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Broadband Usage Survey

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I. Purpose

The rapid development in information and communications technologies has driven the overall digital economy to flourish. Under the trend of convergence, the communications industry is vital to the national economy and development. Particularly, how consumers use the communications services in the communications market is not only closely related to the business operations and technological development in the overall communications industry, but its impact is also expanding to numerous other industries.

A survey on the communications provides an overview of the national development and consumer behaviors. A mechanism of surveys and investigations on the market and consumer behaviors has been established for a long time in many developed countries worldwide, such as Ofcom, the communications regulator in the UK, Ministry of Internal Affairs and Communications in Japan, KCC in Korea and IMDA in Singapore. In these countries, related information is regularly collected and documented to provide important statistics of the communications industry. The above mechanism of regular survey can serve as a key indicator of the overall national development on one hand, and offer an understanding of the consumer behaviors and the market on the other.

Taiwan's survey on the communications market was first conducted by the NCC last year, and is performed again this year. The survey aims to obtain first-hand objective and detailed data on consumer behaviors and the status of the innovative applications through a comprehensive and in-depth investigation on the demand side. In addition, the obtained information will serve as an indicator of the development of Taiwan's digital economy, as well as the basis for the development of future policies and regulations

II. Survey Methods

A. Questionnaire Design

The questionnaires used in this survey are designed with reference to the way Ofcom, the British communications regulator, has surveyed consumer behaviors and trends in the communications market, and modified based on the latest development of Taiwan's broadband usage.

B. Population and Sampling Strategy

1. Survey population

The survey was conducted in Taiwan proper (exclusive of Kinmen County and Lianjiang County) with people aged 16 and above (those who were born on and before December 31, 2002) being approached.

2. Sampling method

Under the principle of PPS (probabilities proportional to size) ¹sampling, the sampling was performed in three stages. In the first and second stages, samples were allocated based on the proportion of the population in the area; while in the third stage, samples were selected using convenience sampling.

The stratified sampling used in this research is based on the classifications established by Peichun Hou et al. (2008), where villages, towns, cities and districts are grouped into seven levels based on the development. Thus, Taiwan's 358 townships and districts are divided into seven levels. They are city cores, commercial and industrial areas, emerging cities and townships, traditional industry townships, less-developed townships, aged townships and remote townships. The primary sampling units were townships, the secondary sampling units were villages, and the third sampling units were gathering places in the townships where an interview point was set up.

Table 1 Levels of Townships and Districts

Level Code	Names of Districts and Townships
1	Songshan District of Taipei City, Xinyi District of Taipei City, Da'an District of Taipei City, Zhongzheng District of Taipei City, Datong District of Taipei City, Wanhua District of Taipei City, Yonghe District of New Taipei City, Central District of Taichung City, West District of Taichung City, North District of Taichung City, East District of Tainan City, West Central District of Tainan City, Yancheng District of Kaohsiung City, Sanmin District of Kaohsiung City, Xinxing District of Kaohsiung City, Qianjin District of Kaohsiung City, Lingya District of Kaohsiung City
2	Zhongshan District of Taipei City, Wenshan District of Taipei City, Nangang District of Taipei City, Neihu District of Taipei City, Shilin District of Taipei City,

¹probabilities proportional to size, PPS

Level Code	Names of Districts and Townships
	Beitou District of Taipei City, Banqiao District of New Taipei City, Sanchong District of New Taipei City, Zhonghe District of New Taipei City, Xinzhuang District of New Taipei City, Tamsui District of New Taipei City, Luzhou District of New Taipei City, Linkou District of New Taipei City, Taoyuan City of Taoyuan County, Zhongli City of Taoyuan County, Zhubei City of Hsinchu County, East District of Hsinchu City, North District of Hsinchu City, South District of Taichung City, Xitun District of Taichung City, Nantun District of Taichung City, Beitun District of Taichung City, North District of Tainan City, Gushan District of Kaohsiung City, Zuoying District of Kaohsiung City, Fengshan District of Kaohsiung City
3	Xindian District of New Taipei City, Shulin District of New Taipei City, Yingge District of New Taipei City, Sanxia District of New Taipei City, Xizhi District of New Taipei City, Tucheng District of New Taipei City, Taishan District of New Taipei City, Yangmei City of Taoyuan County, Luzhu Township of Taoyuan County, Dayuan Township of Taoyuan County, Guishan Township of Taoyuan County, Bade City of Taoyuan County, Longtan Township of Taoyuan County, Pingzhen City of Taoyuan County, Zhudong Township of Hsinchu County, Hukou Township of Hsinchu County, Xinfeng Township of Hsinchu County, Qionglin Township of Hsinchu County, Baoshan Township of Hsinchu County, Xiangshan District of Hsinchu City, Zhunan Township of Miaoli County, Toufen Township of Miaoli County, Fengyuan District of Taichung City, Shalu District of Taichung City, Wuqi District of Taichung City, Tanzi District of Taichung City, Daya District of Taichung City, Wuri District of Taichung City , Longjing District of Taichung City, Taiping District of Taichung City, Dali District of Taichung City, Shanhua District of Tainan City, Rende District of Tainan City, Guiren District of Tainan City, Yongkang District of Tainan City, Annan District of Tainan City, Anping District of Tainan City, Nanzi District of Kaohsiung City, Xiaogang District of Kaohsiung City, Daliao District of Kaohsiung City, Dashe District of Kaohsiung City , Renwu District of Kaohsiung City, Niaosong District of Kaohsiung City, Gangshan District of Kaohsiung City
4	Zhongzheng District of Keelung City, Qidu District of Keelung City, Nuannuan District of Keelung City, Renai District of Keelung City, Zhongshan District of Keelung City, Anle District of Keelung City, Xinyi District of Keelung City, Wugu District of New Taipei City, Shenkeng District of New Taipei City, Bali District of New Taipei City, Miaoli City of Miaoli County, East District of Taichung City, Changhua City of Changhua County, Yuanlin Township of Changhua County,

Level Code	Names of Districts and Townships
	Douliu City of Yunlin County, East District of Chiayi City, West District of Chiayi City, Xinying District of Tainan City, South District of Tainan City, Qianzhen District of Kaohsiung City, Qijin District of Kaohsiung City, Pingtung City of Pingtung County, Yilan City of Yilan County, Luodong Township of Yilan County, Hualien City of Hualien County, Ji'an Township of Hualien County
5	Ruifang District of New Taipei City, Sanzhi District of New Taipei City, Shimen District of New Taipei City, Jinshan District of New Taipei City, Wanli District of New Taipei City, Daxi Township of Taoyuan County, Xinwu Township of Taoyuan County, Guanyin Township of Taoyuan County, Xinpu Township of Hsinchu County, Guanxi Township of Hsinchu County, Hengshan Township of Hsinchu County, Beipu Township of Hsinchu County, Yuanli Township of Miaoli County, Tongxiao Township of Miaoli County, Houlong Township of Miaoli County, Gongguan Township of Miaoli County, Tongluo Township of Miaoli County, Touwu Township of Miaoli County, Sanyi Township of Miaoli County, Zaoqiao Township of Miaoli County, Sanwan Township of Miaoli County, Dajia District of Taichung City, Qingshui District of Taichung City, Houli District of Taichung City, Shengang District of Taichung City, Shigang District of Taichung City, Waipu District of Taichung City, Da'an District of Taichung City, Dadu District of Taichung City, Wufeng District of Taichung City, Lugang Township of Changhua County, Hemei Township of Changhua County, Xianxi Township of Changhua County, Shengang Township of Changhua County, Fuxing Township of Changhua County, Xiushui Township of Changhua County, Huatan Township of Changhua County, Fenyuan Township of Changhua County, Xihu Township of Changhua County, Tianzhong Township of Changhua County, Datsuen Township of Changhua County, Puyan Township of Changhua County, Puxin Township of Changhua County, Yongjing Township of Changhua County, Shetou Township of Changhua County, Beidou Township of Changhua County, Pitou Township of Changhua County, Nantou City of Nantou County, Puli Township of Nantou County, Caotun Township of Nantou County, Dounan Township of Yunlin County, Huwei Township of Yunlin County, Linnei Township of Yunlin County, Taibao City of Chiayi County, Minxiong Township of Chiayi County, Shuishang Township of Chiayi County, Zhongpu Township of Chiayi County, Yanshui District of Tainan City, Liuying District of Tainan City, Madou District of Tainan City, Xiaying District of Tainan City, Liujia District of Tainan City, Guantian District of Tainan City, Jiali District of Tainan City, Xuejia District of Tainan City, Xigang District of Tainan City, Qigu District of Tainan City, Jiangjun District of Tainan City, Beimen District of

Level Code	Names of Districts and Townships
	<p>Tainan City, Xinhua District of Tainan City, Xinshi District of Tainan City, Anding District of Tainan City, Shanshang District of Tainan City, Guanmiao District of Tainan City, Linyuan District of Kaohsiung City, Dashu District of Kaohsiung City, Qiaotou District of Kaohsiung City, Yanchao District of Kaohsiung City, Alian District of Kaohsiung City, Luzhu District of Kaohsiung City, Hune District of Kaohsiung City, Jiading District of Kaohsiung City, Yongan District of Kaohsiung City, Mituo District of Kaohsiung City, Ziguan District of Kaohsiung City, Chaozhou Township of Pingtung County, Donggang Township of Pingtung County, Hengchun Township of Pingtung County, Wandan Township of Pingtung County, Changzhi Township of Pingtung County, Linluo Township of Pingtung County, Jiuru Township of Pingtung County, Neipu Township of Pingtung County, Xinyuan Township of Pingtung County, Su'ao Township of Yilan County, Toucheng Township of Yilan County, Jiaoxi Township of Yilan County, Zhuangwei Township of Yilan County, Yuanshan Township of Yilan County, Dongshan Township of Yilan County, Wujie Township of Yilan County, Taitung City of Taitung County</p>
6	<p>Shiding District of New Taipei City, Pinglin District of New Taipei City, Pingxi District of New Taipei City, Shuangxi District of New Taipei City, Gongliao District of New Taipei City, Emei Township of Hsinch County, Zhuolan Township of Miaoli County, Dahu Township of Miaoli County, Nanzhuang Township of Miaoli County, Xihu Township of Miaoli County, Shitan Township of Miaoli County, Tai'an Township of Miaoli County, Dongshi District of Taichung City, Xinshe District of Taichung City, Heping District of Taichung City, Ershui Township of Changhua County, Erlin Township of Changhua County, Tianwei Township of Changhua County, Fangyuan Township of Changhua County, Dacheng Township of Changhua County, Zhutang Township of Changhua County, Xizhou Township of Changhua County, Zhushan Township of Nantou County, Jiji Town of Nantou County, Mingjian Township of Nantou County, Lugu Township of Nantou County, Zhongliao Township of Nantou County, Yuchi Township of Nantou County, Guoshing Township of Nantou County, Shuili Township of Nantou County, Xinyi Township of Nantou County, Xiluo Township of Yunlin County, Tuku Township of Yunlin County, Beigang Township of Yunlin County, Gukeng Township of Yunlin County, Dapi Township of Yunlin County, Citong Township of Yunlin County, Erlun Township of Yunlin County, Lunbei Township of Yunlin County, Dongshi Township of Yunlin County, Baozhong Township of Yunlin County, Taixi Township of Yunlin County, Yuanchang Township of Yunlin County, Sihou Township of Yunlin County,</p>

Level Code	Names of Districts and Townships
	<p>Kouhu Township of Yunlin County, Shuilin Township of Yunlin County, Puzi City of Jiayi County, Budai Township of Jiayi County, Dalin Township of Chiayi County, Xikou Township of Chiayi County, Xingang Township of Chiayi County, Liujiao Township of Chiayi County, Dongshi Township of Chiayi County, Yizhu Township of Chiayi County, Lucao Township of Chiayi County, Zhuqi Township of Chiayi County, Meishan Township of Chiayi County, Fanlu Township of Chiayi County, Baihe District of Tainan City, Houbi District of Tainan City, Dongshan District of Tainan City, Danei District of Tainan City, Yujing District of Tainan City, Nanxi District of Tainan City, Nanhua District of Tainan City, Zuozen District of Tainan City, Longqi District of Tainan City, Tianliao District of Kaohsiung City, Qishan District of Kaohsiung City, Meinong District of Kaohsiung City, Liugui District of Kaohsiung City, Jiaxian District of Kaohsiung City, Shanlin District of Kaohsiung City, Neimen District of Kaohsiung City, Ligang Township of Pingtung County, Yanpu Township of Pingtung County, Gaoshu Township of Pingtung County, Wanluan Township of Pingtung County, Zhutian Township of Pingtung County, Xinpi Township of Pingtung County, Fangliao Township of Pingtung County, Kanding Township of Pingding Township, Linbian Township of Pingtung County, Nanzhou Township of Pingtung County, Jiadong Township of Pingtung County, Checheng Township of Pingtung County, Manzhou Township of Pingtung County, Fangshan Township of Pingtung County, Huxi Township of Penghu County, Baisha Township of Penghu County, Xiyu Township of Penghu County, Wangan Township of Penghu County, Qimei Township of Penghu County, Sanxing Township of Yilan County, Fenglin Township of Hualien County, Yuli Township of Hualien County, Shoufeng Township of Hualien County, Guangfu Township of Hualien County, Fengbin Township of Hualien County, Ruisui Township of Hualien County, Fuli Township of Hualien County, Chenggung Township of Taitung County, Guanshan Township of Taitung County, Beinan Township of Taitung County, Luye Township of Taitung County, Chishang Township of Taitung County, Donghe Township of Taitung County, Changbin Township of Taitung County, Taimaili Township of Taitung County</p>
7	<p>Wulai District of New Taipei City, Fuxing Township of Taoyuan County, Jianshi Township of Hsinchu County, Wufeng Township of Hsinchu County, Renai Township of Nantou County, Mailiao Township of Yunlin County, Dapu Township of Chiayi County, Alishan Township of Chiayi County, Maolin District of Kaohsiung City, Taoyuan District of Kaohsiung City, Namaxia District of Kaohsiung City, Liuqiu Township of Pingtung County, Sandimen Township of</p>

Level Code	Names of Districts and Townships
	Pingtung County, Wutai Township of Pingtung County, Majia Township of Pingtung County, Taiwu Township of Pingtung County, Laiyi Township of Pingtung County, Chunri Township of Pingtung County, Shizi Township of Pingtung County, Mudan Township of Pingtung County, Magong City of Penghu County, Datong Township of Yilan County, Nan'ao Township of Yilan County, Xincheng Township of Hualien County, Xiulin Township of Hualien County, Wanrong Township of Hualien County, Zhuoxi Township of Hualien County, Dawu Township of Taitung County, Ludao Township of Taitung County, Haiduan Township of Taitung County, Yanping Township of Taitung County, Jinfeng Township of Taitung County, Daren Township of Taitung County, Lanyu Township of Taitung County

Table 2 Table of Geographic Stratifications

Geographic Area	Level Code	Combined Level Code
Taipei City, New Taipei City, Keelung, Yilan	1	1
	2	2
	3, 4	3
	5, 6, 7	4
Taoyuan, Hsinchu, Miaoli	1, 2	1
	3, 4	2
	5, 6, 7	3
Taichung, Changhua, Nantou	1, 2	1
	3, 4	2
	5	3
	6, 7	4
Yunlin, Chiayi, Tainan	1, 2, 3	1
	4, 5	2
	6, 7	3
Kaohsiung, Pingtung, Penghu	1, 2	1
	3, 4	2
	5, 6, 7	3
Hualien, Taitung	4, 5	1
	6, 7	2

(1) Pilot Test

A stratified three-stage probability proportional to size sampling was adopted for the pre-test interviews. Since not many completed samples were expected during the pretest, the stratification system used in this project's formal survey was adjusted in order to meet the project deadline and save survey costs. With the Hualien and Taitung area excluded, only one geographic stratum was sampled within each of the five "geographic areas" -- "Taipei City, New Taipei City, Keelung, Yilan," "Taoyuan, Hsinchu, Miaoli," "Taichung, Changhua, Nantou," "Yunlin, Chiayi, Tainan," and "Kaohsiung, Pingtung, Penghu." Once the proportions of population in the geographic areas were calculated based on the demographic data provided by the Ministry of the Interior at the end of December 2017, the numbers of samples for all geographic areas were determined based on the proportions, with the numbers of townships and the expected number of completed samples within every township adjusted. The actual number of successful samples is 30.

(2) Formal survey

Prior to conducting the formal survey, the proportions of population in the geographic areas were calculated based on the demographic data provided by the Ministry of the Interior at the end of December 2017, and the numbers of samples for all geographic areas were determined based on the proportions, with the numbers of townships and the expected number of completed samples within every township adjusted. Consequently, a total of 1,068 samples were expected to be completed in each of the four investigations. In view of the small population and extremely uneven distribution of population in the Hualien and Taitung area, the stratified two-stage PPS (probabilities proportional to size) sampling was actually used, while the stratified three-stage PPS sampling was used in other areas. During the third stage, a survey point was set up at gathering places (such as village office, activity center, and market) in the townships selected to conduct the survey with local residents.

The sampling units in each stage are explained as below.

- During a two-stage sampling, the primary sampling units were "township" and then "people." All of the "districts and townships" in the geographic stratum were included.
- During a three-stage sampling, the primary sampling units were "townships," and the second sampling units were "villages." The last sampling units were "people."

During the implementation of the survey, the gender and age structures of all communities were strictly controlled with view to ensuring that the structure of the survey results could be similar to that of the target population. In case of any inconsistency between obtained samples and the population, the results were weighted based on variables like gender, age, and community. The weighted sample number in every age group must not exceed the original sample number by 60%.

(3) Allocation of samples

To meet the request of the agency that commissioned this project, at least 1,068 valid samples were investigated in each questionnaire with a sampling error of within $\pm 3\%$ at a 95% confidence level.

Table 3 Plan for Allocation of Samples at Survey Sites in All Communities

Geographic stratum	Level	No. of People Aged 16 and above	Population Percentage	Planned Allocation of Samples	No. of Townships and Districts Selected	No. of Villages Selected	Total Samples of Villages
Taipei City, New Taipei City, Keelung, Yilan	Level 1	1,234,927	19.11%	66	2	2	4
	Level 2	3,180,892	49.22%	169	5	2	10
	Level 3	1,642,127	25.41%	87	3	2	6
	Level 4	404,626	6.26%	22	1	2	2
	Subtotal	6,462,572	32.15%	343	11		22
Taoyuan, Hsinchu, Miaoli	Level 1	1,136,158	36.42%	60	2	2	4
	Level 2	1,460,970	46.83%	78	3	2	6
	Level 3	522,787	16.76%	28	1	2	2
	Subtotal	3,119,915	15.52%	166	6		12
Taichung, Changhua, Nantou	Level 1	903,857	23.26%	48	2	2	4
	Level 2	1,266,346	32.59%	67	2	2	4
	Level 3	1,276,334	32.85%	68	2	2	4
	Level 4	438,815	11.29%	23	1	2	2
	Subtotal	3,885,352	19.33%	206	7		14
Yunlin, Chiayi, Tainan	Level 1	922,186	31.58%	49	2	2	4
	Level 2	1,216,056	41.65%	65	2	2	4
	Level 3	781,563	26.77%	42	1	2	2
	Subtotal	2,919,805	14.53%	155	5		10
Kaohsiung, Pingtung, Penghu	Level 1	1,132,325	35.01%	60	2	2	4
	Level 2	986,400	30.49%	52	2	2	4
	Level 3	1,115,990	34.50%	59	2	2	4
	Subtotal	3,234,715	16.09%	172	6		12
Hualien, Taitung	Level 1	252,400	52.97%	13	0	1	1
	Level 2	224,091	47.03%	12	0	1	1
	Subtotal	476,491	2.37%	25			2
Total		20,098,850	100.00%	1,068			72

Since the original allocation of the survey site sampling is based on proportions of the entire population, these calculated decimal numbers had to be rounded to the nearest integers when the survey was actually performed. Moreover, to meet a specific requirement this year that the number of weighted samples in every age group must not exceed the original number of samples by 60%, the samples were allocated and adjusted accordingly in this project. The adjusted allocation of survey site sampling has been shown in the table below.

