

2022

# DESIGN INDUSTRY STATISTICS OF KOREA

English Report | As of 2021

- This report contains the results of the **2022 Design Industry Statistics of Korea**.
- The target period of this survey is from **January 1, 2021 to December 31, 2021**.
- From **Statistics Korea's Census on Establishments data as of 2019**, the sampling frame is based on a sample survey with the population of businesses that correspond to the Design Industrial Classification, as well as central administration and local governments nationwide that served as populations.
  - **Companies Utilizing Design** : Companies that utilize design in the Design Industrial Classification (excluding Specialized Design Companies and public sector, and education sector)
  - **Specialized Design Companies** : Businesses in the Specialized Design Industry under the Standard Industrial Classification
- The sampling frame and survey list were based on the 2019 Census on Establishments, but the population data is based on the 2020 Economic Census to reflect recent industry trends.
- Businesses classified as unincorporated associations were excluded from the 2021 survey target (as of 2020), but they have been changed to be included in this year's survey (as of 2021) as the design-utilization rate of unincorporated associations is 40.2%.
  - \*Unincorporated associations are groups or associations without legal status, such as alumni associations, sponsorship groups, cultural organizations, labor organizations, and clan gatherings.
- The main targets of this survey are Companies Utilizing Design, Specialized Design Companies, and central and local governments. Companies Utilizing Design refer to businesses that **have a design department, hired designers, or have outsourced design to Specialized Design Companies and freelancers in the last two years** as of December 2021.
- Industry and workforce sizes presented in this survey are based on parameter estimates.
- All numbers in the statistical tables are rounded; hence, the total of the detailed items may not add up to match the sum.
- In the statistical tables in this report, duplicate response questions have a sum of percentages greater than 100.0%.
- The symbols used in the statistical tables have the following meanings: [0], [0.0] : Less than a unit
- If the contents of this report are reprinted or translated for publication, it must be stated as "Reprinted or translated from page X of the Comprehensive Report of the 2022 Design Industry Statistics of Korea."

- The survey's sampling frame and use of survey list are based on the **2019 Census on Establishments**.
- In the absence of up-to-date population data at the time of the survey, we have consulted with Statistics Korea and statisticians to conduct survey by **applying the Census on Establishments of 2019 for using sampling design and sampling frames**, and applying the Economic Census of 2020 for using and weighting reference populations.

Using Stages	Utilized Surveys	Key Takeaways
Using sampling design and sampling frames	2019 Census on Establishments	<ul style="list-style-type: none"> <li>• Identification of Design Industrial Classification Business and Sampling Design</li> <li>• Changes when extracting the list                             <ul style="list-style-type: none"> <li>- General companies : Apply intrinsic stratification to the region variable</li> <li>- Specializing companies : Utilize the existing list, but reset the original sample</li> </ul> </li> </ul>
Using and weighting reference populations	Economy Census of 2020	<ul style="list-style-type: none"> <li>• The population data were provided later than when the survey was conducted, making it unfeasible to utilize the sampling frame and sampling design                             <ul style="list-style-type: none"> <li>- Publication of survey results and provision of population data : June '22, November '22</li> <li>- The period of the Design Industry Statistics Survey : Since September '22</li> </ul> </li> <li>• Businesses to be surveyed were unified based on administrative data registration                             <ul style="list-style-type: none"> <li>→ Businesses that cannot be surveyed because they do not have a place of business were included in the data</li> <li>→ Data consisting of businesses that can be surveyed because they have a place of business are referred to as survey-based, businesses that cannot be surveyed because they do not have a place of business are referred to as registration-based</li> </ul> </li> <li>• The reference population used from 2022 onward is registration-based, which means the population standard is different than the previous publication (survey-based), so <b>caution is required when comparing time series</b> → Significantly increased the number of businesses in the business population when using registration-based populations</li> </ul>

- The main change to the Economic Census of 2020 is **the modification in the standard of business data**(survey-based → registration-based). As a result, it is presumed that **freelance designers, which had been estimated from existing literature survey, was incorporated into one person Specialized Design Companies**. So, in this year's main results, the size of the industry was calculated by estimating the number of freelancers operating with a business license but without place of business.

▶ Companies Utilizing Design Business Distribution of the 2020 Economic Census (Registration-Based, unit: company)

Subclass	Subclass/Size of employees						Total
	1 person	2~4 people	5~9 people	10~19 people	20~49 people	50 people and more	
Product design industry	2116	736	296	76	28	6	3,258
Visual design industry	7,597	1,758	468	138	43	9	10,015
Interior design industry	2,548	1,026	295	84	25	7	3,988
Other profession design industry	1,626	447	89	26	8	4	2,204
<b>Total</b>	<b>13,887</b>	<b>3,967</b>	<b>1,148</b>	<b>324</b>	<b>104</b>	<b>26</b>	<b>19,465</b>

Subclass	Subclass/Size of employees				Total
	Solor proprietorship	Incorporated company	Unincorporated association	Non-company corporations	
Product design industry	2,520	724	0	14	3,258
Visual design industry	8,631	1,343	0	41	10,015
Interior design industry	3,044	936	0	8	3,988
Other profession design industry	1,848	351	0	5	2,204
<b>Total</b>	<b>16,043</b>	<b>3,354</b>	<b>0</b>	<b>68</b>	<b>19,465</b>

▶ Specialized Design Companies Business Distribution of the 2019 Economic Census (Survey-Based, unit: company)

Subclass	Subclass/Size of employees						Total
	1 person	2~4 people	5~9 people	10~19 people	20~49 people	50 people and more	
Product design industry	565	641	256	94	22	3	1,581
Visual design industry	1,144	948	367	127	34	7	2,627
Interior design industry	881	876	258	72	23	5	2,115
Other profession design industry	375	385	105	31	4	6	906
<b>Total</b>	<b>2,965</b>	<b>2,850</b>	<b>986</b>	<b>324</b>	<b>83</b>	<b>21</b>	<b>7,229</b>

Subclass	Subclass/Size of employees				Total
	Solor proprietorship	Incorporated company	Unincorporated association	Non-company corporations	
Product design industry	1,084	487	10	0	1,581
Visual design industry	1,865	744	15	3	2,627
Interior design industry	1,478	633	4	0	2,115
Other profession design industry	690	212	3	1	906
<b>Total</b>	<b>5,117</b>	<b>2,076</b>	<b>32</b>	<b>4</b>	<b>7,229</b>

