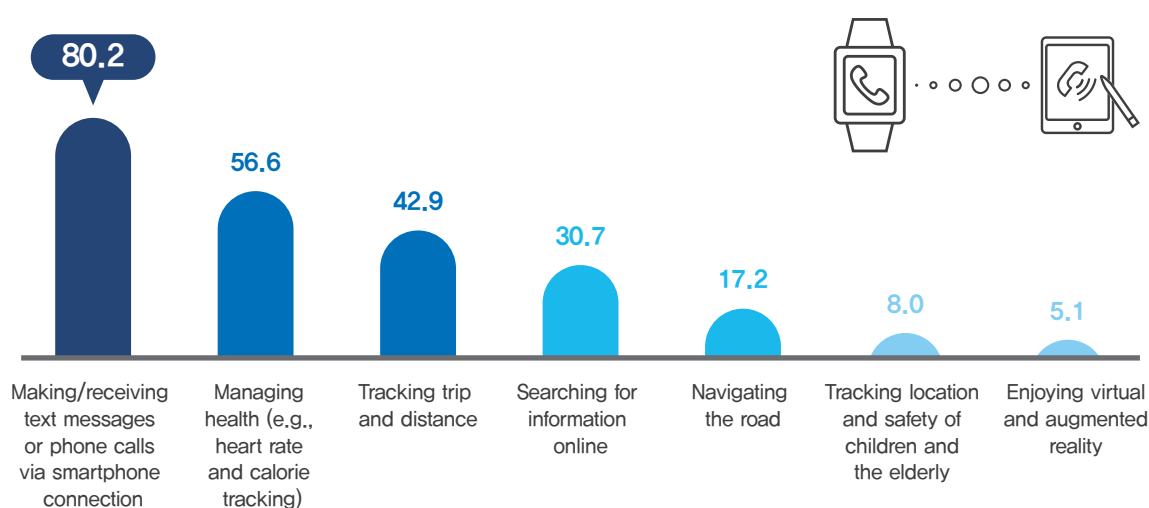


B. Frequently Used Wearable Devices Functions

'Making/receiving text messages or phone calls via smartphone connection' (80.2%) most used function for wearable devices

Owners of wearable devices use them for 'Making/receiving text messages or phone calls via smartphone connection' (80.2%), 'Managing health' (e.g., heart rate and calorie tracking) (56.6%), and 'Tracking trip and distance' (42.9%).

Figure 18 • Frequently Used Wearable Devices Functions (multiple responses, %) — Wearable device owners aged 6 and over



IV. Internet and Communication

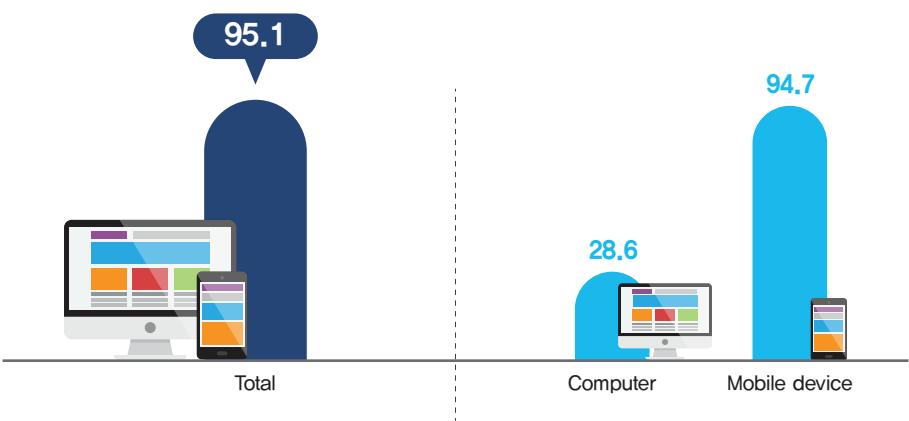
1. Instant Messenger

A. Instant Messenger Usage Rate

Most Internet users aged 6 and over (95.1%) on instant messengers

The rate of instant messenger users (individuals who have used instant messengers at least once in the last 1 year) among Internet users aged 6 and over was 95.1%. Instant messengers were accessed with a mobile device such as a smartphone or a tablet (94.7%) 3 times more often than with a computer (28.6%).

Figure 19 • Instant Messenger Usage Rate (%) – Internet users aged 6 and over



B. Instant Messenger Usage Frequency

29.8% of users on instant messengers 10 to 20 times per day

29.8% of all instant messenger users were found to use the service from 10 times to less than 20 times a day on average. Individuals who used instant messengers less than 10 times a day (51.1%) and 10 or more times a day (48.9%) were similar in number.

Figure 20 • Instant Messenger Usage Frequency per Day (%) – Instant messenger users aged 6 and over



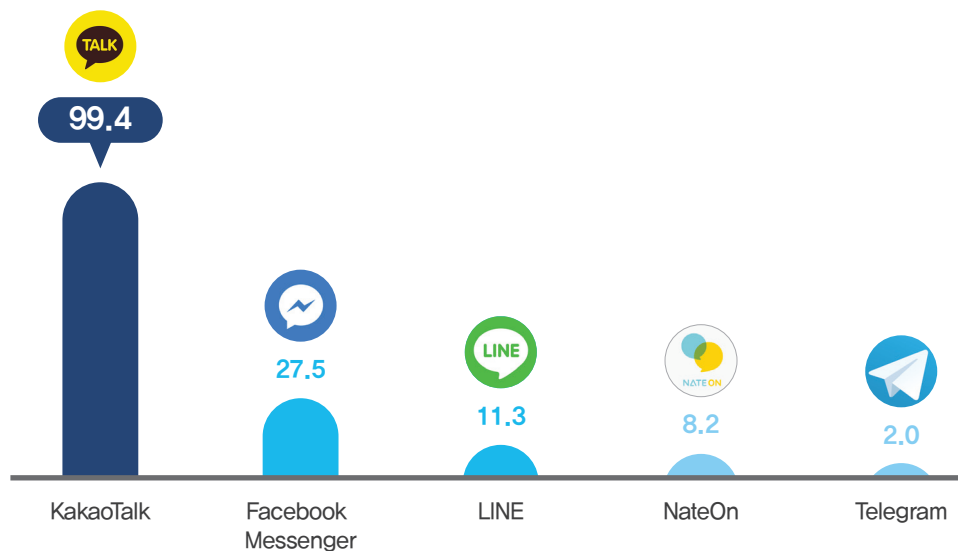
IV. Internet and Communication

C. Frequently Used Instant Messenger Services

Most frequently used instant messenger service 'KakaoTalk' (99.4%)

Among instant messenger users aged 6 and over, 99.4% reported using 'KakaoTalk' frequently, followed by 'Facebook Messenger' (27.5%), 'LINE' (11.3%), and 'NateOn' (8.2%).

Figure 21 • 5 Frequently Used Instant Messenger services (3 primary responses, %) – Instant messenger users aged 6 and over

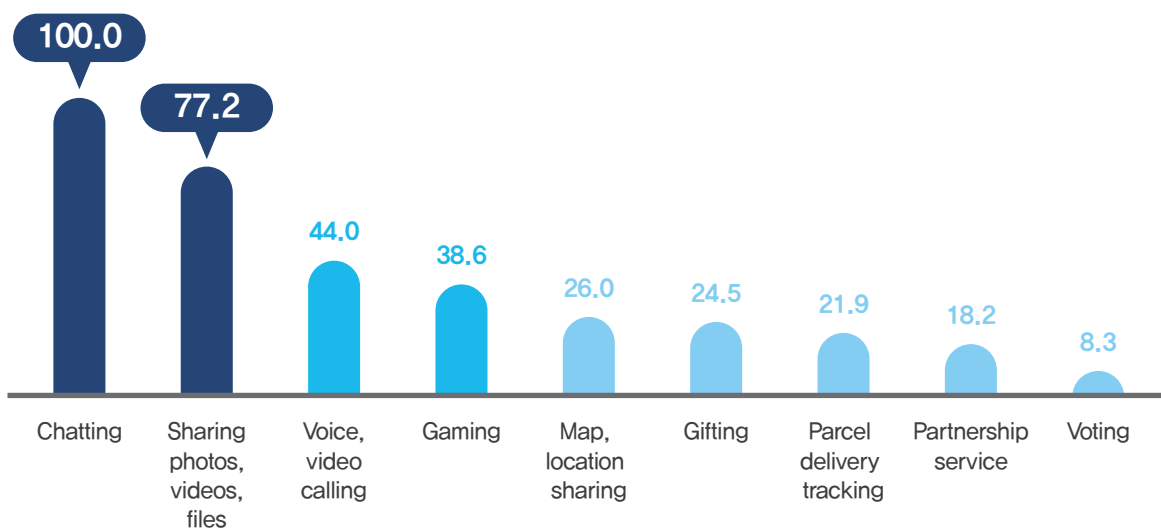


D. Functions of Instant Messengers

'Sharing photos, videos, files' (77.2%) and 'Voice, video calling' (44.0%) main functions for instant messengers

Instant messenger users aged 6 and over used the 'Chatting' function (100.0%) of instant messengers, as well as functions such as 'Sharing photos, videos, files' (77.2%), 'Voice, video calling' (44.0%), and 'Gaming' (38.6%).

Figure 22 • Functions of Instant Messengers (multiple responses, %) – Instant messenger users aged 6 and over



IV. Internet and Communication

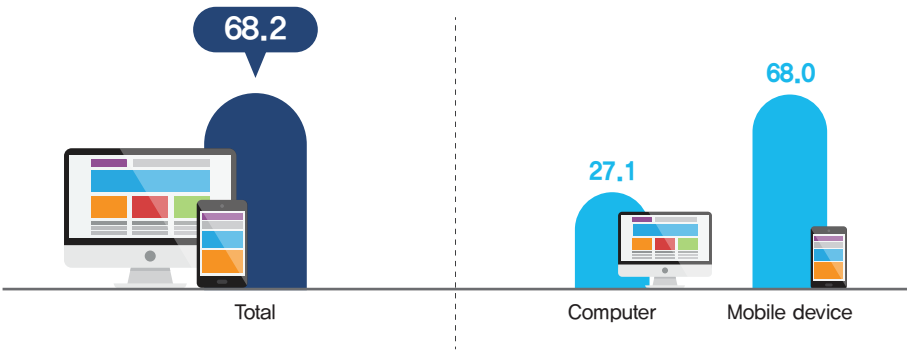
2. Social Network Service (SNS)

A. Social Network Service Usage Rate

More than half of Internet users aged 6 and over (68.2%) on social networks

The rate of social network service users (individuals who have used social network services at least once in the last 1 year) among Internet users aged 6 and over was 68.2%. Social network service access through a mobile device (68.0%) was twice the rate of a computer (27.1%).