Table 4 Plan for Allocation of Samples at Survey Sites in All Communities after Adjustment by Age

Geographic stratum	Level	No. of People Aged 16 and above	Population Percentage	Originally Planned Allocation of Samples at Survey Sites						First Adjustment	
				Planned Allocation of Samples	No. of Townships and Districts Selected	No. of Villages Selected	Total Samples of Villages	Expected No. of Samples by Village	Expected No. of Samples by Level	Expected No. of Samples by Village	Expected No. of Samples by Level
Taipei City, New Taipei City, Keelung, Yilan	Level 1	1,234,927	19.11%	66	2	2	4	16	64	16	64
	Level 2	3,180,892	49.22%	169	5	2	10	17	170	17	170
	Level 3	1,642,127	25.41%	87	3	2	6	15	90	15	90
	Level 4	404,626	6.26%	22	1	2	2	11	22	11	22
	Subtotal	6,462,572	32.15%	343	11	-	22	-	346	-	346
Taoyuan, Hsinchu, Miaoli	Level 1	1,136,158	36.42%	60	2	2	4	15	60	15	60
	Level 2	1,460,970	46.83%	78	3	2	6	13	78	13	78
	Level 3	522,787	16.76%	28	1	2	2	14	28	14	28
	Subtotal	3,119,915	15.52%	166	6	-	12	-	166	-	166
Taichung, Changhua, Nantou	Level 1	903,857	23.26%	48	2	2	4	12	48	12	48
	Level 2	1,266,346	32.59%	67	2	2	4	17	68	17	68
	Level 3	1,276,334	32.85%	68	2	2	4	17	68	17	68
	Level 4	438,815	11.29%	23	1	2	2	12	24	12	24
	Subtotal	3,885,352	19.33%	206	7	-	14	-	208	-	208
Yunlin, Chiayi, Tainan	Level 1	922,186	31.58%	49	2	2	4	12	48	12	48
	Level 2	1,216,056	41.65%	65	2	2	4	16	64	16	64
	Level 3	781,563	26.77%	42	1	2	2	21	42	21	42
	Subtotal	2,919,805	14.53%	155	5	-	10	-	154	-	154
Kaohsiung, Pingtung, Penghu	Level 1	1,132,325	35.01%	60	2	2	4	15	60	12	48
	Level 2	986,400	30.49%	52	2	2	4	13	52	14	56
	Level 3	1,115,990	34.50%	59	2	2	4	15	60	16	64
	Subtotal	3,234,715	16.09%	172	6	-	12	-	172	-	168
Hualien, Taitung	Level 1	252,400	52.97%	13	-	1	1	13	13	14	14
	Level 2	224,091	47.03%	12	-	1	1	12	12	12	12
	Subtotal	476,491	2.37%	25	-	-	2	-	25	-	26
Total		20,098,850	100.00%	1,068	35	-	72	-	1071	-	1068

Table 4 Plan for Allocation of Samples at Survey Sites in All Communities after Adjustment by Age

Geographic stratum	Level	No. of People Aged 16 and above	Population Percentage	First Adjustment		Second Adjustment of Site Allocation Based on Age Distribution in the Population (Expected No. by Site)							Expected No. of Completed Samples in Each Level by Age Group
				Expected No. of Samples by Village	Expected No. of Samples by Level	Expected No. of Samples with Ages 16-25	Expected No. of Samples with Ages 26-35	Expected No. of Samples with Ages 36-45	Expected No. of Samples with Ages 46-55	Expected No. of Samples with Ages 56-65	Expected No. of Samples with Ages 66 and Above	Expected No. of Samples by Level	
Taipei City, New Taipei City, Keelung, Yilan	Level 1	1,234,927	19.11%	16	64	2	4	3	3	2	2	16	64
	Level 2	3,180,892	49.22%	17	170	3	3	3	3	2	2	16	160
	Level 3	1,642,127	25.41%	15	90	3	3	3	3	2	1	15	90
	Level 4	404,626	6.26%	11	22	3	3	2	3	2	1	14	28
	Subtotal	6,462,572	32.15%	-	346	-	-	-	-	-	-	-	-
Taoyuan, Hsinchu, Miaoli	Level 1	1,136,158	36.42%	15	60	3	3	3	3	2	1	15	60
	Level 2	1,460,970	46.83%	13	78	3	3	2	3	2	1	14	84
	Level 3	522,787	16.76%	14	28	3	3	2	3	2	1	14	28
	Subtotal	3,119,915	15.52%	-	166	-	-	-	-	-	-	-	-
Taichung, Changhua, Nantou	Level 1	903,857	23.26%	12	48	3	3	2	3	2	1	14	56
	Level 2	1,266,346	32.59%	17	68	3	3	4	2	2	2	16	64
	Level 3	1,276,334	32.85%	17	68	3	3	4	3	2	2	17	68
	Level 4	438,815	11.29%	12	24	3	3	2	2	2	1	13	26
	Subtotal	3,885,352	19.33%	-	208	-	-	-	-	-	-	-	-
Yunlin, Chiayi, Tainan	Level 1	922,186	31.58%	12	48	3	3	2	2	2	1	13	52
	Level 2	1,216,056	41.65%	16	64	3	3	3	2	2	1	14	56
	Level 3	781,563	26.77%	21	42	3	3	4	3	2	2	17	34
	Subtotal	2,919,805	14.53%	-	154	-	-	-	-	-	-	-	-
Kaohsiung, Pingtung, Penghu	Level 1	1,132,325	35.01%	12	48	3	3	2	3	2	1	14	56
	Level 2	986,400	30.49%	14	56	3	3	3	2	2	1	14	56
	Level 3	1,115,990	34.50%	16	64	3	3	3	2	2	2	15	60
	Subtotal	3,234,715	16.09%	-	168	-	-	-	-	-	-	-	-
Hualien, Taitung	Level 1	252,400	52.97%	14	14	2	3	3	3	2	1	14	14
	Level 2	224,091	47.03%	12	12	2	3	2	3	2	1	13	12
	Subtotal	476,491	2.37%	-	26	-	-	-	-	-	-	-	-
Total		20,098,850	100.00%	-	1068	-	-	-	-	-	-	-	1068

3. Survey period

The interviews took place in the selected areas between May 6 and July 13, 2018.

Table 5 Implementation of Formal Sampling

Area	Level	Townships and Districts	Expected No. of Samples (1,068 samples in total)	No. of Completed Samples (1,072 samples in total)
Taipei City, New Taipei City, Keelung, Yilan	Level 1	Xinyi District of Taipei City	32	33
		Wanhua District of Taipei City	32	32
	Level 2	Banqiao District of New Taipei City	32	32
		Zhonghe District of New Taipei City	32	50
		Zhongshan District of Taipei City	32	38
		Wenshan District of Taipei City	32	32
	Level 3	Shilin District of Taipei City	32	35
		Xindian District of New Taipei City	30	30
		Xizhi District of New Taipei City	30	30
	Level 4	Tucheng District of New Taipei City	30	22
		Sanxing Township of Yilan County	28	28
Subtotal			342	362
Taoyuan, Hsinchu, Miaoli	Level 1	Zhongli City of Taoyuan County	30	29
		Zhubei City of Hsinchu County	30	29
	Level 2	Miaoli City of Miaoli County	28	28
		Bade City of Taoyuan County	28	29
		Zhudong Township of Hsinchu County	28	28
	Level 3	Houlong Township of Miaoli County	28	28
Subtotal			172	171
Taichung, Changhua, Nantou	Level 1	North District of Taichung City	28	28
		Beitun District of Taichung City	28	28
	Level 2	West District of Taichung City	32	30
		Changhua City of Changhua County	32	32
	Level 3	Caotun Township of Nantou County	34	33
		Puli Township of Nantou County	34	28
	Level 4	Zhushan Township of Nantou County	26	26
Subtotal			214	205
Yunlin, Chiayi, Tainan	Level 1	Yongkang District of Tainan City	26	26
		Annan District of Tainan City	26	26
	Level 2	Huwei Township of Yunlin County	28	29
		Zhuqi Township of Chiayi County	28	26
	Level 3	Baihe District of Tainan City	34	34
Subtotal			142	141
Kaohsiung, Pingtung, Penghu	Level 1	Fengshan District of Kaohsiung City	28	28
		Sanmin District of Kaohsiung City	28	22
	Level 2	Qianzhen District of Kaohsiung City	28	29
		Nanzi District of Kaohsiung City	28	28
	Level 3	Magong City of Penghu County	30	30
		Pingtung City of Pingtung County	30	28
Subtotal			172	165
Hualien, Taitung	Level 1	Hualien City of Hualien County	14	15
	Level 2	Taitung City of Taitung County	12	13
	Subtotal			26
Total			1068	1072

Differences between the actual numbers of samples and the planned numbers of samples are explained as below:

- (1) This survey was completely implemented as planned in terms of sites and allocation of samples. However, due to reasons like age control and the people's willingness to be interviewed at different sites, fewer samples were completed than expected at several sites.
- (2) Although samples were not performed as planned at some sites, samples of all areas were verified to represent the population in terms of distribution, through a test prior to weighting (See Table 6 below).

Table 6 Contingency Table for Broadband Survey Site before Weighting

Allocation of Survey Site No.	Allocation of Samples		No. of Samples before		Chi-Square Test before Weighting
	No. of People	Percentage	No. of People	Percentage	
Total	1,068	100.0%	1,072	100.0%	
Survey Site					The Chi-square value is 1.97, and p-value (= 0.85) is below the accepted significance level of 5%, meaning no significant difference between the distribution of samples and the original allocation of samples.
Taipei City, New Taipei City, Keelung, Yilan	342	32.0%	362	33.8%	
Taoyuan, Hsinchu, Miaoli	172	16.1%	171	16.0%	
Taichung, Changhua, Nantou	214	20.0%	205	19.1%	
Yunlin, Chiayi, Tainan	142	13.3%	141	13.2%	
Kaohsiung, Pingtung, Penghu	172	16.1%	165	15.4%	
Hualien, Taitung	26	2.4%	28	2.6%	

C. Implementation of Survey

1. Timeline

Before the survey was formally launched, preparations for questionnaires and related affairs were undertaken from April 22 to April 26, 2018. After the questionnaires were modified based on the conclusions from the meeting with the agency that commissioned this study, the survey formally began on May 6, 2018. The timeline is explained as below.

- (1) Preparation period: April 1 to April 27, 2018
- (2) Survey period:
 - Phase 1: April 22 to April 26, 2018
 - Phase 2: May 6 to July 13, 2018
- (3) Review period: July 14 to July 18, 2018

2. Survey method

Face-to-face interviews were employed for this survey; a computer-assisted interview survey system was used during the interview, and was complemented with printed questionnaires.

3. Statistical analysis method

(1) Sample representativeness and weighting

After the survey results were reviewed, the NPAR Chi-square test was used to examine the difference between the allocation of samples and the structure of the population in terms of age, gender, and population percentage, to enhance the representativeness and reliability of the survey so that these samples could reflect the population structure. In case a significant difference in structure was identified between the samples and the population, weighting was used to make the sample structure identical to that of the population.

About weighting, the raking method was used to adjust the sampling weights based on variables in the order of gender, age and area of household registered until no significant difference existed between the allocation of samples and the population in every variable.

All the data in the results were multiplied by the adjustment weight. $\frac{N_i}{N} / \frac{n'_i}{n}$,

N_i and n'_i represent the number of the population and the number of sample population weighted in the Cross Group i , while N and n represent the number of the total population and the number of the total sample population weighted. This way, the sampling distribution was completely the same as the population distribution after weighting. The last weight was gained by multiplying all the adjustment weights.

(2) Reliability analysis

Reliability refers to trustworthiness or consistency of a survey. Namely, when the survey is performed under the same or similar conditions, consistent or stable results can be obtained. Cronbach's (1951) α reliability coefficient is currently the most used reliability indicator. Nunnally (1967) suggested that a reliability of 0.7 or higher, also known as high reliability, is acceptable.

(3) Frequency

How people understand and rate each of the aspects can be realized through the data presented in allocation of frequencies and percentages in all questions.

(4) Cross analysis and Chi-square test

A cross analysis table was established with the basic data in "all the issues" to realize whether a difference existed between the respondents with different backgrounds in all the issues. Pearson's Chi-square test was used in the cross table. The Chi-square test value (W) is defined as below:

$$W = \sum_{i=1}^r \sum_{j=1}^c \frac{(O_{ij} - E_{ij})^2}{E_{ij}} \sim \chi^2((r-1)(c-1)), \text{ wherein}$$

O_{ij} is the observed frequency from Row j , Column i , and

E_{ij} is the expected frequency from Row j , Column i .

When p -value in the Chi-square test is less than 0.05, it means the two variables are not independent at a 95% confidence level. That is, a significant statistic difference exists between the respondents with different backgrounds in the issue.

(5) Analysis of variance (ANOVA)

The total variation can be divided into the variation between groups and the variation within groups. Analysis of variance is used to calculate the ratio of variation between groups to variation within groups. If the variation between groups is significantly greater than the variation within groups, significant differences among group means exist between two or more groups. If the variation between groups is not

highly different from the variation within groups, little differences exist among groups. The ANOVA F-test calculations are as below.

$$F = \frac{MS_b}{MS_w} = \frac{SS_b / k - 1}{SS_w / n - k}$$

, where n represents the number of samples and k represents the number of groups,

$$SS_b = n \sum_{i=1}^k (\bar{X}_i - \bar{X})^2$$

is the total sum of squared deviations of group means from

grand mean, and

$$SS_w = \sum_{i=1}^k \sum_{j=1}^{n_i} (X_{ij} - \bar{X}_i)^2$$

is the total sum of the squared deviations within groups.

4. Sample structure

As of July 18, 2018, the survey for this research has been implemented and reviewed by the research team, with 1,072 questionnaires completed as valid samples. The sample structure is shown in Table 7.

Table 7 Contingency Table for Broadband Usage Survey Samples

Population variables	Population		No. of Samples before Weighting		No. of Samples after Weighting		Chi-Square Test before Weighting	Chi-Square Test after Weighting
	No. of People	Percentage	No. of People	Percentage	No. of People	Percentage		
Total	20,098,850	100.0%	1,072	100.0%	1,072	100.0%		
Gender							The Chi-square value is 0.29, and p-value (= 0.591) is below the accepted significance level of 5%, meaning no significant difference between samples and the target population in distribution of gender.	The Chi-square value is 0.000, and p-value (= 0.999) is below the accepted significance level of 5%, meaning no significant difference between samples and the target population in distribution of gender.
Male	9,914,303	49.3%	520	48.5%	529	49.3%		
Female	10,184,547	50.7%	552	51.5%	543	50.7%		
Age							The Chi-square value is 54.04, and p-value (= 0.000) is below the accepted significance level of 5%, meaning significant difference between samples and the target population in distribution of age.	The Chi-square value is 0.003, and p-value (= 0.999) is below the accepted significance level of 5%, meaning no significant difference between samples and the target population in distribution of age.
Age 16-25	3,019,238	15.0%	212	19.8%	161	15.0%		
Age 26-35	3,365,892	16.7%	228	21.3%	180	16.8%		
Age 36-45	3,830,729	19.1%	202	18.8%	204	19.0%		
Age 46-55	3,652,178	18.2%	181	16.9%	195	18.2%		
Age 56-65	3,263,731	16.2%	146	13.6%	174	16.2%		
Age 66 and above	2,967,082	14.8%	103	9.6%	158	14.7%		
City or County							The Chi-square value is 373.77, and p-value (= 0.000) is below the accepted significance level of 5%, meaning significant difference between samples and the target population in distribution of city and county.	The Chi-square value is 2.405, and p-value (= 0.999) is below the accepted significance level of 5%, meaning no significant difference between samples and the target population in distribution of city and county.
New Taipei City	3,448,947	17.2%	145	13.5%	183	17.0%		
Taipei City	2,289,192	11.4%	145	13.5%	132	12.3%		
Taoyuan City	1,830,616	9.1%	84	7.8%	96	9.0%		
Taichung City	2,347,963	11.7%	78	7.3%	125	11.7%		
Tainan City	1,634,429	8.1%	100	9.3%	87	8.1%		
Kaohsiung City	2,412,066	12.0%	107	10.0%	125	11.7%		
Yilan County	396,203	2.0%	40	3.7%	21	2.0%		
Hsinch County	454,239	2.3%	63	5.9%	24	2.2%		
Miaoli County	475,420	2.4%	46	4.3%	24	2.3%		
Changhua County	1,097,511	5.5%	35	3.3%	63	5.9%		
Nantou County	439,878	2.2%	65	6.1%	24	2.2%		
Yilan County	601,273	3.0%	30	2.8%	30	2.8%		
Chiayi County	455,600	2.3%	33	3.1%	25	2.4%		
Pingtung County	730,817	3.6%	25	2.3%	39	3.6%		
Taitung County	190,752	0.9%	11	1.0%	10	0.9%		
Hualien County	285,739	1.4%	13	1.2%	14	1.3%		
Penghu County	91,832	0.5%	30	2.8%	5	0.5%		
Keelung City	328,230	1.6%	7	0.7%	15	1.4%		
Hsinch City	359,640	1.8%	3	0.3%	16	1.5%		
Chiayi City	228,503	1.1%	12	1.1%	12	1.1%		

Note: The source of the population data is the 2017 December Demographic Data of Households in Each Village provided on the Open Data platform by the Ministry of the Interior.

D. Research limitations

To keep on top of how Taiwanese people use communications in the digital economic era, a survey on the Broadband Usage trend in the communications industry was implemented by means of interviews with people aged 16 and above (those who were born on and before December 31, 2002) in Taiwan proper (exclusive of Kinmen County and Lianjiang County), at the request of NCC. However, the following study limitations exist when actually performing the survey:

1. Sample frame limitations

Based on the requirements of the NCC, at least 1,068 successful samples were to be completed with the allocation of samples proportional to the population of every county or city.

In order to undertake rigorous sampling, research was conducted with reference to the sample structure used in Taiwan Social Change Survey by Academia Sinica. Nonetheless, it may be worth noting that this research differed from Taiwan Social Change Survey, where household registrations were used as a sampling frame. With no access to Taiwan's household registration database, a household survey seemed impossible. Instead, interviews were carried out at gathering places in townships or cities.

2. Sample recovery restrictions

The survey questionnaires contained 112 questions. In order to meet the requirement of at least 1,068 successful sample responses, groups of two interviewers were arranged at bustling locations, such as parks and busy crossroads, to perform interviews.

During this survey, the average number of those who did not comply was 3.93. Among the aged 55 and over groups, the average number of refusals was 8.28, making it much harder to achieve the planned number of interviews when compared with young people. Even so, the interviewers were urged to obtain the required number of samples by gender and age, so the weighted number of all age groups would not exceed the original number of samples by 60%.

3. Sample inference restrictions

After weighting, the sample number of young people, such as ages 16-25, was 0.76 times greater; the sample number of ages 26-35 was 0.79 times greater; the

sample number of ages 36-45 was 1.01 time greater; the sample number of middle-aged people such as ages 46-55 was 1.08 times greater; the sample number of ages 56-65 was 1.19 times greater; and the sample number of ages 66 and above was 1.53 times greater.

III. Results

A. Online Behaviors

Measures taken to protect online security

1. Overall analysis

The most commonly used measure to protect internet security by people in Taiwan is anti-virus software (61.6%), followed by firewall (36.1%); while 20% of people do not take any internet security measures (See Figure 1).

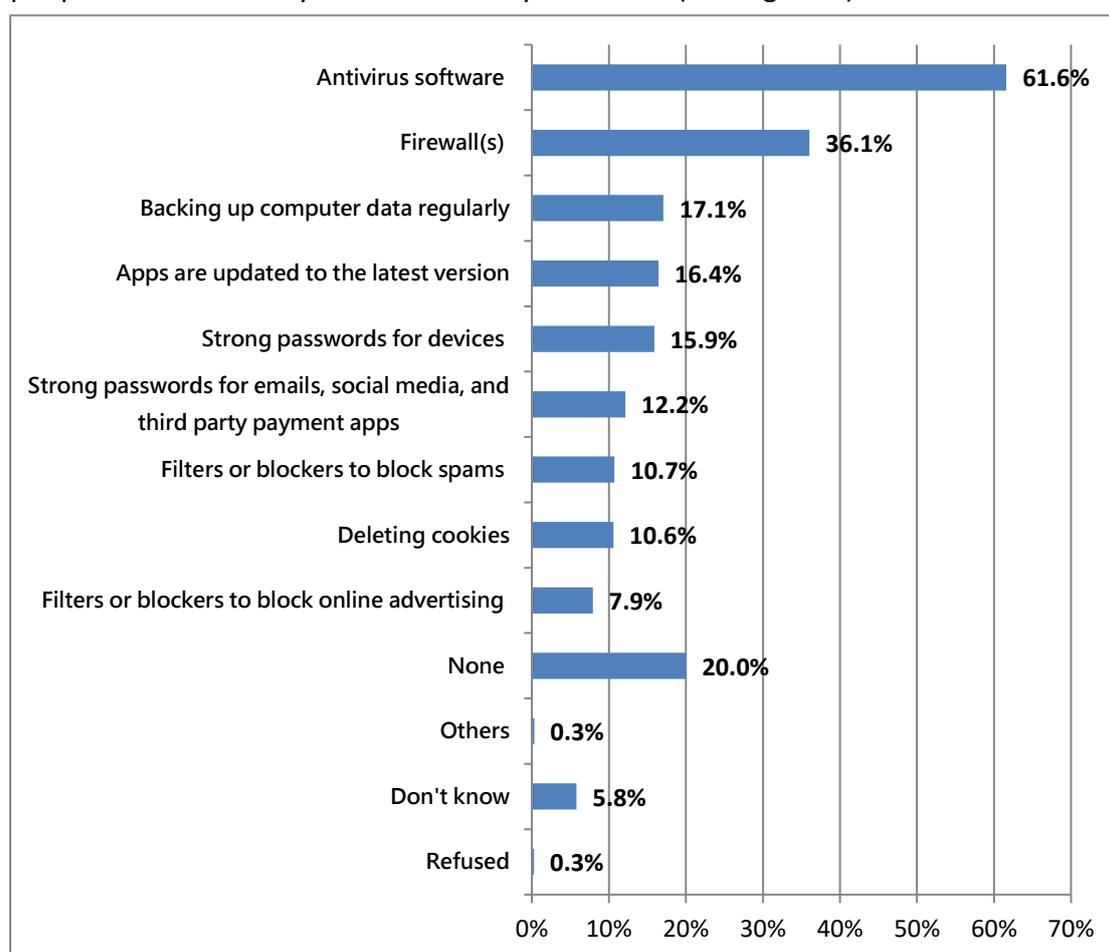


Figure 1 Internet Security Measures

Base : N=959, multiple-choice (Internet users)

2. Comparative analysis

(1) Analysis of regional differences

The cross analysis suggests that most of Taiwanese people prevent online threats with anti-virus software to protect online security.

(2) Analysis of basic differences

When analyzed by gender, antivirus software is the most used measure to protect internet security by both males and females (65.2% and 58% respectively), and slightly more females (22.5%) do not take any measure to protect Internet security than males (17.5%).

When analyzed by age, antivirus software is the most used measure to protect internet security among people aged below 65, while most of those aged 66 and above (58.7%) do not take any measure to protect Internet security.

When analyzed by marriage status, antivirus software is the most used measure to protect internet security by people, regardless of marriage status.

Situations encountered online in the past 12 months

1. Overall analysis

The survey shows that most Taiwanese people aged 16 and above did not encounter special situations online (71.1%) in the past 12 months, while 13.3% encountered computer viruses, 7% encountered personal information leaks, and 6.5% encountered Internet fraud in the past 12 months (See Figure 2).