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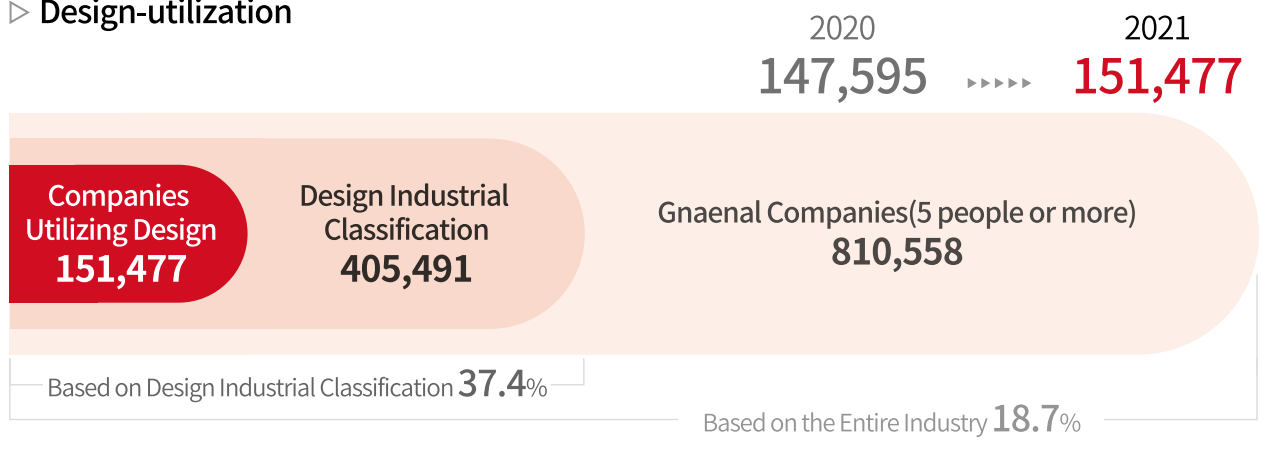
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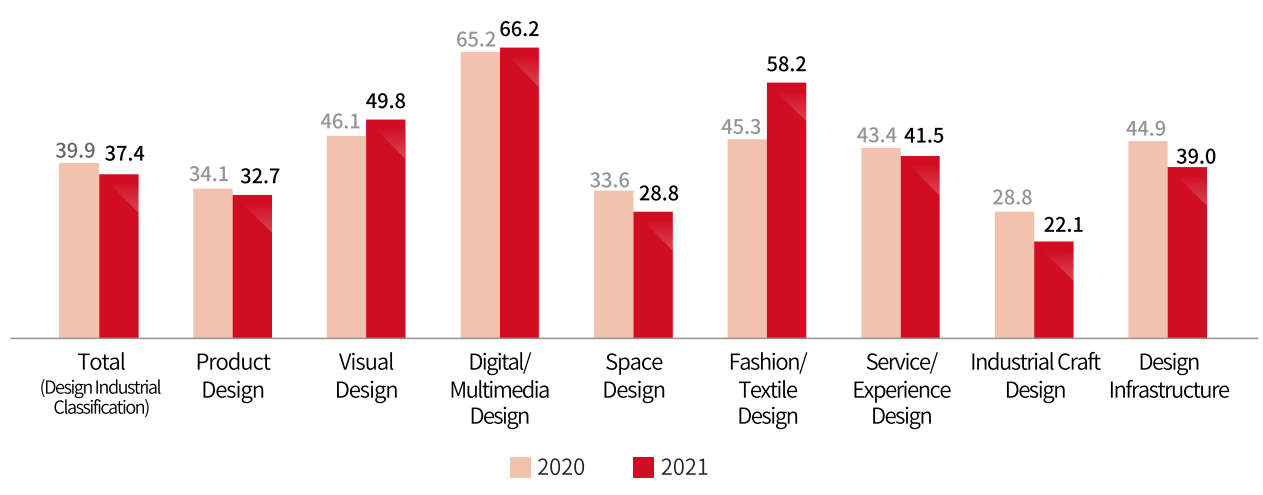


