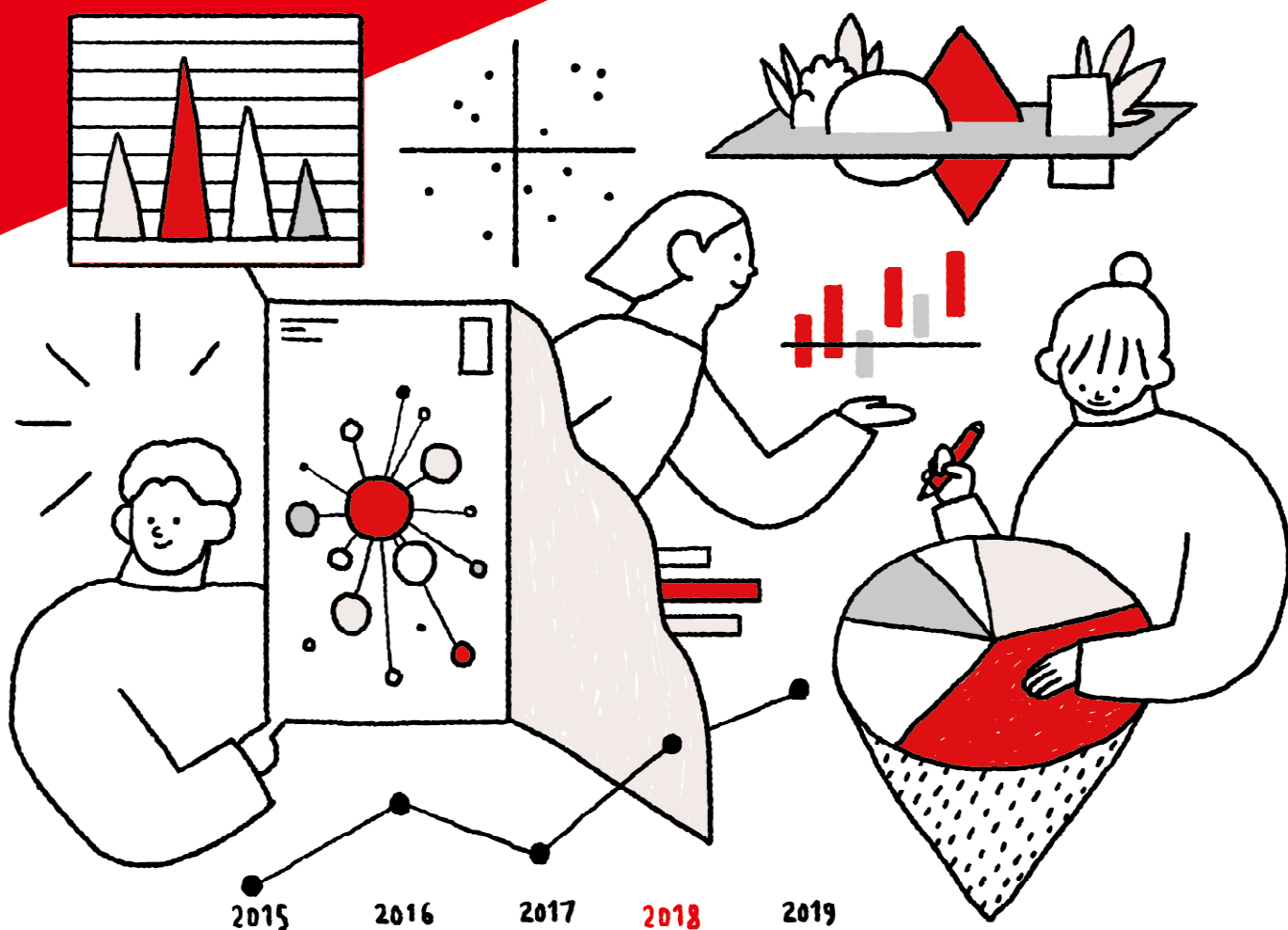


# 2018 Design Census

- Summary report



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# Domestic Design Industry Statistics





## Chapter 01    **Survey Outline**

1. Design of Survey
2. Characteristics of Respondents



## 01. Survey Outline

### 1. Design of Survey

#### 1) Purpose of Survey

- The purpose of this survey is to build objective and reliable data that can serve as a basis for evaluation of the current status of the design industry, thereby responding to the demands of the users of the statistics, and to use the data as basic reference materials in the development of design policies and strategies by government, industries and academic circles.

#### 2) Basis of Survey

- Clause 3, Article 20, Enforcement Decree of the Industrial Design Promotion Act (Compilation and management of industrial design statistics)
- Official statistics according to Article 18 of the Statistics Act (No. 11526)

#### 3) History of Survey



#### 4) Period of Survey




- Survey reference period : 2017. 01. 01 ~ 2017. 12. 31
- Fieldwork period : 2018. 08. 20 ~ 2018. 11. 02

#### 5) Subject of Survey

Category	Contents
<b>Survey Subjects of Actual Conditions</b>	<ul style="list-style-type: none"> <li>• Utilization or non-utilization of design by companies in general</li> <li>• Companies that utilize design</li> <li>• Specialized design companies</li> <li>• Central governments (18 ministries, 4 agencies, and 17 offices)</li> <li>• Local governments (cities/autonomous districts)</li> </ul>
<b>Subjects of Literature Survey</b>	<ul style="list-style-type: none"> <li>• Status of Freelancers</li> <li>• Status of Design-related Educational Institutions</li> </ul>



## 6) Survey Outline of Actual Conditions

Classification	 General Companies	 Specialized Design Companies	 Central Government Agencies and Local Governments
<b>Sampling Method</b>	Two-phase sampling) 1 <sup>st</sup> Phase : Survey of utilization/ non-utilization of design - Stratified sampling/ square root transformation proportional distribution 2 <sup>nd</sup> phase : Survey of actual conditions of companies that utilize design -Stratified sampling/ square root transformation proportional distribution	Stratified sampling/ square root transformation proportional distribution	Complete enumeration survey
<b>Target Sample Size</b>	1st phase: Survey of utilization/ non-utilization of design - 10,000 companies 2nd phase: Survey of actual conditions of companies that utilize design - 1,000 companies	600 companies	Central Department (18 ministries 4 agencies and 17offices) - 39 institutions Local government (City/ autonomous districts) - 243 institutions Regional Design Support Center
<b>Actual Sample Size</b>	1st phase: Survey of utilization/ non-utilization of design - 10,314 companies 2nd phase: Survey of actual conditions of companies that utilize design - 1,145 companies	638 companies	Central Department (13 ministries, 4 agencies and 15 offices) - 32 institutions Local Governments (cities/autonomous districts) - 240 institutions Regional Design Support Center
<b>Survey Subjects</b>	Company representatives, department Chiefs or above staffs in charge of design	Company representatives, department chiefs or above	Public officials in charge of design
<b>Survey Methods</b>	Visiting survey and e-mail/or FAX/phone survey		

## 7) Survey Items

Classification	Items	
<b>Utilization/ non-utilization of design by companies</b>	<ul style="list-style-type: none"> <li>• whether a designer has been employed as of December 2017</li> <li>• Whether a request order for design development has been made to a specialized design company within the recent two years</li> </ul>	
<b>Survey of actual conditions of companies that utilize design</b>	<ul style="list-style-type: none"> <li>• General status of company</li> <li>• Investment performance of design</li> <li>• Status of design and level of contribution</li> <li>• Government policies and support</li> </ul>	<ul style="list-style-type: none"> <li>• Status of design utilization</li> <li>• Level of design utilization</li> <li>• Status of design staff</li> <li>• Status of design education</li> </ul>
<b>Survey of actual conditions of specialized design companies</b>	<ul style="list-style-type: none"> <li>• General status of company</li> <li>• Business performance of design</li> <li>• Status of design education</li> </ul>	<ul style="list-style-type: none"> <li>• Focusing area of design and Status of design staff</li> <li>• International exchanges of design</li> <li>• Government policies and support</li> </ul>
<b>Survey of actual conditions of central government agencies and local governments</b>	<ul style="list-style-type: none"> <li>• Status of design utilization</li> <li>• Design education</li> </ul>	<ul style="list-style-type: none"> <li>• Status of request orders for design project</li> </ul>
<b>Others</b>	<ul style="list-style-type: none"> <li>• Scale of freelancer industry</li> <li>• Economic values of design</li> </ul>	<ul style="list-style-type: none"> <li>• Status of design-related educational institutions</li> <li>• Export·Import scale of design</li> </ul>

## 8) Keywords and Concepts

### Companies in general and Specialized design companies

#### (1) Confirmation of utilization/ non-utilization of design

##### Step 1



As of December 2017, were there designers working as employees in your company? If it is difficult to verify the status because of the time, are there designers working as employees in your company at present?