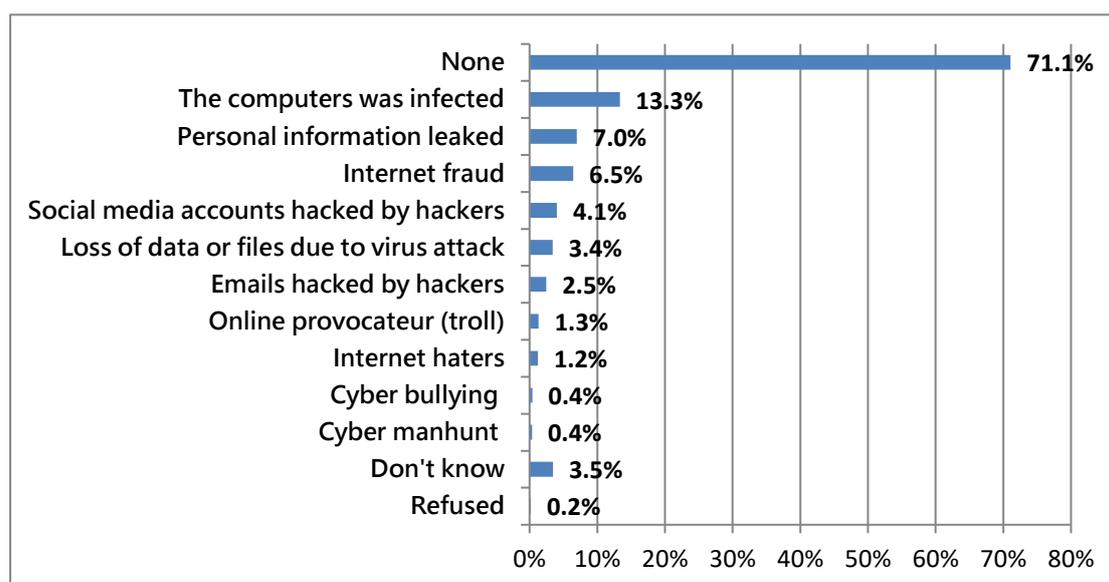


Figure 2 Situations Encountered Online in the Past 12 Months

Base : N=959, multiple-choice (Internet users)

2. Comparative analysis

(1) Analysis of regional differences

The cross analysis suggests that most of Taiwanese people did not experience Internet problems, such as computer virus and Internet fraud, in the past 12 months.

(2) Analysis of basic differences

When analyzed by gender, most of the people did not experience Internet problems, such as computer virus and Internet fraud, in the past 12 months, regardless of gender.

When analyzed by age, most of the people did not experience Internet problems, such as computer virus and Internet fraud, in the past 12 months, regardless of age.

When analyzed by marriage status, most of the people did not experience situations online, such as computer virus and Internet fraud, in the past 12 months, regardless of marriage status.

Reasons to use the internet in the coming 12 months

1. Overall analysis

The survey shows that Taiwanese people aged 16 and above will use the internet in the coming 12 months for contact with others (69.2%), to search for data (67%) and for online shopping (41.2%) (See Figure 3).

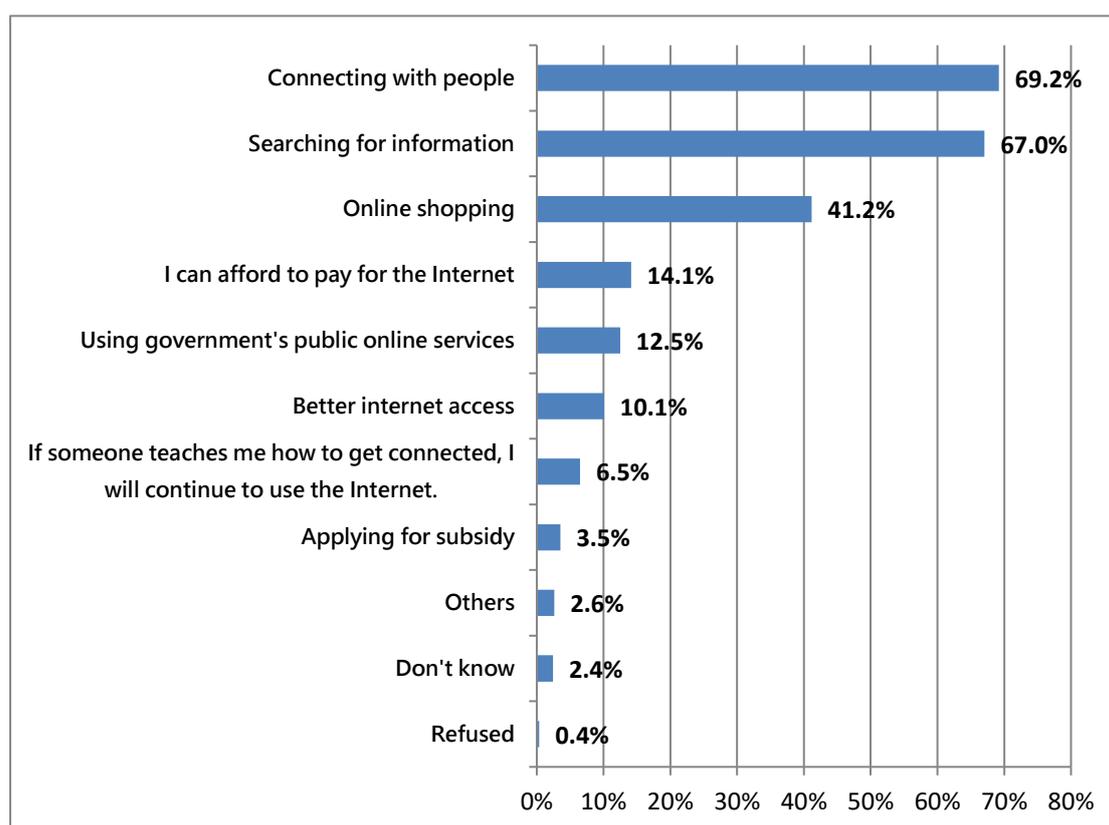


Figure 3 Reasons to Use the internet in the Future

Base : N=959, multiple-choice (Internet users)

2. Comparative analysis

(1) Analysis of regional differences

The cross analysis suggests that Taiwanese people will use the internet in the

coming 12 months primarily for contact with others and to search for data.

(2) Analysis of basic differences

When analyzed by gender, people will use the internet in the coming 12 months primarily for contact with others and to search for data, regardless of gender.

When analyzed by age, people will use the internet in the coming 12 months primarily for contact with others and to search for data, regardless of age.

When analyzed by marriage status, people will use the internet in the coming 12 months primarily for contact with others and to search for data, regardless of marriage status.

Confidence levels to use the internet

1. Overall analysis

Overall, the average confidence level of Taiwanese people aged 16 and above in using the Internet is 6.72 (1 indicates no confidence and 10 indicates total confidence). Among them, the average confidence level to “determine whether the online information is advertising or not” is the highest (6.88), followed by writing blogs, sharing photos online and uploading videos to the web (5.90) and control of personal information published online (5.49) (See Table 8).

Table 8 Confidence Levels in Using Internet

Online Behaviors	Confidence Level (Average)
Determining Whether the Online Information is Advertising or Not	6.88
Internet Usage as a Whole	6.72
Writing Blogs, Sharing Photos Online and Uploading Videos to the Web	5.90
Control of Personal Information Published Online	5.49

Base: N=959 (Internet users)

Source: Results of this research

2. Comparative analysis

(1) Analysis of regional differences

The one-way ANOVA suggests that whether one has confidence in the online behaviors shown in Table 8 is significantly related to the area where one lives.

The cross analysis suggests that people in Taoyuan, Hsinchu and Miaoli have the highest confidence level no matter in writing blogs, sharing photos online and uploading videos to the web (6.88), control of personal information published online

(6.70), determining whether the online information is advertising or not (7.53), or internet usage as a whole (7.56).

(2) Analysis of basic differences

The one-way ANOVA suggests that whether one has confidence in writing blogs, sharing photos online and uploading videos to the web, control of personal information published online (6.70), and internet usage as a whole is significantly related to gender, age, or marriage status; while whether one has confidence in determining whether the online information is advertising or not is significantly related to age, and marriage status.

When analyzed by gender, males have higher confidence than females in writing blogs, sharing photos online and uploading videos to the web (6.08), control of personal information published online (5.75), determining whether the online information is advertising or not (6.98), and internet usage as a whole (6.99).

When analyzed by age, people aged 26-35 have the highest confidence in writing blogs, sharing photos online and uploading videos to the web (6.60), and determining whether the online information is advertising or not (7.28), while people aged 16-25 have the highest confidence level in control of personal information published online (6.05), and internet usage as a whole (7.35).

When analyzed by marriage status, unmarried people have higher confidence levels in writing blogs, sharing photos online and uploading videos to the web (6.27), control of personal information published online (5.76), determining whether the online information is advertising or not (7.30) and internet usage as a whole (7.26) than their married and widowed/separated counterparts.

(3) Analysis of differences in social and economic status

The one-way ANOVA suggests that whether one has confidence in the online behaviors shown in Table 8 is significantly related to the average monthly individual income, education level, and profession.

When analyzed by average monthly individual income, the NT40,000-49,999 group has the highest confidence levels in writing blogs, sharing photos online and uploading videos to the web (6.67), and control of personal information published online (6.14) among all income groups; while the NT60,000 and more group has the highest confidence levels in determining whether the online information is advertising or not (7.81) and internet usage as a whole (7.40) among all income groups.

When analyzed by education level, university graduates have the highest scores whether in writing blogs, sharing photos online and uploading videos to the web (6.44), control of personal information published online (5.92), determining whether the online information is advertising or not (7.37), or internet usage as a whole (7.38).

When analyzed by profession, people in the publication, audio-video production,

mass communication, information, communications industries have the highest confidence levels in writing blogs, sharing photos online and uploading videos to the web (8.33), control of personal information published online (6.91), and internet usage as a whole (8.54) among all groups; while people in the transportation and warehousing industries have the highest confidence level in determining whether the online information is advertising or not (8.14).

Online activities

1. Overall analysis

The survey shows that the most common online behavior was browsing/searching (65.3%), followed by obtaining news (53.8%) and searching for products or services (47.9%) (See figure 4).

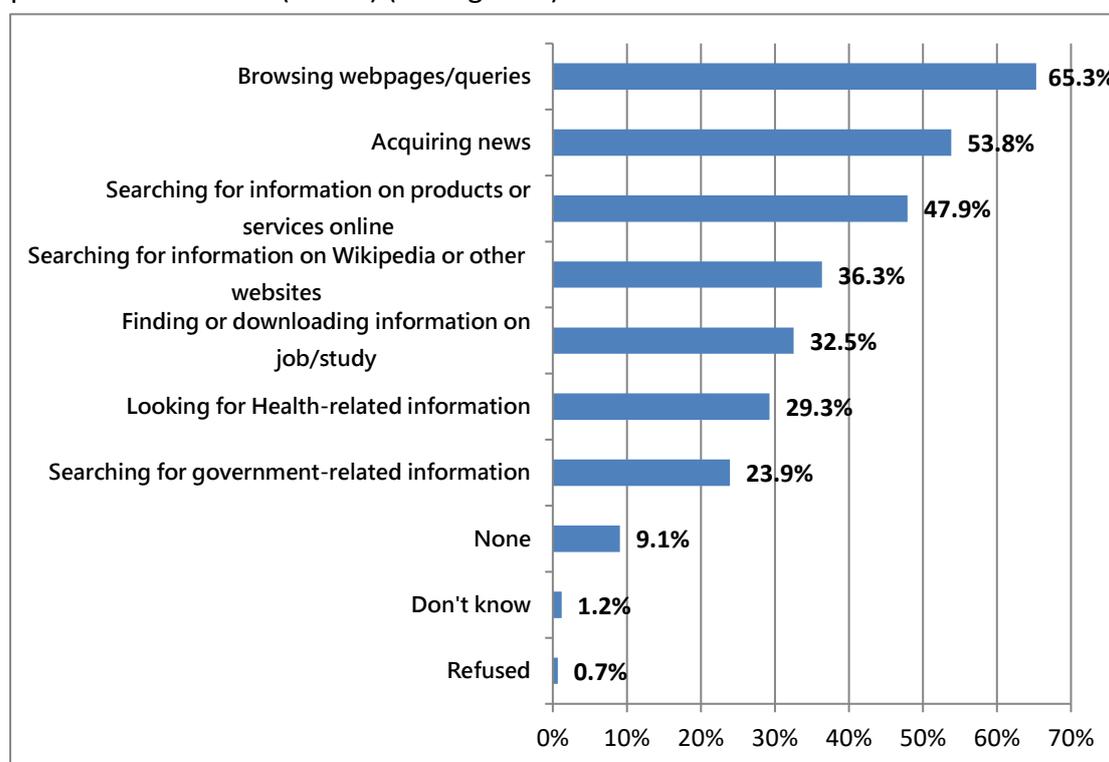


Figure 4 The Most Engaged Online Activities

Base: N=959, multiple-choice (Internet users)

2. Comparative analysis

(1) Analysis of regional differences

The cross analysis suggests that the most engaged online activities are web browsing/searching and obtaining news information for people in all regions.

(2) Analysis of basic differences

When analyzed by gender, the most engaged online activities are web browsing/searching and obtaining news information for both sexes.

When analyzed by age, the most engaged online activities are web browsing/searching and obtaining news information for all age groups and a relatively high percentage (56.1%) of people in the age 16-25 group are engaged in searching for products or services online.

When analyzed by marriage status, the most engaged online activities are web browsing/searching and obtaining news information among all online activities, regardless of marriage status. However, a higher percentage of widowed/separated people are engaged in searching for products or services online (46.8%) than those engaged in obtaining news information (36.8%).

Online social networking or communication

1. Overall analysis

The survey shows that among the online social networking or communication activities, social media (such as browsing/reading/messaging/liking/posting on Facebook, Instagram, Line, Twitter, LinkedIn, Snapchat) are the most used (67.4%), and 63.2% of people communicate through instant messengers, and 58.6% use voice calls (such as FaceTime, Line, Facebook Messenger, Skype) (See Figure 5).

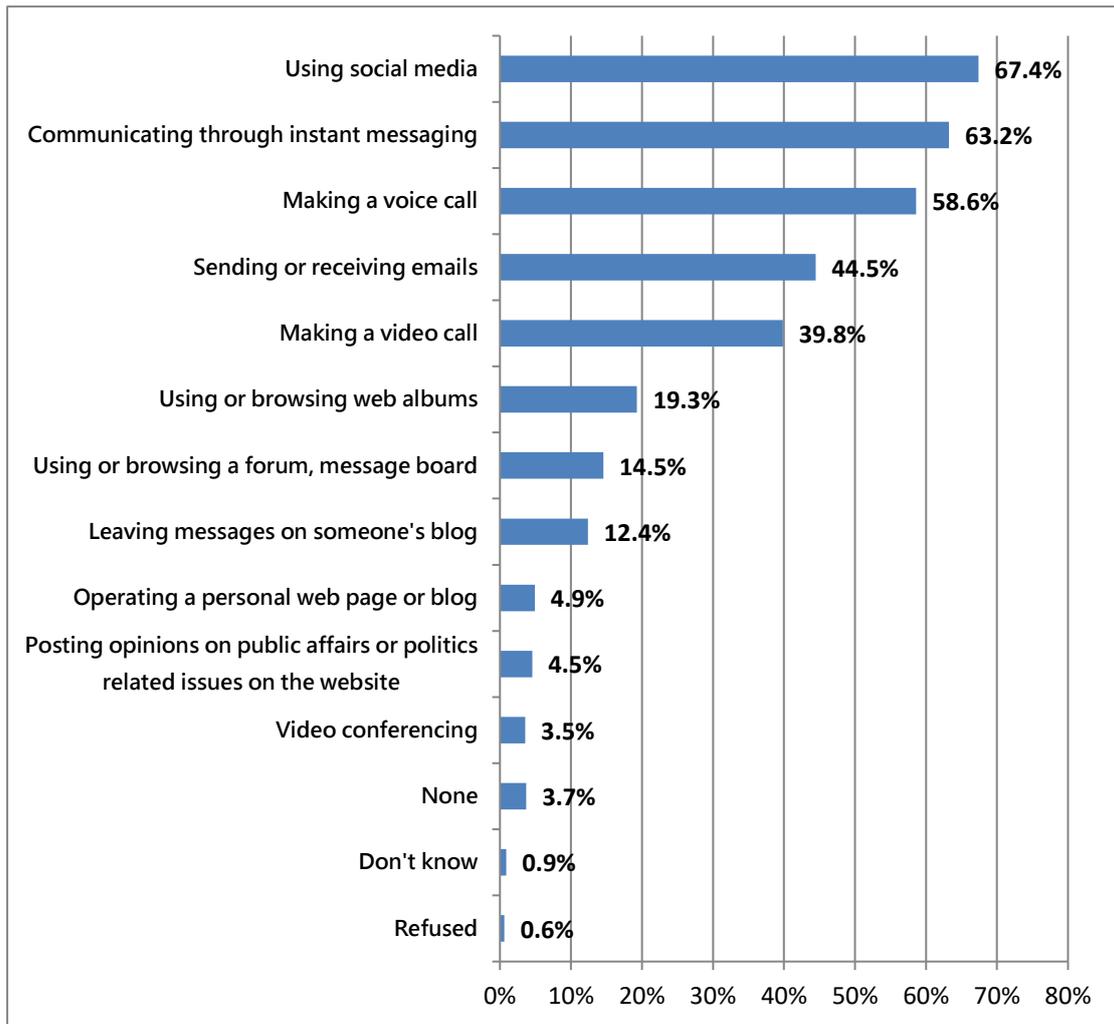


Figure 5 Online social networking or communication

Base: N=959, multiple-choice (Internet users)

2. Comparative analysis

(1) Analysis of regional differences

The analysis suggests that among all the online social networking or communication activities, the most common activity by Taiwanese people in general is communication through social media, voice calls, and instant messengers except in Taipei city, New Taipei City and Keelung, where communicating through instant message has a higher rate (63%).

(2) Analysis of basic differences

When analyzed by gender, among all the online social networking or communication activities, the most common activity is communication through social media, voice calls, and instant messengers for both sexes.

When analyzed by age, among all the online social networking or communication activities, the most common activity is communication through social media, voice calls, and instant messengers among all age groups except for 56-65 group and 66 and

above group.

When analyzed by marriage status, among all the online social networking or communication activities, the most common activity is communication through social media, voice calls, and instant messengers for unmarried and widowed/separated people.

Use of online services and online activities

1. Overall analysis

The survey shows that among the used online services, accessing to files from the cloud (such as Dropbox, Google Drive, and Microsoft OneDrive) accounts for the highest rate (36.3%), participating in groups makes up for 35.5%, and online banking and financial services is responsible for 30.3% (See Figure 6).

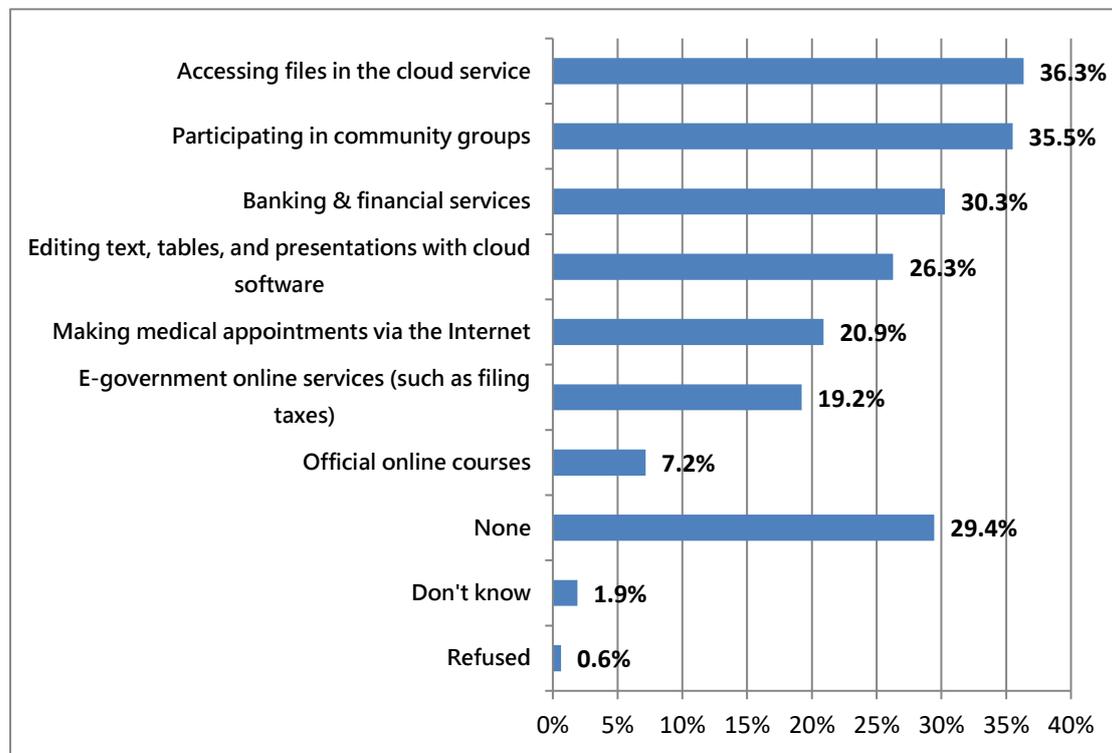


Figure 6 The Most Used Online Services

Base: N=959, multiple-choice (Internet users)

Among online activities, watching videos (on YouTube, Facebook, etc.) has the highest rate of 56.4%, uploading or sharing photographs or videos (on YouTube, Facebook, etc.) accounts for 43.7%, and online shopping (such as purchase of products, services or tickets) is responsible for 34% (See Figure 7).