# 1. Design-utilization Rate

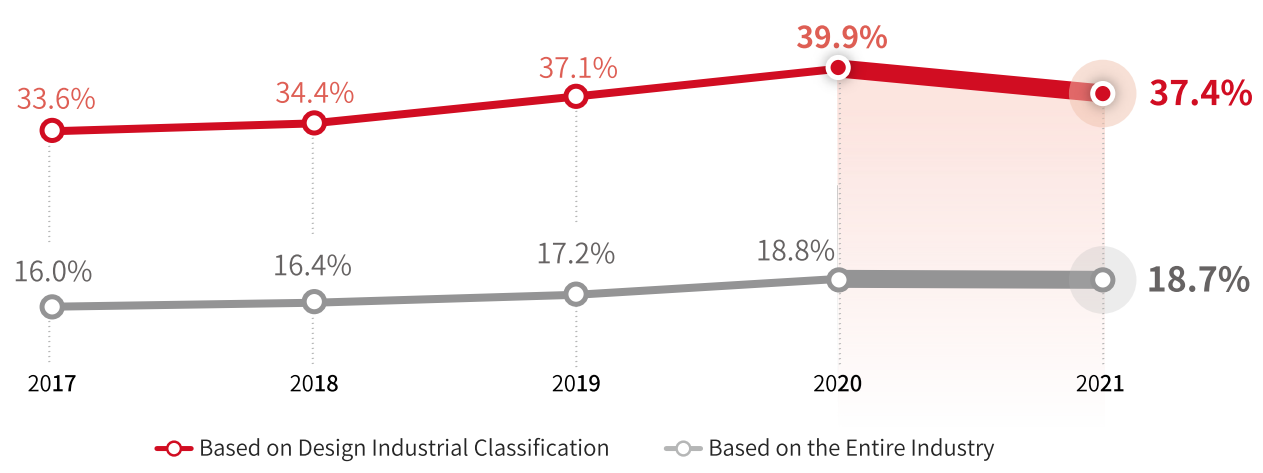
## ▷ Design-utilization



## ▷ Design-utilization Rates by Type of Industry (Based on Design Industrial Classification)

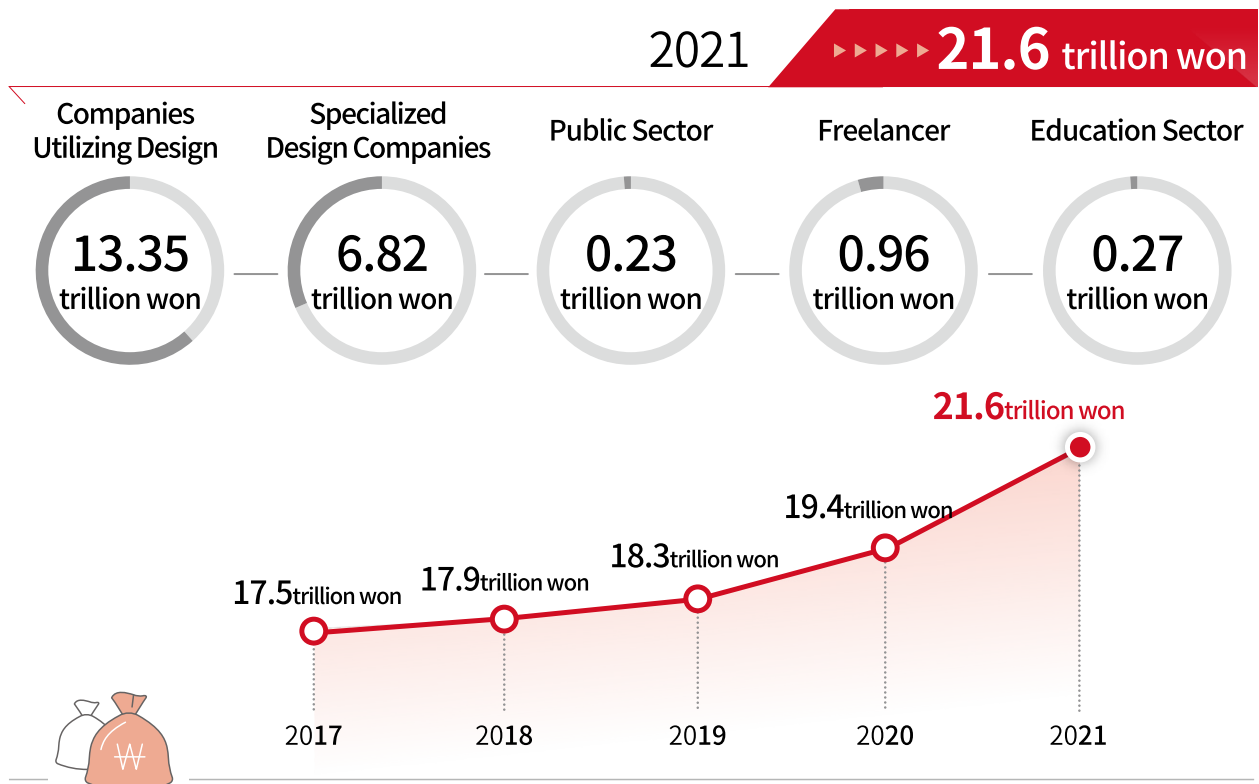


## ▷ Trends of Design-utilization Rate

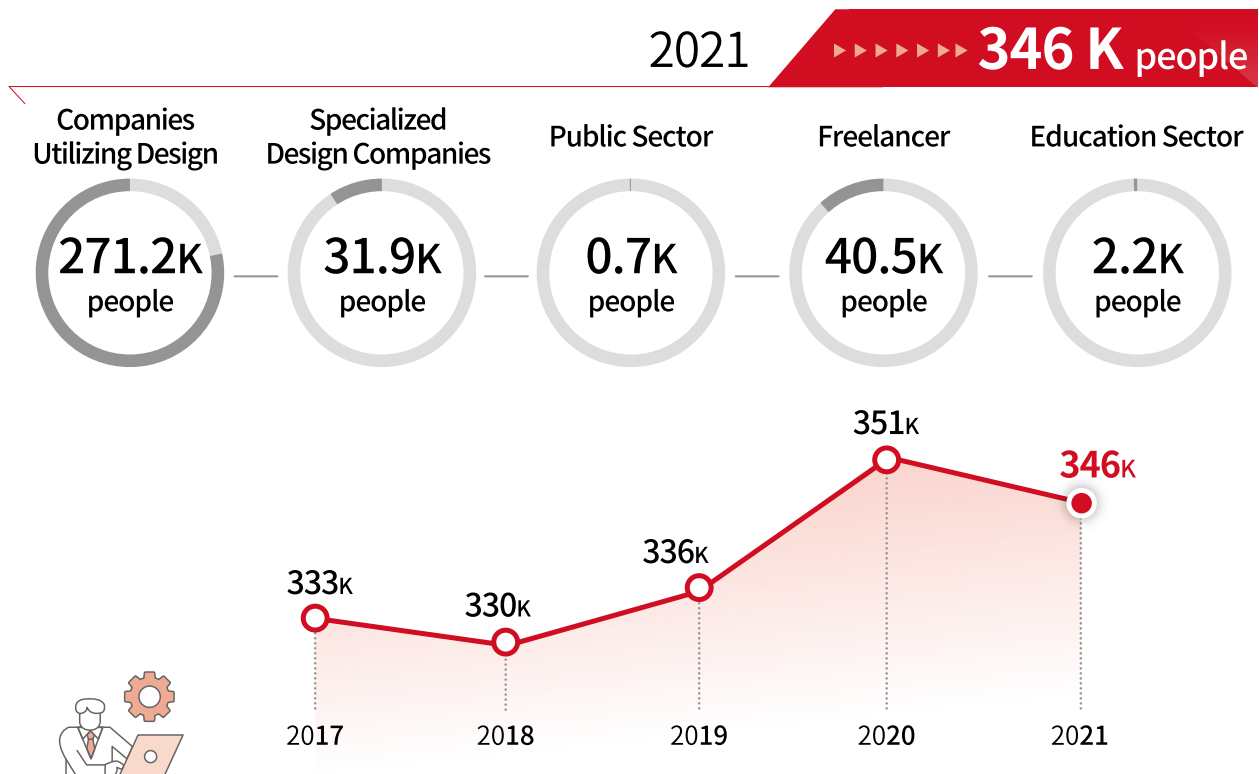


## 2. Size of Design Industry and Workforce

### ▷ Size of Design Industry



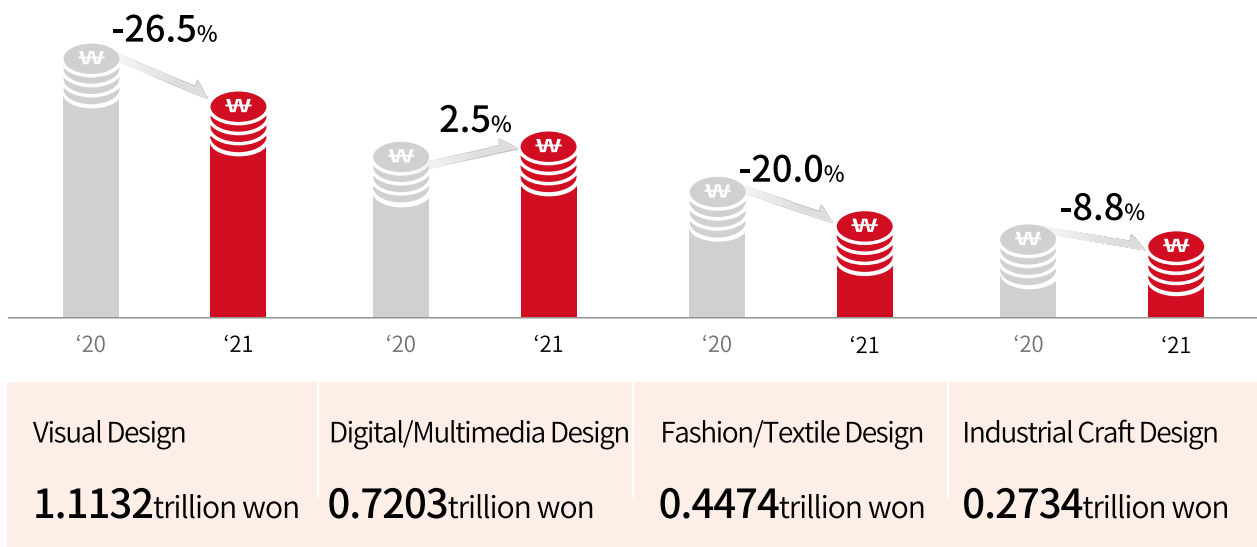
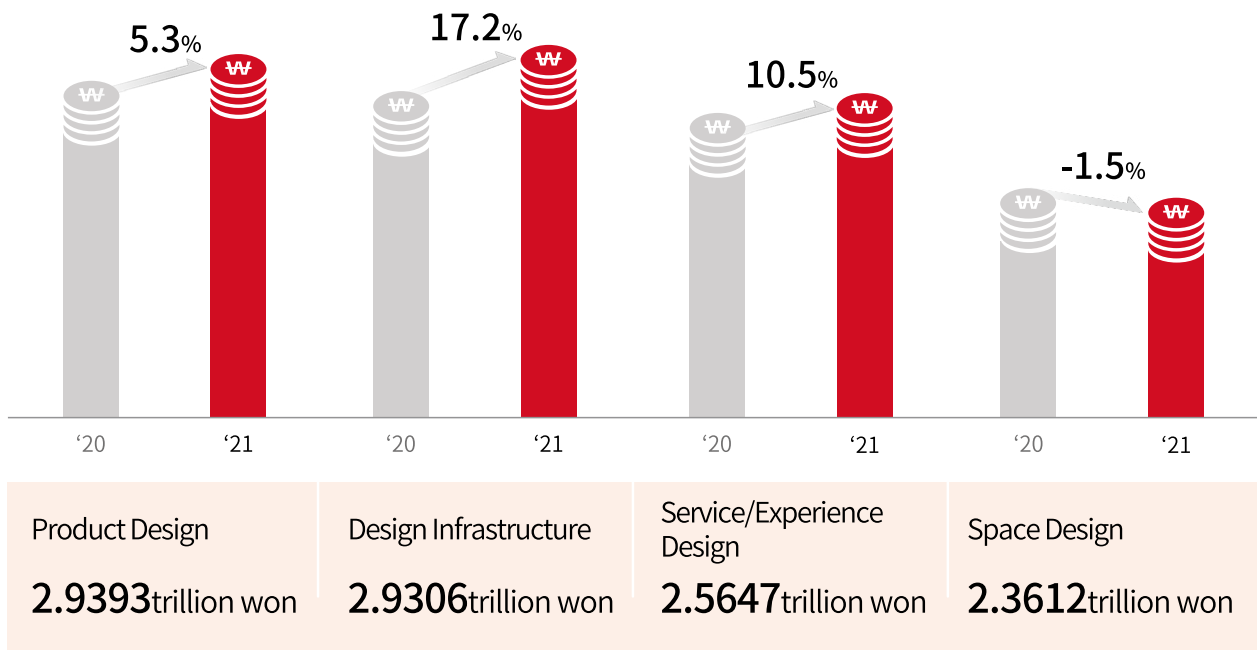
### ▷ Size of Design Workforce



