

Contents

I Online Shopping Trends Statistics in the Past

- 1. Background**
- 2. Between 2000 and 2010**
- 3. Between 2011 and 2020**

II Online Shopping Trends Statistics in the Present

- 1. Survey Overview**
- 2. Survey Summary**
- 3. Population Management and Sample Design**

Contents

III Statistics on Global Direct Selling and Buying

- 1. Background**
- 2. Compilation of Statistics**

IV Plans for Future Improvement

- 1. 2020 Sample Revision Plans**
- 2. Potential Compilation of Seasonal Adjustment**

I Online Shopping Trends Statistics in the Past

1. Background

[Advent of digital economy]

The advancement of IT and spread of internet gave rise to digital economy characterized by e-commerce, ICT, and knowledge-based industry

[Rapid growth of e-commerce]

Such a sharp growth indicated that e-commerce would soon be established to be a common trading arrangement

- * Domestic B2C market size in 2000 : estimated to be 1.6trillion won (globally: 1 trillion USD)
- * Internet penetration in 2000 : 44.7%

In response to the steep increase of e-commerce market and prospective growth
In statistical demands, KOSTAT developed the online shopping survey in **2000**.

I Online Shopping Trends Statistics in the Past

2. Between 2000 and 2010

[Statistical population]

Establishment running an online shopping mall for internet B2C trading

→ (2008) Establishment running an online shopping mall which has a trading value of 12 million won or more from internet B2C trading

[Sample design]

Complete enumeration (4,500 targets)
→ (2008) Sample survey (983 samples)

<2008 Sample Design>

- General trading malls : Complete enumeration
- Specialty trading malls :
 - 1) Take-all strata : Include samples belonging to a product category that has a smaller share of annual trading value, whereby ensuring the representativeness of the entire product categories (e.g. SW, music records/video/musical instruments, flowers, adult products, automobiles, miscellaneous services)
 - 2) Take-some strata : Select samples using a cut-off method according to the trading values of each product categories

[Survey mode] F2F interview or self-administered internet survey(CASI)

[Survey items] product categories, operational arrangements, product coverages, sales media, trading values

I Online Shopping Trends Statistics in the Past

3. Between 2011 and 2020

[Statistical population]

Establishments running an online shopping mall that have a trading value of 12 million won or more from internet B2C trading

→ (2018) Establishments running an online shopping mall that have a trading value of 24 million won or more from internet B2C trading

[Sample design]

General malls : Complete enumeration
→ (2018) Cut-off method

Specialty malls : Cut-off method
→ (2018) Modified cut-off method

<2018 Sample Design>

- General malls : cut-off method
- Specialty malls :
 - 1) Take-all strata : Specialty malls with a certain minimum size selected by using a modified cut-off approach
 - 2) Take-some strata : Select samples by using systematic sample according to trading values for each product category

[Survey mode] F2F interview or self-administered internet survey (CASI) ⊕ SASI (since 2021)

[Survey items] Product categories, operational arrangements, product coverages, sales media, trading values

II Online Shopping Trends Statistics in the Present

1. Survey Overview

[Purpose]

To inform policy making for governments and business planning for enterprises and to provide research institutes and relevant associations with data that measure activities in online shopping to portray the trends of e-commerce

[Survey items] product classifications, country (continent) classifications, trading values

[Survey coverage] 23 product categories

* 'Online contents' category is covered in the Content Industry Survey administered by the Ministry of Culture, Sports and Tourism

[Survey period] 1st through 22nd day in the following month

* Reference period: 1st through the last day of each month (1 month)

[Survey mode] Interview or self-administered survey (incl. CASI, SASI, telephone, Fax, etc.)

[Release cycle] Monthly

I Online Shopping Trends Statistics in the Present

2. Survey Summary

[Recent Trends in Online Shopping by Product Category]