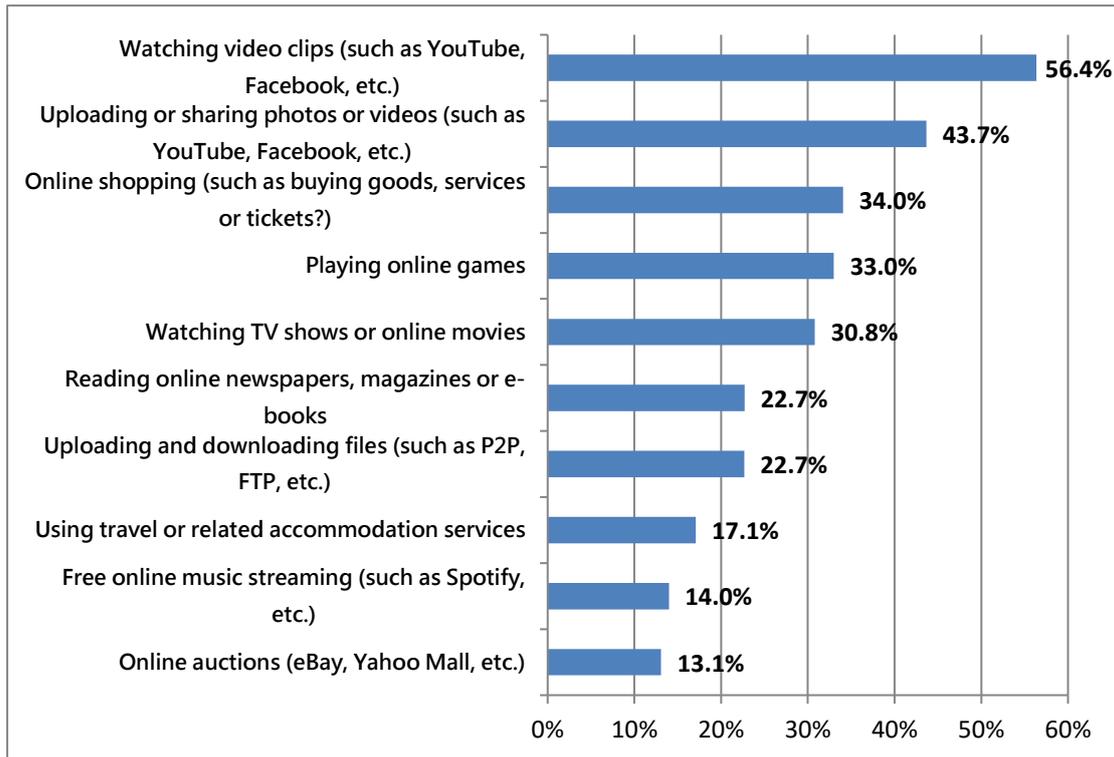


Figure 7 The Most Used Online Activities (Top 10)

Base: N=959, multiple-choice (Internet users)

2. Comparative analysis

(1) Analysis of regional differences

The survey shows that among the online services, participating in community groups has the highest rates among people in Taipei City, New Taipei City and Keelung (37.2%); Taichung, Changhua and Nantou (35.2%); Yilan, Hualien and Taitung (50.1%), while accessing files in the cloud service has the highest rates among people in Taoyuan, Hsinchu and Miaoli (53%); Yunlin, Chiayi and Tainan (35.7%); Kaohsiung, Pingtung and Penghu (40.6%). Among the online activities, watching videos has the highest rate among people in all areas except in Yunlin, Chiayi and Tainan.

(2) Analysis of basic differences

When analyzed by gender, males has the highest rate to access files in the cloud service; while females has the highest rate to participate in community groups. Among the online activities, watching videos has the highest rate for males and females.

When analyzed by age, editing in the cloud has a higher rate than online banking services among ages 16-25, 26-35 and 36-45; using e-government websites has a higher rate than accessing files in the cloud among ages 46-55. Among the online activities, watching videos has the highest rate for all age groups.

When analyzed by marriage status, unmarried people use editing in the cloud more often than online banking services. Among the online activities, watching videos has the highest rate regardless of the marriage status.

Internet access at places other than home

1. Overall analysis

The survey shows that 86.3% of Taiwanese people access the Internet at places other than home (See Figure 8). When away from home, 60.6% of people access the Internet at work (the highest), followed by at indoor public places (such as restaurant, movie theater, shopping mall) (38.1%) and on transportation or walking (36.7%) (See Figure 9).

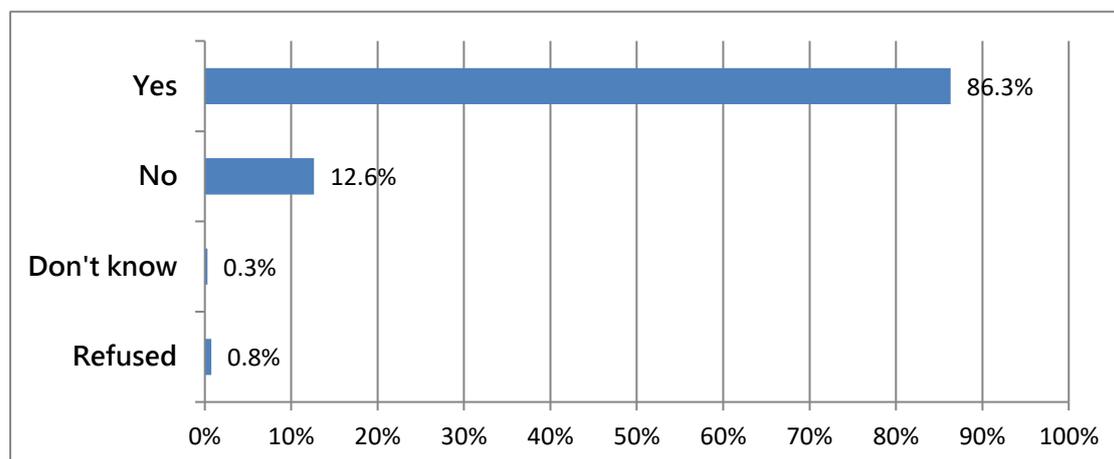


Figure 8 Do You Access the Internet at Places Other Than Home

Base: N=959 (Internet users)

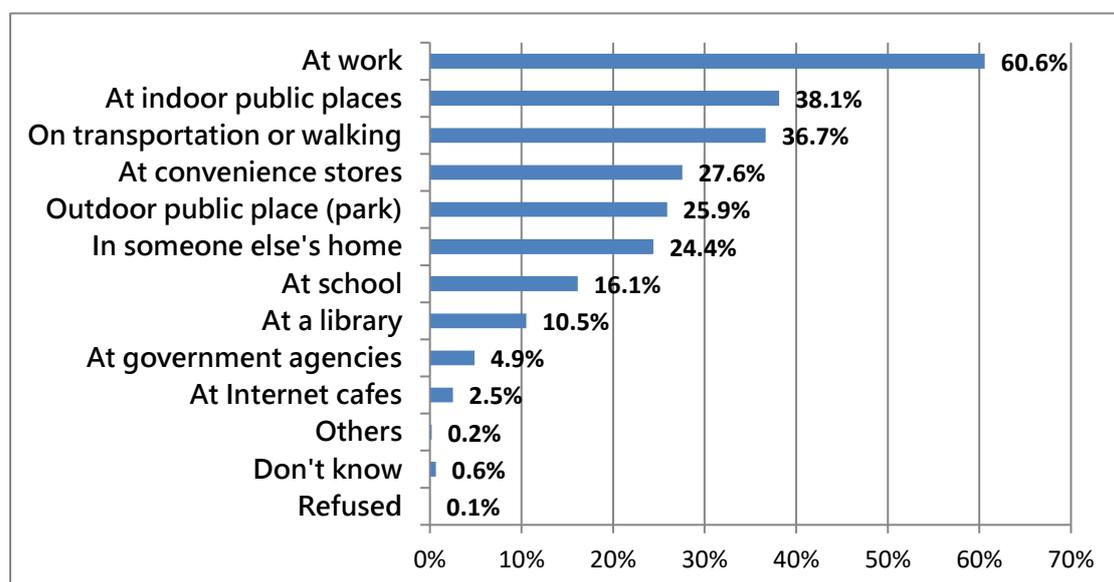


Figure 9 Places to Access Internet Other than Home

Base: N=827, multiple-choice (People access the Internet at places other than home)

2. Comparative analysis

(1) Analysis of regional differences

The cross analysis suggests that people (97.2%) in Taoyuan, Hsinchu and Miaoli

have the highest rate to access the Internet at places other than home, followed by those in Kaohsiung, Pingtung and Penghu (89.7%). In regard to the place to access the Internet at places other than home, people in Taichung, Changhua and Nantou (74.3%) have the highest rate to access the Internet at work, followed by those in Yilan, Hualian and Taitung (62.3%), while people in Taoyuan, Hsinchu and Miaoli (51.4%) have the highest rate to access the Internet at indoor public places, followed by those in Taipei City, New Taipei City and Keelung (43.9%).

(2) Analysis of basic differences

When analyzed by gender, both males (87.4%) and females (85.3%) have higher rates to access the Internet at places other than home. In regard to the place to access the Internet at places other than home, males (64.6%) have a higher rate to access the Internet at work than females (56.5%), while females (40.9%) have a higher rate to access the Internet at indoor public places than males (35.4%).

When analyzed by age, people in all age groups have a higher rate to access the Internet at places other than home. In regard to the place to access the Internet at places other than home, people aged 36-45 have a higher rate to access the Internet at work (79.4%) and at indoor public places (44.3%) than people in any other age group.

When analyzed by marriage status, people in all marriage statuses have a higher rate to access the Internet at places other than home. In regard to the place to access the Internet at places other than home, 63.4% of married people access the Internet at work; while 40.2% of unmarried people access the Internet at indoor public places.

Average number of hours spent on the Internet per week

1. Overall analysis

According to the study, people spend an average of 21.06 hours on the Internet at work or at school every week (N=827, people who access the Internet at places other than home); people spend an average of 13.08 hours on the Internet at other places every week (N=827, people who access the Internet at places other than home); while people spend an average of 20.61 hours on the Internet at home every week (N=937, people who access the internet at home) (See Table 9).

Table 9 Average Hours Spent Online per Week by Location

Location	Average Number of Hours Spent Online per Week	Base
At workplace or school	21.06	827
Other places (non- home, workplace, or school)	13.08	827
Home	20.61	937

Source: Results of this research

2. Comparative analysis

(1) Analysis of regional differences

The one-way ANOVA suggests that the average hours spent online at home every week are significantly related to the area where one lives in.

The cross analysis suggests that people in Taipei City, New Taipei City and Keelung spend an average of 23.04 hours online at work or school every week; while people in Yunlin, Chiayi, and Tainan spend only 19.58 hours online per week. People in Kaohsiung, Pingtung and Penghu spend an average of 15.14 hours online at other places every week; while people in Taichung, Changhua and Nantou spend only 10.71 hours online per week. People in Taoyuan, Hsinchu and Miaoli spend an average of 24.40 hours online at home every week, while people in Taichung, Changhua and Nantou spend only 16.67 hours online per week.

(2) Analysis of basic differences

The one-way ANOVA suggests that the average hours spent online at work or school every week, the average hours spent online at other places every week, and the average hours spent online at home every week are significantly related to gender, age, and marriage status.

When analyzed by gender, males spend an average of 23.76 hours online at work or school every week; while females spend only 18.18 hours online per week. Males spend an average of 14.68 hours online at other places every week; while females only 11.37 hours online per week. Males spend an average of 21.90 hours online at home every week; while females only 19.27 hours online per week. On average, males spend more time online than females, regardless of location.

When analyzed by age, people aged 26-35 spend an average of 24.38 hours online at work or school every week; while people aged 56-65 spend only 12.9 hours online per week. People aged 16-25 spend an average of 17.54 hours online at other places every week; while people aged 66 and above spend only 7.03 hours online per week. People aged 16-25 spend an average of 27.99 hours online at home every week; while people aged 66 and above spend only 11.90 hours online per week.

When analyzed by marriage status, unmarried people spend an average of 24.25 hours online at work or school every week; while widowed/separated people spend only 13.42 hours online per week. Unmarried people spend an average of 16.43 hours online at other places every week; while widowed/separated people spend only 5.89 hours online per week. Unmarried people spend an average of 26.40 hours online at home every week; while widowed/separated people spend only 12.67 hours online per week.

(3) Analysis of differences in social and economic status

The one-way ANOVA suggests that the average hours spent online at work or

school every week and the average hours spent online at home every week are significantly related to average monthly individual income, residence, education level and profession; while the average hours spent online at other places every week are significantly related to average monthly individual income, education level and profession.

When analyzed by average monthly individual income, people of no income spend an average of 91.07 hours online at work or school every week; while the NT1-NT9.999 group spends only 10.57 hours online per week. People of no income spend an average of 112.98 hours online at other places; while the NT1-NT9.999 group spends only 1.74 hours online per week. People of no income spend an average of 91.07 hours online at home every week; while the NT1-NT9.999 and NT10,000-NT19.999 groups spend only 16.59 hours online per week.

When analyzed by residence, house renters spend an average of 25.6 hours online at work or school every week; while home owners spend only 19.36 hours online per week. House renters spend an average of 23.79 hours online at home every week; while home owners spend only 19.48 hours online per week.

When analyzed by education level, people with a master's degree and above spend an average of 32.77 hours online at work or school every week; while the group of elementary school and below spends only 8.73 hours online per week. People with a master's degree and above spend an average of 18.54 hours online at other places every week; while the high school and secondary school group spends only 6.71 hours online per week. People with a master's degree and above spend an average of 26.43 hours online at home every week; while the group of elementary school and below spends only 9.47 hours online per week.

When analyzed by profession, people in publication, audio-video production, mass communication, information, and communications industries spend an average of 50.75 hours online at work or school every week; while people in the agriculture, forestry, fishery and husbandry industry spend only 7.61 hours online per week. People in the support service industry spend an average of 21.11 hours online at other places; while people in the agriculture, forestry, fishery and husbandry industry spend only 4.21 hours online per week. Students spend an average of 28.96 hours online at home every week; while retired people spend only 13.55 hours online per week.

Concerns about Internet use

1. Overall analysis

The survey shows that 50.5% of people have concerns about Internet use (See Figure 10). Their main concerns include personal information leaks (53.8%), fraud (44.3%) and threat of viruses, Trojan horse, or spyware (26.8%). (See Figure 11)

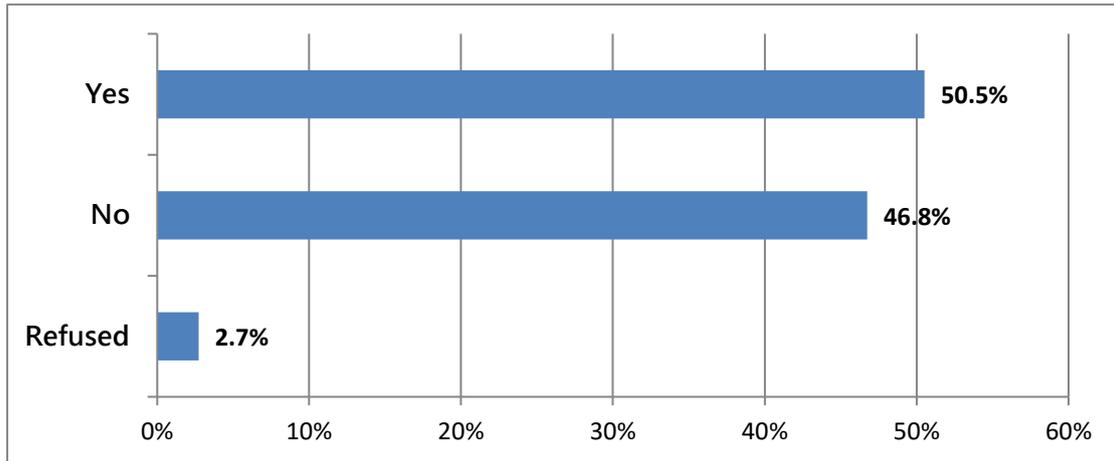


Figure 10 Do You Have Concerns about Internet Use?

Base: N=1,072

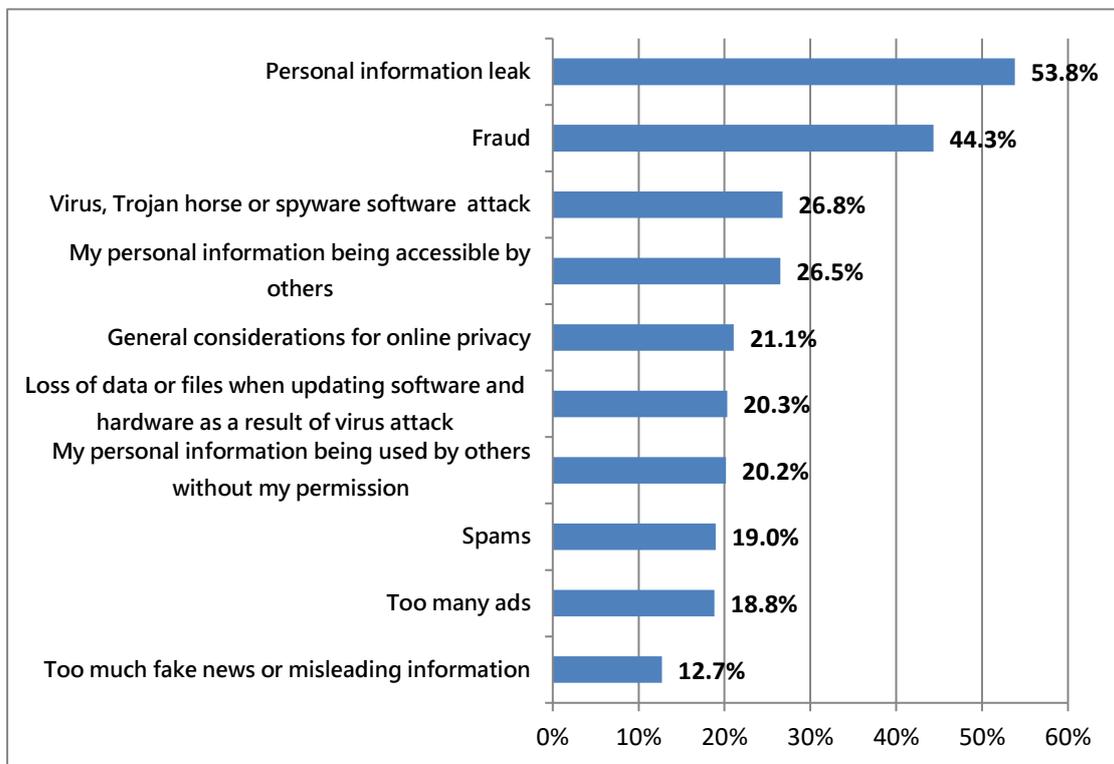


Figure 11 Concerns about Internet Use (Top 10)

Base: N=542, multiple-choice (people who have concerns)

2. Comparative analysis

(1) Analysis of regional differences

The Chi-square test suggests that whether one has concerns about Internet use is significantly related to the area where one lives.

The cross analysis suggests that people in Taoyuan, Hsinchu and Miaoli have the highest rate (69.5%) to have concerns about Internet use; while people in Taipei City, New Taipei City, and Keelung have the highest rate (55%) to have no concerns about Internet use.

The survey suggests that people in Taoyuan, Hsinchu and Miaoli have the highest rate to have concerns about personal information leaks (69.3%), while people in Taichung, Changhua and Nantou have the lowest rate (36.9%). People in Taoyuan, Hsinchu and Miaoli also have the highest rate to have concerns about fraud (72.9%), while people in Yunlin, Chiayi, and Tainan have the lowest rate (29.9%).

(2) Analysis of basic differences

The Chi-square test suggests that whether one has concerns about Internet use is significantly related to age.

When analyzed by gender, a higher rate of females (57.7%) has concerns about personal information leaks than males (49.5%). Likewise, a higher rate of females (46.0%) has concerns about fraud than males (42.6%).

When analyzed by age, people aged 46-55 have a higher rate (56.6%) to have concerns about Internet use than any other age groups. People aged 66 and above have the highest rate (60.3%) to have no concerns about Internet use. Among those who have concerns about Internet use, people aged 36-45 have the highest rate (59.5%) to have concerns about personal information leaks, while people aged 66 and above have the lowest rate (48.1%). People aged 66 and above have the highest rate (56.0%) to have concerns about fraud; while people aged 26-35 have the lowest rate (36.0%).

When analyzed by marriage status, among those who have concerns about Internet use, widowed/separated people have the highest rate (66.3%) to have concerns about personal information leaks, while unmarried people have the lowest rate (53.0%). Married people have the highest rate (50.1%) to have concerns about fraud, while unmarried people have the lowest rate (36.7%).

(3) Analysis of differences in social and economic status

The Chi-square test suggests that whether one has concerns about Internet use is significantly related to one's **education level**.

When analyzed by education level, 61.5% of people with a master's degree and above have concerns about Internet use, while 66.1% of the elementary school and below group have no concerns about Internet use.

B. Use of Social Media

Social Media or Instant Messaging App Accounts

1. Overall analysis

The survey shows that 88.2% of people in Taiwan have at least one social media or instant messaging account, while only 8.3% have no such account (See Figure 12).

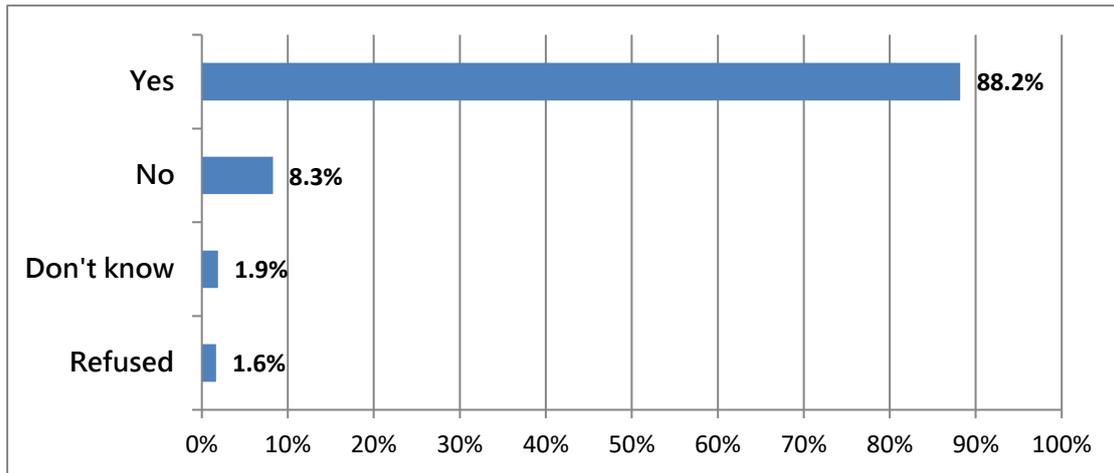


Figure 12 Do you Have Any Social Media or App Account?

Base: N=959 (Internet users)

2. Comparative analysis

(1) Analysis of regional differences

The cross analysis suggests that people in Taoyuan, Hsinchu and Miaoli have the highest rate (95.4%) to have at least one social media or instant messaging app account, while people in Kaohsiung, Pingtung and Penghu have the highest rate (11.9%) to have no social media or instant messaging app account

(2) Analysis of basic differences

When analyzed by gender, females have a higher rate (89.5%) to have at least one social media or instant messaging app account than males (86.9%). Males have a higher rate (8.9%) to have no social media or instant messaging app account than females (7.6%).

Active User of Social Media or Instant Messaging App Account

1. Overall analysis

The survey shows that 92.5% of people are still using Line, followed by Facebook (75.3%). 51.5% of people are using Facebook Messenger (See Figure 13).