## 2-1. Industry Size of Companies Utilizing Design



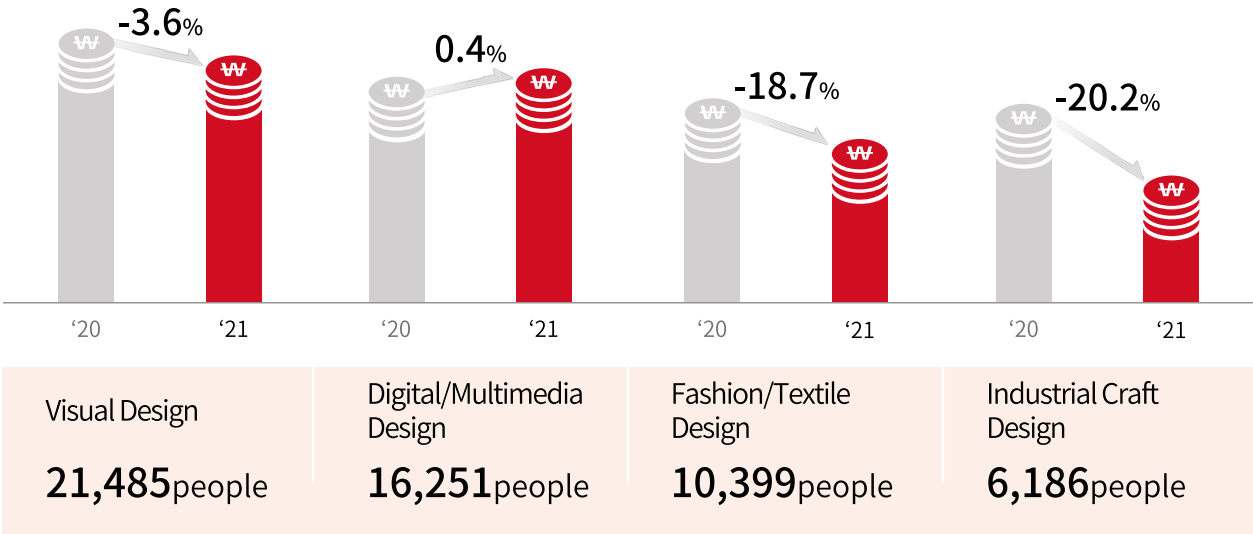
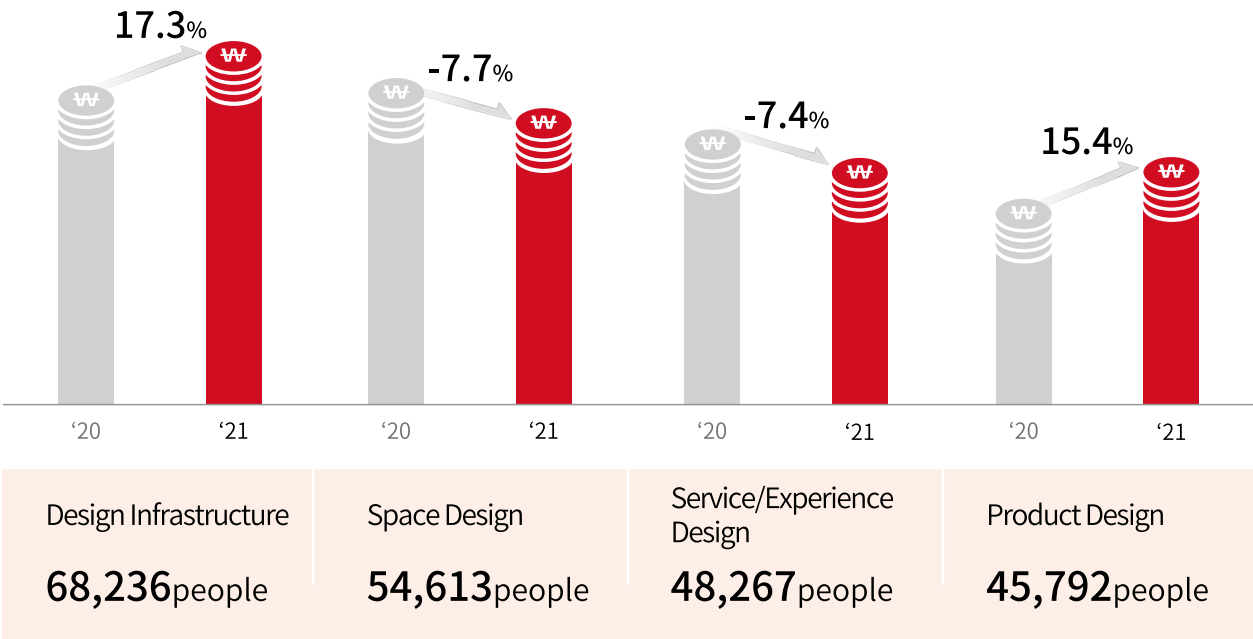
### ▷ Industry Size by Industrial Classification



## 2-2. Workforce Size of Companies Utilizing Design

2020 **268,176** people ▶▶▶ 2021 **271,230** people  
 Average 1.82 people Average 2.08 people