Figure 23 • Social Network Service Usage Rate (%) – Internet users aged 6 and over



B. Social Network Service Usage Frequency and Hours

Users access social network services average 23.7 times per week

More than half of social network service users aged 6 and over (55.5%) accessed the service more than 20 times a week on average. The average user participated in social network service 23.7 times (or 3.4 times per day). Meanwhile, the weekly average hours of social network service use 1 hour 2 minutes (or 9 minutes per day).

Figure 24 • Social Network Service Usage Frequency per Week
— Social network service users aged 6 and over

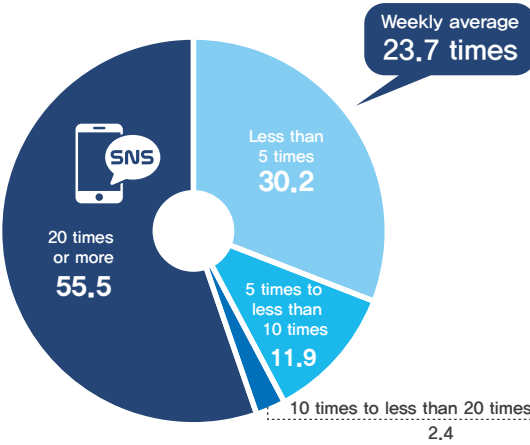
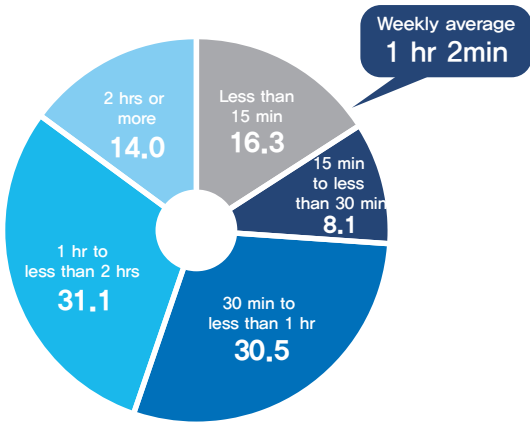


Figure 24 • Hours-of-Use of Social Network Services per Week
— Social network service users aged 6 and over



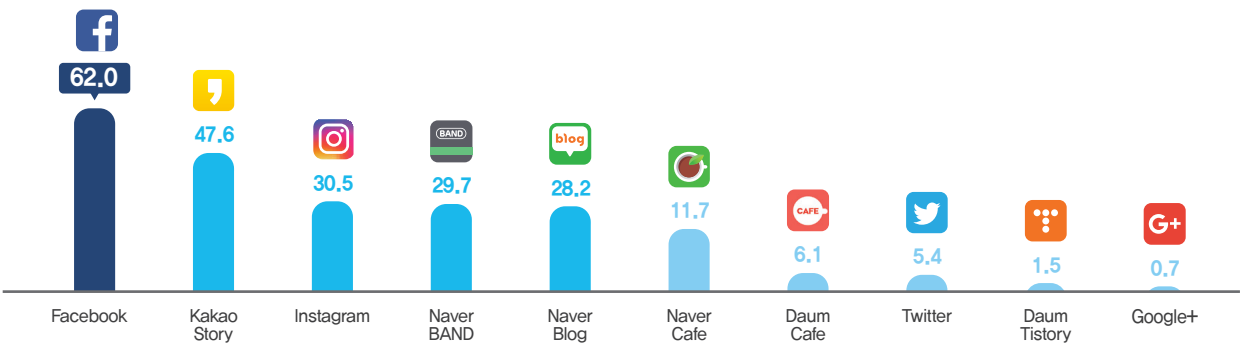
IV. Internet and Communication

C. Frequently Used Social Network Services

'Facebook' (62.0%) and 'KakaoStory' (47.6%) most frequently used services

Among users aged 6 and over, 62.0% reported to using 'Facebook' most frequently, followed by 'KakaoStory' (47.6%), 'Instagram' (30.5%), 'Naver BAND' (29.7%), and 'Naver Blog' (28.2%).

Figure 26 • Frequently Used Social Network Services (3 primary responses, %)
— Social network service users aged 6 and over



IV. Internet and Communication

D. Reasons for Using Social Network Services

‘To socialize and network’ (76.5%) the main reason for using social network service

Among social network service users aged 6 and over, 76.5% said that they used the service ‘To socialize and network’, 55.3% ‘To check out posts or contents created by others’, and 43.0% ‘To share personal interests like hobbies and leisure activities’.

Figure 27 • Reasons for Using Social Network Services (3 primary responses, %)

— Social network service users aged 6 and over



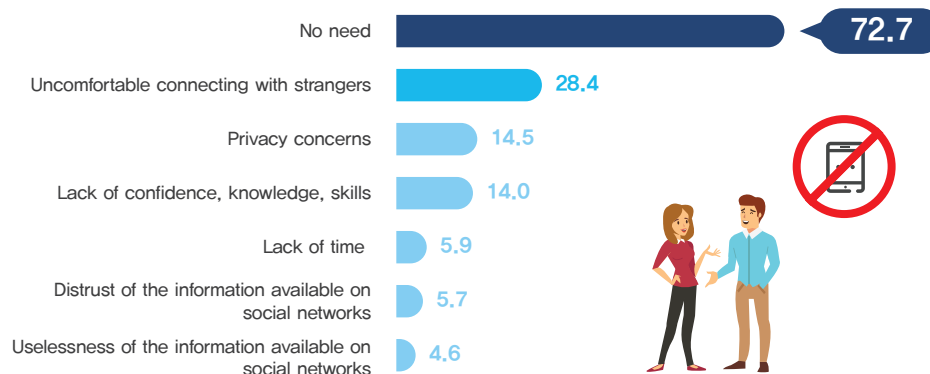
E. Reasons for Not Using Social Network Services

‘No need’ the biggest reason for not using social network service (72.7%)

Among non-users of social network services aged 6 and over, 72.7% did not use the service because there was ‘No need’, and 28.4% because they were ‘Uncomfortable connecting with strangers’.

Figure 28 • Reasons for Not Using Social Network Services (multiple responses, %)

— Social network service non-users aged 6 and over



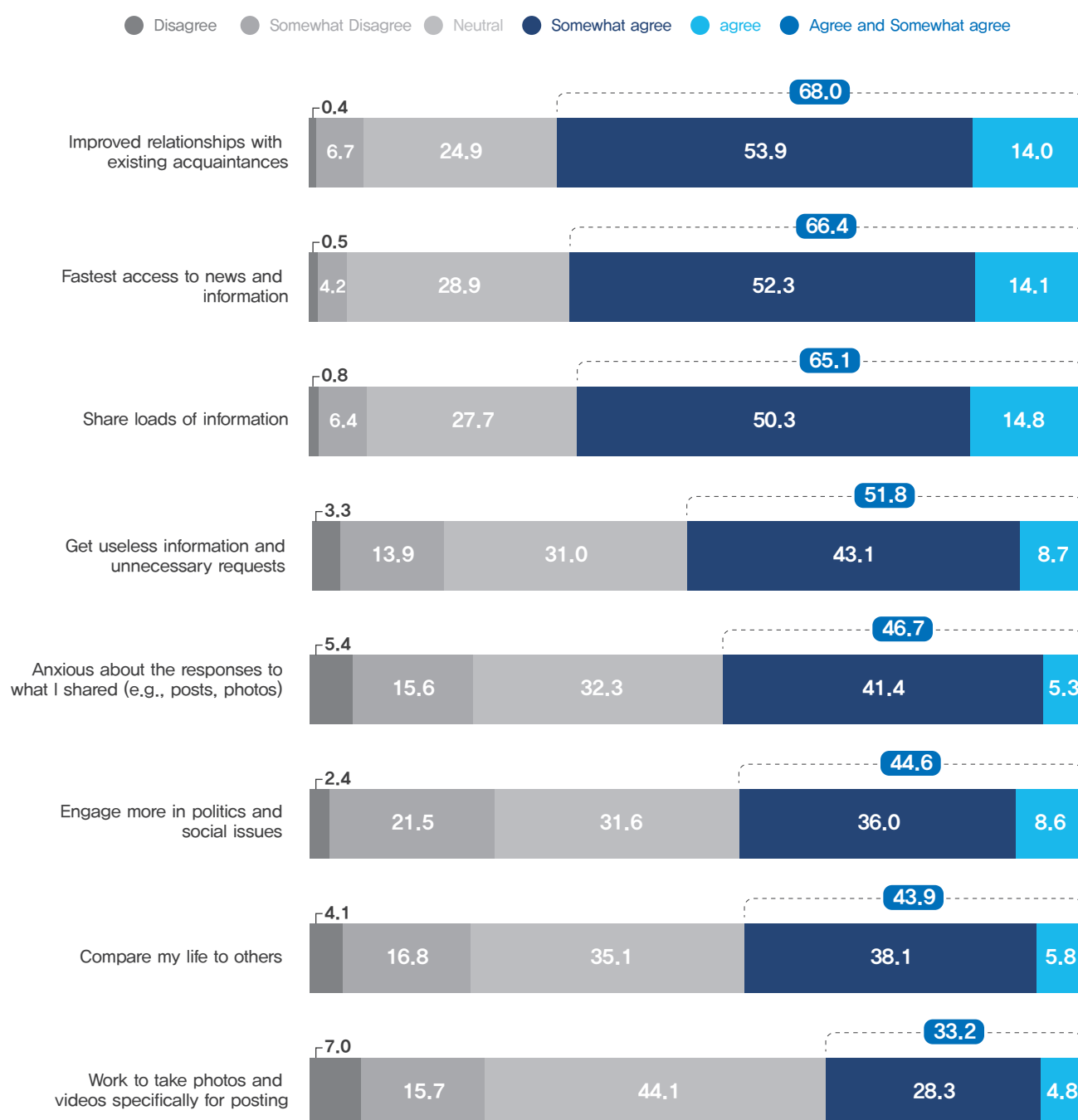
IV. Internet and Communication

F. Social Network Service Usage Behavior and Perceptions

‘Improved relationships with existing acquaintances’ (68.0%)

68.0% of social network service users aged 12 and over said they expected ‘Improved relationships with existing acquaintances’ from social network services. 66.4% answered they felt social network services offered them the ‘Fastest access to news and information’, and 33.2% said they ‘Work to take photos and videos specifically for posting’.