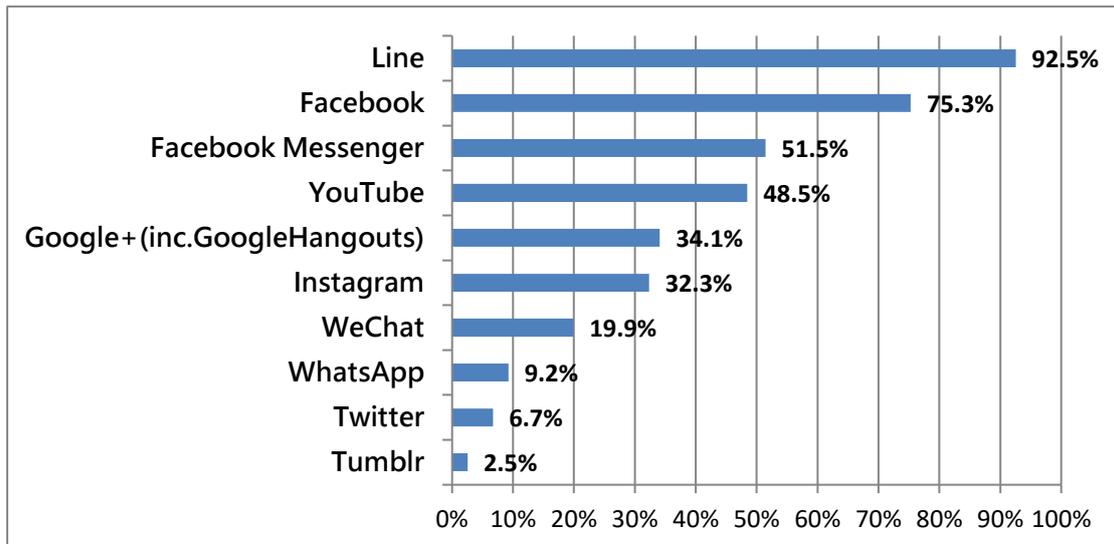


Figure 13 Are You Still Using Any Social Media or Instant Messaging App Account? (Top 10)

Base: N=845, multiple-choice (People who have any social media or instant messaging app)

2. Comparative analysis

(1) Analysis of regional differences

The cross analysis suggests that among the used social media or instant messaging apps, people in Yilan, Hualien, and Taitung have the highest rate (96.3%) to use Line, while people in Taichung, Changhua and Nantou have the lowest rate (87.3%). People in Yilan, Hualien, and Taitung have the highest rate (82.1%) to use Facebook, while people in Taipei City, New Taipei City and Keelung have the lowest rate (69.3%). People in Yunlin, Chiayi and Tainan have the highest rate (0.6%) not to use any social media or instant messaging app.

(2) Analysis of basic differences

When analyzed by gender, females have a higher rate (93.8%) to use Line than males (91.2%), while males have a higher rate (77.9%) to use Facebook than females (72.7%).

When analyzed by age, people aged 56-65 have the highest rate (98.4%) to use Line, while people aged 46-55 have the lowest rate (88.9%). People aged 16-25 have the highest rate (85.4%) to use Facebook, while people aged 66 and above have the lowest rate (44.0%).

When analyzed by marriage status, unmarried people have the highest (94.5%) and widowed/separated people have the lowest (90.1%) rate respectively to use Line. Unmarried people have the highest rate (81.6%) to use Facebook, while widowed/separated people have the lowest rate (62.9%).

Sharing Article Links on Social Media

1. Overall analysis

The survey shows that the vast majority of people (74.3%) once shared article links on social media (Facebook, Line, etc.). (See Figure 14)

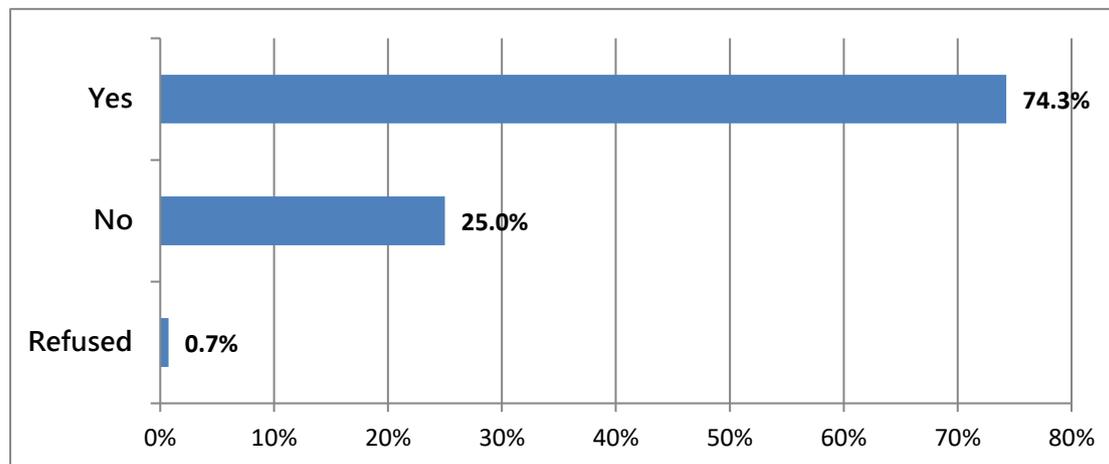


Figure 14 Have You Shared Article Links on Social Media

Base: N=845 (People who have any social media or instant messaging app)

2. Comparative analysis

(1) Analysis of regional differences

The cross analysis suggests that people in Kaohsiung, Pingtung and Penghu have a higher percentage (82.7%) to have shared article links on social media than those in Yunlin, Chiayi, and Tainan (82.6%), while people in Taipei City, New Taipei City and Keelung have a higher percentage (34.7%) to have not shared article links on social media than those in Yilan, Hualien and Taitung (31.7%).

(2) Analysis of basic differences

When analyzed by gender, males have a higher rate (77%) to have shared article links on social media than females (71.6%), while males have a lower rate (22.7%) to have not shared article links on social media than females (27.2%).

Sharing links on social media without reading through the whole articles

1. Overall analysis

The survey shows that people who strongly disagree and disagree to have shared links on social media (Facebook, Line, etc.) without reading through the whole articles account for 63.3%, while those who strongly agree and agree to have shared links on social media without reading through the whole articles constitute 32.9% (See Figure 15).

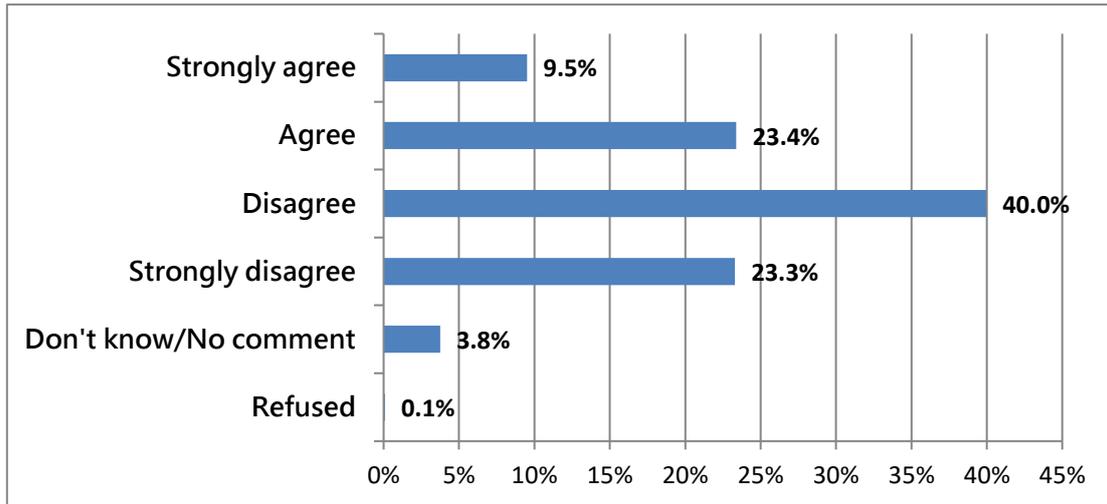


Figure 15 Often Sharing Links on Social Media without Reading through the Whole Articles

Base: N=628 (People who once shared article links on social media)

2. Comparative analysis

(1) Analysis of regional differences

The cross analysis suggests that people in Kaohsiung, Pingtung and Penghu have the highest rate (33.5%) to agree “they have shared links on social media without reading through the whole articles,” while people in Taoyuan, Hsinchu and Miaoli have the highest rate (43.0%) to disagree “they have shared links on social media without reading through the whole articles.”

(2) Analysis of basic differences

When analyzed by gender, males have a higher rate (27.4%) to agree “they have shared links on social media without reading through the whole articles” than females (19.3%), while females have a higher rate (22.7%) to disagree they have shared links on social media without reading through the whole articles than males (38.0%).

Believing in what one reads or sees on social media

1. Overall analysis

The survey shows that 58.4% of people strongly agree or agree that they tend to believe in what they read or see on social media, while 34.5% of people strongly disagree or disagree (See Figure 16).

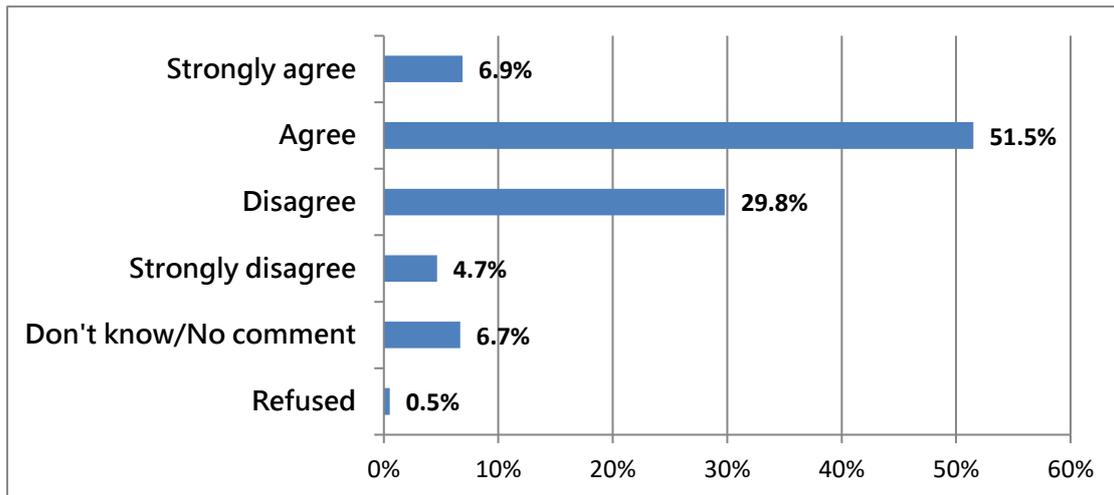


Figure 16 I Tend to Believe What I Read or See on Social Media

Base: N=845 (People who have any social media or instant messaging app)

2. Comparative analysis

(1) Analysis of regional differences

The cross analysis suggests that people in Taoyuan, Hsinchu and Miaoli have the highest rate (66.0%) to agree “they believe what they read or see on social media,” while people in Taichung, Changhua and Nantou have the highest rate (42.6%) to disagree “they believe what they read or see on social media.”

(2) Analysis of basic differences

The Chi-square test suggests that whether one believes what one reads or sees on social media is significantly related to age.

When analyzed by gender, males have a higher rate (53.1%) to agree “they believe what they read and see on social media” than females (49.9%), while females have a higher rate (30.6%) to disagree “they believe what they read and see on social media” than males (29.0%).

When analyzed by age, people aged 66 and above have a higher rate (69.3%) to agree “they believe what they read and see on social media” than people in any other age group, while people aged 36-45 have the highest rate (34.4%) to disagree “they believe what they read and see on social media.”

(3) Analysis of differences in social and economic status

The Chi-square test suggests that whether one believes what one reads or sees on social media is significantly related to residence.

When analyzed by residence, 53.8% of home owners agree “they believe what they read and see on social media,” while 41.8% of respondents who replied “Don’t Know/Refuse to Answer” disagree/ “believe what they read and see on social media.”

Sharing opinions with people you don't know on social media

1. Overall analysis

The survey shows that a large majority (65.6%) of people have never shared opinions with people they do not know (See Figure 17), while 62.5% of them will not share opinions with their real name (See Figure 18).

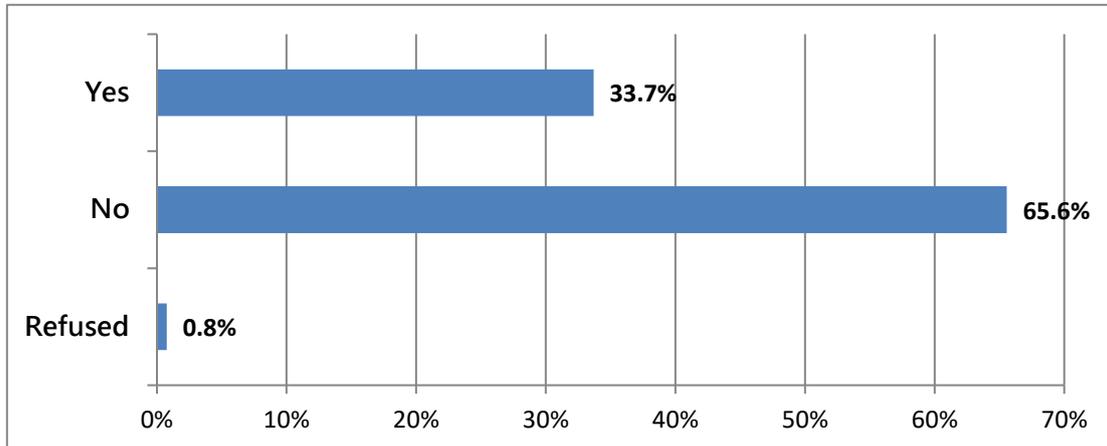


Figure 17 Have You Ever Shared Opinions with People You Don't Know on Social Media

Base: N=845 (People who have any social media or instant messaging app)

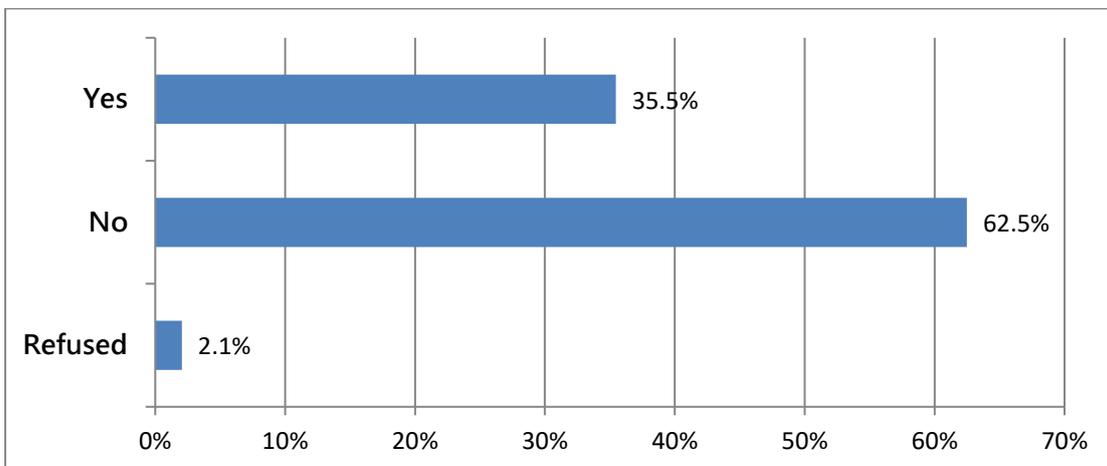


Figure 18 Will You Share Opinions with Your Real Name

Base: N=845 (People who have any social media or instant messaging app)

2. Comparative analysis

(1) Analysis of regional differences

The cross analysis suggests that people in Kaohsiung, Pingtung and Penghu have the highest percentage (46.3%) to have shared opinions with people they do not know, while people in Taoyuan, Hsinchu and Miaoli and Taipei City, New Taipei City and Keelung have the highest rate (68.9%) to have not shared opinions with people they do not know.

The cross analysis suggests that people in Yilan, Hualien, and Taitung have the highest rate (50.5%) to have shared opinions with their real name, while people in Taichung, Changhua and Nantou have the highest rate (76.2%) to have not shared opinions with their real name.

(2) Analysis of basic differences

When analyzed by gender, males have a higher rate (38.2%) to have shared opinions with their real name than females (32.8%), while females have a higher rate (65.3%) to have not shared opinions with their real name than males (59.6%).

Frequency to consider privacy or safety when posting photographs or tagging others in photographs

1. Overall analysis

The survey shows that 61.3% and 63.6% of people (always and often) consider privacy or security when posting photographs or tagging others in photographs (See Figures 19 & 20).

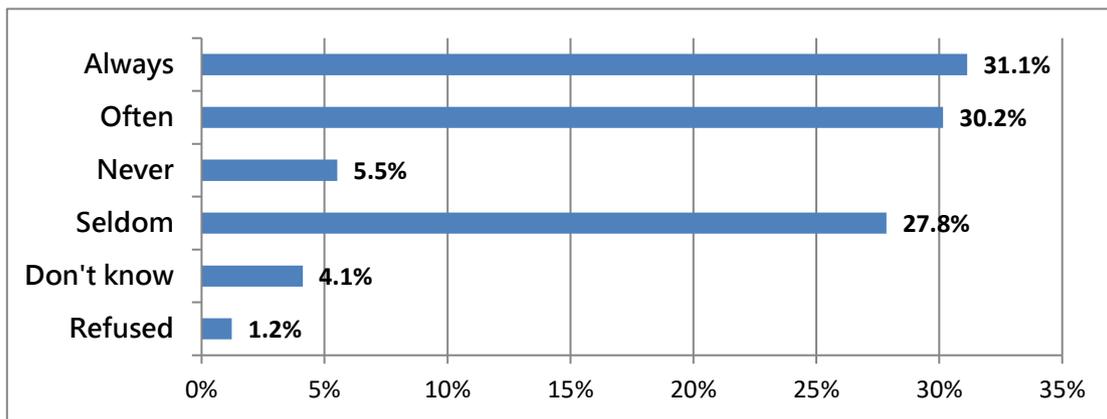


Figure 19 Frequency to Consider Privacy or Safety When Posting Photographs

Base: N=845 (People who have any social media or instant messaging app)

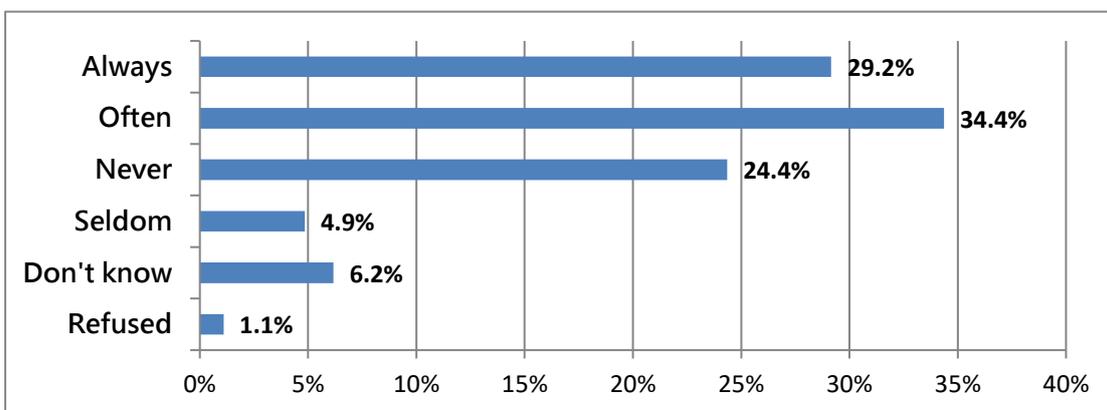


Figure 20 Frequency to Consider Privacy or Safety When Tagging Friends in Photographs

Base: N=845 (People who have any social media or instant messaging app)

2. Comparative analysis

(1) Analysis of regional differences

The cross analysis suggests that people in Taoyuan, Hsinchu and Miaoli have the highest rate (43.8%) to always consider privacy or safety when posting photographs, while people in Yilan, Hualien and Taitung have the highest rate (37.0%) to seldom consider privacy or safety. °

The Chi-square test suggests that whether one considers privacy or safety when posting photographs or tagging friends in photographs is significantly related to the **area** where one lives.

People in Taichung, Changhua and Nantou have the highest rate (45.3%) to always consider privacy or safety when tagging friends in photographs, while those in Yilan, Hualien and Taitung have the highest rate (32.3%) to seldom consider privacy or safety.

(2) Analysis of basic differences

The Chi-square test suggests that whether one considers privacy or safety when tagging friends in photographs is significantly related to age.

When analyzed by gender, females have a higher rate (34.4%) to always consider privacy or safety when posting photographs than males (27.8%), while males have a higher rate (30.7%) to seldom consider privacy or safety when posting photographs than females (25.1%).

When analyzed by gender, males have a higher rate (36.0%) to always consider privacy or safety when tagging friends in photographs than females (32.7%), while males have a higher rate (26.1%) to seldom consider privacy or safety when tagging friends in photographs than females (22.7%).

When analyzed by age, people aged 26-35 have a higher rate (39.7%) to always consider privacy or safety when tagging friends in photographs than any other age groups, while people aged 16-25 have the highest rate (27.2%) to seldom consider privacy or safety when tagging friends in photographs.

Whether to read opinions one does not agree with

1. Overall analysis

The survey shows that 44.8% of people sometimes read opinions they do not agree with on social media, while only 12.4% often read opinions they do not agree with (See Figure 21).