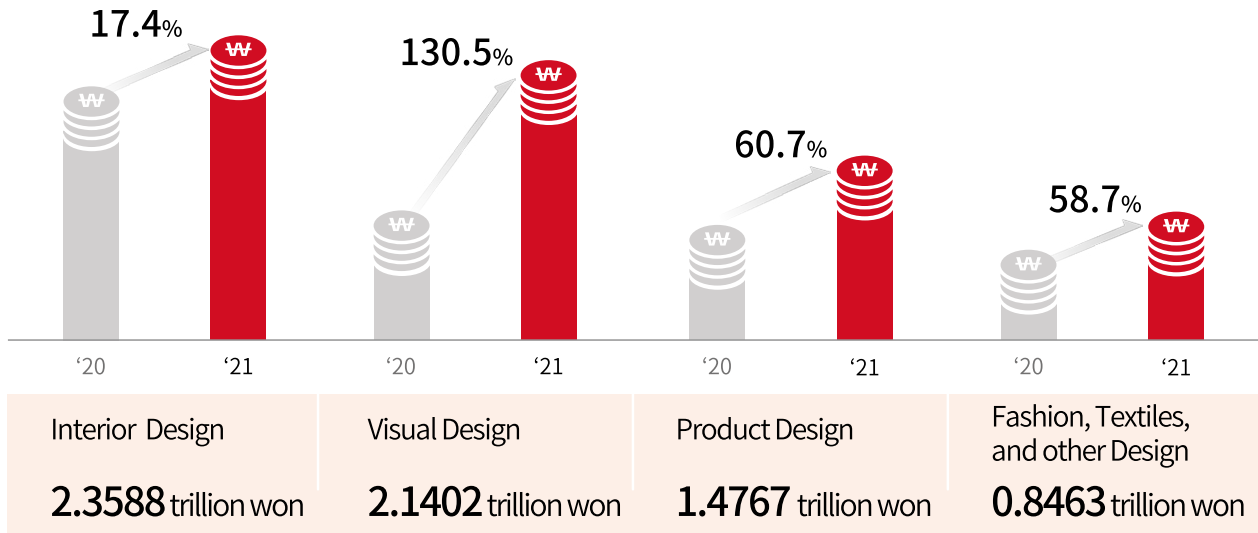
### ▷ Workforce Size by Industrial Classification



### 3. Industry and Workforce Size of Specialized Design Companies

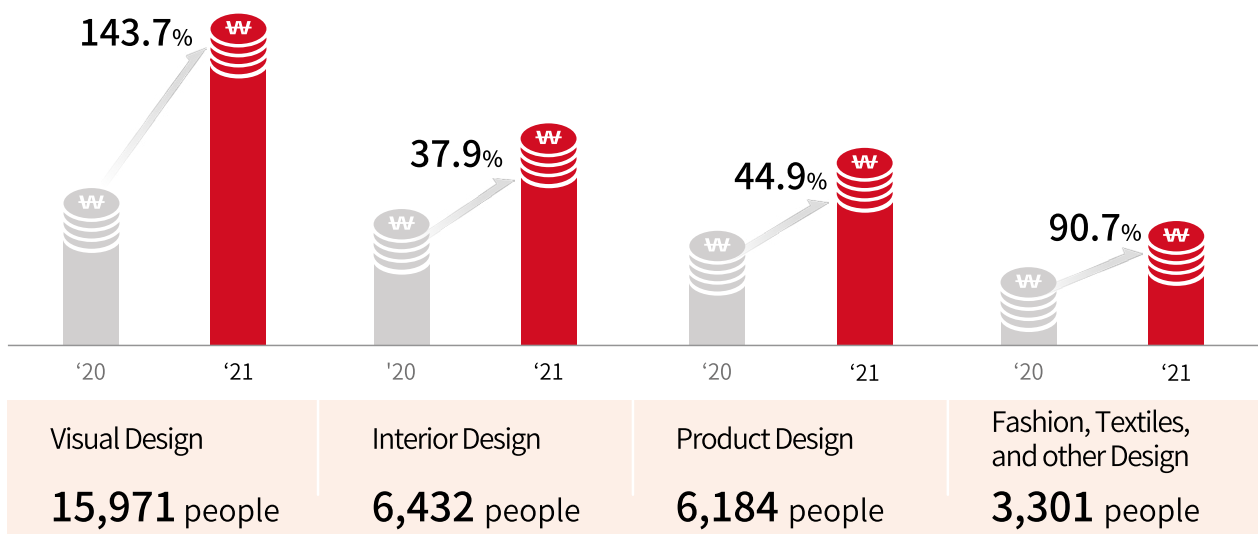
**2020** 4.3897 trillion won ▶▶▶ **2021** 6.8221 trillion won  
 Average 607.24 million won Average 350.48 million won

#### ▷ Industry Size by Industrial Classification

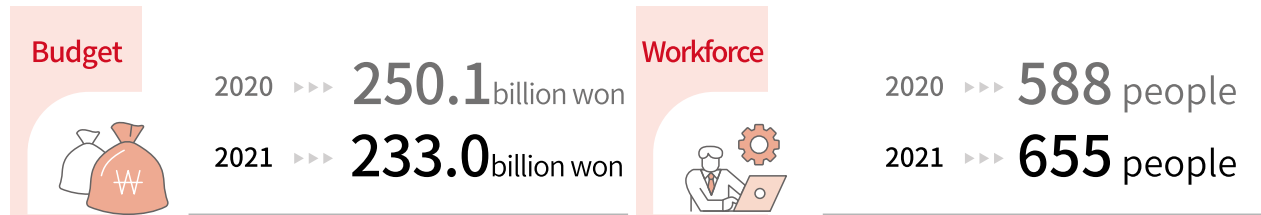


**2020** 17,217 people ▶▶▶▶ **2021** 31,888 people  
 Based on employee, Average 2.38 people Based on employee, Average 1.64 people