Figure 29 • Social Network Service Usage Behavior and Perceptions (%) — Social network service users aged 12 and over



IV. Internet and Communication

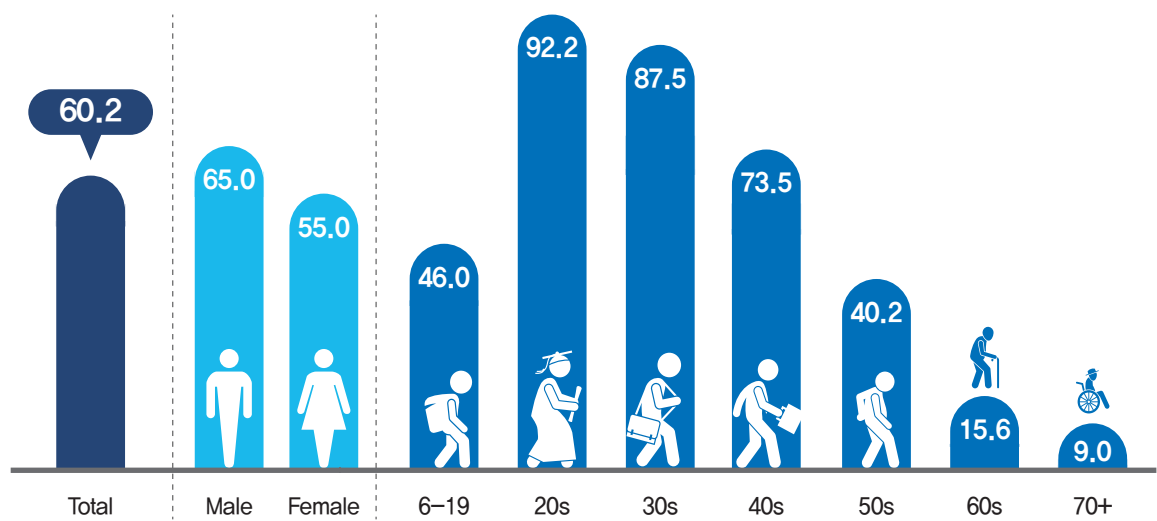
3. E-mail

A. E-mail Usage Rate

6 out of 10 Internet users aged 6 and over (60.2%) using e-mail

The rate of e-mail users (individuals who have used e-mail services at least once in the last 1 year) among Internet users aged 6 and over was 60.2%. Compared to the e-mail usage rate for individuals in their 20s (92.2%) and 30s (87.5%), that of people in their 60s (15.6%) and those 70 and over (9.0%) were lower.

Figure 30 • E-mail Usage Rate (%) – Internet users aged 6 and over



V. Internet and Living

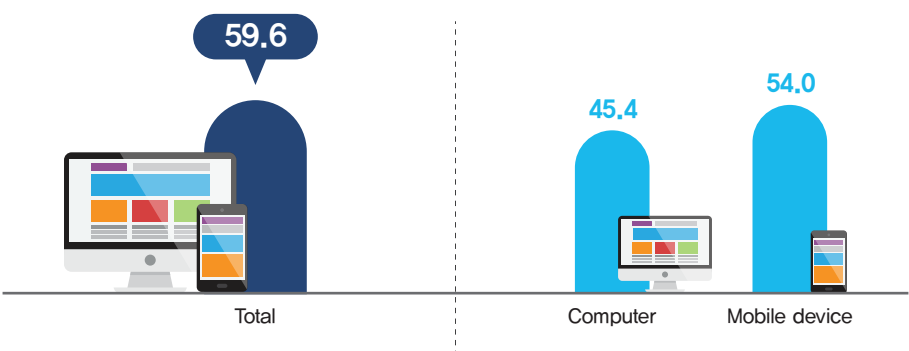
1. Internet Shopping

A. Internet Shopping Usage Rate

More than half of all Internet users aged 12 and over (59.6%) using Internet shopping

The rate of Internet shopping users (individuals who have used Internet shopping services at least once in the last 1 year) among Internet users aged 12 and over was 59.6%. Internet shopping services were accessed more with a mobile device (54.0%) than with a computer (45.4%).

Figure 31 • Internet Shopping Usage Rate (%) – Internet users aged 12 and over



B. Internet Shopping Frequency and Average Shopping Expenditure

Internet shopping an average of 2.7 times a month in frequency and KRW 90,718 in average expenditure

Among Internet shopping users aged 12 and over, 90.8% shopped online once or more per month. The monthly average frequency of Internet shopping was 2.7 times, and the monthly average spending was KRW 90,718.

Figure 32 • Internet Shopping Frequency and Average Shopping Expenditure per Month (%) – Internet shoppers aged 12 and over



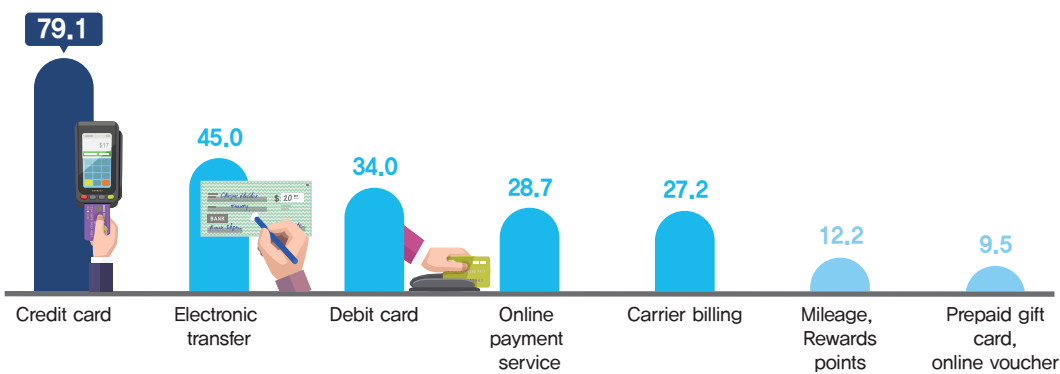
V. Internet and Living

C. Payment Methods for Internet Shopping

‘Credit card’ (79.1%) was the main payment method for Internet shopping

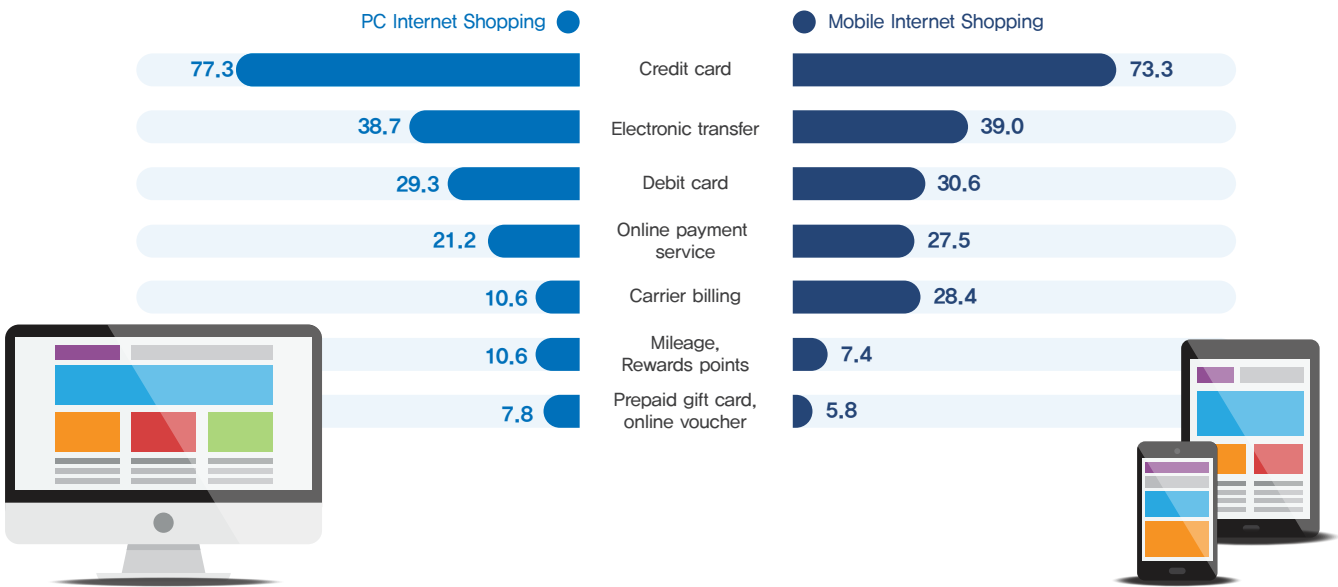
Among Internet shopping users aged 12 and over, 79.1% reported making their payments with a ‘Credit card’, followed by ‘Electronic transfer’ (45.0%), ‘Debit card’ (34.0%), ‘Online payment service’ (28.7%), and ‘Carrier billing’ (27.2%).

Figure 33 • Payment Methods for Internet Shopping (multiple responses, %) — Internet shoppers aged 12 and over



By devices used for payment, more mobile device users paid via ‘Online payment service’ (27.5%) and ‘Carrier billing’ (28.4%) computer users did.

Figure 34 • Payment Methods for Internet Shopping (multiple responses, %) — PC Internet shoppers and mobile Internet shoppers aged 12 and over



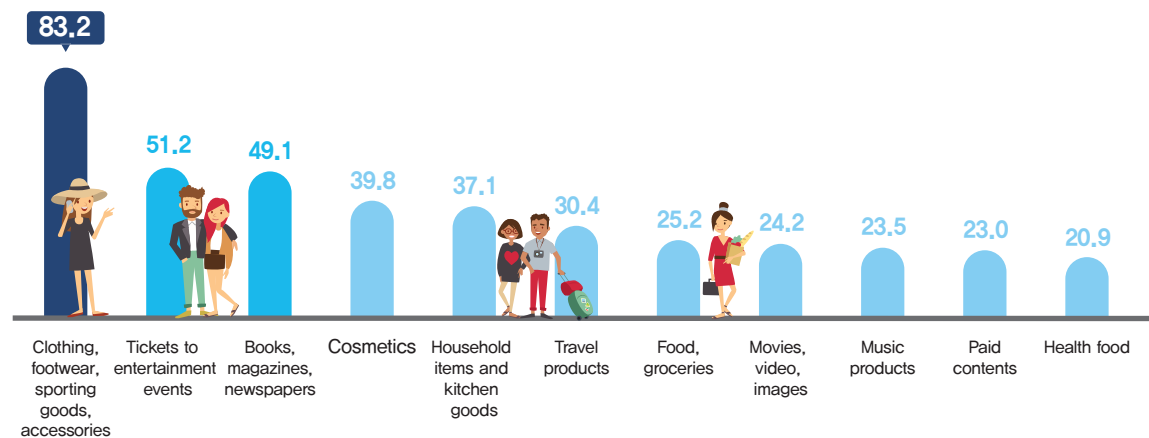
V. Internet and Living

D. Items Purchased with Internet Shopping

‘Clothing, footwear, sporting goods, accessories’ (83.2%) main items purchased online

Internet shopping users aged 12 and over purchased ‘Clothing, footwear, sporting goods, accessories’ (83.2%) online, followed by ‘Tickets to entertainment events’ (51.2%), ‘Books, magazines, newspapers’ (49.1%), ‘Cosmetics’ (39.8%), and ‘Household items and kitchen goods’ (37.1%).