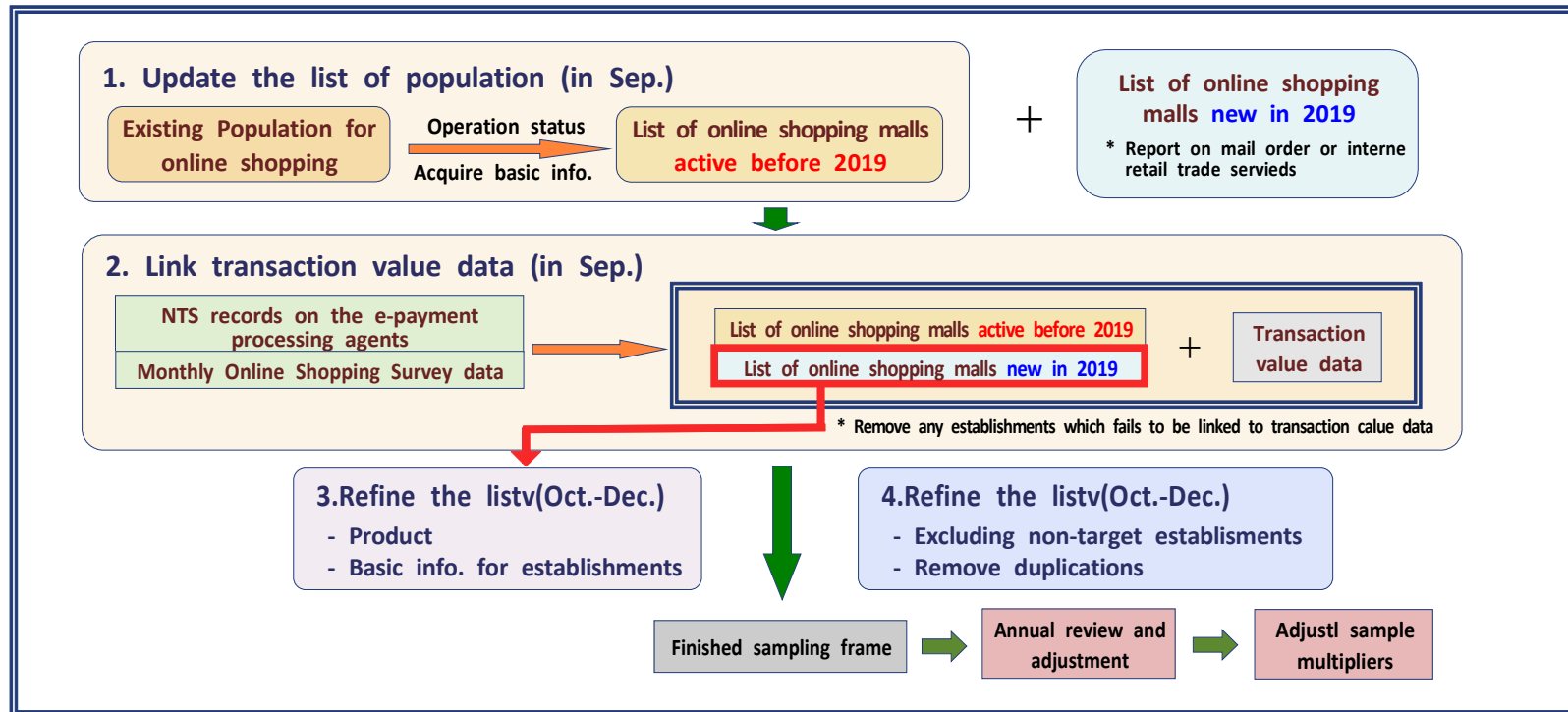
Product category	Total		Internet shopping		Mobile shopping	
	2021.06 ^{P)}	2021.07 ^{P)}	2021.06 ^{P)}	2021.07 ^{P)}	2021.06 ^{P)}	2021.07 ^{P)}
Total	15,696,608	16,199,648	4,722,706	4,485,706	10,973,902	11,713,942
Computer and computer related appliances	613,258	728,138	361,240	442,181	252,017	285,956
Home appliances, electronic and elecommunication equipment	1,787,899	2,062,302	611,512	698,328	1,176,387	1,363,973
books	184,325	221,254	93,795	107,407	90,530	113,847
Office appliances and stationeries	89,816	85,613	41,282	37,711	48,533	47,902
Clothing	1,432,246	1,283,677	492,426	412,037	939,820	871,640
Footwear	294,746	250,854	117,724	95,780	177,021	155,075
Luggage	258,565	261,409	55,340	55,733	203,225	205,676
Fashion and accessories	204,259	211,425	52,325	54,413	151,935	157,012
Sports and leisure appliances	538,192	554,474	170,295	173,887	367,897	380,587
Cosmetics	1,039,432	982,003	496,235	447,099	543,197	534,904
Goods for infants and children	433,161	452,458	76,985	78,796	356,175	373,662
Food and beverage	1,958,851	2,067,564	515,351	542,992	1,443,500	1,524,572
Agriculture, livestock, and fisheries products	586,679	623,627	136,353	145,033	450,326	478,594
Household goods	1,343,650	1,441,364	372,353	417,103	971,298	1,024,262
Motor vehicles and their parts & accessories	520,183	170,584	401,033	51,118	119,150	119,466
Furniture	448,509	446,650	137,144	133,555	311,365	313,095
Pet products	106,002	108,191	20,655	20,984	85,347	87,208
Travel and transportation services	819,921	822,457	212,382	223,036	607,540	599,421
Cultural and leisure services	126,718	89,681	49,203	32,959	77,515	56,722
E-coupon services	483,505	486,430	56,978	55,535	426,527	430,895
Food services	1,972,304	2,377,780	52,566	60,828	1,919,738	2,316,952
Miscellaneous services	188,837	199,372	80,009	85,545	108,828	113,826
Others	265,552	272,342	119,519	113,646	146,032	158,695

II Online Shopping Trends Statistics in the Present

3. Population Management and Sample Design

[Managing populations]

- Purpose : To regularly manage a population in order to reflect the business cycles of the online shopping market in a timely manner
- Data sources : Economic censuses ⊕ (0000) administrative data (Reports on Mail Order or Internet Retail Trade Services from the National Tax Service (NTS))