- ☒ Yes ► Company that utilizes design. Should be contacted for the survey.  
☒ No ► Advance to Step 2

※ Designer : Among those who are employed as designers, a person who majors in design-related department, has design-related licenses, or has 2 or more years of business career in design without design-related degrees or licenses

##### Step 2



Has your company ordered for a design development service to a specialized design company for your products and service within the last two years?

- ☒ Yes ► Company that utilizes design. Should be contacted for the survey.  
☒ No ► Advance to Step 3

##### Step 3



Has your company launched a new product or modified the design of an existing product within the last two years?

- ☒ Yes ► Advance to Step 4  
☒ No ► Company that does not utilize design. Stop the survey

##### Step 4

(If the company has launched a new product or modified the design of an existing product) In what way (in-house/outourcing) did you develop the design of the new product or modify the existing product design?

- ☒ Short answers by respondents were used to determine whether the company utilizes design or not-based on the design utilization criteria below.

#### (2) Criteria for Determination of Service Orders for Specialized Design Companies

- Design service related to products and services (products and packaging)
- Brand identity (BI) advertisements, pamphlets, banners, etc. related to the promotion of products
- Production of uniform such as Company Identity (CI) company introduction ads, pamphlets, web pages, interior design etc

#### NOTE

- Construction industry: It is difficult to separate design and construction plans.  
(Establishing of only construction plans not regarded as design outsourcing:)  
Construction plan relates to the height, form and size of a building.
- Research institutes: Employees in charge of production work are included as those who prepare the report, but shall not be called designers. Among those in charge of production work, those who majored in design shall be acknowledged as designers.
- Only designs developed originally by designers shall be recognized as designs. If modification of an existing design is made by those who did not major in design, it shall not be regarded as a design.
- Design outsourcing should have been made within the last two years. If products continue to be manufactured using a design developed from an outsource order made more than two years ago, it shall not be recognized as design outsourcing.
- Only outside companies with designers who majored in design are applicable. For example, outsourcing made to a publisher or printing company in which a designer is employed is recognized as design outsourcing.

## » Specialized Design Companies

- Includes companies that belong to the specialized design service sub-class of the Korean Standard Industrial Classification, such as interior design companies, product design companies, graphic design companies and other specialized design companies.

## » Company Types

### ① Individual Proprietorships

- Businesses run by individuals and not by corporate bodies; businesses jointly run by different individuals are also included in this category.
- Authorized agents, special agencies, franchise stores, etc. run independently under the responsibility of private business owners based on sales contracts concerning products, services, etc. with relevant companies.

### ② Incorporated companies

- Profit-making corporations established according to the regulations of a commercial law: includes incorporated companies, limited companies, joint stock companies, unlimited partnership companies and foreign companies.
- Foreign companies are those with branch offices, sales offices, etc. established in Korea with head offices in a foreign country (e.g. the US).

### ③ **Non-business corporations**

- These are corporations established based on the regulations of civil law or special laws and include foundations, incorporated associations, incorporated educational institutions, medical corporations, social welfare corporations, public corporations, etc.

### ④ **Unincorporated associations**

- Various associations, unions, supporters' associations, cultural organizations, labor organizations, etc. without a corporate entity.

## » **Business Types**

### ① **Unit Business (one business, one office)**

- Individual office-with no head office, branch office, business office, sales office, etc. in another location

### ② **Head offices, main stores (one business, multiple offices)**

- Businesses that supervise the overall business activities of one or more branch offices, business offices or sales offices under the same management
- Businesses in which overall management operations such as planning, accounting, finance, purchase, advertisement, legal affairs, etc. are carried out

### ③ **Branch offices, business offices, sales offices (one business, multiple offices)**

- Branch offices, business offices, sales offices, etc. that receive directions on overall operations from a separate head office, etc. that oversees management

## » **Employees**

### ① **Full-time Employees**

- Those who have concluded employment contracts for one year or longer with the business or those, although without an employment contract for a certain period, who are subjected to the company's personnel management rules or receive various benefits including bonuses from the company


### ② **Temporary or Daily employed Workers**

- Workers with less than one year of employment under contract who receive wages from the company

## » Classification of Business Scale

- Classification of medium and small companies is made based on Article 2 of the Framework Act on Small and Medium Enterprises, and the other enterprises are classified as large companies. Midsize Enterprises are separated by the list of Midsize Enterprises which High Potential Enterprises(<https://www.hpe.or.kr/>) offers.

※ The public administrations, national defenses, and social security administrations are classified by the number of employees in a conventional manner, because there is no criteria for classification of these kinds of things.

Industry		 Medium Companies	 Small Companies
Manu factu ring	Other machinery and equipment manufacturing	12~100 billion KRW	less than 12 billion KRW
	Manufacture of metalworking products; Excluding machinery and furniture	12~100 billion KRW	less than 12 billion KRW
	Food manufacturing	12~100 billion KRW	less than 12 billion KRW
	Automobile and trailer manufacturing	12~100 billion KRW	less than 12 billion KRW
	Manufacture of electronic components, computers, video, sound and communication equipment	12~100 billion KRW	less than 12 billion KRW
	Manufacture of coke, briquette and oil refining products	12~100 billion KRW	less than 12 billion KRW
	Chemical and chemical products manufacturing; Excluding medicines	12~100 billion KRW	less than 12 billion KRW
	Manufacture of primary metal	12~150 billion KRW	less than 12 billion KRW
	Furniture manufacturing	12~150 billion KRW	less than 12 billion KRW
	Manufacture of leather, bags and footwear	12~150 billion KRW	less than 12 billion KRW
	Manufacture of apparel, clothing accessories and fur products	12~150 billion KRW	less than 12 billion KRW
	Electrical equipment manufacturing	12~150 billion KRW	less than 12 billion KRW
	Manufacture of non-metallic mineral products	12~80 billion KRW	less than 12 billion KRW
	Beverage industry	12~80 billion KRW	less than 12 billion KRW
	Manufacture of medical materials and pharmaceuticals	12~80 billion KRW	less than 12 billion KRW
	Manufacture of rubber and plastic products	8~100 billion KRW	less than 8 billion KRW
	Other transportation equipment manufacturing	8~100 billion KRW	less than 8 billion KRW
	Tobacco industry	8~100 billion KRW	less than 8 billion KRW
	Manufacture of wood and wood products; Furniture exclusion	8~100 billion KRW	less than 8 billion KRW
	Textile products manufacturing; Except clothing	8~100 billion KRW	less than 8 billion KRW
	Manufacture of pulp, paper and paper products	8~150 billion KRW	less than 8 billion KRW
	Other product manufacturing	8~80 billion KRW	less than 8 billion KRW
Non- manu factu ring	Medical, precision, optical equipment and watch manufacturing	8~80 billion KRW	less than 8 billion KRW
	Printing and Recording Media Reproduction	8~80 billion KRW	less than 8 billion KRW
	Electricity, gas, steam, and water services	12~100 billion KRW	less than 12 billion KRW
	Construction	8~100 billion KRW	less than 8 billion KRW
	Mining	8~100 billion KRW	less than 8 billion KRW
	Agriculture, forestry and fishing	8~100 billion KRW	less than 8 billion KRW
	Transportation	8~80 billion KRW	less than 8 billion KRW
	sewage and waste disposal, raw material recycling	8~80 billion KRW	less than 3 billion KRW
	Financial service and insurance activities	8~40 billion KRW	less than 8 billion KRW
	Wholesale and retail sale	5~100 billion KRW	less than 5 billion KRW
	Publishing, video, broadcast communications and information services	5~80 billion KRW	less than 5 billion KRW
	Real estate activities and renting and leasing	3~40 billion KRW	less than 3 billion KRW
	Business facilities and management and business support services	3~60 billion KRW	less than 3 billion KRW
	Arts, sports and recreation related services	3~60 billion KRW	less than 3 billion KRW
	Professional, scientific and technical services	3~60 billion KRW	less than 3 billion KRW
	Health and social work services	1~60 billion KRW	less than 1 billion KRW
	Membership organizations, repair and other personal services	1~60 billion KRW	less than 1 billion KRW
	Education services	1~40 billion KRW	less than 1 billion KRW
	Accommodation and restaurant business	1~40 billion KRW	less than 1 billion KRW
	Public administration, defence and social security administration	50~299 Workers	less than 49 employees