Figure 33 • Items Purchased with Internet Shopping (multiple responses, %) — Internet shoppers aged 12 and over



*Other items purchased online include Mobile phone ringtones, emoticons, and background images (15.3%), Computer equipment and parts (14.5%), Home appliances, electronic products (11.8%), Paid applications (11.7%), Furniture, interior supplies (11.3%), Baby supplies (9.9%), Computer and video games (6.2%), Financial products (5.8%), Webtoons (4.6%), In-game purchases (4.5%), Computer software (non-games) (4.3%), Education (3.9%), and Adult contents (0.6%), in the order of response volume.

V. Internet and Living

2. Internet Banking

A. Internet Banking Usage Rate

6 out of 10 Internet users aged 6 and over (63.1%) using Internet banking

The rate of Internet banking users (individuals who have used Internet banking services at least once in the last 1 year) among Internet users aged 12 and over was 63.1%. Internet banking services were accessed more with a mobile device (57.1%) than with a computer (39.7%). By gender and age, more males used Internet banking (64.2%) than females (61.9%), and individuals in their 30s (91.4%), 20s (86.6%), and 40s (79.7%) used the service more than those in their 60s (19.9%) and those 70 and over (6.4%).

Figure 36 • Internet Banking Usage Rate (%) – Internet users aged 12 and over

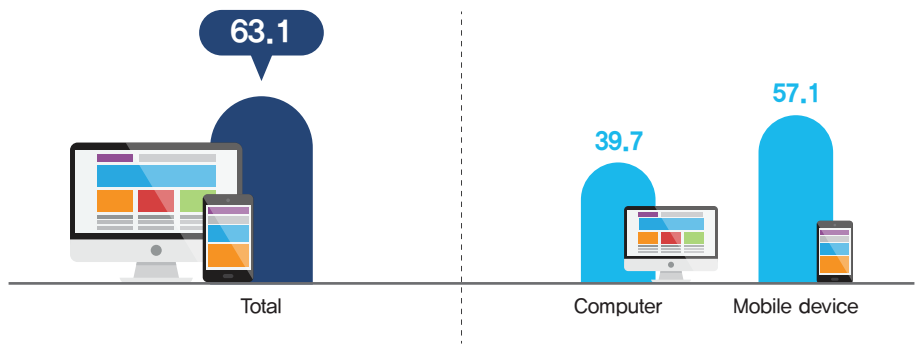
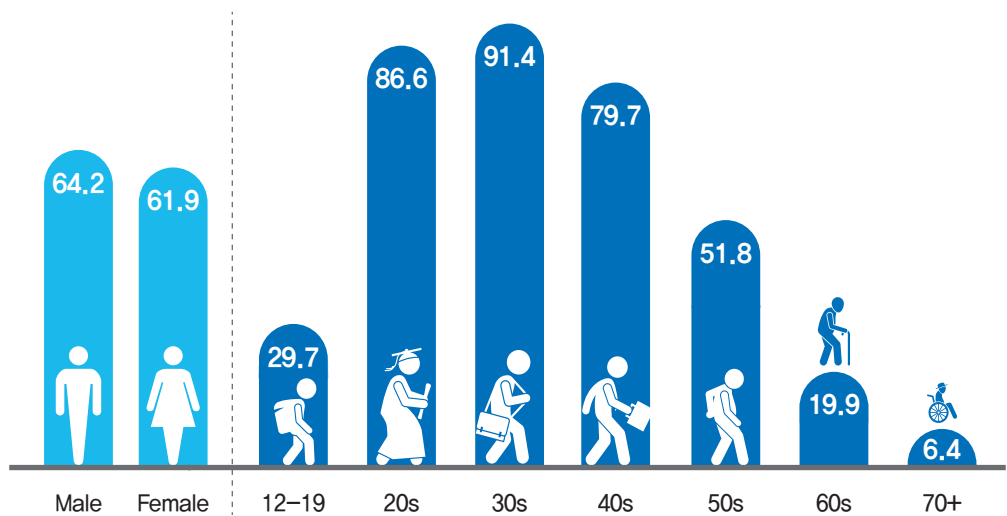


Figure 37 • Internet Banking Usage Rate by Gender and Age (%) – Internet users aged 12 and over



V. Internet and Living

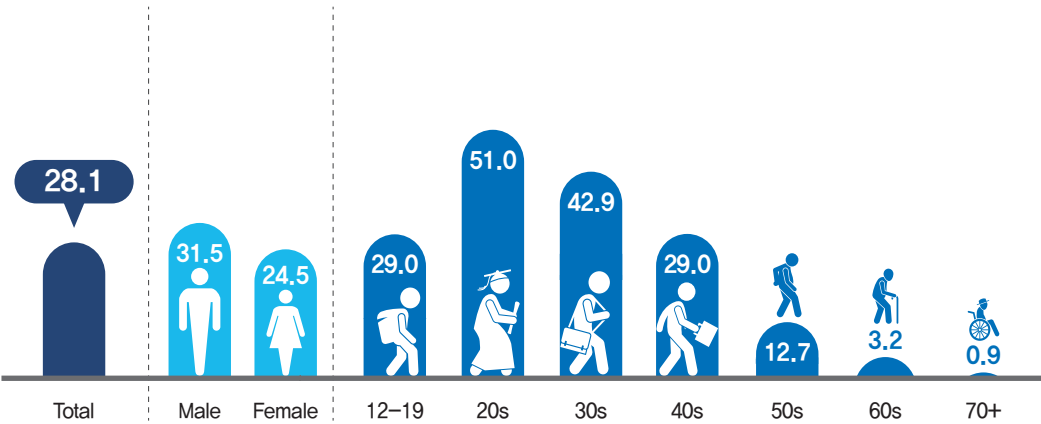
3. Cloud Service

A. Cloud Service Usage Rate

28.1% of Internet users aged 12 and over using cloud services

The rate of cloud service users (individuals who have used the service at least once in the last 1 year) among Internet users aged 12 and over was 28.1%. More males (31.5%) used the services than females (24.5%), and individuals in their 20s (51.0%) and 30s (42.9%), had higher cloud service usage rates than those in their 60s (3.2%) and those 70 and over (0.9%).

Figure 38 • Cloud Service Usage Rate (%) – Internet users aged 12 and over

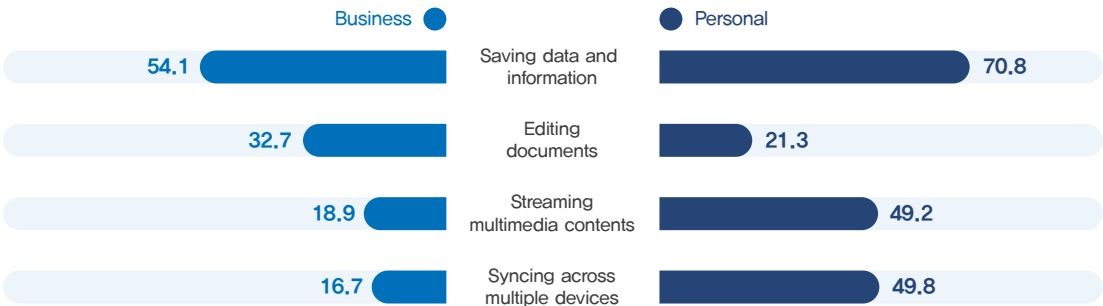


B. Purpose of Using Cloud Services

‘Saving data and information’ main reason for using cloud services (54.1% for business, 70.8% for personal use)

Most cloud service users aged 12 and over used the services for ‘Saving data and information’ (54.1% for business, 70.8% for personal use). By usage purposes, ‘Editing documents’ (32.7%) was the main business –related reason for using cloud services, while ‘Syncing across multiple devices’ (49.8%) was the main personal reason.

Figure 39 • Purpose of Using Cloud Services (multiple responses, %) – Cloud service users aged 12 and over





In-Depth Analysis



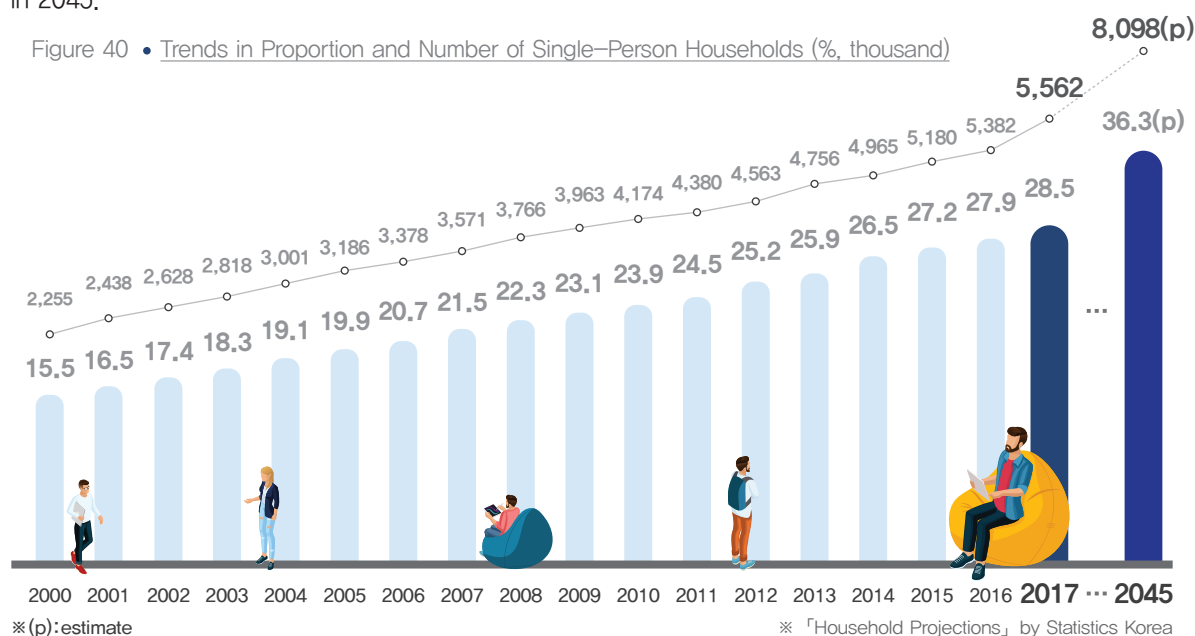
I . Internet Usage Pattern of Single–Person Households

A. Single–Person Households

Single–person households account for 28.5% in 2017, will grow until 2045

According to the 「Household Projections」 by Statistics Korea, 28.5% of all households (5,562 thousand) were inhabited by a single–person households in 2017. This figure was higher than 2–person households (26.9%), 3–person households (21.4%), 4–person households (17.5%), and 5–person households (5.7%). In addition, the share of single–person households is expected to grow annually to reach 36.3% (7.8%p higher than in 2017) in 2045.