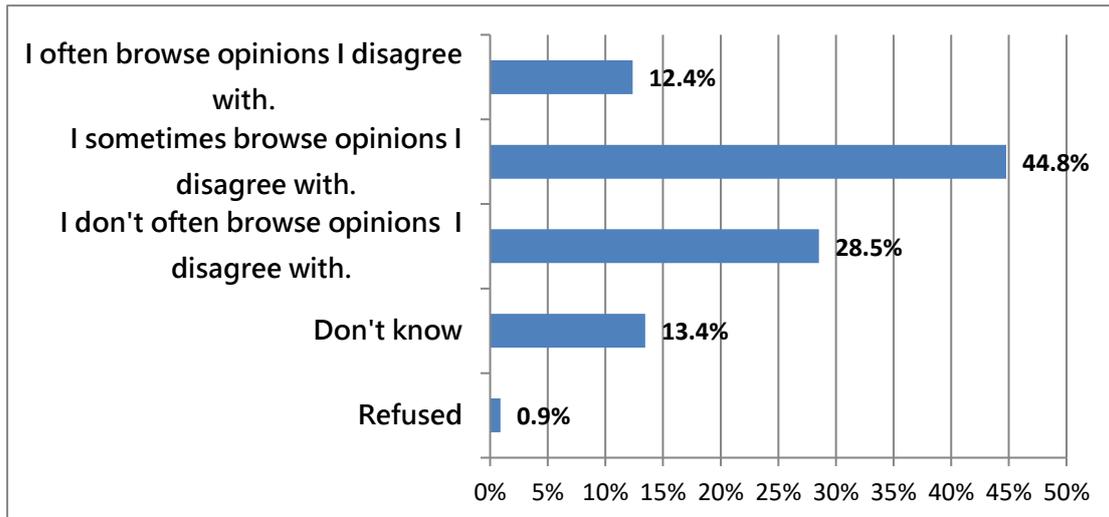


Figure 21 Do You Read What You Don't Agree with?

Base : N=845 (People who have any social media or instant messaging app)

2. Comparative analysis

(1) Analysis of regional differences

The Chi-square test suggests that whether one reads opinions they do not agree with on social media is significantly related to the area where one lives.

The cross analysis suggests that people in Kaohsiung, Pingtung and Penghu have the highest percentage (54.6%) to sometimes read opinions they do not agree with on social media, followed by those in Taoyuan, Hsinchu and Miaoli (44.7%), while people in Kaohsiung, Pingtung and Penghu have the highest rate (17.5%) to often read opinions they do not agree with on social media, followed by those in Yunlin, Chiayi, and Tainan (14.8%).

(2) Analysis of basic differences

The Chi-square test suggests that whether one reads opinions they do not agree with on social media is significantly related to gender and age.

When analyzed by gender, males have a higher rate (49.4%) to sometimes read opinions they do not agree with on social media than females (40.3%), while 13.2% of males and 11.5% of females often read opinions they do not agree with on social media.

When analyzed by age, people aged 26-35 have the highest rate (56.9%) to sometimes read opinions they do not agree with on social media, followed by those aged 26-35 (52%).

Protecting Internet users from inappropriate or offensive content

1. Overall analysis

The survey shows that 90.1% of people strongly agree or agree that internet users

must be protected from inappropriate or offensive content, while 5.8% strongly disagree or disagree (See Figure 22).

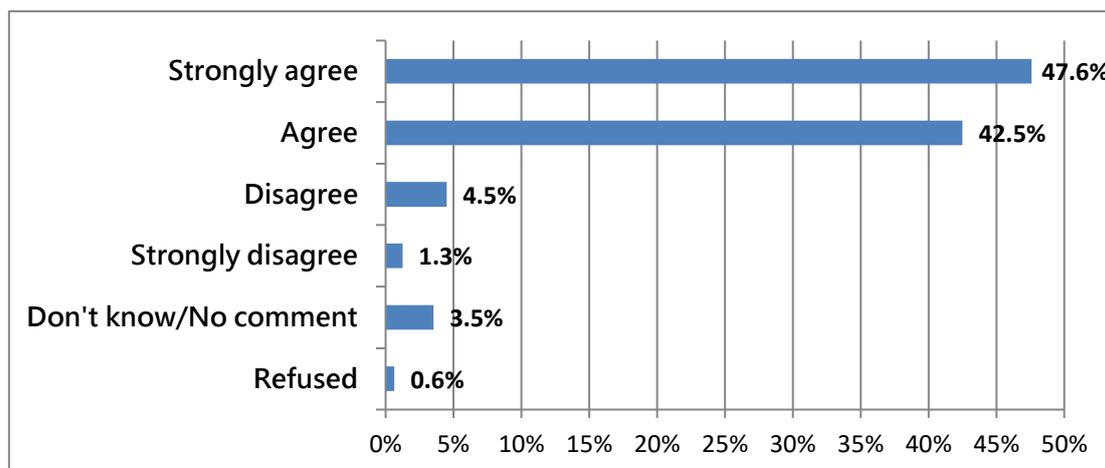


Figure 22 Internet Users Must be Protected from Inappropriate or Offensive Content

Base : N=959 (Internet users)

2. Comparative analysis

(1) Analysis of regional differences

The cross analysis suggests that people in Yilan, Hualian and Taitung have the highest rate (60%) to strongly agree that “Internet users must be protected from inappropriate or offensive content,” followed by those in Yunlin, Chiayi, and Tainan (58.4%), while people in Taoyuan, Hsinchu and Miaoli have the highest rate (2.2%) to strongly disagree that “Internet users must be protected from inappropriate or offensive content,” followed by those in Taichung, Changhua, and Nantou(1.4%).

(2) Analysis of basic differences

The Chi-square test suggests that whether one agrees that “Internet users must be protected from inappropriate or offensive content” is significantly related to gender only.

When analyzed by gender, females have a higher rate (51.3%) to strongly agree that “Internet users must be protected from inappropriate or offensive content” than males (43.8%), while similar rates of males (5.6%) and females (3.4%) disagree that “Internet users must be protected from inappropriate or offensive content.”

Providing incorrect or false information on the website to protect personal identity

1. Overall analysis

The survey shows that 50.9% of people strongly agree or agree that “Incorrect or false information should be provided on the website to protect personal identity”

while 39% strongly disagree or disagree (See Figure 23).

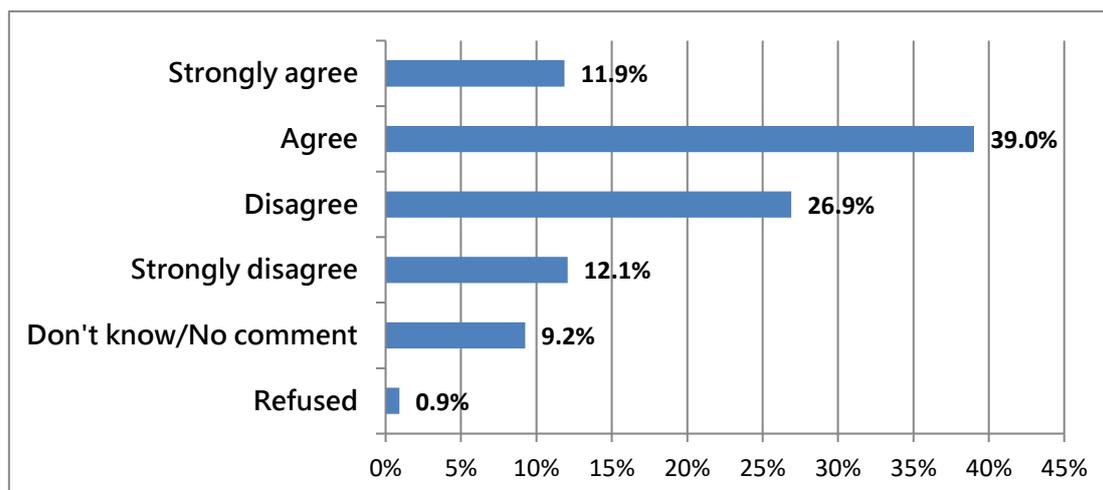


Figure 23 Incorrect or False Information Should be Provided on the Website to Protect Personal Identity

Base : N=959 (Internet users)

2. Comparative analysis

(1) Analysis of regional differences

The cross analysis suggests that people in Taoyuan, Hsinchu and Miaoli have the highest rate (53%) to agree that “Incorrect or false information should be provided on the website to protect personal identity,” followed by those in Kaohsiung, Pingtung and Penghu (45.5%), while people in Taipei City, New Taipei City and Keelung have the highest rate (18.6%) to strongly disagree that “Incorrect or false information should be provided on the website to protect personal identity,” followed by those in Yunlin, Chiayi, and Tainan (13.3%).

(2) Analysis of basic differences

The Chi-square test suggests that whether one agrees that “Incorrect or false information should be provided on the website to protect personal identity” is only significantly related to age.

When analyzed by age, people aged 36-45 have the highest rate (47.5%) to agree that “Incorrect or false information should be provided on the website to protect personal identity,” followed by those aged 26-35 (44.2%). People aged 66 and above have the highest rate (17.9%) to strongly disagree that “Incorrect or false information should be provided on the website to protect personal identity,” followed by those aged 56-65 (15.9%).

Providing personal information to get what one wants on the web

1. Overall analysis

The survey shows that 57.5% of people strongly disagree or disagree that “Personal information can be provided to get what one wants on the web,” while 35.9% strongly agree or agree (See Figure 24).

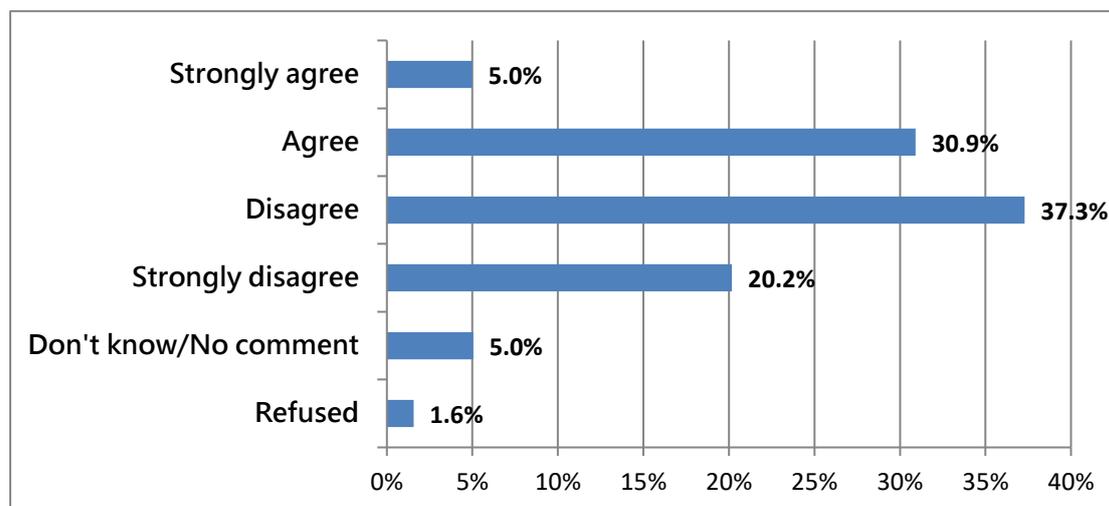


Figure 24 Personal information can be provided to get what one wants on the web

Base : N=959 (Internet users)

2. Comparative analysis

(1) Analysis of regional differences

The Chi-square test suggests that whether one agrees that “Personal information can be provided to get what one wants on the web” is significantly related to area where one lives.

The cross analysis suggests that people in Taichung, Changhua and Nantou have the highest rate (48.1%) to disagree that “Personal information can be provided to get what one wants on the web,” followed by those in Taoyuan, Hsinchu, and Miaoli (43.9%), while those in Kaohsiung, Pingtung and Penghu have a higher rate (9.4%) to strongly agree that “Personal information can be provided to get what one wants on the web” than those in any other area.

(2) Analysis of basic differences

The Chi-square test suggests that whether one agrees that “Personal information can be provided to get what one wants on the web” is significantly related to gender and age.

When analyzed by gender, males (35.6%) and females (39%) have the highest rates to disagree that “Personal information can be provided to get what one wants on the web,” while 5.1% of males and 4.9% of females strongly agree that “Personal information can be provided to get what one wants on the web.”

When analyzed by age, people aged 36-45 have the highest rate (45.5%) to disagree that “Personal information can be provided to get what one wants on the web,” while people aged 16-25 and 66 and above have a higher rate (7.3%) to strongly

agree that “Personal information can be provided to get what one wants on the web” than any other age group.

C. Online Transaction

Searching for product information and comparing prices online

1. Overall analysis

The survey shows that most people (60.7%) have searched for product information and compared prices online, while 35.6% have not (See Figure 25).

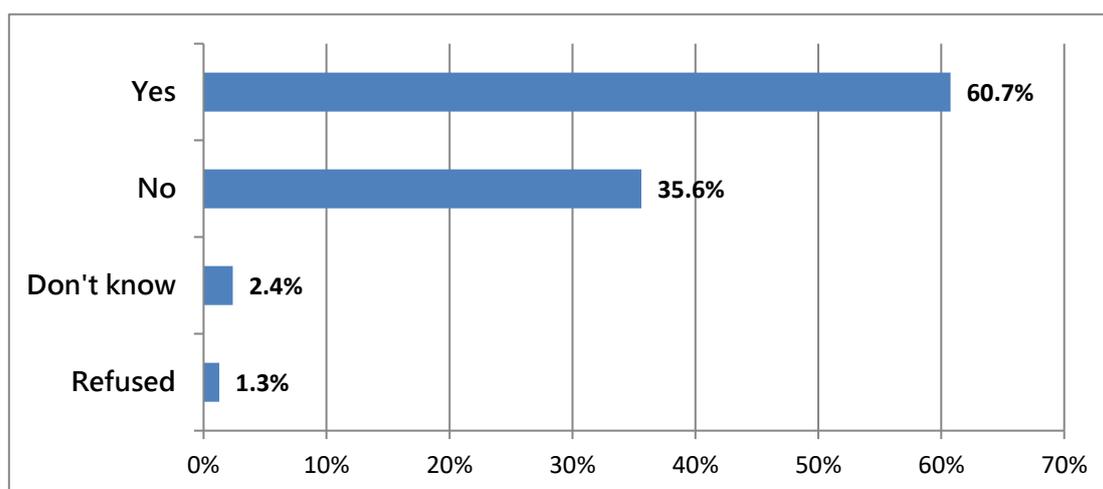


Figure 25 Experience in Searching for Product Information and Comparing Prices Online

Base : N=959 (Internet users)

2. Comparative analysis

(1) Analysis of regional differences

The cross analysis suggests that people in all areas have higher percentages to have searched for product information and compared prices online than those who have not, with people in Yilan, Hualien, and Taitung having the highest rate (66.4%) among all areas, followed by those in Yunlin, Chiayi, and Tainan (66.3%). People in Taipei City, New Taipei City, and Keelung have the highest rate (42.3%) to have not searched for product information and compared prices online, followed by those in Kaohsiung, Pingtung, and Penghu (36.7%).

(2) Analysis of basic differences

When analyzed by gender, males have a higher rate (62.1%) to have searched for product information and compared prices online than females (59.3%).

When analyzed by age, people aged 16-25 have the highest rate (77.7%) to have searched for product information and comparing prices online, followed by those aged

26-35 (73.6%). People aged 66 and above have the highest rate (74.5%) to have not searched for product information and compared prices online, followed by those aged 56-65 (60%).

When analyzed by marriage status, unmarried people have the highest rate (71.9%) to have searched for product information and compared prices online, followed by their widowed/separated counterparts (54.4%), while married people have the highest rate (44.6%) to have not searched for product information and compared prices online, followed by their widowed/separated counterparts (41.2%).

(3) Analysis of differences in social and economic status

The Chi-square test suggests that whether one has searched for product information and compared prices online is significantly related to area where one lives.

When analyzed by residence, 62.6% of house renters have searched for product information and compared prices online, higher than home owners (60%).

Experience in online shopping

1. Overall analysis

The survey shows that 61.7% of people have experience in online shopping (See Figure 26).

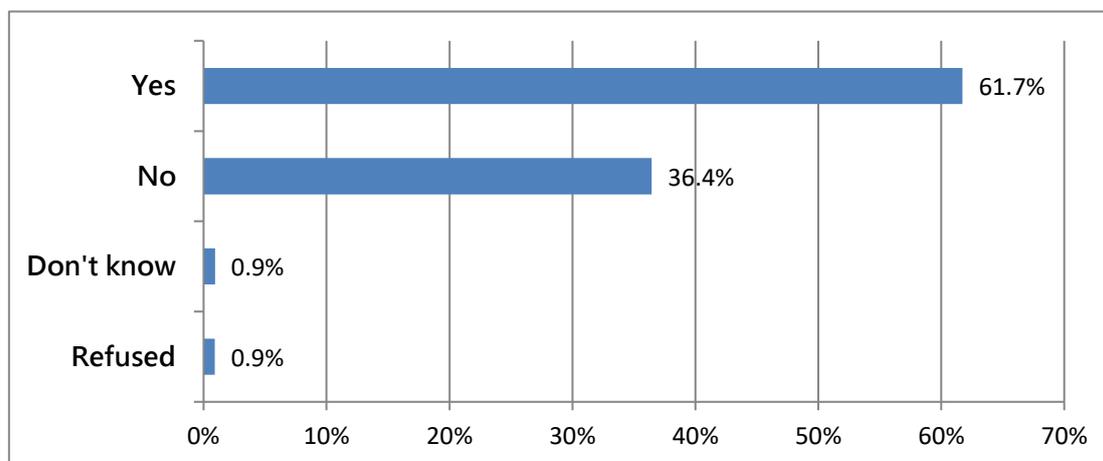


Figure 26 Do You Have Any Experience in Online Shopping?

Base : N=959 (Internet users)

2. Comparative analysis

(1) Analysis of regional differences

The cross analysis suggests that people in all areas have higher rates to have experience in online shopping than those who have not, with people in Taoyuan, Hsinchu, and Miaoli having the highest rate (70%), followed by those in Yilan, Hualien, and Taitung (68.6%). People in Taipei City, New Taipei City, and Keelung have the highest rate (44.8%) to have no experience in online shopping, followed by those in

Kaohsiung, Pingtung, and Penghu (34.8%).

(2) Analysis of basic differences

When analyzed by gender, females (66.9%) have a higher rate to have experience in online shopping than males (56.4%).

When analyzed by age, people aged 26-35 have the highest rate (81.1%) to have experience in online shopping, while people aged 66 and above have the lowest rate (15.2%).

When analyzed by marriage status, unmarried people have the highest rate (74.1%) to have experience in online shopping, while widowed/separated people have the lowest rate (44.3%).

Products bought online in the last 12 months

1. Overall analysis

The survey shows that clothing and footwear (non-sports) accounts for the largest share (31.8%) of the products bought in the last 12 months, followed by kitchen, living goods and stationery (17.5%) and beauty and makeups (15.9%). (See Figure 27)

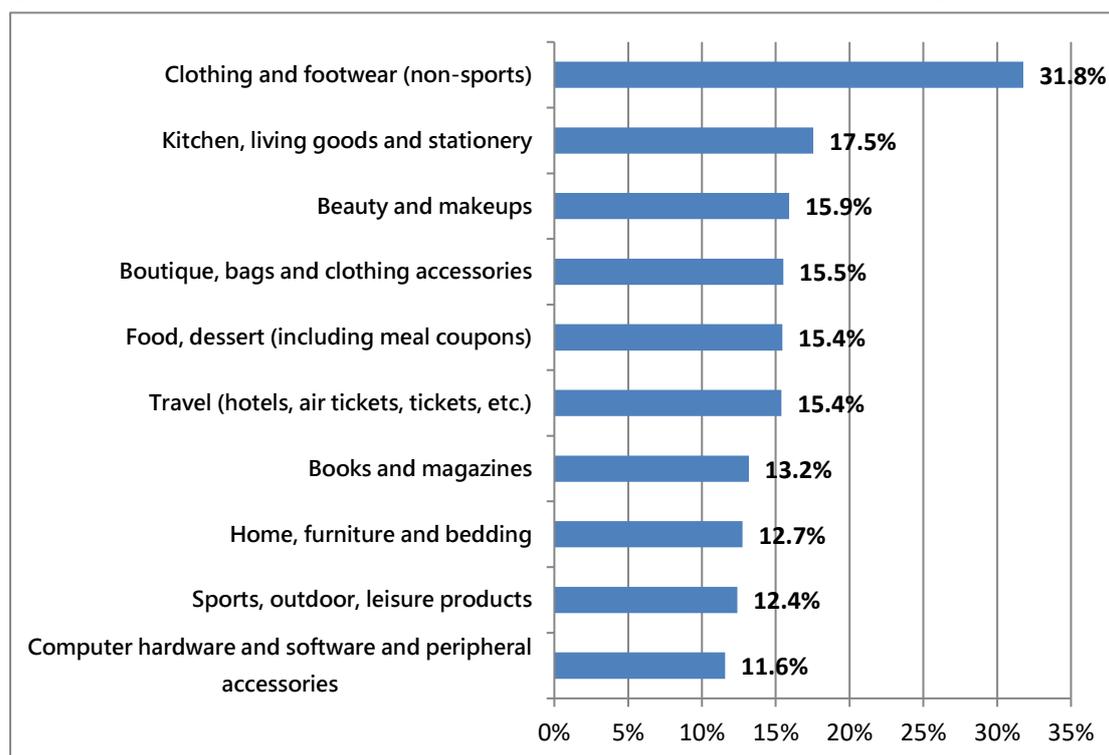


Figure 27 Types of Products bought online in the last 12 months (Top 10)

Base : N=592, multiple-choice (People who have bought products online)

2. Comparative analysis

(1) Analysis of regional differences

The cross analysis suggests that among the products bought online, people in

Taoyuan, Hsinchu and Miaoli have the highest rate (50%) to have bought clothing and footwear (non-sports), while people in Taichung, Changhua and Nantou have the lowest rate (17.1%). People in Yilan, Hualien, and Taitung have the highest rate (25.6%) to have bought kitchen, living goods and stationery, while people in Taoyuan, Hsinchu and Miaoli have the lowest rate (11.3%). People in Taipei City, New Taipei City and Keelung have the highest rate (22.7%) to have bought beauty and makeups, while people in Kaohsiung, Pingtung and Penghu have the lowest rate (9.4%).

(2) Analysis of basic differences

When analyzed by gender, females (41.8%) have a significantly higher rate to have bought clothing and footwear (non-sports) than males (19.7%). Females (20.0%) have a higher rate to have bought kitchen, living goods and stationery than males (14.6%). Females (27.5%) also have a significantly higher rate to have bought beauty and makeups than males (2.1%).

When analyzed by age, people aged 36-45 have the highest rate (38.0%) to have bought clothing and footwear (non-sports), while people aged 66 and above have the lowest rate (0.0%). People aged 66 and above have the highest rate (33.5%) to have bought kitchen, living goods and stationery, while people aged 16-25 have the lowest rate (5.9%). People aged 36-45 have the highest rate (19.7%) to have bought beauty and makeups, while people aged 66 and above have the lowest rate (0.0%).