## » Business Results

### ① Sales

- Total earnings from business activities carried out for the year 2017

### ② Personnel expenses

- Benefits and charges paid to employees including wages, welfare benefits, retirement allowances, etc. for the year 2017

### ③ R&D costs

- Research costs, development costs, ordinary R&D costs

### ④ Business profits

- Profits obtained by subtracting operation costs from total sales

## » Design related investments and business expenses

### ① Personnel expenses for designers

- Personnel expenses for designers employed for the year 2017

### ② Design service charges

- Service charges for specialized design companies, freelancers and other personnel who are not employed by the company for the year 2017

※ Service charges of specialized design companies and other service charges separated.

### ③ Design machines/devices and software

- Expenses for purchase and management of high-price equipment, devices, computer systems and application software for the year 2017

### ④ Land/building for design

- R&D Expenses spent on purchase, major repair, etc. of land and buildings for design R&D for the year 2017

### ⑤ Other design-related operation costs

- Other costs for design research such as those spent on materials, printed matters, purchase of fixtures, education and training, business trips, etc. for the year 2017

## » Standards for designer

- Among those employed as designers, those with design-related degrees or certificates, or those with two or more years of experience in design who do not hold design-related degrees or certificates

## » Fields of design

### Product design

Electrical and electronic product design, multi-purpose machinery and tool design, household/ environmental goods design, transportation design, furniture design, manufacturing company head office design, other product design



### Visual design

Editorial design, food and medicine packaging design, packaging design for products other than food and medicine, advertising design (printed media), other types of visual design



### Digital media design

Moving image design, web design, game design, other digital/multimedia design



### Space design

Architectural design, interior decoration design, exhibition and stage design, interior material design, exterior design, landscape and leisure space design, remodeling design, architectural environmental design, civil environmental design, other types of interior design



### Fashion/ textile design

Fashion design, functional fashion design, textile design, miscellaneous goods design, other fashion/textile design



### Service/ experience design

Service design, interaction design, other service/experience design

**Service Design** A field of design that focuses on and applies user-oriented research in the overall processes of design and delivery of services, so as improve user experience



### Industrial design

Metal craft, ceramic craft, textile craft, wood craft, other craft



### Design infrastructure (Design-based technology)

Design models, design R&D, other design services



## » Application for and registration of industrial property rights

### ① application

- Submission of documents required under relevant laws to a government agency for the purpose of registration of industrial property rights

### ② Registration

- Administrative measures by an administrative agency evaluating submitted application materials based on formal and actual conditions required by relevant laws, and authorization of rights when the requirements are satisfied

## » Good Design (GD) Mark

- The Good Design (GD) Selection program has been carried out since 1985.

Under this program, designs of products currently on sale or those soon to be on sale are evaluated based on form, economic feasibility, convenience, etc. Products selected through the evaluation are authorized by the government as Good Design products and given the GD mark.

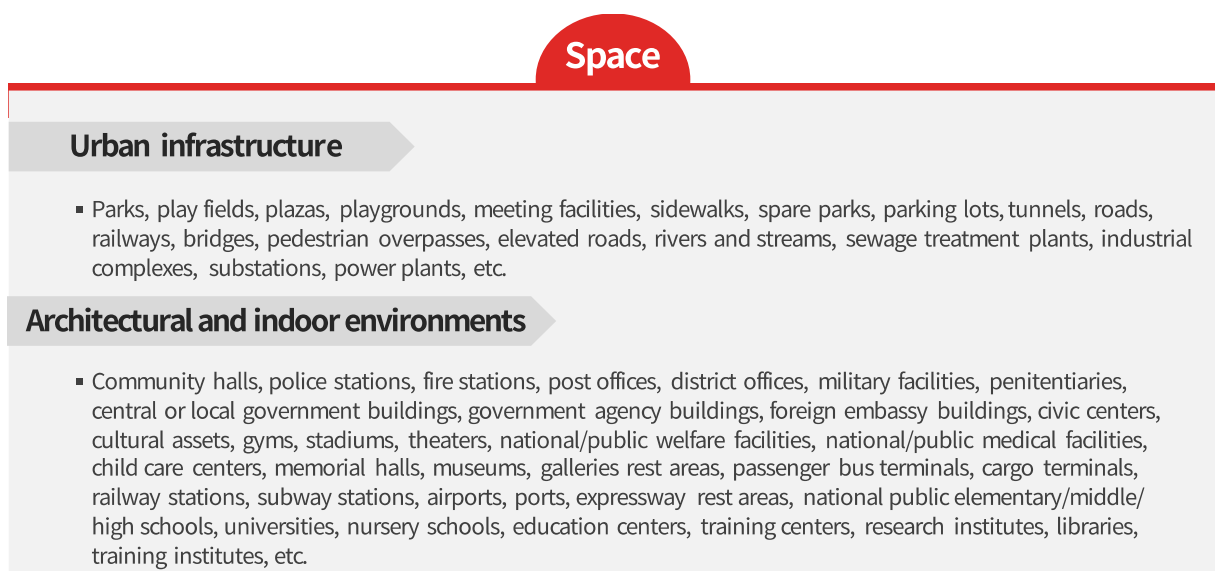
## » Standard design contracts

- The standard design contracts are standard contract forms for design development services, which were formally announced and presented by the Ministry of Trade, Industry and Energy in June 2013.

The contract forms include the standard visual design service contract form, standard product design service form, standard product design service form including incentive compensation, and standard interactive design service contract form.

## Central government agencies and local governments

### » Public design classification





## Facilities

### Walking and transportation facilities

- Pedestrian signals, fences, soundproof walls, bollard, guard rails, road markings, escalators, elevators, pedestrian overpasses, bus stops, bicycle posts, pedestrian signal lights, traffic barriers, speed deterrents, parking facilities, parking meters, public institution vehicles, etc.

### Convenience facilities

- Benches, chairs, shelters, outdoor tables, waste bins, drinking fountains, ash trays, restrooms, washrooms, canteens, unmanned kiosks, vending machines, newsstands, etc.