Figure 40 • Trends in Proportion and Number of Single–Person Households (% , thousand)

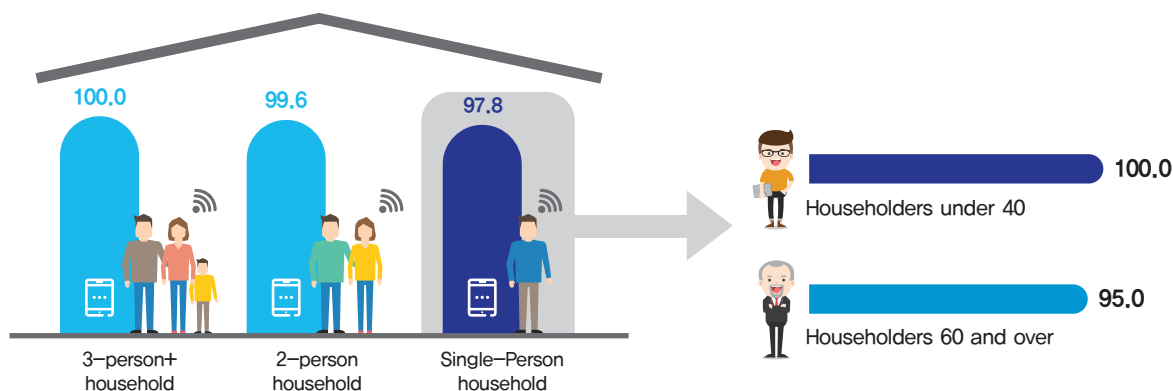


B. Households with Internet Access

The Internet access rates similar for single–person households (97.8%), 2–person households (99.6%), and households with three or more persons(100.0%)

The Internet access rate of single–person households in July 2017 was 97.8%, which was similar to that of 2–person households (99.6%) and 3–person or more households (100.0%). Meanwhile, among single–person households, those occupied by individuals under 40 years old had an Internet access rate (100.0%) that was 5.0%p higher than those occupied by individuals aged 60 and over (95.0%).

Figure 41 • Households with Internet Access by Household Size and Age of Single–Person Householder (%)



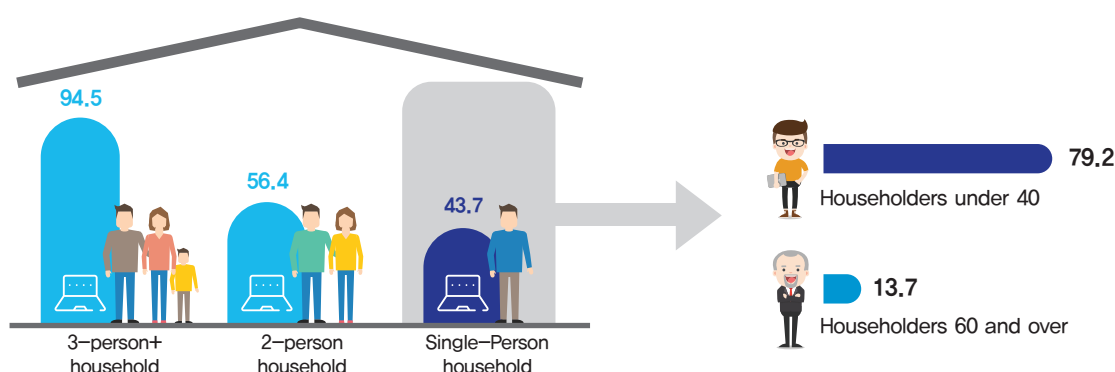
I . Internet Usage Pattern of Single–Person Households

C. Households with Computers

Rate of single–person households with computers half of households with three or more persons

43.7% of single–person households had a computer (including desktops, laptops, tablets), which was half the rate of households with three or more persons (94.5%). Meanwhile, among single–person households, those occupied by individuals under 40 years old had computers at a rate 5 times higher (79.2%) than those occupied by individuals 60 years old and over (13.7%).

Figure 42 Households with Computers by Household Size and Age of Single–Person Householder (%)

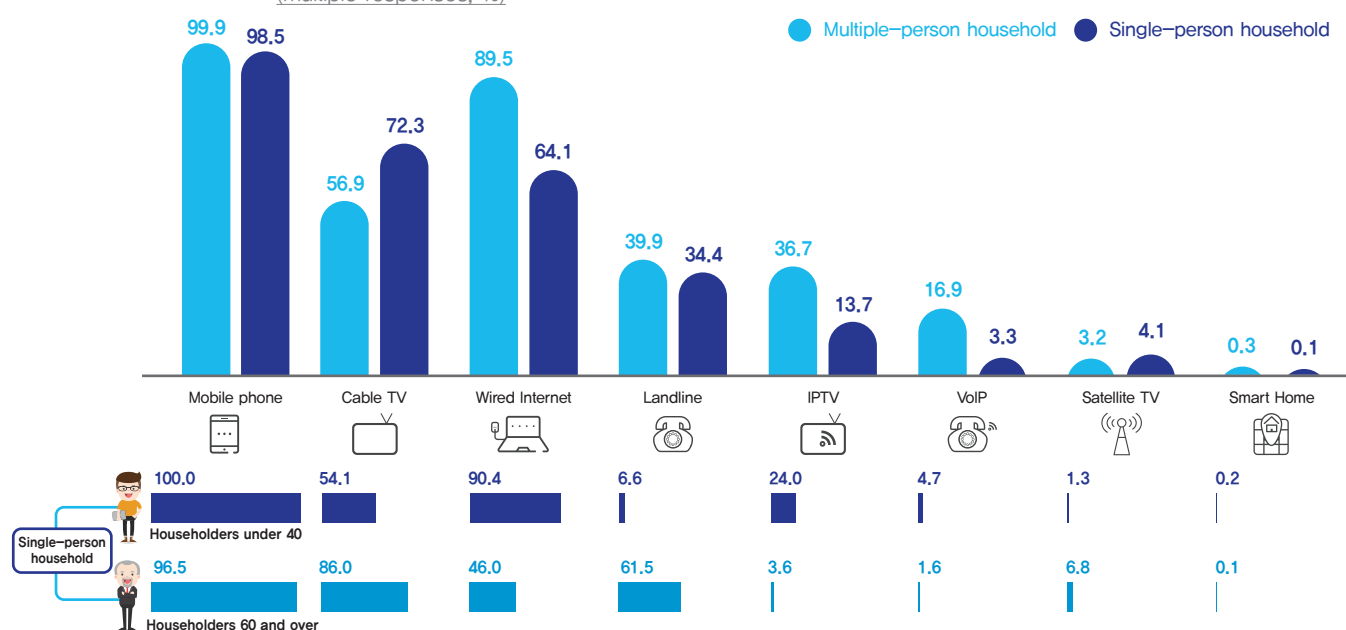


D. Households with ICT Services

Single–person households use more ‘Cable TV’ than multiple–person households (15.4%p more) and less ‘Wired Internet’ (25.4%p less)

Single–person households used ‘Cable TV’ by 15.4%p more than multiple–person households (households with 2 or more persons) but used 25.4%p less ‘Wired Internet’. Among single–person households, only a few of those occupied by individuals under 40 years old used ‘Landline’ (6.6%), while those occupied by individuals aged 60 and over used such phones (61.5%).

Figure 43 Households with ICT Services by Household Size and Age of Single–Person Householder (multiple responses, %)



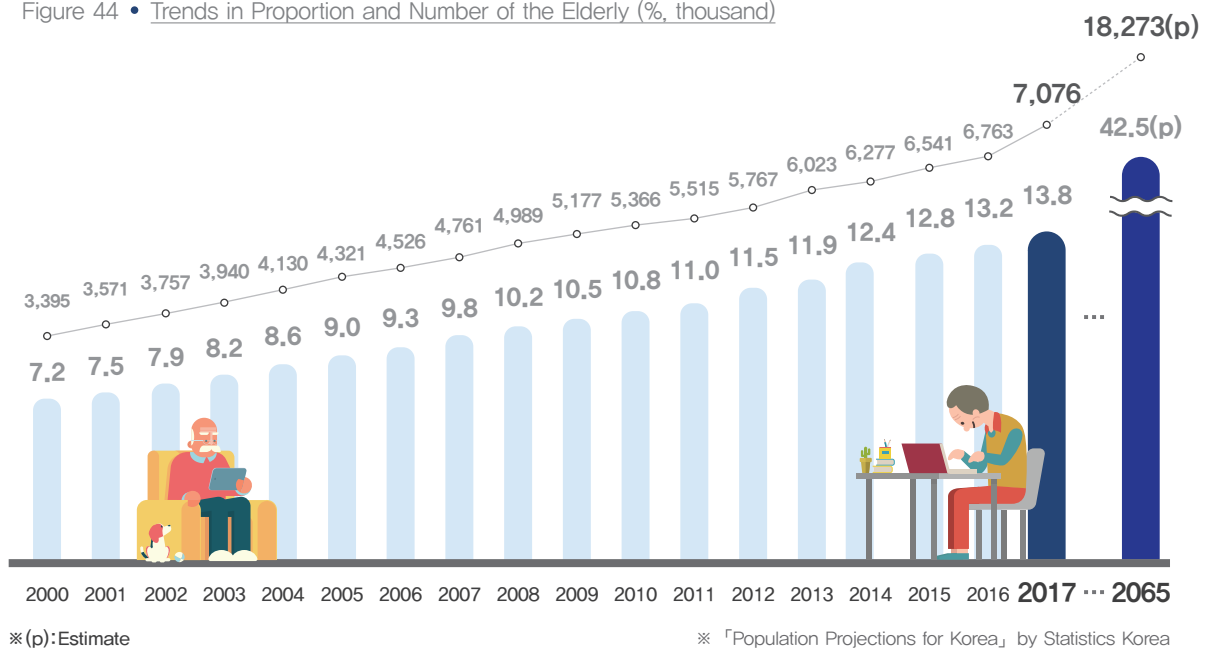
II. Internet Usage Pattern of the Elderly

A. The Elderly

The elderly 13.8% of entire population in 2017 and expected to grow until 2065

According to the 「Population Projections for Korea」 by Statistics Korea, the proportion of the aged population (aged 65 and over) among the entire population was 13.8% (7,076 thousand) in 2017. In addition, this number is expected to grow annually to reach 42.5% (28.7% higher than in 2017) in 2065.