When analyzed by marriage status, widowed/separated people have the highest rate (37.2%) to have bought clothing and footwear (non-sports), while married people have the lowest rate (30.8%). Widowed/separated people have the highest rate (55.0%) to have bought kitchen, living goods and stationery, while unmarried people have the lowest rate (12.2%). Married people have the highest rate (18.0%) to have bought beauty and makeups, while their widowed/separated counterparts have the lowest rate (12.1%).

Experience in selling products online

1. Overall analysis

The survey shows that the vast majority of people (83.9%) do not have experience in selling products online (See Figure 28).

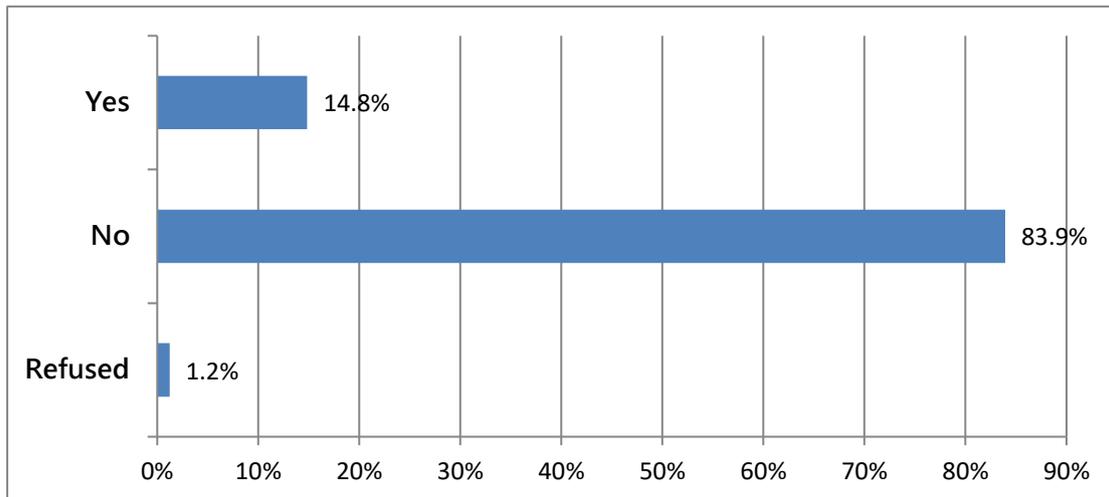


Figure 28 Experience in Selling Products Online

Base : N=959 (Internet users)

2. Comparative analysis

(1) Analysis of regional differences

The cross analysis suggests that a much higher rate (83.9%) of people have experience in selling products online than those who have not (14.8%). Among the respondents who have no experience in selling products online, people in Taoyuan, Hsinchu and Miaoli account for the largest share (90.4%), followed by those in Taipei City, New Taipei City and Keelung (84.9%) and Taichung, Changhua and Nantou (83.5%). Among those who have experience in selling products online, people in Yilan, Hualien, and Taitung account for the largest share (22.1%), followed by those in Kaohsiung, Pingtung and Penghu (17.4%).

(2) Analysis of basic differences

When analyzed by gender, males and females have the same rate (83.9%) to have no experience in selling products online, while females have a slightly higher rate (15.1%) to have experience in selling products online than males (14.6%).

When analyzed by age, people aged 16-25 have the highest rate (25.7%) to have experience in selling products online, while people aged 56-65 have the lowest rate (2.2%).

When analyzed by marriage status, unmarried people have the highest rate (21.4%) to have experience in selling products online, while widowed/separated people have the lowest rate (8.2%).

Products sold online in the last 12 months

1. Overall analysis

The survey shows that 15.3% of people have sold clothing and footwear (non-

sports) online, 12.1% have sold infant and maternal supplies, and 11.6% have sold books and magazines in the last 12 months (See Figure 29).

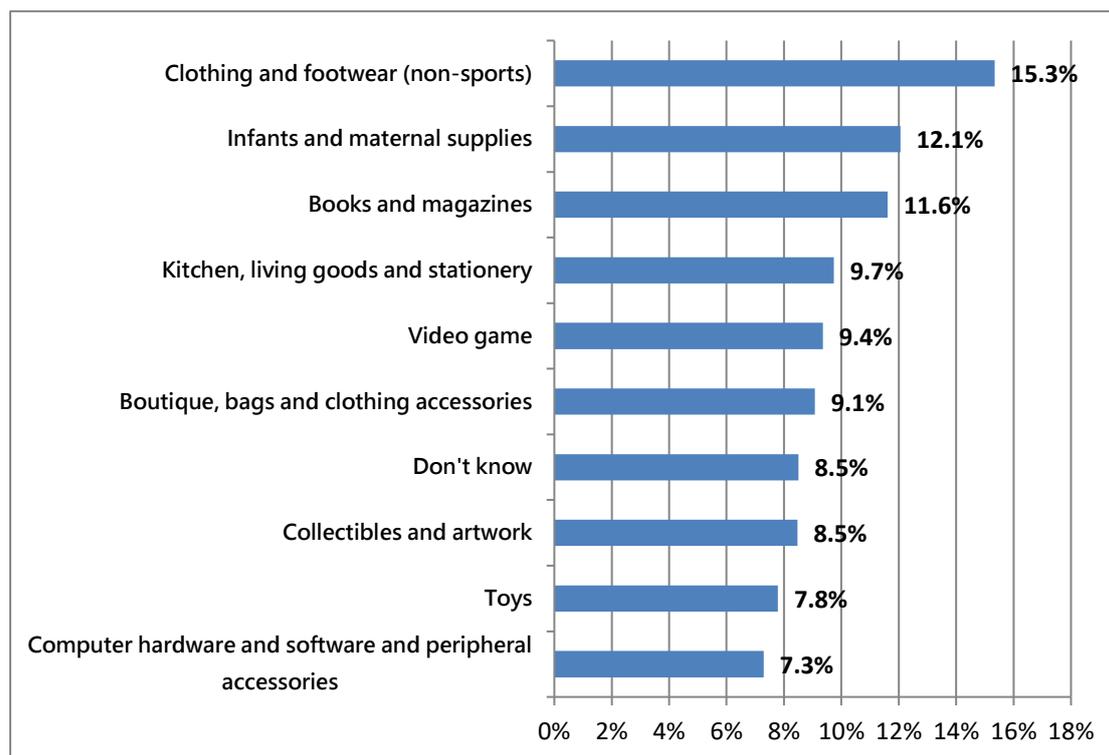


Figure 29 Products Sold Online in the Last 12 Months (Top 10)

Base : N=112, multiple-choice (People who have sold any product online)

2. Comparative analysis

(1) Analysis of regional differences

The cross analysis suggests that among the products sold online, people in Taoyuan, Hsinchu and Miaoli have the highest rate (47.3%) to have sold clothing and footwear (non-sports), followed by people in Kaohsiung, Pingtung and Penghu (14.7%). People in Taichung, Changhua and Nantou have the highest rate (17.5%) to have sold infant and maternal supplies, followed by people in Taipei City, New Taipei City and Keelung (16.1%). People in Taipei City, New Taipei City and Keelung have the highest rate (17.0%) to have sold books and magazines, followed by people in Kaohsiung, Pingtung and Penghu (10.5%).

(2) Analysis of basic differences

When analyzed by gender, females have higher rates to have sold clothing and footwear (non-sports) (20.8%), infants and maternal supplies (17.7%), and books and magazines (14.1%) than males (8.2%, 4.7%, and 8.4% respectively).

When analyzed by age, people aged 16-25 have the highest rate (34.1%) to have sold clothing and footwear (non-sports), followed by people aged 36-45 (7.5%). People aged 26-35 have the highest rate (21.5%) to have sold infants and maternal supplies, followed by people aged 36-45 (16.0%). People aged 16-25 have the highest rate

(17.7%) to have sold books and magazines, followed by people aged 26-35 (10.8%).

When analyzed by marriage status, married people have the highest rate (18.6%) to have sold clothing and footwear (non-sports), followed by unmarried people (15%). Married people have the highest rate (29.6%) to have sold infants and maternal supplies, followed by unmarried people (3.2%). Unmarried people have the highest rate (17.4%) to have sold books and magazines, followed by married people (3.6%).

D. Searching and Sharing Information Online

Reading relevant comments written or published online by others before deciding to buy products

1. Overall analysis

The survey shows that 60.9% of people read relevant comments written or published online by others before deciding to buy products (See Figure 30).

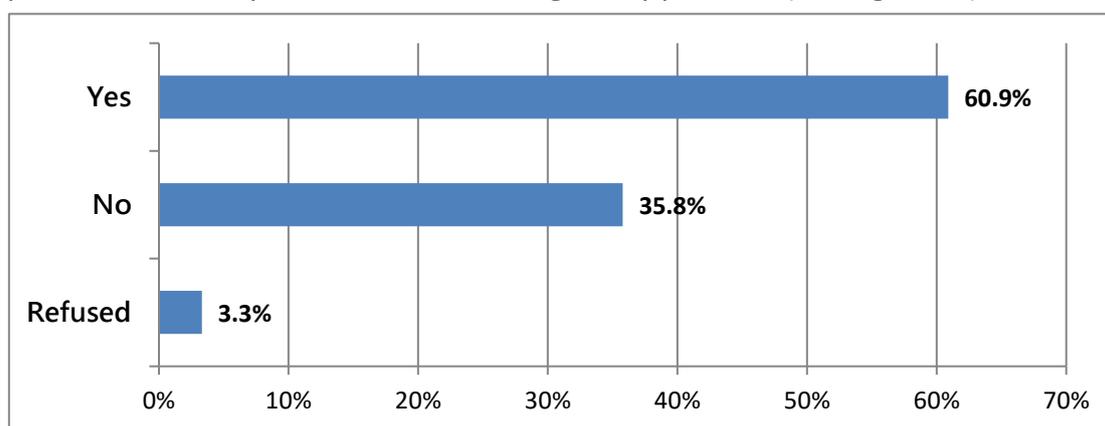


Figure 30 Reading Relevant Comments Written or Published Online by Others Before Deciding to Buy Products

Base : N=959 (Internet users)

2. Comparative analysis

(1) Analysis of regional differences

The Chi-square test suggests that whether one reads relevant comments written or published online by others before deciding to buy products is significantly related to area where one lives.

The cross analysis suggests that people in Kaohsiung, Pingtung and Penghu and Yilan, Hualien, and Taitung have the same percentage (64.3%) to read relevant comments written or published online by others before deciding to buy products. Those in Taipei City, New Taipei City and Keelung have the highest rate (43%) not to read relevant comments written or published online by others before deciding to buy products, followed by people in Yilan, Hualien, and Taitung (36.3%).

(2) Analysis of basic differences

The Chi-square test suggests that whether one reads relevant comments written or published online by others before deciding to buy products is significantly related to age.

When analyzed by gender, males have a higher rate (61.4%) to read relevant comments written or published online by others before deciding to buy products than females (60.4%).

When analyzed by age, people aged 16-25 have the highest rate (80%) to read relevant comments written or published online by others before deciding to buy products, while people aged 66 and above have the lowest rate (21.8%).

When analyzed by marriage status, unmarried people have the highest rate (73.7%) to read relevant comments written or published online by others before deciding to buy products, while widowed/separated people have the lowest rate (51.1%).

(3) Analysis of differences in social and economic status

The Chi-square test suggests that whether one reads relevant comments written or published online by others before deciding to buy products is significantly related to education level.

When analyzed by education level, people with a master's degree and above have the highest rate (75.7%) to read relevant comments written or published online by others before deciding to buy products, while the group of elementary school and below has the lowest rate (20.1%).

Publishing comments online after buying products or using services

1. Overall analysis

The survey shows that 81.9% of people do not publish comments online after buying products or using services (See Figure 31).

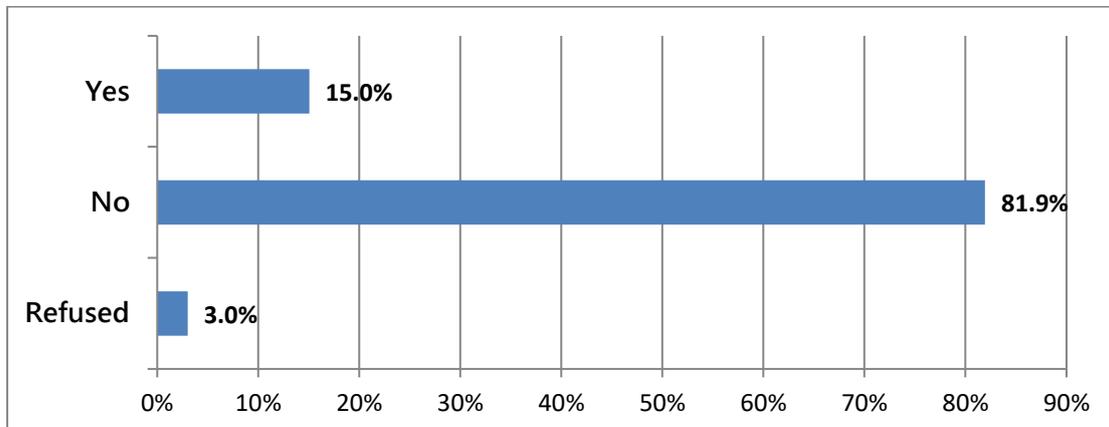


Figure 31 Publishing Comments Online After Buying Products or Using Services

Base : N=959 (Internet users)

2. Comparative analysis

(1) Analysis of regional differences

The Chi-square test suggests that whether one publishes comments online after buying products or using services is significantly related to the area where one lives.

The cross analysis suggests that people in Taipei City, New Taipei City, Keelung have the highest rate (88.4%) not to publish comments online after buying products or using services, while people in Yilan, Hualien, and Taitung have the highest rate (27.2%) to publish comments online after buying products or using services.

(2) Analysis of basic differences

The Chi-square test suggests that whether one publishes comments online after buying products or using services is significantly related to age.

When analyzed by gender, males have a higher rate (16.8%) to publish comments online after buying products or using services than females (13.3%).

When analyzed by age, people aged 26-35 have a higher rate (25.7%) to publish comments online after buying products or using services than any other age group, while people aged 66 and above have the highest rate (95%) not to publish comments online after buying products or using services.

When analyzed by marriage status, married people have the highest rate (85.3%) not to publish comments online after buying products or using services.

(3) Analysis of differences in social and economic status

The Chi-square test suggests that whether one publishes comments online after buying products or using services is significantly related to education level only.

When analyzed by education level, 20.3% of people with a master's degree and above publish comments online after buying products or using services, while 90.6% of people in the Elementary School And Below group do not publish comments online after buying products or using services.

E. Online Information Verification and Information Security

Methods confirming the authenticity of information on websites

1. Overall analysis

The survey shows that 27.9% of people verify with information from other websites, and 27.3% verify by looking for the credibility of the source (such as name of the writer, link to the original source, etc.); in contrast, 29.8% never confirm the authenticity of the content on the website (See Figure 32).

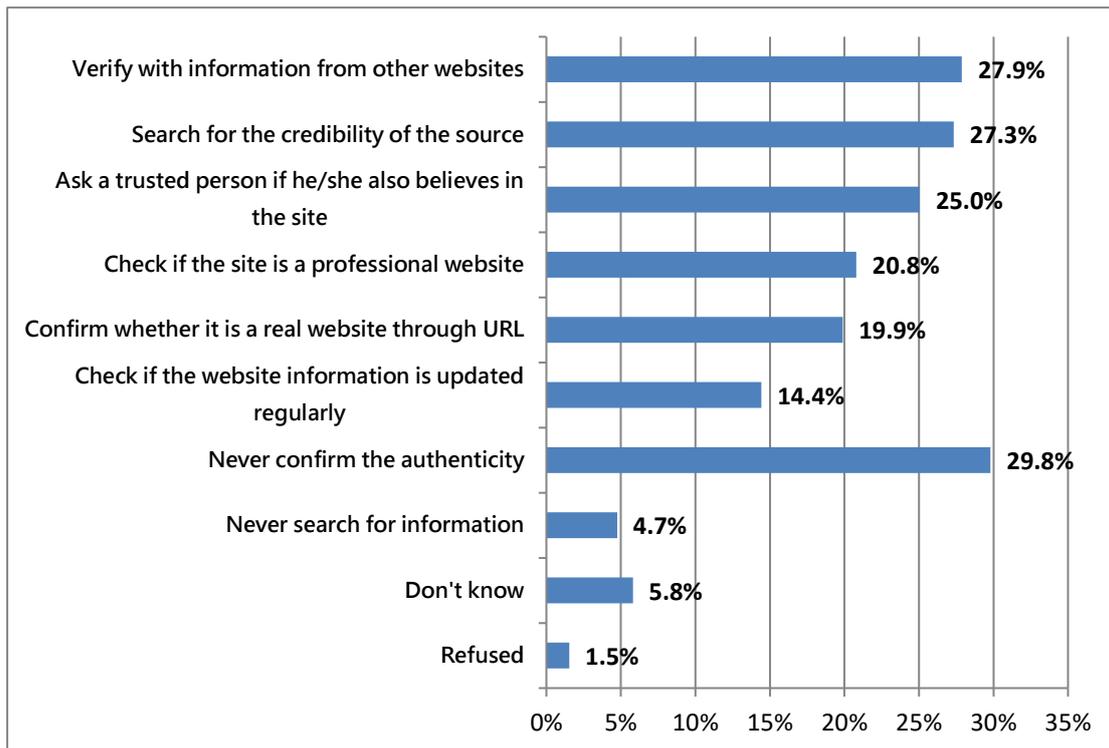


Figure 32 Methods to Verify the Authenticity of Information Found Online

Base : N=959, multiple-choice (Internet users)

2. Comparative analysis

(1) Analysis of regional differences

The cross analysis suggests that people in Taoyuan, Hsinchu and Miaoli have the highest rate (46.9%) to never confirm the authenticity of information online, while people in Taichung, Changhua and Nantou have the lowest rate (17.7%). People in Kaohsiung, Pingtung and Penghu have the highest rate (36.9%) to verify with information from other websites, while people in Taoyuan, Hsinchu and Miaoli have the lowest rate (23.6%).

(2) Analysis of basic differences

When analyzed by gender, females have a higher rate (31.9%) to never confirm the authenticity of information online than males (27.7%). Males have a higher rate (29.6%) to verify with information from other websites than females (26.1%).

When analyzed by age, people aged 66 and above have the highest rate (54.9%) to never confirm the authenticity of information online, while people aged 16-25 have the lowest rate (16.8%). People aged 16-25 have the highest rate (43.6%) to verify with information from other websites, while people aged 66 and above have the lowest rate (3.1%).

When analyzed by marriage status, married people have the highest rate (37.6%) to never confirm the authenticity of information online, while unmarried people have the lowest rate (20.1%). Unmarried people have the highest rate (37.6%) to verify with

information from other websites, while widowed/separated people have the lowest rate (17.0%).

Considerations before signing up on a website with personal information

1. Overall analysis

The survey shows that before signing up on a website with personal information, 56.8% of people consider whether the website is safe, 47.5% consider whether it promises not to leak personal information, and 37.4% consider whether it is a company or brand that one is familiar with (See Figure 33).



Figure 33 Considerations before Signing Up on a Website with Personal Information

Base : N=959, multiple-choice (Internet users)

2. Comparative analysis

(1) Analysis of regional differences

The cross analysis suggests that before signing up on a website with personal information, people in Kaohsiung, Pingtung and Penghu have the highest rate (63.2%) to consider whether the website is safe, followed by people in Yunlin, Chiayi, and Tainan (60.8%), while people in Taoyuan, Hsinchu and Miaoli have the highest rate (57.7%) to consider whether it promises not to leak personal information, followed by people in Kaohsiung, Pingtung and Penghu (55.9%).

(2) Analysis of basic differences

When analyzed by gender, before signing up on a website with personal

information, males have a higher rate (58.4%) to consider whether the website is safe than females (55.2%), while males have a lower rate (46.7%) to consider whether it promises not to leak personal information than females (48.2%).

When analyzed by age, before signing up on a website with personal information, people aged 26-35 have the highest rate (66.9%) to consider whether the website is safe, followed by people aged 16-25 (65.8%), while people aged 16-25 have the highest rate (56.7%) to consider whether it promises not to leak personal information, followed by people aged 36-45 (55.4%).

When analyzed by marriage status, before signing up on a website with personal information, unmarried people have the highest rate (64.7%) to consider whether the website is safe, followed by married people (52.7%). Unmarried people have the highest rate (54.5%) to consider whether it promises not to leak personal information, followed by married people (43.4%).

F. Impacts of Internet Use on Work or Daily Life

Positive impacts of Internet use on work or daily life

1. Overall analysis

The survey shows that among the positive impacts of Internet use on work or daily life, 66.2% of people think “Finding information is very easy,” and 46.1% think “Life has become more interesting,” and 43.8% think “New ways of communication makes life easier” (See Figure 34).