### Management facilities

- Manholes, utility poles, street lamps, switch signals, power outlets, panel boards, air vents, post boxes, fire hydrants, disaster prevention facilities, crime prevention devices, identification devices, etc.

### Information facilities

- Public phones, weather vanes, clocks, thermo-hygrometers, information booths, local/tourist information facilities, city (province) boundary stones, local government symbol towers, traffic message signs, etc.

### Administration facilities

- Uniforms, furniture, stationery, labels, unmanned civil service machines, etc.

## Images

### Information media

- Signposts, traffic signs, local/tourist guide maps, bus route maps, direction signs, restriction signs, car license plates, various pictograms, billboards, banners, posters, bulletin boards, signboards, lags, promotional videos

### Symbolic media

- Government symbol systems for the central government, government agencies, local governments and public institutions of various levels (symbol signs, certificates, public documents, book covers, web-pages, etc.), currencies, ID cards, passports, transportation cards, bonds, commemorative coins, postage stamps, etc.

### Environment facilities

- Wall paintings, super graphics, media art, sound scape, light scape, art decorations

### Urban masterplan/ guidelines

- Design development for green belt areas, design development for the promotion of unique city images

## 2. Characteristics of Respondents

### 1) Companies in general - Survey on utilization or non-utilization of design

#### » Characteristics of respondents on utilization of design

Classification		Survey Sample	
		Number of cases	%
<b>Total</b>		<b>10,314</b>	<b>100.0</b>
<b>Region</b>	Seoul	2,975	28.8
	Busan/ Ulsan/ Gyeongnam	2,681	26.0
	Daegu/ Gyeongbuk	1,306	12.7
	Incheon	993	9.6
	Gyeonggi	887	8.6
	Gwangju/ Jeolla	682	6.6
	Daejeon/ Sejong /Chungcheong	504	4.9
	Gangwon/ Jeju	286	2.8
<b>Business Type</b>	Product design	2,197	21.3
	Visual design	915	8.9
	Digital/ multimedia design	520	5.0
	Space design	2,383	23.1
	Fashion/ textile design	716	6.9
	Service/ experience design	1,225	11.9
	Industrial craft design	795	7.7
	Design infrastructure (design-based technology)	1,563	15.2
<b>Business scale</b>	Small companies	6,580	63.8
	Medium companies	2,452	23.8
	Midsize Companies	649	6.3
	Large companies	633	6.1

## 2) Companies in general - Survey of companies that utilize design

### » Characteristics of respondents on actual conditions of design utilization

Classification		Survey Sample	
		Number of cases	%
<b>Total</b>		<b>1,145</b>	<b>100.0</b>
<b>Region</b>	Seoul	372	32.5
	Busan/ Ulsan/ Gyeongnam	287	25.1
	Daegu/ Gyeongbuk	121	10.6
	Incheon	107	9.3
	Gyeonggi	104	9.1
	Gwangju/ Jeolla	70	6.1
	Daejeon/ Sejong /Chungcheong	50	4.4
	Gangwon/ Jeju	34	3.0
<b>Business Type</b>	Product design	229	20.0
	Visual design	137	12.0
	Digital/ multimedia design	85	7.4
	Space design	209	18.3
	Fashion/ textile design	86	7.5
	Service/ experience design	157	13.7
	Industrial craft design	92	8.0
	Design infrastructure (design-based technology)	150	13.1
<b>Business scale</b>	Small companies	702	61.3
	Medium companies	272	23.8
	Midsize companies	73	6.4
	Large companies	98	8.6
<b>Employ -ment</b>	Designer employment	824	72.0
	Designer non-employment	321	28.0
<b>Out -sourcing</b>	Design outsourcing	481	42.0
	Design non-outsourcing	664	58.0

### 3) Specialized design companies

#### » Characteristics of respondents on actual conditions of specialized design companies

Classification		Survey Sample	
		Number of cases	%
<b>Total</b>		<b>638</b>	<b>100.0</b>
<b>Region</b>	Seoul	369	57.8
	Busan/ Ulsan/ Gyeongnam	66	10.3
	Daegu/ Gyeongbuk	53	8.3
	Incheon	53	8.3
	Gyeonggi	52	8.2
	Gwangju/ Jeolla	23	3.6
	Daejeon/ Sejong /Chungcheong	16	2.5
	Gangwon/ Jeju	6	0.9
<b>Business type</b>	Product design	179	28.1
	Visual design	199	31.2
	Space design	142	22.3
	Fashion/ textile design	118	18.5
<b>Number of employees</b>	1 person	68	10.7
	2-4 persons	235	36.8
	5~9 persons	198	31.0
	10~19 persons	60	9.4
	20 or more persons	77	12.1
<b>Type</b>	individual proprietorship	335	52.5
	Incorporated company	301	47.2
	Non-business corporation	2	0.3
	Unincorporated association	0	0.0

#### 4) Central government agencies

» Enumeration survey of 32 agencies completed, out of a total of 39 agencies<sup>1)</sup>

Classification	Central government agencies
<b>18 ministries</b> (13 ministries completed)	Ministry of Employment and Labor; Ministry of Science and ICT; Ministry of Education; Ministry of National Defense; Ministry of Land, Infrastructure and Transport; Ministry of Strategy and Finance; Ministry of Agriculture, Food and Rural Affairs; Ministry of Culture, Sports and Tourism; Ministry of Trade, Industry and Energy; Ministry of SMEs and Startups; Ministry of Unification; Ministry of Public Administration and Security; Ministry of Environment
<b>4 agencies</b> (4 agencies completed)	Ministry of Patriots and Veterans Affairs; Ministry of Government Legislation; Ministry of Food and Drug Safety; Ministry of Personnel Management
<b>17 offices</b> (15 offices completed)	the National Police Agency; Korea Customs Service; Korea Meteorological Administration; Rural Development Administration; Cultural Heritage Administration; Defense Acquisition Program Administration; Military Manpower Administration; Korea Forest Service; Sae-mangeum Development and Investment Agency; National Fire Agency; Public Procurement Service; Statistics Korea; Korean Intellectual Property Office; Korea Coast Guard; Multi-functional Administrative City Construction Agency

#### 5) Local governments

» Enumeration survey of 240 local government agencies completed, out of a total of 243<sup>2)</sup>

[ Local Government Completed Survey by region(2017) ]

Completed Survey / Total local Government



City/ Province	City/Country/District			Total
	City	Country	District	
Seoul	1/1		24/25	25/26
Busan	1/1	1/1	14/15	16/17
Daegu	1/1	1/1	7/7	9/9
Incheon	1/1	2/2	8/8	11/11
Gwangju	1/1		5/5	6/6
Daejeon	1/1		5/5	6/6
Ulsan	1/1	1/1	4/4	6/6
Gyeonggi	1/1	28/28	3/3	32/32
Gangwon	1/1	7/7	11/11	19/19
Chungbuk	1/1	3/3	8/8	12/12
Chungnam	1/1	8/8	6/7	15/16
Sejong	1/1			1/1
Jeonbuk	1/1	6/6	8/8	15/15
Jeonnam	1/1	5/5	17/17	23/23
Gyeongbuk	1/1	10/10	13/13	24/24
Gyeongnam	1/1	8/8	9/9	19/19
Jeju	1/1			1/1
<b>Total</b>	<b>17/17</b>	<b>75/75</b>	<b>81/82</b>	<b>240/243</b>

1) Not Responded : Supreme Prosecutors' Office, National Tax Service, Ministry of Justice, Ministry of Health and Welfare Ministry of Gender Equality and Family, Ministry of Foreign Affairs, Ministry of Maritime Affairs and Fisheries

2) Not Responded : Guro-gu, Seoul/ Seo-gu, Busan/ Seochon-gun, Chungnam

Incheon Design Support Center responses were analyzed, and the total analysis was analyzed by 241 local governments (included in the unit of cities/provinces).