Figure 44 • Trends in Proportion and Number of the Elderly (% , thousand)

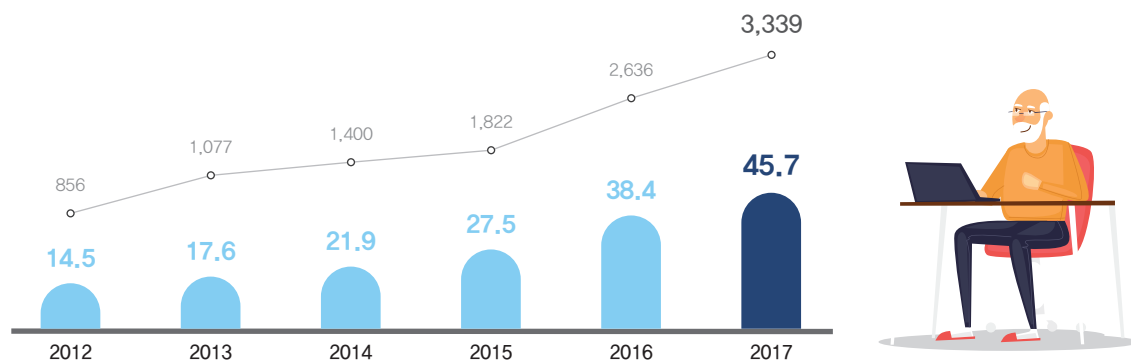


B. Internet Usage Rate

Internet usage rate of the elderly increased three-fold from 2012

As of July 2017, the rate of Internet users (individuals who have used the Internet at least once in the last 1 month) among the elderly aged 65 and over was 45.7% (3,339 thousand), which is a three-fold increase compared to 5 years ago.

Figure 45 • Internet Usage Rate of the Elderly (% , thousand) – Elderly population



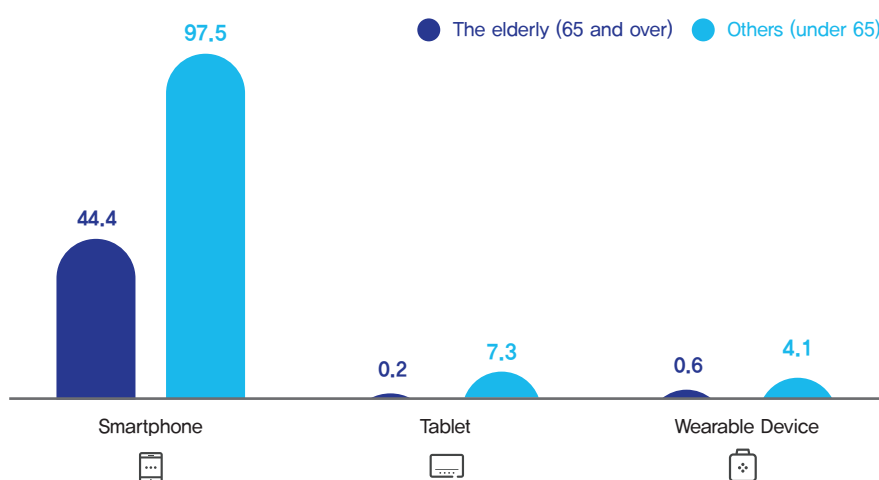
II. Internet Usage Pattern of the Elderly

C. Ownership of Mobile Device

4 out of 10 (44.4%) of the elderly own smartphones

The smartphone ownership rate of the elderly aged 65 and over was 44.4% which was only half that of other age groups (97.5%). Their ownership rate of tablets (0.2%) and wearable devices (0.6%) was also lower compared to other age groups.

Figure 46 • Mobile Device Ownership of the Elderly and Other Age Groups (multiple responses, %)
— The elderly and other age groups

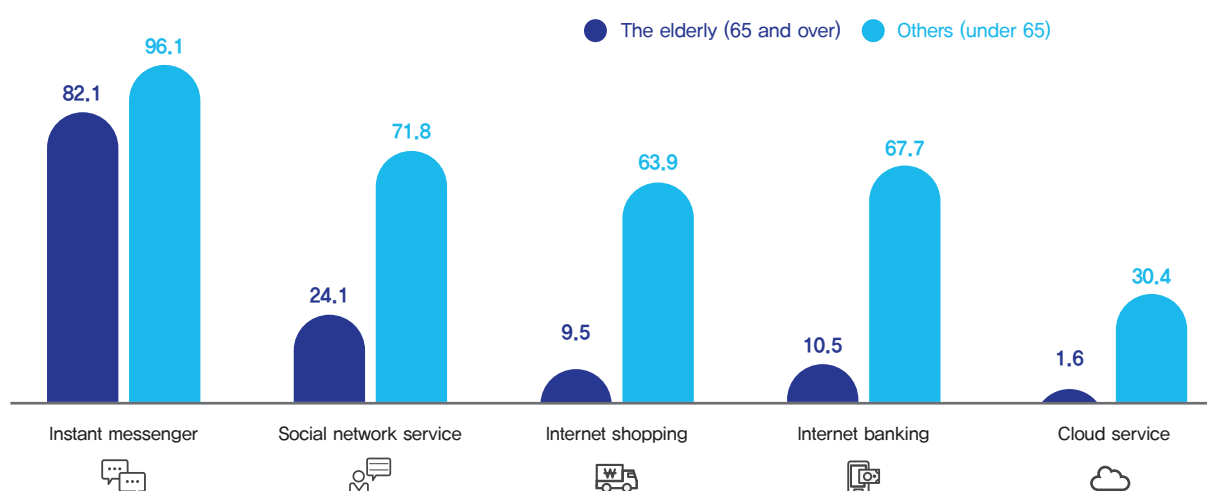


D. Internet Service Usage

Instant messenger usage rate of the elderly 82.1%

Among various Internet services, the rate of 'Instant messenger' users had the smallest gap (14.0%p) between the elderly and other age groups (82.1% for the elderly, 96.1% of other age groups), while 'Internet banking' had the largest gap (57.2%p) (10.5% for the elderly, 67.7% for other age groups).

Figure 47 • Internet Service Usage Rate of the Elderly and Other Age Groups (%) — The elderly and other age groups



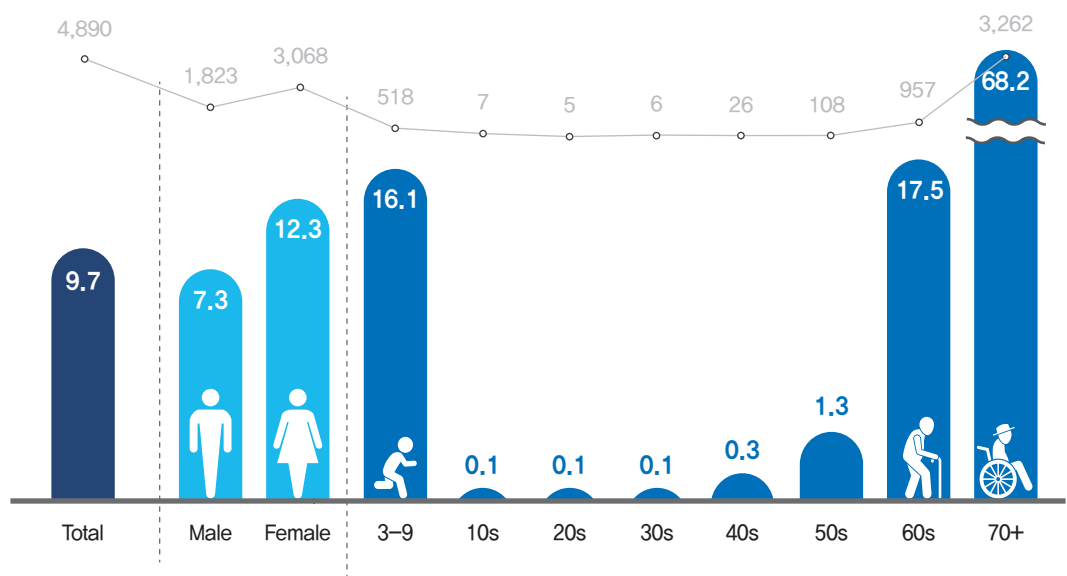
III. Internet Non-Users

A. Internet Non-Users

Among the population aged 3 and over, Internet non-users 9.7% (4,890 thousand)

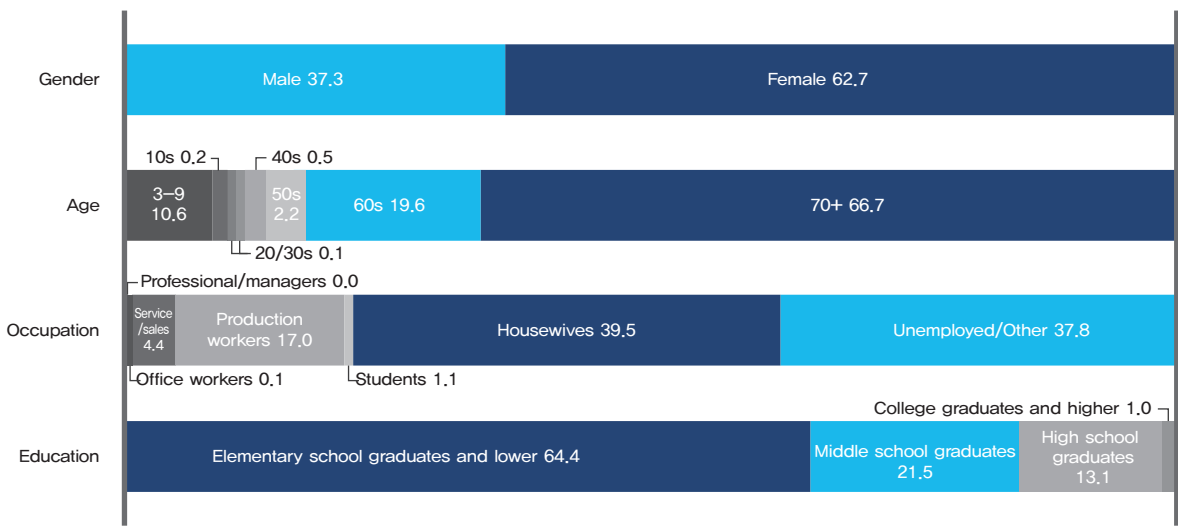
The rate of Internet non-users (individuals who have not used the Internet at least once in the last 1 month) among individuals aged 3 and over (50,173 thousand) was 9.7% (4,890 thousand).