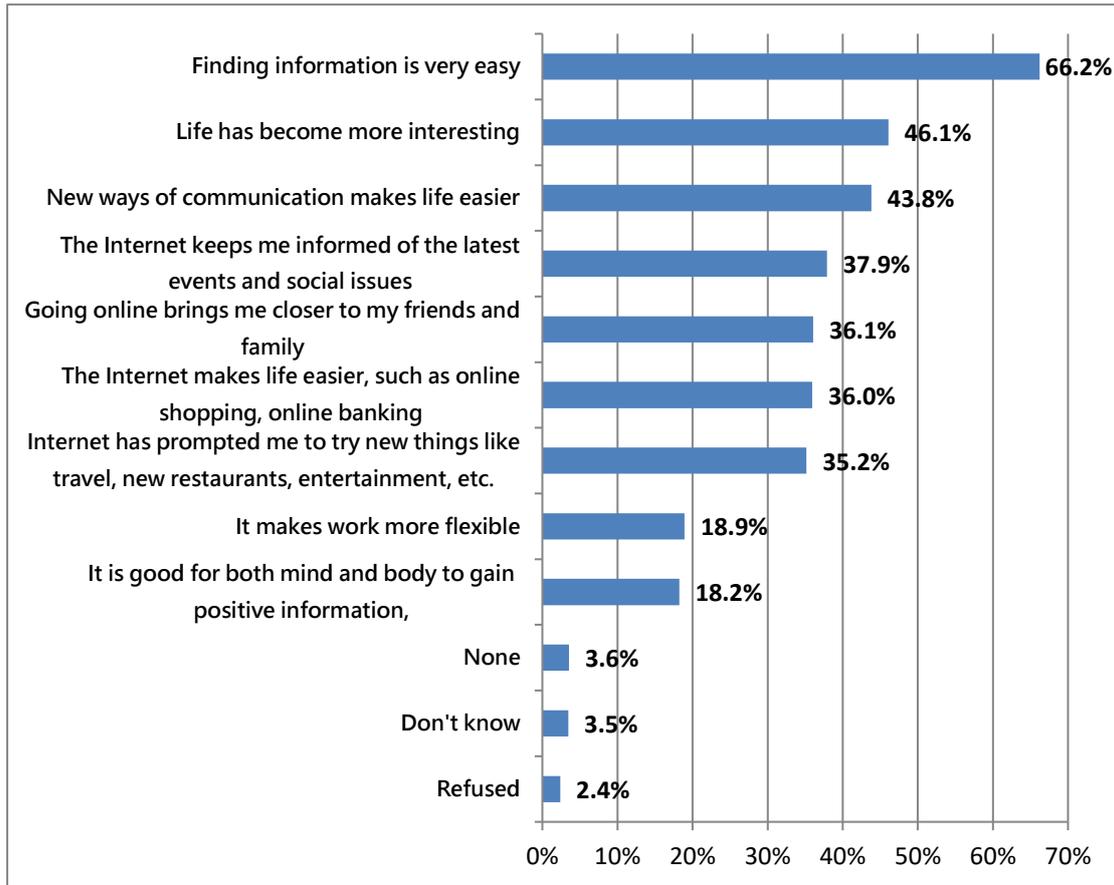


Figure 34 Positive Impacts of Internet Use on Work or Daily Life

Base : N=959, multiple-choice (Internet users)

2. Comparative analysis

(1) Analysis of regional differences

The cross analysis suggests that among the positive impacts of Internet use on work or daily life, people in Taoyuan, Hsinchu and Miaoli have the highest rate (76.6%) to think “Finding information is very easy,” followed by people in Taipei City, New Taipei City and Keelung (70%). People in Taoyuan, Hsinchu and Miaoli have the highest rate (57.2%) to think “Life has become more interesting,” followed by people in Kaohsiung, Pingtung and Penghu (48.5%).

(2) Analysis of basic differences

When analyzed by gender, among the positive impacts of Internet use on work or daily life, females (67.4%) have a higher rate to think “Finding information is very easy” than males (65%), while males have a higher rate (49%) to think “Life has become more interesting” than females (43.2%).

When analyzed by age, among the positive impacts of Internet use on work or daily life, people aged 36-45 have the highest rate (73.1%) to think “Finding information is very easy,” followed by people aged 46-55 (69.6%). People aged 16-25 have the highest rate (51.5%) to think “Life has become more interesting,” followed

by people aged 26-35 (51.3%).

When analyzed by marriage status, among the positive impacts of Internet use on work or daily life, married people have the highest rate (69.4%) to think “Finding information is very easy,” followed by widowed/separated people (67.8%), while unmarried people have the highest rate (50%) to think “Life has become more interesting,” followed by widowed/separated people (46.2%).

Negative impacts of Internet use on work or daily life

1. Overall analysis

The survey shows that among the negative impacts of Internet use on work or daily life, 59.6% of people choose “Visual deterioration/Shoulder and neck pain/Poor health,” and 28.5% choose “Daily routine interrupted/Feeling tired the next day,” and 22.5% choose “Reduced time spent with friends and family” (See Figure 35).

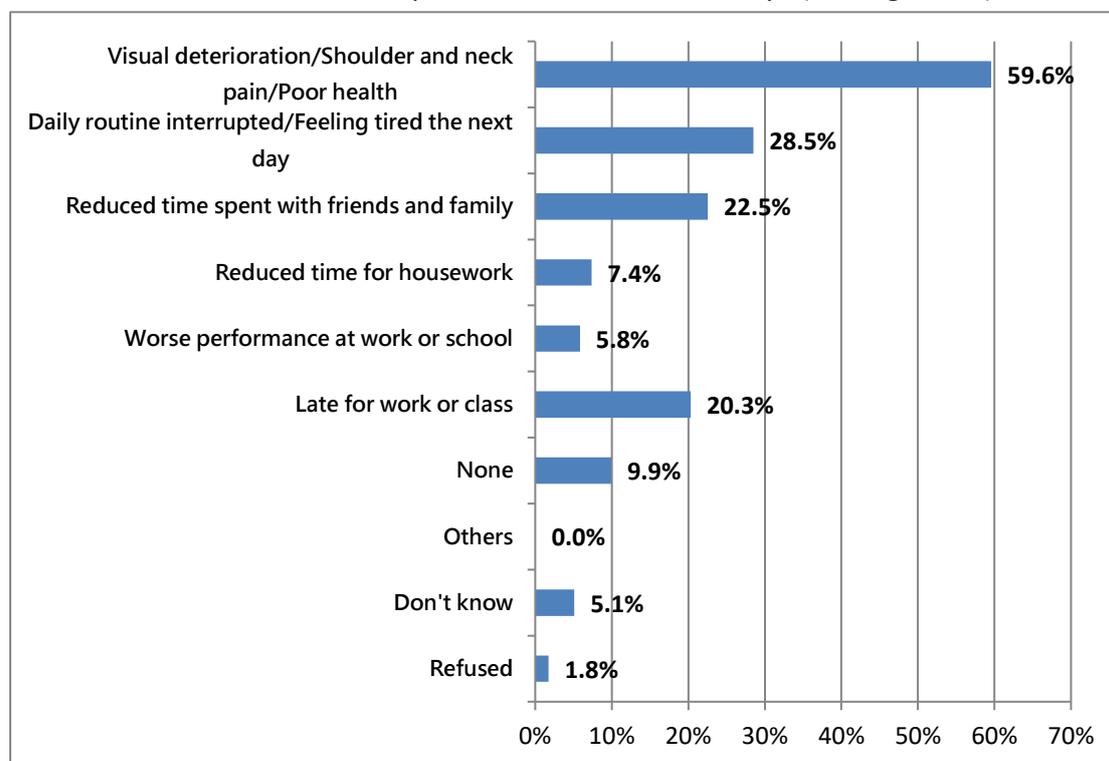


Figure 35 Negative Impacts of Internet Use on Work or Daily Life

Base : N=959, multiple-choice (Internet users)

2. Comparative analysis

(1) Analysis of regional differences

The cross analysis suggests that among the negative impacts of Internet use on work or daily life, people in Taoyuan, Hsinchu and Miaoli have the highest rate (74%) to choose “Visual deterioration/Shoulder and neck pain/Poor health,” followed by people in Yilan, Hualian and Taitung (64.8%). People in Kaohsiung, Pingtung and

Penghu have the highest rate (36.2%) to choose “Daily routine interrupted/Feeling tired the next day,” followed by people in Taichung, Changhua and Nantou (31.8%).

(2) Analysis of basic differences

When analyzed by gender, among the negative impacts of Internet use on work or daily life, females have a higher rate (63.1%) to choose “Visual deterioration/Shoulder and neck pain/Poor health” than males (56.1%), while males have a higher rate (29.4%) to choose “Daily routine interrupted/Feeling tired the next day” than females (27.7%).

When analyzed by age, among the negative impacts of Internet use on work or daily life, people aged 46-55 have the highest rate (69.5%) to choose “Visual deterioration/Shoulder and neck pain/Poor health,” followed by people aged 36-45 (63.6%). People aged 16-25 and 26-35 share a higher rate (39.7%) to choose “Daily routine interrupted/Feeling tired the next day,” followed by people aged 36-45 (30.9%).

When analyzed by marriage status, among the negative impacts of Internet use on work or daily life, widowed/separated people have the highest rate (62.5%) to choose “Visual deterioration/Shoulder and neck pain/Poor health,” followed by married people (60.5%). Unmarried people have the highest rate (38.6%) to choose “Daily routine interrupted/Feeling tired the next day,” followed by married people (22.8%).

Impacts of cellphones on sleep

1. Overall analysis

The survey shows that Taiwanese people’s level of agreement with the statement “I make sure my cellphone is around when sleeping” is 5.77; the level of agreement with “I always check my cellphone before sleeping (excluding setting an alarm, checking the time)” is 5.71; the level of agreement with “The first thing in the morning is to check my cellphone (excluding setting an alarm, checking the time)” is 5.21; while the level of agreement with “I always check my cellphone when waking up at night (excluding checking the time)” is 3.63 (See Table 10).

Table 10 Cellphone Habits When Sleeping

Statements about Cellphone Habits	Average Level of Agreement (1 for strongly disagree and 10 for strongly agree)
I make sure my cellphone is around when sleeping.	5.77
I always check my cellphone before bed (excluding setting an alarm, checking the time).	5.71
The first thing I do in the morning is to check the cellphone (excluding setting an alarm, checking the time).	5.21
The first thing I do after waking up at night is to check the cellphone (excluding checking the time).	3.63

Base: N=1,072

Source: Results of this research

2. Comparative analysis

(1) Analysis of regional differences

The one-way ANOVA suggests that how one agrees with the statements: “I make sure my cellphone is around when sleeping,” “I always check my cellphone before bed (excluding setting an alarm, checking the time),” “The first thing I do in the morning is to check the cellphone (excluding setting an alarm, checking the time),” and “The first thing I do after waking up at night is to check the cellphone (excluding checking the time)” is significantly related to the area where one lives.

People in Taoyuan, Hsinchu and Miaoli have the highest average level (7.15) of agreement with the statement “I make sure my cellphone is around when sleeping.” People in Yilan, Hualian and Taitung have the highest average level (7) to agree with the statement “I always check my cellphone before bed.” People in the Taoyuan, Hsinchu and Miaoli regions have the highest average level (6.51) of agreement with the statement “The first thing I do in the morning is to check the cellphone.” People in Taoyuan, Hsinchu and Miaoli have the highest average level (5.33) of agreement with the statement “The first thing I do after waking up at night is to check the cellphone.”

(2) Analysis of basic differences

The one-way ANOVA suggests that whether one makes sure the cellphone is around when sleeping is significantly related to gender, age, and marriage status; whether one always checks the cellphone before bed is significantly related to, age, and marriage status; whether the first thing in the morning is to check the cellphone is significantly related to age, and marriage status; and whether the first thing after waking up at night is to check the cellphone is significantly related to age, and marriage

status.

When analyzed by gender, males have higher average levels of agreement with the statements “I make sure my cellphone is around when sleeping” (6.11), “I always check my cellphone before bed” (5.86), “The first thing I do in the morning is to check the cellphone” (5.40), and “The first thing I do after waking up at night is to check the cellphone” (3.78) than females.

When analyzed by age, people age 26-35 have the highest average levels of agreement with statements: “I make sure my cellphone is around when sleeping” (7.1) and “I always check my cellphone before bed” (7.01). People aged 16-25 have the highest average levels of agreement with statements: “The first thing I do in the morning is to check the cellphone” (6.26) and “The first thing I do after waking up at night is to check the cellphone” (4.53) among all age groups.

When analyzed by marriage status, unmarried people have the highest average levels of agreement with all the statements: “I make sure my cellphone is around when sleeping” (6.7), “I always check my cellphone before bed” (6.56), “The first thing I do in the morning is to check the cellphone” (6.03), and “The first thing I do after waking up at night is to check the cellphone” (4.35).

(3) Analysis of differences in social and economic status

The one-way ANOVA suggests that whether one makes sure the cellphone is around when sleeping is significantly related to residence, education level, and profession; whether one always checks the cellphone before bed is significantly related to residence, education level, profession, and average monthly individual income; whether the first thing one does in the morning is to check the cellphone is significantly related to residence, education level, and profession; and whether The first thing one does after waking up at night is to check the cellphone is significantly related to residence, education level, profession, and average monthly individual income.

When analyzed by residence, house renters have the highest average levels of agreement with all the statements: “I make sure my cellphone is around when sleeping” (6.39), “I always check my cellphone before bed” (6.36), “The first thing I do in the morning is to check the cellphone” (5.96), and “The first thing I do after waking up at night is to check the cellphone” (4.29) than home owners (5.57, 5.47, 4.96, 3.42 respectively).

When analyzed by education level, people with a master’s degree and above have higher average levels of agreement with the statements: “I make sure my cellphone is around when sleeping” (6.63), “I always check my cellphone before bed” (6.56), and “The first thing I do in the morning is to check the cellphone” (6.19) than those in any other group, while people with a bachelor’s degree have higher average level of

agreement with the statement: “The first thing I do after waking up at night is to check the cellphone” (4.23).

When analyzed by profession, people in the real estate industry have higher average levels of agreement with the statements: “I make sure my cellphone is around when sleeping” (8.54), and “I always check my cellphone before bed” (5.72) than those in other industries, while the average agreement level of people in the public administration and national defense industries with the statement: “The first thing I do in the morning is to check the cellphone” (6.19) is 6.55. The average agreement level of people in the real estate industry with the statement: “The first thing I do after waking up at night is to check the cellphone” is 5.72.

When analyzed by average monthly individual income, people in the NT50,000-NT59,999 group have the highest average agreement levels with statements: “I make sure my cellphone is around when sleeping” (6.91) and “The first thing I do after waking up at night is to check the cellphone” (4.67). People in the ‘NT60,000 and more’ group have the highest average agreement levels with the statements: “I always check my cellphone before bed” (6.75) and “The first thing I do in the morning is to check the cellphone” (6.28) respectively. The average agreement level of people with no income with the statement: “The first thing I do after waking up at night is to check the cellphone” is 9.68.

How people feel about the Internet

1. Overall analysis

The survey results show that people have the highest level of agreement (1 for strongly disagree and 10 for strongly agree) with the statement “Life with the Internet is never boring” (6.69) among all statements, while the agreement levels with statements “Life without Internet becomes boring” (5.9), “I don’t know how to search for data without the Internet” (5.72), “I don’t know what’s happening out there without the Internet” (5.49), and “I feel it’s hard to get rid of the Internet” (5.63) are all higher than 5 (See Table 11).

Table 11 How People Feel about the Internet

Statement	Average Score
Life with the Internet is never boring	6.69
Life without the Internet becomes boring	5.90
I don't know how to search for data without the Internet	5.72
I feel it's hard to get rid of the Internet	5.63
I don't know what's happening out there without the Internet	5.49
I feel anxious when cut off from the Internet	4.95
I feel lost when cut off from the Internet	4.83
I feel disconnected from the real world when cut off from the Internet	4.60
I feel at work when connected to the Internet	4.18

Base: N=959

Source: Results of this research

2. Comparative analysis

(1) Analysis of regional differences

The one-way ANOVA suggests that how one feels about the Internet is significantly related to area where one lives.

People in Taoyuan, Hsinchu and Miaoli have the highest average agreement levels with all the statements: "Life without the Internet becomes boring" (7.19), "I don't know how to search for data without the Internet" (6.82), "I don't know what's happening out there without the Internet" (6.84), "I feel anxious when cut off from the Internet" (6.6), "I feel lost when cut off from the Internet" (6.52), "I feel it's hard to get rid of the Internet" (7.3), "I feel disconnected from the real world when cut off from the Internet" (6.25), "I feel at work when connected to the Internet" (5.58), and "Life with the Internet is never boring" (7.65).

(2) Analysis of basic differences

The one-way ANOVA suggests that whether one agrees with the statements on the attitude toward the Internet is all significantly related to age, while whether one agrees with the statements "Life without the Internet becomes boring," "I don't know how to search for data without the Internet," "I don't know what's happening out there without the Internet," "I feel anxious when cut off from the Internet," "I feel lost when cut off from the Internet," "I feel it's hard to get rid of the Internet," and "Life with the Internet is never boring" is significantly related to marriage status.

When analyzed by age, people age 26-35 have a higher average agreement level with the statement: "I make sure my cellphone is around when sleeping" (7.04), while

people age 56-65 have an average agreement level as low as 4.6. People aged 26-35 have an average agreement level of 6.51 with the statement: "I don't know how to search for data without the Internet," while people aged 66 and above have a low average agreement level (4.59). People aged 26-35 generally agree with the statement: "I don't know what's happening out there without the Internet" (6.17), while people aged 66 and above have a low average agreement level (4.36). People aged 26-35 generally agree with the statement: "I feel anxious when cut off from the Internet" (6.11), while people aged 66 and above have an average agreement level as low as 3.33. People aged 26-35 generally agree with the statement: "I feel lost when cut off from the Internet" (5.85), while people aged 66 and above have an average agreement level as low as 3.70. People aged 26-35 generally agree with the statement: "I feel it's hard to get rid of the Internet" (6.85), while people aged 66 and above have a low average agreement level (4.07). People aged 26-35 generally agree with the statement: "I feel disconnected from the real world when cut off from the Internet" (5.20), while people aged 66 and above have an average agreement level as low as 3.59. People aged 26-35 generally agree with the statement: "I feel at work when connected to the Internet" (4.72), while people aged 66 and above have an average agreement level as low as 3.57. People aged 26-35 generally agree with the statement: "Life with the Internet is never boring" (7.47), while people aged 66 and above have a low average agreement level (5.78).

When analyzed by marriage status, unmarried people generally have higher agreement levels with the statements: "Life without the Internet becomes boring" (6.47), "I don't know how to search for data without the Internet" (6.03), "I don't know what's happening out there without the Internet" (5.77), "I feel anxious when cut off from the Internet" (5.60), "I feel lost when cut off from the Internet" (5.32), "I feel it's hard to get rid of the Internet" (6.32), and "Life with the Internet is never boring" (7.16), while their widowed/separated counterparts generally have lower agreement levels (5.10, 4.86, 3.95, 3.79, 4.84, 6.00) with the statements above, except "I don't know how to search for data without the Internet."

(3) Analysis of differences in social and economic status

The one-way ANOVA suggests that whether one agrees with the statement "Life without the Internet becomes boring" is significantly related to residence, education level, and profession; whether one agrees with the statement "I don't know how to search for data without the Internet" is significantly related to residence, education level, and profession; whether one agrees with the statement "I don't know what's happening out there without the Internet" is significantly related to education level, profession, and average monthly individual income; whether one agrees with the statement "I feel anxious when cut off from the Internet" is significantly related to

residence, education level, profession, and average monthly individual income; whether one agrees with the statement “I feel lost when cut off from the Internet” is significantly related to education level, profession, and average monthly individual income; whether one agrees with the statement “I feel it’s hard to get rid of the Internet” is significantly related to education level and profession; whether one agrees with the statement “I feel disconnected from the real world when cut off from the Internet” is significantly related to education level, profession and average monthly individual income; whether one agrees with the statement “I feel at work when connected to the Internet” is significantly related to education level, profession and average monthly individual income; whether one agrees with the statement “Life with the Internet is never boring” is significantly related to education level, profession and average monthly individual income.

When analyzed by residence, house renters generally have higher agreement levels with “Life with the Internet is never boring” (6.24), “I don’t know how to search for data without the Internet” (6.14), and “I feel anxious when cut off from the Internet” (5.40) than home owners (5.80, 5.62, and 4.84).

When analyzed by education level, people with a master’s degree and above have higher agreement levels with the statement “Life with the Internet is never boring” (6.83), “I don’t know how to search for data without the Internet” (6.21), and “Life with the Internet is never boring” (7.26), while people with elementary school education and below have lower agreement levels (3.93, 3.58, 5.14). People with college education generally agree with “I don’t know what’s happening out there without the Internet” (5.76), “I feel anxious when cut off from the Internet” (5.47), “I feel lost when cut off from the Internet” (5.22), “I feel it’s hard to get rid of the Internet” (6.41), “I feel disconnected from the real world when cut off from the Internet” (4.88), “I feel at work when connected to the Internet” (4.55), while their counterparts with elementary school education and below have lower agreement levels (3.03, 2.75, 2.61, 3.04, 2.66, 2.49).

When analyzed by profession, people in the manufacturing industry have the highest agreement level of agreement with the statement “Life without the Internet becomes boring” (6.89); people in the real estate industry have the highest agreement level with “I don’t know how to search for data without the Internet” (7.41); people in the transportation and warehousing industries have the highest agreement level with “I don’t know what’s happening out there without the Internet” (6.58); people in the transportation and warehousing industries have the highest agreement level with “I feel anxious when cut off from the Internet” (6.21); people in the transportation and warehousing industries have the highest agreement level with “I feel lost when cut off from the Internet” (6.36); people in the support service industry have the highest

agreement level with “I feel it’s hard to get rid of the Internet” (6.57); people in the real estate industry have the highest agreement level with “I feel disconnected from the real world when cut off from the Internet” (5.88); people in the real estate industry have the highest agreement level with “I feel at work when connected to the Internet” (5.74); people in the publication, audio-video production, mass communication, and information and communications industries have the highest agreement level with the statement “Life with the Internet is never boring” (8.2).

When analyzed by average monthly individual income, people in the NT1-19,999 group have the highest agreement level with the statement “I don’t know what’s happening out there without the Internet” (6.14); people in the NT50,000-59,999 group have the highest agreement level with the statement “I feel anxious when cut off from the Internet” (5.52); people in the NT40,000-49,999 group have the highest agreement level with the statement “I feel lost when cut off from the Internet” (5.48); people in the NT50,000-59,999 group have the highest level of agreement level with the statement “I feel disconnected from the real world when cut off from the Internet” (5.55); people in the NT50,000-59,999 group have the highest agreement level with the statement “I feel at work when connected to the Internet” (5.1); people in the NT50,000-59,999 group have the highest agreement level with the statement “Life without the Internet becomes boring” (7.13).

Table 12 One-way ANOVA on Attitudes toward Internet

Statement	Significantly Related Variables
Life without the Internet becomes boring	Area, age, marriage status, residence, education level, profession
I don’t know how to search for data without the Internet	Area, age, marriage status, residence, education level, profession
I don’t know what’s happening out there without the Internet	Area, age, marriage status, education level, profession, average monthly individual income
I feel anxious when cut off from the Internet	Area, age, marriage status, residence, education level, profession, average monthly individual income
I feel lost when cut off from the Internet	Area, age, marriage status, education level, profession, average monthly individual income
I feel it’s hard to get rid of the Internet	Area, age, marriage status, education level, profession
I feel disconnected from the real world when cut off from the Internet	Area, age, education level, profession, average monthly individual income
I feel at work when connected to the Internet	Area, age, education level, profession, average monthly individual income
Life with the Internet is never boring	Area, age, marriage status, education level, profession, average monthly individual income

Source: Results of this research