## Chapter 02 Major statistics

1. Size of Design Industry
2. Economic Value of Design
3. Design Utilization Rate
4. Status of Design  
Department Graduates  
and their Employment





## 02. Major Statistics

### 1. Size of Design Industry

- In 2017, the total size of Korean design industry was estimated at 1,7545.1 billion KRW. The size was estimated by adding up the amount of design investments by companies that utilize design (12,349 billion KRW), sales by specialized design companies (3,524.7 billion KRW), budget for design departments in the public sector(234.3 billion KRW) and the value of freelancers (1,189.5 billion KRW) and higher education sector (247.6 billion KRW).
- The amount of design manpower in 2017 was 333,042.  
The number was estimated by adding up the numbers of designers at companies that utilize design(255,047), employees at specialized design companies(18,645), employees at design departments in the public sector(823), freelance designers(56,004), professors at design-related university departments(2,524).

#### » Size and manpower of design industry in 2017

Classification		2016		2017	
		Size of design industry (million KRW)	Design manpower (no. of persons)	Size of design industry (million KRW)	Design manpower (no. of persons)
Survey of Actual Conditions	Companies in general	12,041,094	254,489	12,348,980	255,047
	Specialized design companies	3,357,819	18,803 *(29,536)	3,524,707	18,645 *(29,480)
	Public sector (local governments, government agencies)	232,050 **(43,120)	708	234,287 **(42,944)	823
	<b>Subtotal</b>	<b>15,630,964 **(15,442,034)</b>	<b>273,999 *(284,732)</b>	<b>16,107,975 **(15,916,632)</b>	<b>274,515 *(285,350)</b>
Literature	Freelancers	1,034,235	47,655	1,189,519	56,004
	Higher education	248,517	2,623	247,577	2,524
<b>Total</b>		<b>16,913,716 **(16,724,786)</b>	<b>324,277 *(335,010)</b>	<b>17,545,071 **(17,353,728)</b>	<b>333,042 *(343,878)</b>

\* The number of employees in specialized companies including those who are not designers

\*\* Size of industry estimated by deducting service charges of public sector

### 1-1) Size and manpower of the design industry of companies in general

- Average amount of design investment by companies that utilize design is estimated at 98.57 million KRW and the size of the industry is estimated to be 12,349 billion KRW.

The average amount of design investment by business type is the highest in product design (215.81 million KRW), followed by visual design (167.17 million KRW), Digital/ multimedia design (135.40 million KRW), Fashion/ textile design (106.86 million KRW), Service/ experience design (94.29 million KRW), Space design (79.74 million KRW), Design infrastructure (59.91 million KRW), Industrial craft design (52.71 million KRW).

By size, the average amount of design investment in large companies was 926.99 million KRW, in midsize companies was 815.27 million KRW, in medium companies was 150.82 million KRW, and in Small companies was 66.29, which means that the larger size, the higher average amount of design investment.

- By analyzing the size of industry by business type, the industry size of product design (2,790.9 billion KRW) was the largest, followed by design infrastructure (2479.3 billion KRW), Service/ experience design (2,324.5 billion KRW), Space design (1,782.6 billion KRW), visual design (1,500.6 billion KRW), etc.

### » Size of design industry of companies that utilize design in 2017

(Unit : Million KRW)

Classification		2016			2017			Rate of change compared to 2016
		No. of companies that utilize design	Average amount of design investment	Size of industry	No. of companies that utilize design	Average amount of design investment	Size of industry	
Business type	Product design	13,535	203.19	2,750,145	12,932	215.81	2,790,891	▲ 1.5%
	Visual design	8,496	164.12	1,394,409	8,976	167.17	1,500,565	▲ 7.6%
	Digital/ multimedia design	4,849	130.34	631,983	4,878	135.40	660,494	▲ 4.5%
	Space design	18,778	93.69	1,759,323	22,355	79.74	1,782,625	▲ 1.3%
	Fashion/ textile design	5,019	114.08	572,578	5,137	106.86	548,923	▼ 4.1%
	Service/ experience design	24,907	93.75	2,335,000	24,652	94.29	2,324,543	▼ 0.4%
	Industrial craft design	4,758	52.64	250,438	4,964	52.71	261,664	▲ 4.5%
	Design infrastructure	37,592	62.44	2,347,218	41,384	59.91	2,479,275	▲ 5.6%
Business scale	Small companies	87,729	72.66	6,374,615	97,157	66.29	6,440,795	▲ 1.0%
	Medium companies	27,758	135.86	3,771,136	25,797	150.82	3,890,773	▲ 3.2%
	Midsize companies	1,373	711.01	976,485	1,221	815.27	995,404	▲ 1.9%
	Large companies	1,073	856.01	918,859	1,103	926.99	1,022,008	▲ 11.2%
Total		117,934	102.10	12,041,094	125,278	98.57	12,348,980	▲ 2.6%

- The average number of designers in companies that utilize design was 2.04, which is slightly lower compared to 2016 (2.16). The average number of designers in companies that hire designers was 3.09 (3.62 in 2016). the number of manpower in companies that utilize design was estimated to be 255,047.
- The number of manpower in design industry by business type was highest in space design with 54,227, followed by design infrastructure (53,598).

## » 2017 Design manpower in companies that utilize design

(Unit : No. of Persons)

Classification		2016			2017			Rate of change compared to 2016
		Average no. of designers in companies employing designers	Average no. of designers in companies utilizing design	Manpower	Average no. of designers in companies employing designers	Average no. of designers in companies utilizing design	Manpower	
Business type	Product design	5.07	3.22	43,641	5.26	3.19	41,317	▼ 5.3%
	Visual design	3.43	2.32	19,725	2.58	2.35	21,058	▲ 6.8%
	Digital/ multimedia design	3.61	2.32	11,262	2.57	2.51	12,228	▲ 8.6%
	Space design	2.83	2.81	52,785	3.03	2.43	54,227	▲ 2.7%
	Fashion/ textile design	3.64	2.74	13,735	3.22	2.56	13,174	▼ 4.1%
	Service/ experience design	4.01	2.06	51,295	7.31	2.07	50,937	▼ 0.7%
	Industrial craft design	4.06	1.79	8,507	1.81	1.71	8,508	▲ 0.0%
	Design infrastructure	3.45	1.42	53,539	1.84	1.30	53,598	▲ 0.1%
Business scale	Small companies	2.76	1.65	144,404	2.26	1.46	141,806	▼ 1.8%
	Medium companies	7.06	3.10	86,021	4.62	3.41	87,995	▲ 2.3%
	Midsized companies	12.95	8.72	11,976	16.19	10.42	12,727	▲ 6.3%
	Large companies	41.34	11.26	12,087	14.09	11.36	12,519	▲ 3.6%
Total		3.62	2.16	254,489	3.09	2.04	255,047	▲ 0.2%

## 1-2) Size and manpower of the design industry in specialized design companies

- Average amount of sales in specialized design companies was 640.62 million KRW (618.95 million KRW in 2016) and the overall size of the specialized design companies was estimated to be 3524.7 billion KRW.  
Meanwhile, the number of specialized design companies was 5,502, which is not that different compared to 2016 (5,425).
- Examining the average sales of specialized design industry by business type, interior design was the highest with 966.24 million KRW and the size of industry was the highest with 1,232.9 billion KRW, as well. The following types were other types of fashion/ textile design (648.54 million KRW), product design (613.02 million KRW), visual design (453.76 million KRW).
- Year-on-year rate of industry scale was the highest in Interior design with 8.2%, followed by visual design (4.7%), product design (2.6%), other fashion/ textile design (2.0%).