Figure 48 • Internet Non-Usage Rate and Non-users (% , thousand) – Population aged 3 and over



Females did not use the Internet at a higher rate (62.7%) than males (37.3%); by age, individuals in their 60s or older accounted for more than 80% of non-users (60s for 19.6%, 70+ for 66.7%). By occupation, 'Housewives' (39.5%) and 'Unemployed/Other' (37.8%) accounted for more than 70%, and by education, individuals who were 'Elementary school graduates and lower' (64.4%) took up more than half.

Figure 49 • Composition of Non-users (%) – Internet non-users aged 3 and over



III. Internet Non-Users

B. Characteristics of Non-Users

The Internet non-user comprised of ‘Ex-users’ (23.1%) and ‘Unexposed’ (76.9%)

Among Internet non-users (4,890 thousand), 23.1% (1,130 thousand) were ex-users (or individuals who have not used the Internet at least once in the last 1 month). 76.9% (3,761 thousand) of non-users were the ‘Unexposed’, or those who have never used the Internet in their lifetime.

Figure 50 • Composition of Non-users by Characteristics: by Gender and Age (%) – Internet non-users aged 3 and over

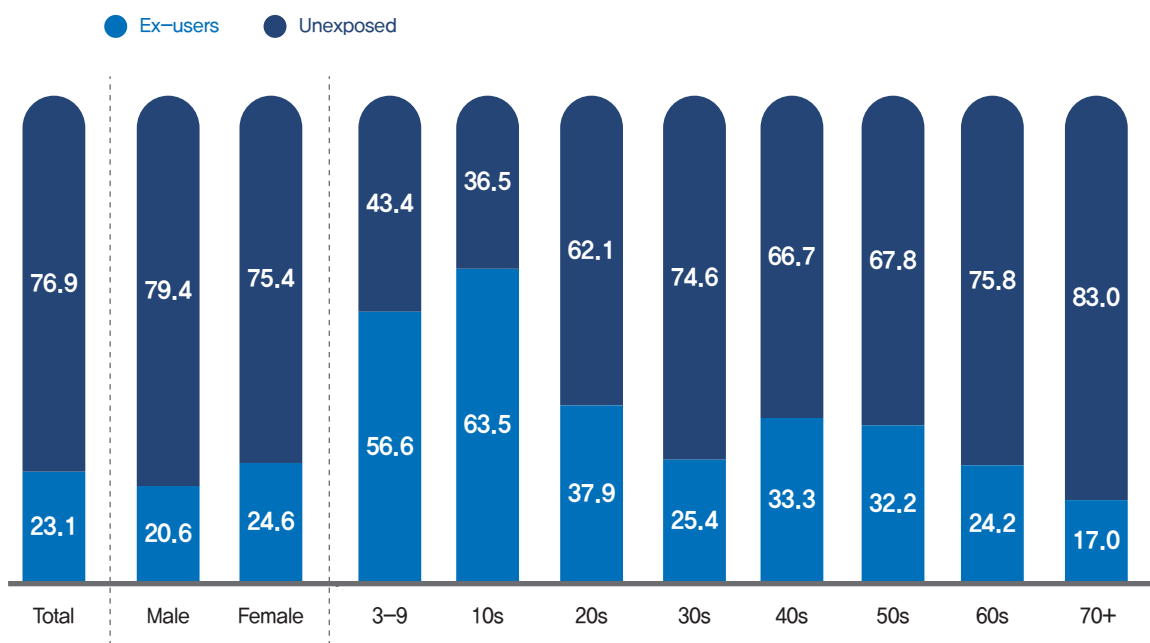
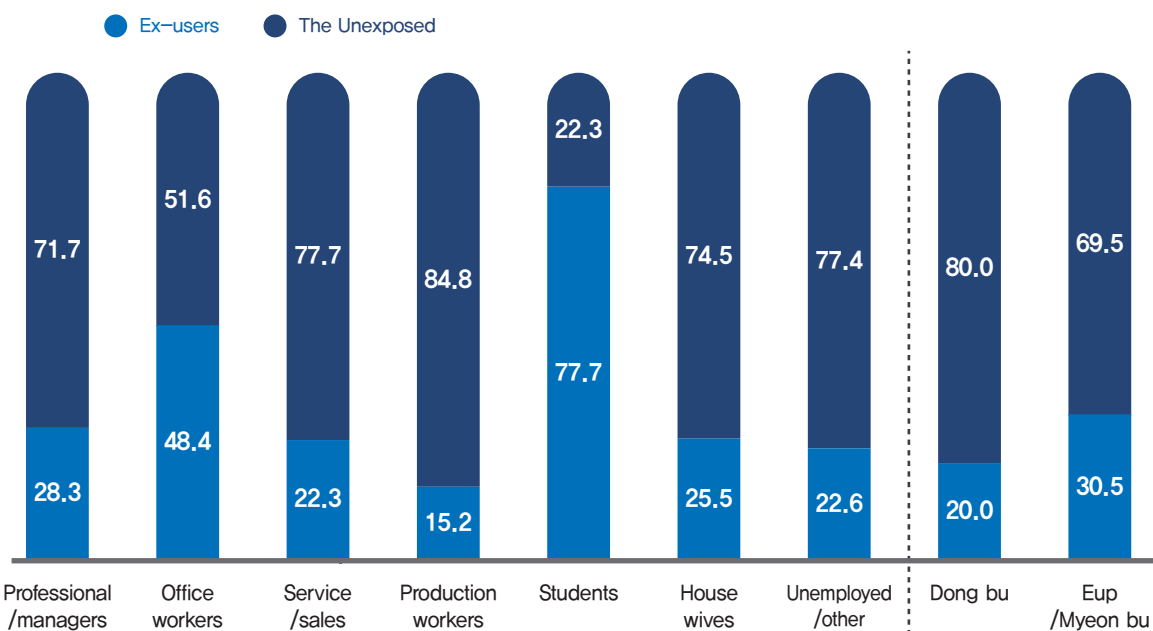


Figure 51 • Composition of Non-users by Characteristics: by Occupation and Size of Region (%) – Internet non-users aged 3 and over



- Ex-users: Individuals who have experience using the Internet but have not used it in the last 1 month.
- Unexposed: Individuals who have never used the Internet in their lifetime.

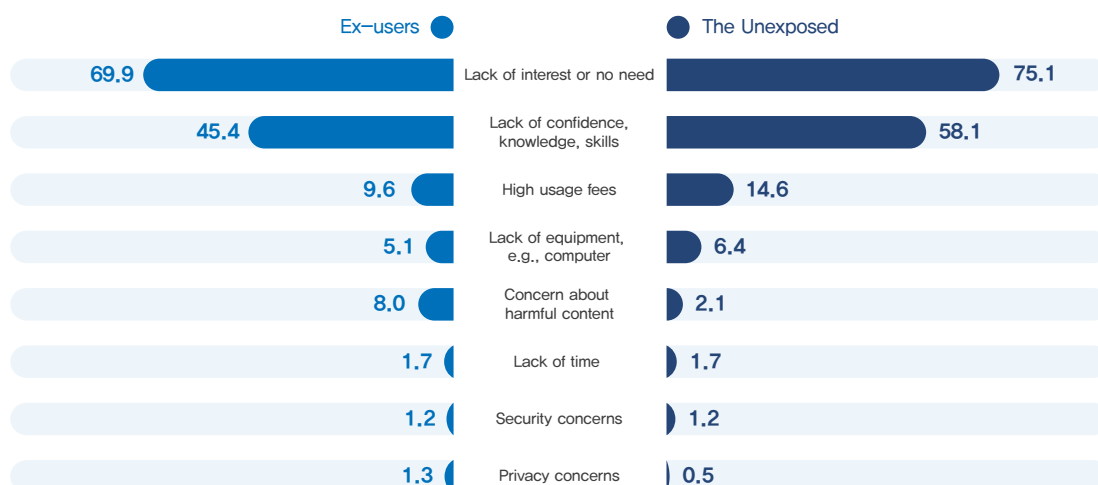
III. Internet Non-Users

C. Reasons for Not Using the Internet

‘Lack of interest or no need’ the main reason for Internet non-use

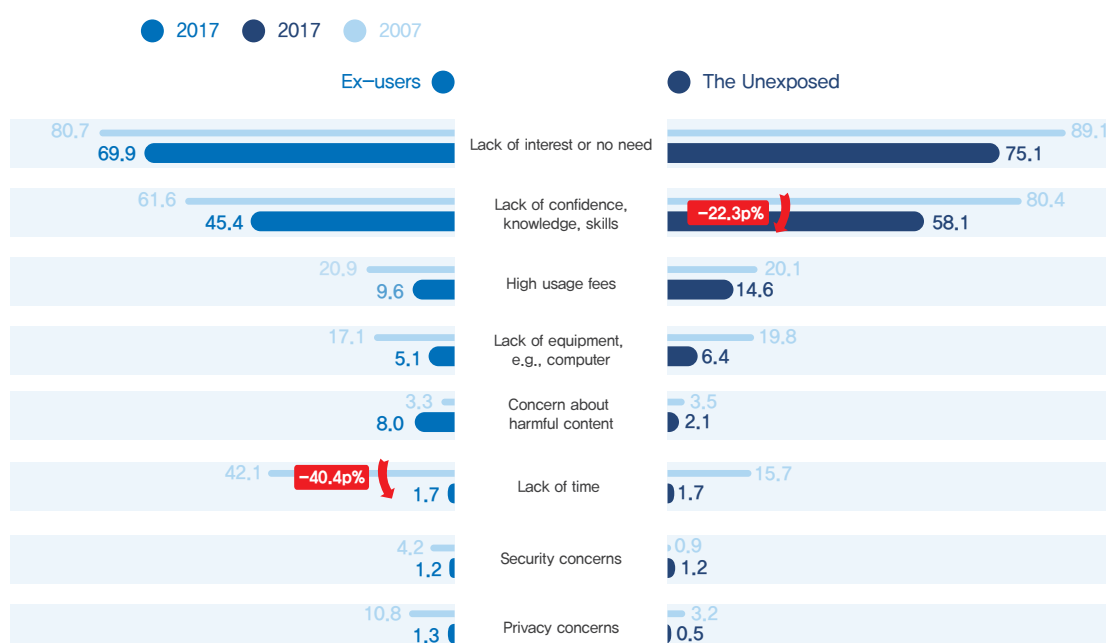
Ex-users and those unexposed to the Internet said they did not use the Internet because of a ‘Lack of interest or no need’ (69.9% for ex-users, 75.1% for the unexposed). Some also cited ‘Lack of confidence, knowledge, skills’ (45.4% for ex-users, 58.1% for the unexposed). Some also cited ‘Lack of confidence, knowledge, skills’ (45.4% for ex-users, 58.1% for the unexposed).