II Online Shopping Trends Statistics in the Present

[Designing Samples]

- **Statistics population**
 - Establishments that are identified to operate an online shopping mall(s) through the internet
 - ※ Online shopping business having an annual trading value of 24 million won or more
- **Sample design**
 - **General malls** : Trading goods and services of a variety of product categories
 - ▶ Select samples of general malls by using a cut-off method which have an annual trading value of 75 million won or more
 - ※ Include any internet duty-free malls regardless of their sizes
 - **Specialty malls** : Trading goods and services of a single product category or of specific core categories
 - ▶ Take-all strata : Use a modified cut-off method to select specialty malls having a certain minimum business size
 - ▶ Take-some strata : Use systematic sampling to select certain number of samples for each product category according to their trading values

Sortation	2000	2008	2018
Population	• complete enumeration	• Shopping malls with an annual trading value of 12 million won or more	• Shopping malls with an annual trading value of 24million won or more
Sample desing	-	• General malls: complete enumeration • Specialty malls: cut-off method - 5 categories belonging to take-all strata	• General mall: cut-off method • Specialty mall: modified cut-off method, stratified systematic sampling
Sample size	-	983	1,077
#of product categories	-	20	23

III Statistics on Overseas Direct Selling and Buying

1. Background

- Growing needs for the overseas direct selling statistics by the government in order to inform policies that can help promoting exports via online shopping
- Greater interests of statistical users, especially in disaggregated data, for overseas direct selling, which come with a fast-growing domestic market and a paradigm shift in distribution of goods

2. Compilation of statistics

- **Population** : Use administrative data from Korea Customs Service (KCS)
(i.e. list-clearance, simplified and general declaration for imports and exports)
 - Identify a preliminary list of establishments that may be involved in overseas direct selling at the time of establishing a statistical population for the online shopping survey, which is inspected/checked-out by the regional statistics offices and complemented.
- **Survey method**
 - Overseas direct selling: Field survey ⊕ administrative data
 - Overseasdirect buying: Administrative data

Field survey	Admin. data acquisition	Data editing/processing	Data analysis	Dissemination
shopping malls providing overseas direct selling (excl. overseas direct buying)	Import and export data from KCS	Repurpose admin. data for statistical production (product, country, continent classifications)	Quarterly time-series analysis	Quarterly

3. Statistics Improvement and Feedback

- Maintain interlocking relationship with KCS which governs relevant administrative data
- Organize year-round consultation meetings for improving business with the help of a consultative body

III Statistics on Overseas Direct Selling and Buying

[Country classifications]

Country / continent	Detailed Country
China	Incl. Taiwan, Macao and Hong Kong
ASEAN	Brunei Darussalam, Cambodia, Indonesia, Laos, Malaysia, Myanmar, Philippines, Singapore, Thailand, Vietnam
EU	Germany, France, Ireland, Belgium, Netherlands, Luxembourg, Denmark, Sweden, Finland, Austria, Italia, Portugal, Greece, Czech Republic, Hungary, Slovakia, Lithuania, Latvia, Estonia, Slovenia, Kypros, Malta, Bulgaria, Croatia, United Kingdom, Spain, Romania, Poland
Middel East	Iran, Iraq, Syria, Turkey, Jordan, Saudi Arabia, Bahrain, Kuwait, Oman, Yemen, United Arab Emirates, Afghanistan, Qatar, Israel, Lebanon
Latin America	Mexico, Peru, Colombia, Paraguay, Bolivia, Brazil, Suriname, Venezuela, Cuba, etc.
Oceania	Australia, New Zealand, Northern Mariana Islands, Guam, etc.
Other	Countries not hereinabove classified

[Product classifications]

Product categories
① Computer and computer related appliances
② home appliances, electronic and telecommunication equipment
③ Software
④ Books
⑤ Office appliances and stationeries
⑥ Music records, video, musical instruments
⑦ Clothing and fashion-related products
⑧ Sports and leisure appliances
⑨ Cosmetics
⑩ Goods for infants and children
⑪ Food and beverage
⑫ Agriculture, livestock, and fisheries products
⑬ Household goods and motor vehicle related products
⑭ Others ()

IV Plans for Future Improvement

1. 2020 sample revision plans

[Background]

- The revision of the survey of establishments has taken place in connection with the 2020 Economic Census
- Samples are revised regularly to ensure the relevance of statistics with the real-world conditions
- Need to establish a sample revision system in compliance with directives to promote untact surveys

[Main activities]

- Revisit the frequency of sample revision and mode of rotation sampling and enhance the refinement of statistical populations
- Reconsider the utilization of human and financial resources in consideration of the expansion of untact surveys
- Review the product categories for merging, segregating, and disaggregating them

2. Potential compilation of seasonal adjustment

[Main activities]

- Explore the determination of a deflator for online activities to consider feasible options
- Remove the seasonality and variability of data to enable the analysis of business cycles under consistent conditions
- Identify a seasonal factor for each product category to possibly compile their seasonal adjustment