### » 2017 size of specialized design industry

(Unit : Million KRW)

Classification	2016			2017			Rate of change compared to 2016
	Survey population (no. of companies)	Average sales	Size of industry (percentage)	Survey population (no. of companies)	Average sales	Size of industry (percentage)	
Product design	1,324	586.14	776,049 (23.1%)	1,299	613.02	796,319 (22.6%)	▲ 2.6%
Visual design	2,045	438.17	896,058 (26.7%)	2,068	453.76	938,368 (26.6%)	▲ 4.7%
Interior design	1,188	959.00	1,139,286 (33.9%)	1,276	966.24	1,232,926 (35.0%)	▲ 8.2%
Other types of fashion/ textile design	868	629.52	546,426 (16.3%)	859	648.54	557,093 (15.8%)	▲ 2.0%
<b>Total</b>	<b>5,425</b>	<b>618.95</b>	<b>3,357,819 (100.0%)</b>	<b>5,502</b>	<b>640.62</b>	<b>3,524,707 (100.0%)</b>	<b>▲ 5.0%</b>

- Average number of employees in specialized design companies including designers and other employees was 5.36 and the overall manpower in the industry is estimated to be 29,480. Regarding the number of designers, the average number of designers in a company is 3.39 and entire number of designer in the industry is 18,645.
- There is the most number of employees in visual design (10,345), which showed 35.1% of the total. The following types were interior design (7,856, 26.6%), product design (7,251, 24.6%), Other types of fashion/ textile design (4,028, 13.7%).

### » 2017 design manpower in specialized design companies (Based on the number of employees)

(Unit : No. of persons)

Classification	2016			2017			Rate of change compared to 2016
	Survey population (no. of companies)	Average no. of employees	Manpower (percentage)	Survey population (no. of companies)	Average no. of employees	Manpower (percentage)	
Product design	1,324	5.58	7,392 (25.0%)	1,299	5.58	7,251 (24.6%)	▼ 1.9%
Visual design	2,045	5.20	10,635 (36.0%)	2,068	5.00	10,345 (35.1%)	▼ 2.7%
Interior design	1,188	6.21	7,374 (25.0%)	1,276	6.16	7,856 (26.6%)	▲ 6.5%
Other types of fashion/ textile design	868	4.76	4,135 (14.0%)	859	4.69	4,028 (13.7%)	▼ 2.6%
<b>Total</b>	<b>5,425</b>	<b>5.44</b>	<b>29,536 (100.0%)</b>	<b>5,502</b>	<b>5.36</b>	<b>29,480 (100.0%)</b>	<b>▼ 0.2%</b>

※ No. of members of workforce in the specialized design industry according to the 2016 economic census: 22,315

### » 2017 sdesign manpower in specialized design companies (Based on the number of designers)

(Unit : No. of persons)

Classification	2016			2017			Rate of change compared to 2016
	Survey population (no. of companies)	Average no. of employees	Manpower (percentage)	Survey population (no. of companies)	Average no. of employees	Manpower (percentage)	
Product design	1,324	3.93	5,199 (27.7%)	1,299	3.73	4,849 (26.0%)	▼ 1.9%
Visual design	2,045	3.56	7,283 (38.7%)	2,068	3.52	7,288 (39.1%)	▼ 2.7%
Interior design	1,188	3.21	3,809 (20.3%)	1,276	3.27	4,174 (22.4%)	▲ 6.5%
Fashion/ textile design	868	2.89	2,511 (13.4%)	859	2.72	2,333 (12.5%)	▼ 2.6%
<b>Total</b>	<b>5,425</b>	<b>3.47</b>	<b>18,803 (100.0%)</b>	<b>5,502</b>	<b>3.39</b>	<b>18,645 (100.0%)</b>	<b>▼ 0.2%</b>

### 1-3) Size and manpower of the design industry in the public sector (Central government/ local government)

- The survey of the scale of design investment in the central government and local government showed that, with the central government budget for design departments at 73.9 billion KRW, local government budget for design departments at 16.03 billion KRW and the total design investment in the public sector is estimated to be 23.43 billion KRW.
- The number of employees in design departments of the central government is 37, and that of employees in design departments in local governments is 786명. By adding these figures, the total number of design-related employees in the public sector is estimated to be 823.

### » Design investment and manpower in public sector

Classification	2016		2017	
	Total budget for design departments (million KRW)	Total number of employees in design departments (no. of persons)	Total budget for design departments (million KRW)	Total number of employees in design departments (no. of persons)
Central government	69,969 *(40)	71	73,943 *(5,370)	37
Local government	162,081 *(43,080)	637	160,344 *(37,574)	786
<b>Total</b>	<b>232,050</b> <b>*(43,120)</b>	<b>708</b>	<b>234,287</b> <b>*(42,944)</b>	<b>823</b>

※ ( ): The amount of the budget related to design excluding design service charges

#### 1-4) Size and manpower of the freelance designer industry

- The number of freelance designers is estimated, based on the result of 2017 Regional Employment Survey<sup>3)</sup>, then the size of the freelance designer industry is estimated by multiplying the estimated number of freelance designers times wages for designers.
- The number of freelance designers in 2017 is estimated at 56,004 (47,655 in 2016).

$$\begin{aligned} & \text{- No. of freelancers (56,004) = \{No. of employees in specialized design companies (29,480)} \\ & \quad + \text{No. of designers in companies in general (255,047)\} \times 19.7\% \end{aligned}$$

※ Designers who are individual proprietors who no employees/Total number of designers=46,654/237,026=19.7%

The number of freelance designers is estimated by calculating the number of designers who are individual proprietor with no employees, based on the results of the 2017 Regional Employment Survey.

<b>No. of freelancers</b> <b>Equation for estimation</b>	$\frac{\text{Estimated no. of employees in specialized design companies} \times \text{No. of designers who are individual proprietors with no employees}}{\text{Total number of designers}}$
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#### » Designers working as individual proprietors in the 201 Regional Employment Survey

2017		No. of Persons
Individual proprietors with no employees		46,654
Other Designers	Full-time employees	190,372
	Temporary employees	
	Daily employed workers	
	Individual proprietors with employees	
	Unpaid family workers	
Total		237,026

$$\begin{aligned} & \text{- 1,189.5 billion KRW = No. of freelance designers 56,004} \times \text{Average monthly wage for freelancer} \\ & \quad \text{1,770,000 won (2017 Regional Employment Survey)} \times 12 \text{ months} \end{aligned}$$

<b>Size of freelance designer industry</b> <b>Equation for estimation</b>	$\text{Estimated number of Freelance designers} \times \text{Average monthly wage for freelance designers} \times 12 \text{ months}$
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Classification	2016	2017	Rate of change compared to 2016
Size of freelance designer industry	1,034.2 billion KRW	1,189.5 billion KRW	▲15.0%
Number of freelance designers	47,655	56,004	▲17.5%

3) In the second half of 2017, regional employment surveys surveyed 199,000 households in the country in October 2017 for 15-year-old or older households, surveyed their activities for 1 week (4 weeks for the unemployed) This is the result of aggregation.



### 1-5) Size and manpower of design industry in education sector

- Size of industry in the higher education sector is obtained by adding up the estimated salaries of design faculty in universities and the estimated amount of research funds for design departments. Size of manpower is obtained by adding up the numbers of professors, associate professors, assistant professors and full-time lecturers<sup>4)</sup> in design-related departments of junior colleges and four-year universities/colleges.
- The amount of design investment in the education sector is estimated to be 247.6 billion KRW.