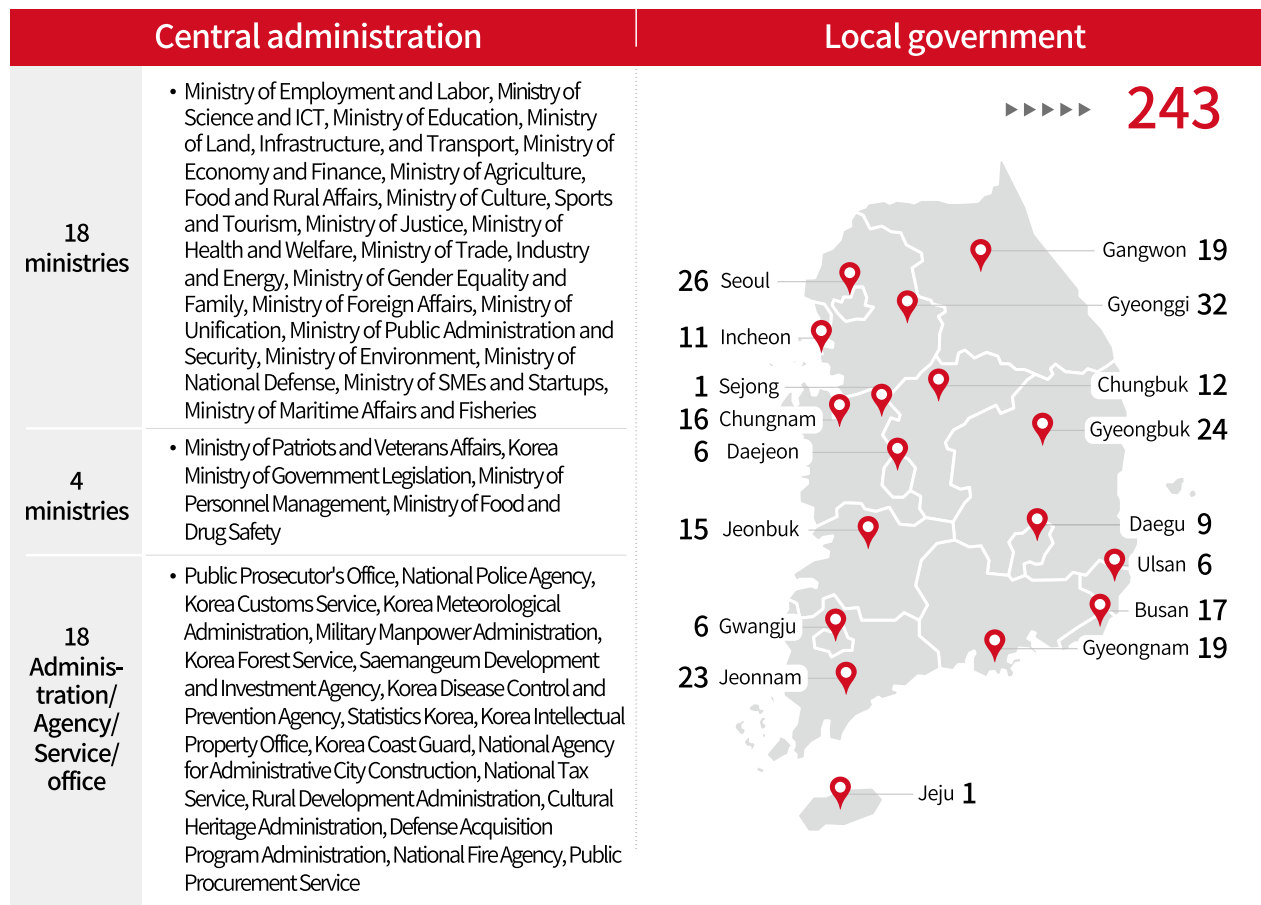
#### ▷ Workforce Size by Industrial Classification



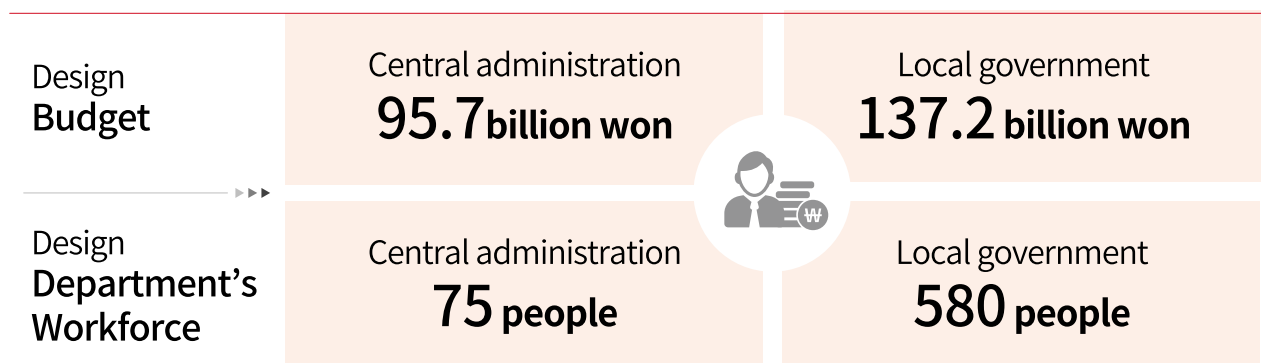
## 4. Public Sector



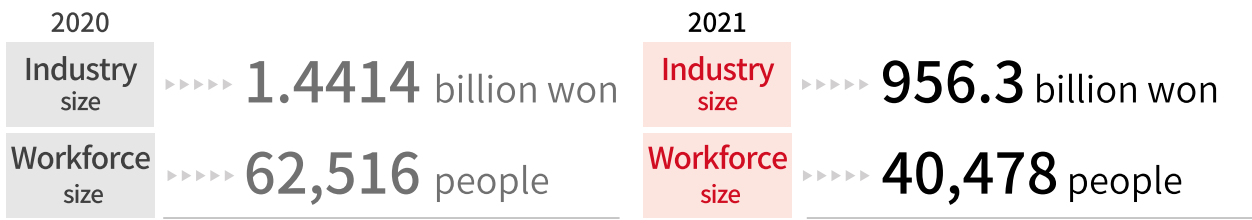
### ▷ Target Organizations



### ▷ Budget and Workforce










## 5. Freelancers



**Number of Freelancers Equation for extimation**

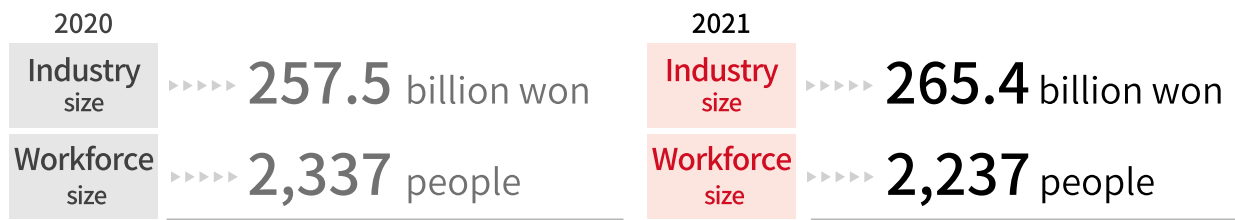
$$\frac{\text{Number of employees in Specialized Design Companies \& Number of designers in General companies}}{\text{Total number of Designer}} \times \frac{\text{Number of designers who are Self-employed with no employer}}{\text{Number of One-person Specialized Design Companies without a Place of Business}}$$

Freelance Designer (Including One-person Specialized Design Companies)	The Number of One-person Specialized Design Companies			Freelance Designer (Excluding One-person Specialized Design Companies)
	Total	Workforce with Place of business	Workforce without a place of business	
51,877 (down 10,639 year-over-year)	13,887 (up 11,957 year-over-year)	2,488	11,399	40,478

The Process of Estimating the Number of Freelancers	The Process of Estimating the Freelancer Designer Industry Size
 Workforce of Companies Utilizing Design and Specialized Design Companies <b>315,122</b>	 Number of Freelancers (estimated) <b>51,877</b>
 Self-employed with no employer <b>16.5%</b>	
<input checked="" type="checkbox"/> The number of self-employed with no employer <b>42,155</b> <input checked="" type="checkbox"/> Total number of designer <b>256,064</b> <small>* Regional Employment Survey Code : 285</small>	 The Average monthly wage <b>1.97</b> million won
 One-person Specialized Design Companies <b>11,399</b>	 Yearly <b>12</b> months
<b>Estimated the Number of Freelancer</b> <span style="font-size: 2em; color: #c00000;"><b>40,478</b></span>	<b>The Freelancer Designer Industry Size</b> <span style="font-size: 2em; color: #c00000;"><b>956.3</b></span> billion won