Figure 52 • Reasons for Not Using the Internet (multiple responses, %) – Internet non-users aged 3 and over



Compared to 10 years ago, 40.4%p less ex-users answered that they did not use the Internet because of their ‘Lack of time’ (42.1% in 2007, 1.7% in 2017). For those unexposed to the Internet, 22.3%p less people answered that their lack of Internet experience was because of a ‘Lack of confidence, knowledge, skills’ required for using the Internet (80.4% in 2007, 58.1% in 2017).

Figure 53 • Comparison of Reasons for Not Using the Internet: 2007 and 2017 (multiple responses, %) – Internet non-users aged 3 and over



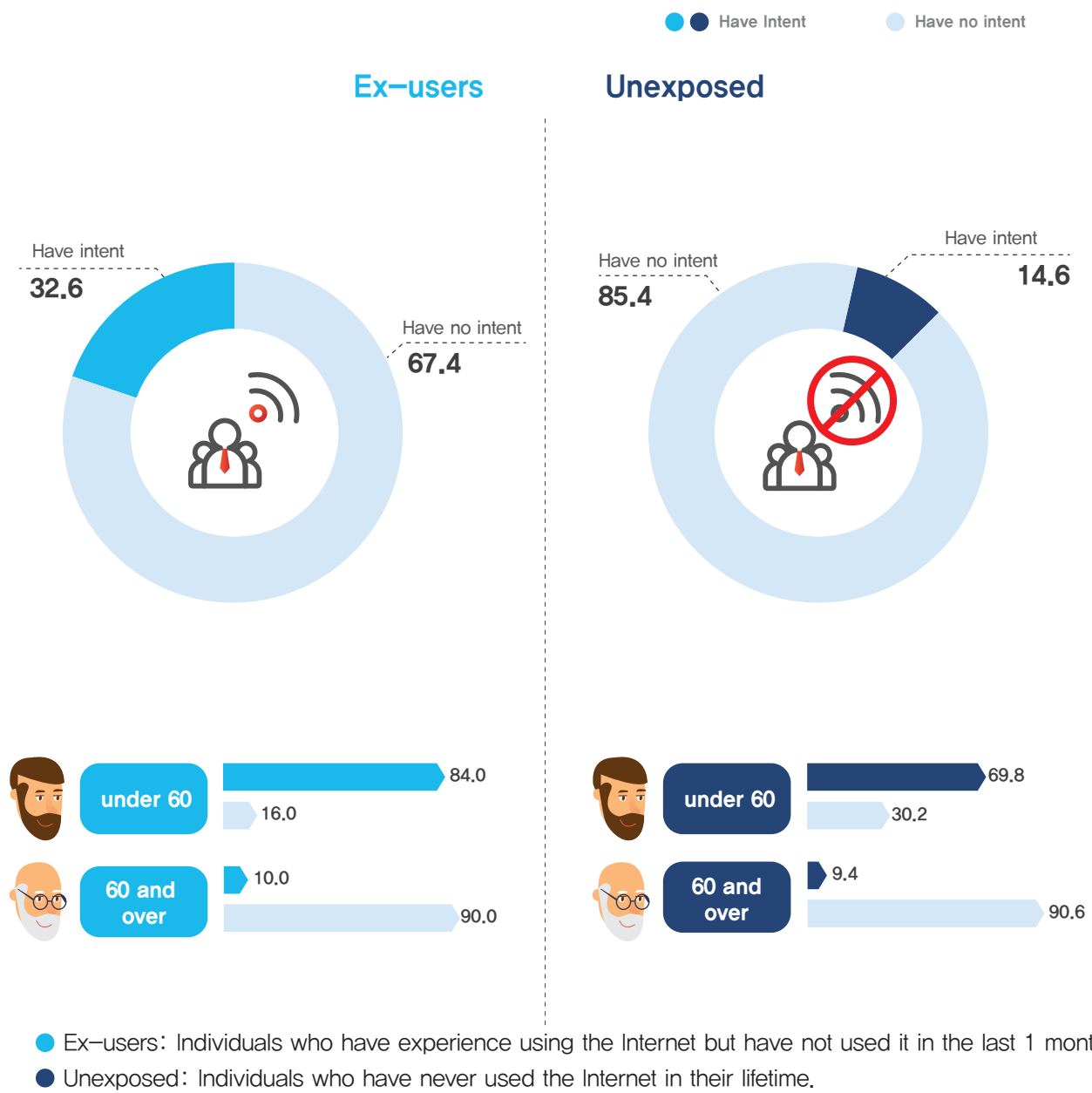
III . Internet Non-Users

D. Intentions to Use the Internet

1 out of 10 non-users (14.6%) with intent to use the Internet

Among Internet non-users aged 3 and over, only 32.6% of ex-users (10.0% for 60 years old and over, 84.0% for younger age groups) and 14.6% of those unexposed to the Internet (9.4% for 60 years old and over, 69.8% for younger age groups) said that they intended to use the Internet in the future. By age group, individuals who were under 60 (84.0% among ex-users, 69.8% among the unexposed) showed a higher intent to use the Internet in the future than those 60 years old and over (10.0% among ex-users, 9.4% among the unexposed).

Figure 54 • Intentions to Use the Internet (%) – Internet non-users aged 3 and over



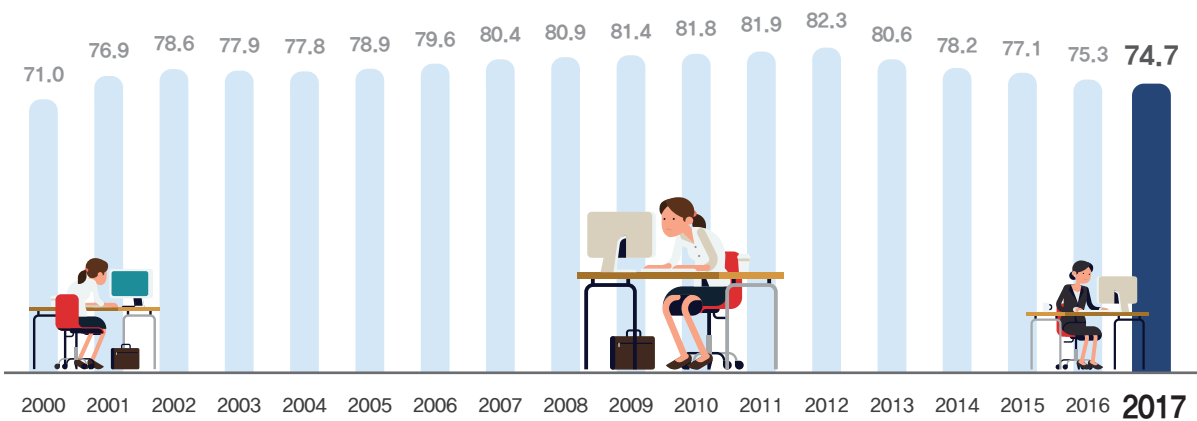
IV. Internet Without Computers

A. Households with Computers

Rate of households with computers falling after peaking at 2012

As of July 2017, 74.7% of all households had a computer (e.g., desktop, laptop, tablet). Household computer ownership began its gradual increase in 2000 from 71.0% after which it began to decrease after peaking at 82.3% in 2012.

Figure 55 • Households with Computers (%) – All Households



B. Reasons for Decrease in Households with Computers

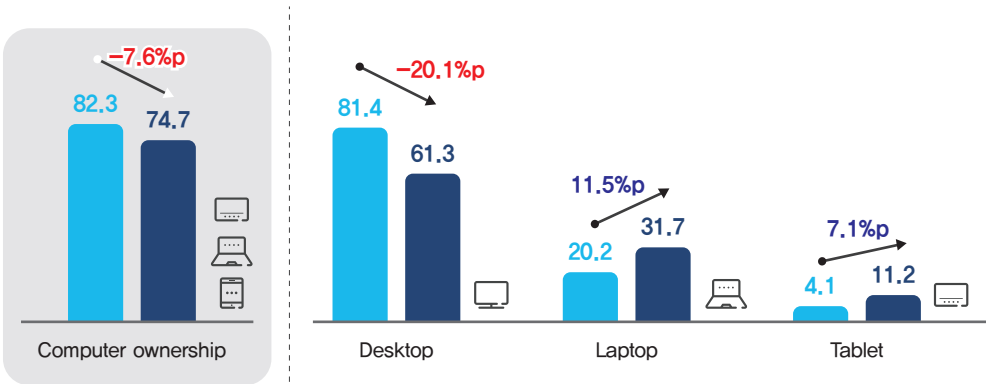
1) Households with Computers by Device Type

Decrease in desktop ownership rate (20.1%p) towing overall reduction in households with computers

Compared to 5 years ago, households with laptops and tablets increased by 11.5%p and 7.1%p respectively but as households with desktops decreased by 20.1%p there was an overall decline in the rate of households with computers.

Figure 56 • Comparison of Households with Computers by Device Type: 2012 and 2017 (multiple responses, %)

— All Households
● 2012 ● 2017



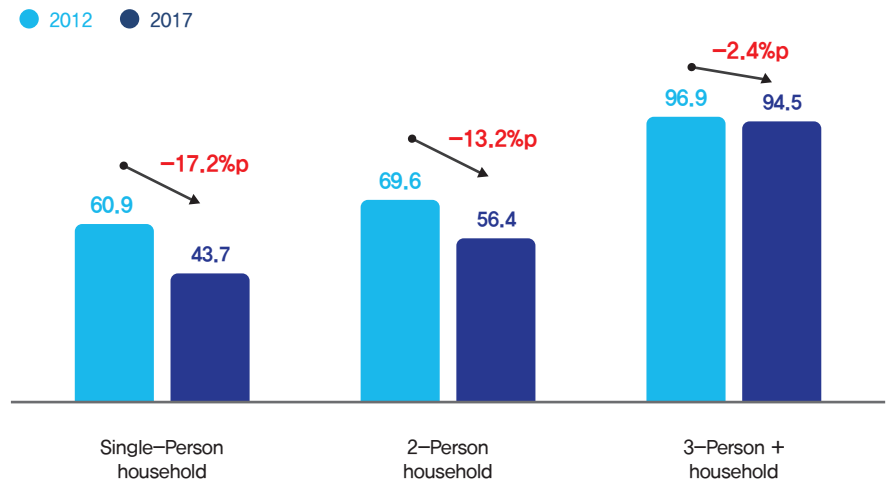
IV. Internet Without Computers

2) Single-Person and Multiple-Person Households with Computers

Single-person households with computers dropped 17.2%p in 5 years

Single-person households with computers in 2017 was 43.7%, which is half that of households with 3 persons or more (94.5%). This is a 17.2%p fall from 5 years ago (60.9%). In contrast, the rate for households inhabited by more 3 persons or more decreased only slightly by 2.4%p.

Figure 57 • Comparison of Households with Computers by Household Size: 2012 and 2017 (multiple responses, %)
— All Households



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