<b>Education sector</b> <b>248,517 million KRW</b>	221,657 million KRW (Annual salary of professors)	+	25,920 million KRW (Research funds for design departments)
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- The number of design manpower in education sector is 2,524.  
(Source: Educational Statistics Database, Korean Educational Development Institute).

### » Annual salary of Design faculty in 2017

(Unit : Million KRW)

Classification		2016			2017		
		Average annual salary (million KRW)	Number of design faculty (no. of persons)	Estimated annual salary of design faculty (million KRW)	Average annual salary (million KRW)	Number of design faculty (no. of persons)	Estimated annual salary of design faculty (million KRW)
Four-year Colleges/ Universities	Professor	105.2	767	80,701	108.7	756	82,156
	Associate professor	87.9	350	30,752	90.8	313	28,421
	Assistant professor	73.8	494	36,438	76.2	480	36,593
	Full-time lecturers	55.3	121	6,680	57.1	115	6,558
Subtotal		89.2	1,732	154,571	92.38	1,664	153,728
Junior Colleges	Professor	99.8	232	23,152	103.1	222	22,887
	Associate professor	81.4	261	21,233	84.1	271	22,787
	Assistant professor	66.2	264	17,468	68.4	240	16,412
	Full-time lecturers	44.5	134	5,971	46.0	127	5,844
Subtotal		76.1	891	67,824	79.0	860	67,930
Total		77.0	2,623	222,395	79.5	2,524	221,657

※ Estimated annual salary and number of design faculty: Educational Statistics Database, Korean Educational Development Institute (KEDI)

4) The number of full-time lecturers was not provided in the KEDI Educational Statistics Database, and was thus estimated using the rate of change in the number of registered students between 2016 and 2017.

## » Research funds for design departments

(Unit : Million KRW)

Classification		2016	2017	Rate of change compared to 2016
Four-year Colleges/ Universities	Central government fund	12,384	13,336	▲ 7.7%
	Local government fund	1,260	1,233	▼ 2.1%
	Private fund	5,761	5,062	▼12.1%
	Foreign fund	1,259	6	▼99.5%
	Domestic fund	3,907	3,936	▲ 0.7%
Subtotal		23,476	23,574	▲ 0.4%
Junior Colleges	Faculty	2,646	2,346	▼11.3%
Total		26,122	25,920	▼ 0.8%

※ 2017 Survey of University Research Activities, Ministry of Education, Science and Technology, National Research Foundation of Korea

## 2) Changes in size of design industry

### » Changes in size of the design industry from 2012 to 2017

(Unit : Million KRW)

Classification	2012	2013	2014	2015	2016	2017
Companies in general	10,056,779	9,152,954	10,292,018	11,252,597	12,041,094	12,348,980
Specialized Design service	2,499,239	2,745,643	2,990,423	3,059,925	3,357,819	3,524,707
Public Sector	363,045	247,758	138,281 *(17,782)	271,727 *(36,709)	232,050 *(43,120)	234,287 *(42,944)
Subtotal	12,919,063	13,067,240	13,420,722 *(13,300,223)	14,584,249 *(14,349,231)	15,630,964 *(15,442,034)	16,107,975 *(15,916,632)
Freelance Designers	593,268	691,968	715,641	820,990	1,034,235	1,189,519
Higher Education	222,970	228,917	233,758	246,359	248,517	247,577
Total	13,735,301	13,067,240	14,370,121 *(14,249,622)	15,651,598 *(15,416,580)	16,913,716 *(16,724,786)	17,545,071 *(17,353,728)

- From 2012, all companies classified under the Special Design Classification with five or more employees have been included in the estimation.
- From the 2013 estimation of industry size, it is estimated that the size of design industry(design investment), excluding the service charges of specialized design companies.
- (parenthesis) in public sectors is the amount of the size of design industry(budget for design departments) excluding design-related service charges, after 2014.

### 3) Amount of export/import in design

- Amount of design import by companies that utilize design is estimated at 13.5 billion KRW.

$$\text{Companies utilizing design} \times \text{No. of companies Utilizing design} \times \text{Ratio of import companies} \times (\text{Average design investment} \times \text{Ratio of foreign outsourcing for design development}) = \text{Amount of income}$$

#### » Estimated amount of design import

Classification	Estimated no. of companies utilizing design	Ratio of import companies <sup>5)</sup>	Average design investment (million KRW)	Ratio of foreign outsourcing for design development	Estimated amount of import (million KRW)
Design Import	125,278	0.17%	98.57	65.05%	13,466

- Amount of design export by specialized design companies is estimated at 80.7 billion KRW.

$$\text{Specialized design companies} \times \text{No. of specialized design companies} \times \text{Ratio of export companies} \times (\text{Average sales} \times \text{Ratio of overseas sales}) = \text{Amount of export}$$

#### » Estimated amount of design export

Classification	Estimated no. of companies design companies	Ratio of export companies <sup>6)</sup>	Average sales (million KRW)	Ratio of foreign clients in sales	Estimated amount of export (million KRW)
Design Export	5,502	5.27%	640.62	43.43%	80,710

#### » Changes in design import/export from 2012 to 2017

Classification	2012	2013	2014	2015	2016	2017
Import amount	26 billion KRW	26.2 billion KRW	19.2 billion KRW	7 billion KRW	10.3 billion KRW	13.5 billion KRW
Export amount	56.8 billion KRW	44 billion KRW	45.6 billion KRW	74.1 billion KRW	88.2 billion KRW	80.7 billion KRW

5) Ratio of import companies: Companies that appeared to have 1% or higher percentage of foreign company outsourcing for design development in the Industrial Design Statistical Survey

6) Ratio of export companies: Companies that appeared to have 1% or higher percentage of foreign clients in sales composition in the Industrial Design Statistical Survey

## 2. Economic Value of Design

- Economic value of design was estimated at 117,400 billion KRW.
- Regarding the business type, the economic value of design infrastructure was the highest with 39,500 billion KRW.  
Design infrastructure (39,500 billion KRW) > Service/ experience design (35,100 billion KRW) > Space design (15,800 billion KRW) > Product design (15,400 billion KRW)

### » Calculation status of economic value of design

Special Design Classification	Sales (Unit : Million KRW)	Contribution rate of design (Unit : %)	Added value ratio (Rate : %)	Economic value of design (Unit : Million KRW)
Product design	230,346,839	24.9%	26.9%	15,426,148
Visual design	69,093,972	28.6%	27.4%	5,429,735
Digital/ multimedia design	23,291,634	27.4%	42.2%	2,689,349
Space design	120,433,854	30.9%	42.4%	15,764,639
Fashion/ textile design	21,734,803	30.9%	26.7%	1,797,124
Service/ experience design	245,976,840	24.6%	58.1%	35,137,850
Industrial craft design	22,156,969	23.4%	32.2%	1,672,852
Design infrastructure	288,708,852	24.2%	56.6%	39,472,250
<b>Total</b>	<b>1,021,743,764</b>	<b>-</b>	<b>-</b>	<b>117,389,947</b>

※ Sales : Sales from industries that belong to the Special Design Classification × ratio of design utilization  
× sales increase rate between 2014 and 2017<sup>7)</sup>

※ Contribution rate of design: Results of Design Survey

※ Added value ratio: Data presumed to be from the Bank of Korea

- Examining the economic value by business type, economic value was increased in all types excluding visual design and fashion/ textile design. Especially, it showed a great increase (+20.5%) in service/ experience design.