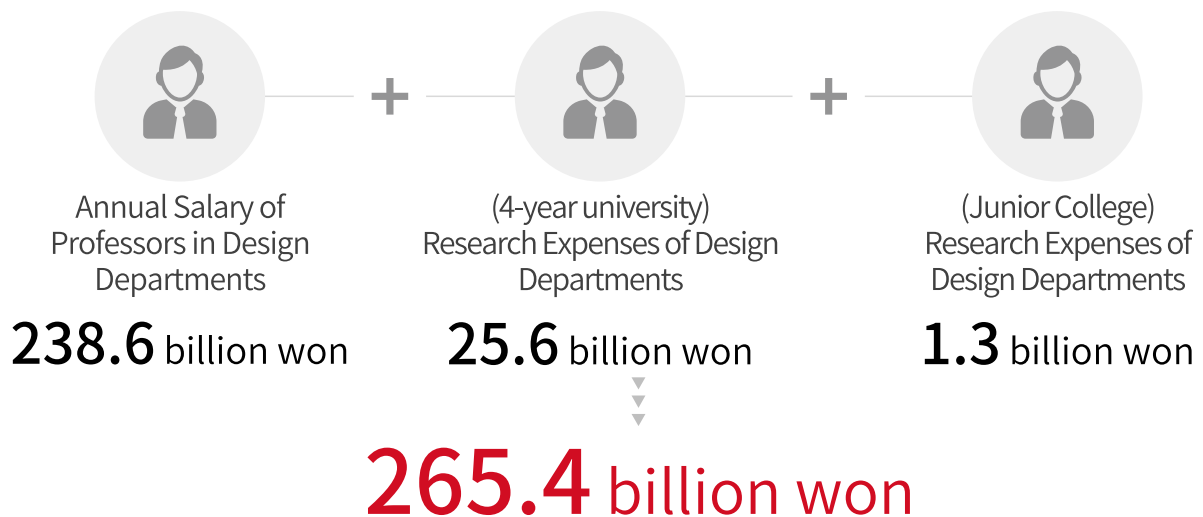


## 6. Education Sector

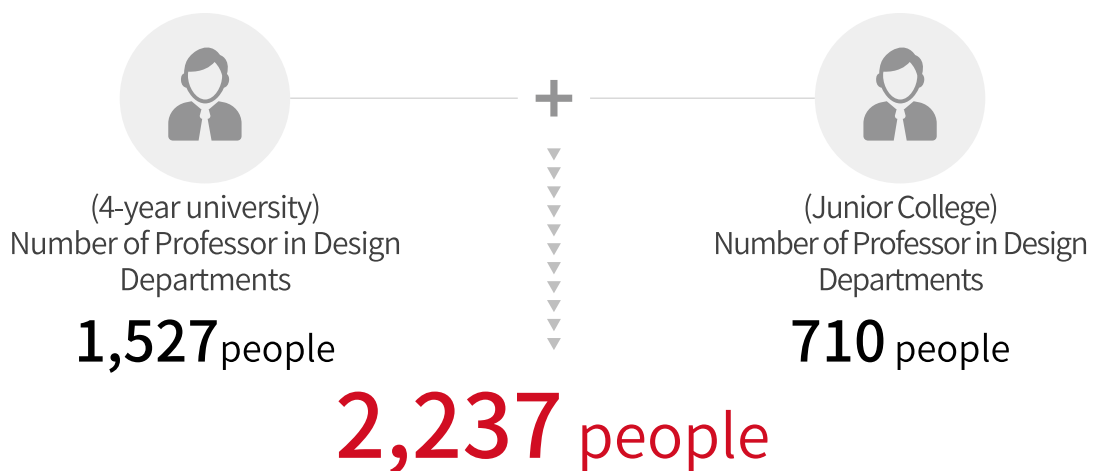


### ▷ Education Sector Size and Workforce

#### Size of the Design Industry in the Education Sector



#### Number of Professor in Design Departments



## 7. Employment rate

2020

64.5%



2021 Graduated

68.3%

\* Graduates are divided into employed and unemployed.

And the unemployed are divided into enrollees to higher learning, the enlisted, the unemployable, the exemptible, foreign students, etc.

When calculating the employment rate, we used graduates, which exclude enrollees to higher learning, the enlisted, the unemployable, the exemptible, and foreign students, etc.