### » 2017 Economic value of design

(Unit : Million KRW)

Special Design Classification	2016	2017	Rate of change compared to 2016
Product design	14,783,446	15,426,148	▲ 4.3%
Visual design	5,614,624	5,429,735	▼ 3.3%
Digital/ multimedia design	2,361,357	2,689,349	▲13.9%
Space design	13,638,161	15,764,639	▲15.6%
Fashion/ textile design	1,861,923	1,797,124	▼ 3.5%
Service/ experience design	29,153,092	35,137,850	▲20.5%
Industrial craft design	1,547,611	1,672,852	▲ 8.1%
Design infrastructure	34,883,362	39,472,250	▲13.2%
<b>Total</b>	<b>103,843,576</b>	<b>117,389,947</b>	<b>▲13.0%</b>

7) We use the sales growth rate data of all industries in the Business Management Analysis Index announced by the Bank of Korea and the results of applying the design utilization ratio to the sum of sales of relevant companies in Special Design Classification in the 2015 Economic Census. The sum of 2017 sales of relevant business types in special design classification was calculated by applying 2015, 2016 and 2017 sales growth rate to the total sales of special design classification, since the base year of 2015 economic census is 2014.

### 3. Design Utilization Rate

- (Industry wide) among 766,161 industrywide companies that have five or more employees, the number of those that utilize design was 125,278, showing a design utilization rate of 16.4%.
- (Special design classification) the design utilization rate of 364,139 general companies that belong to the Special Design Classification was 34.4%.

#### » Changes in the percentage of companies that utilizes design

Classification	2016		2017	
	Industrywide	Special Design Classification	Industrywide	Special Design Classification
<b>Percentage of companies that utilize design</b>	16.0%	33.6%	16.4%	34.4%

#### » Industrywide design utilization rate

(Unit : No. of companies)

Classification		No. of companies		2017 Utilization Rate
		Companies with 5 or more employees	Companies utilizing design	
Standard Industrial Classification	Agriculture, forestry and fishing	2,050	161	7.9%
	Mining and quarrying	613	-	0.0%
	Manufacturing	153,811	32,255	21.0%
	Electricity, gas, steam and water supply	1,202	-	0.0%
	Sewage, waste management, materials recovery and remediation activities	4,208	-	0.0%
	Construction	61,171	14,712	24.1%
	Wholesale and retail trade	123,399	21,383	17.3%
	Transportation	23,338	1,500	6.4%
	Accommodation and food service activities	96,165	24	0.0%
	Publishing, video, broadcast communications and information services	18,222	9,644	52.9%
	Financial and insurance activities	30,797	3,384	11.0%
	Real estate activities and renting and leasing	26,301	6,219	23.6%
	Professional, scientific and technical activities (excluding specialized design services)	35,738	8,681	24.3%
	Business facilities management and business support services	19,146	4,246	22.2%
	Public administration, defence and social security administration (excluding central government agencies and local governments)	5,809	81	1.4%
	Education services (excluding universities)	39,555	10,198	25.8%
	Health and social work services	78,790	4,995	6.3%
	Arts, sports and recreation related services	12,991	1,697	13.1%
	Membership organizations, repair and other personal services	32,855	6,099	18.6%
Business Scale	Small companies	637,159	101,836	16.0%
	Medium companies	124,917	22,008	17.6%
	Large companies	4,083	1,434	35.1%
<b>Total</b>		<b>766,161</b>	<b>125,278</b>	<b>16.4%</b>

» **Design utilization rate among companies under Special Design Classification**  
(Unit : No. of companies)

Classification		No. of companies			Design utilization rate
		Companies under Special Design Classification	Companies utilizing design (estimation)	Companies not utilizing design (estimation)	
Business type	Product design	52,913	12,932	39,981	24.4%
	Visual design	19,683	8,976	10,707	45.6%
	Digital/ multimedia design	7,986	4,878	3,108	61.1%
	Space design	80,534	22,355	58,179	27.8%
	Fashion/ textile design	13,608	5,137	8,471	37.7%
	Service/ experience design	70,266	24,652	45,614	35.1%
	Industrial craft design	18,712	4,964	13,748	26.5%
	Design infrastructure (design-based technology)	100,437	41,384	59,053	41.2%
Business scale	Small companies	299,113	99,743	199,370	33.3%
	Medium companies	54,036	20,999	33,037	38.9%
	Midsized companies	8,339	3,368	4,971	40.4%
	Large companies	2,652	1,168	1,483	44.1%
Total		364,139	125,278	239,356	34.4%

## 4. Status of Design department Graduates and their Employment

- The number of graduates from design departments at universities and graduate schools was 22,709 (1,434 less than 2017), and the number of the employed among them was 13,427 (1,261 less than 2017). The employment rate(64.9%) was 1.4% decreased compared to 2017.

### » Status of design department graduates and their employment

(Unit : No. of persons)

Classification	Graduates	Employed	Employment rate(%)
<b>2018</b>	22,709	13,427	64.9
<b>2017</b>	24,203	14,688	66.3
<b>Gap</b>	<b>▼1,434</b>	<b>▼1,261</b>	<b>▼1.4%p</b>

### » Status of design department graduates and their employment in different types of universities/ colleges

(Unit : No. of persons)

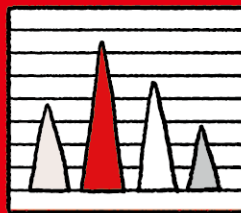
	Classification	Graduates				Employed				Employment rate(%)			
		Under-graduate	Master's degree	Doctor's degree	Total	Under-graduate	Master's degree	Doctor's degree	Total	Under-graduate	Master's degree	Doctor's degree	Total
<b>Total</b>	<b>Subtotal</b>	<b>22,093</b>	<b>483</b>	<b>133</b>	<b>22,709</b>	<b>13,121</b>	<b>217</b>	<b>89</b>	<b>13,427</b>	<b>64.9</b>	<b>66.6</b>	<b>73.6</b>	<b>64.9</b>
<b>Univer-sity type</b>	Junior college	9,889	-	-	9,889	5,837	-	-	5,837	66.3	-	-	66.3
	University in general	11,120	-	-	11,120	6,542	-	-	6,542	62.8	-	-	62.8
	Industrial college	279	-	-	279	163	-	-	163	59.7	-	-	59.7
	University(college)	28	-	-	28	20	-	-	20	71.4	-	-	71.4
	Graduate college	-	483	133	616	-	217	89	306	-	66.6	73.6	68.5
	Functional college	777	-	-	777	559	-	-	559	79.9	-	-	79.9
<b>Special Design Classification</b>	General design	1,493	182	41	1,716	829	67	25	921	61.4	57.8	75.8	61.4
	Product design	3,475	53	13	3,541	2,053	27	11	2,091	64.5	81.8	91.7	64.8
	Visual design	3,962	27	1	3,990	2,294	14	1	2,309	62.6	73.7	100.0	62.6
	Digital/ multimedia design	3,093	25	8	3,126	1,771	12	7	1,790	62.8	80.0	87.5	62.9
	Space design	3,444	24	6	3,474	2,076	12	4	2,092	67.1	85.7	66.7	67.2
	Fashion/ textile design	4,748	37	6	4,791	2,940	14	3	2,957	66.7	63.6	50.0	66.6
	Service/ experience design	312	40	1	353	190	22	1	213	67.6	73.3	100.0	68.3
	Industrial craft design	1,027	17	57	1101	582	10	37	629	63.0	66.7	68.5	63.3
	Design infrastructure	539	78	-	617	386	39	-	425	77.8	62.9	-	76.2

※ Data provided by Korean Educational Development Institute(KEDI)

※ Graduates Survey base date: December 12<sup>th</sup>, 2017

※ Employment rate: Employed/{Graduates-(Advanced+Enlisted+Unable to work+Exclusion+Foreign students)}\*100

※ Employed: Employees with health insurance, On-campus employment, Overseas employees, Agriculture and forestry fisheries, Individual creative workers, Individual proprietorships, Freelancers



## 2018 Design Census