### ▷ Status of Graduates and Employment of Design Departments

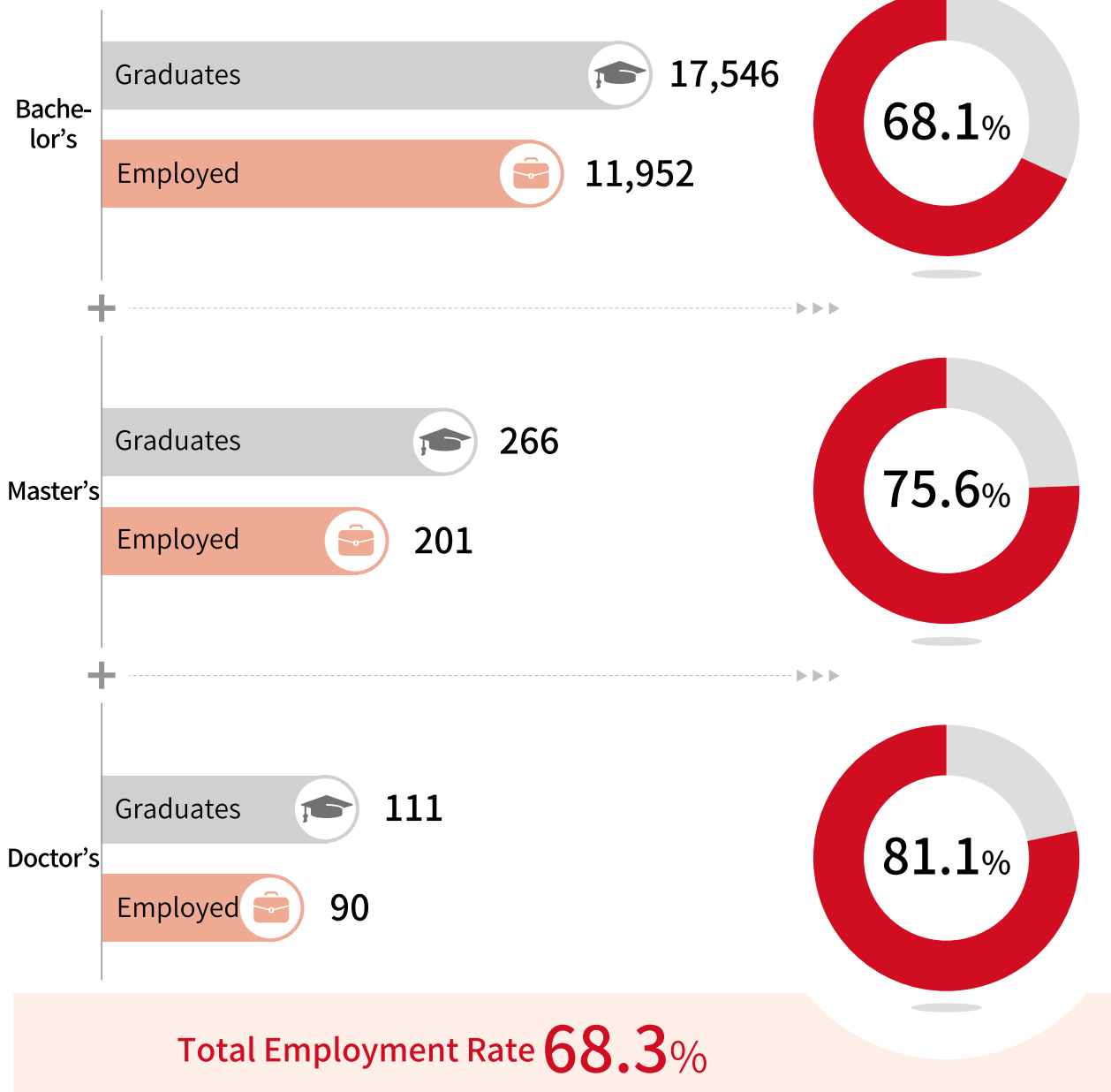


Graduates 17,923



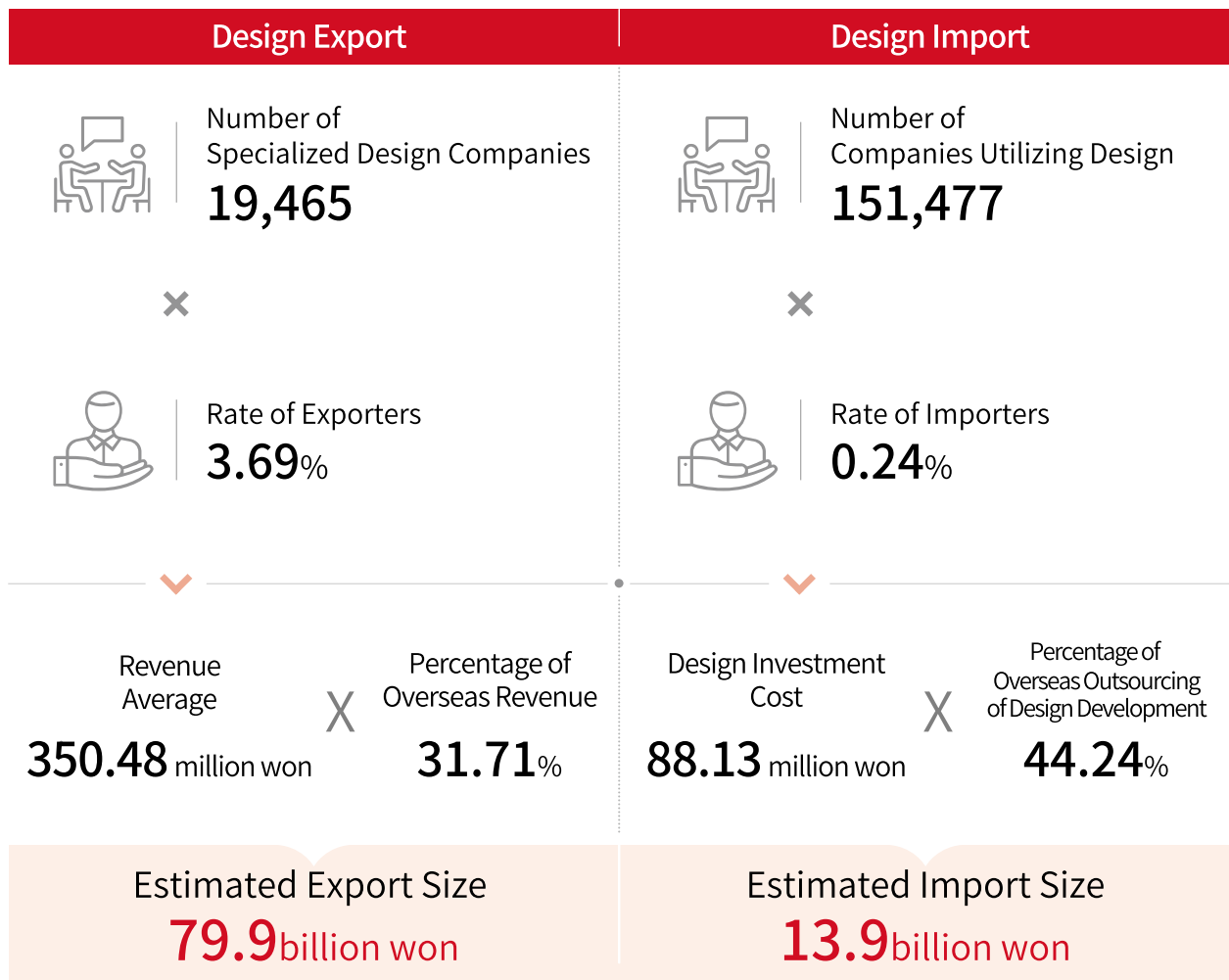
Employed 12,243

Employment Rate

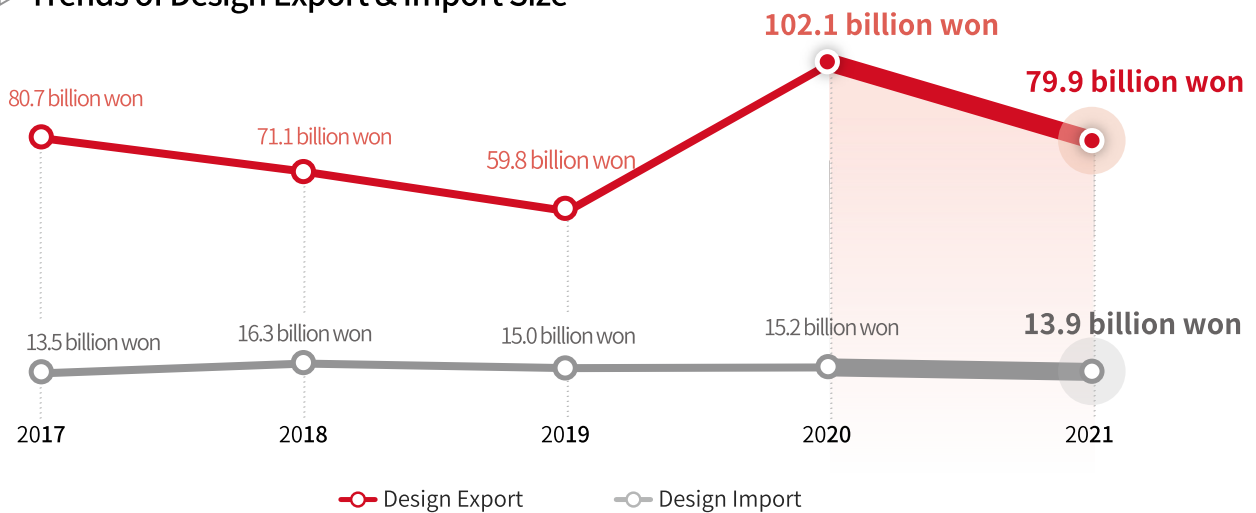


Total Employment Rate **68.3%**

## 8. Size of Design Export & Import



### ▷ Trends of Design Export & Import Size



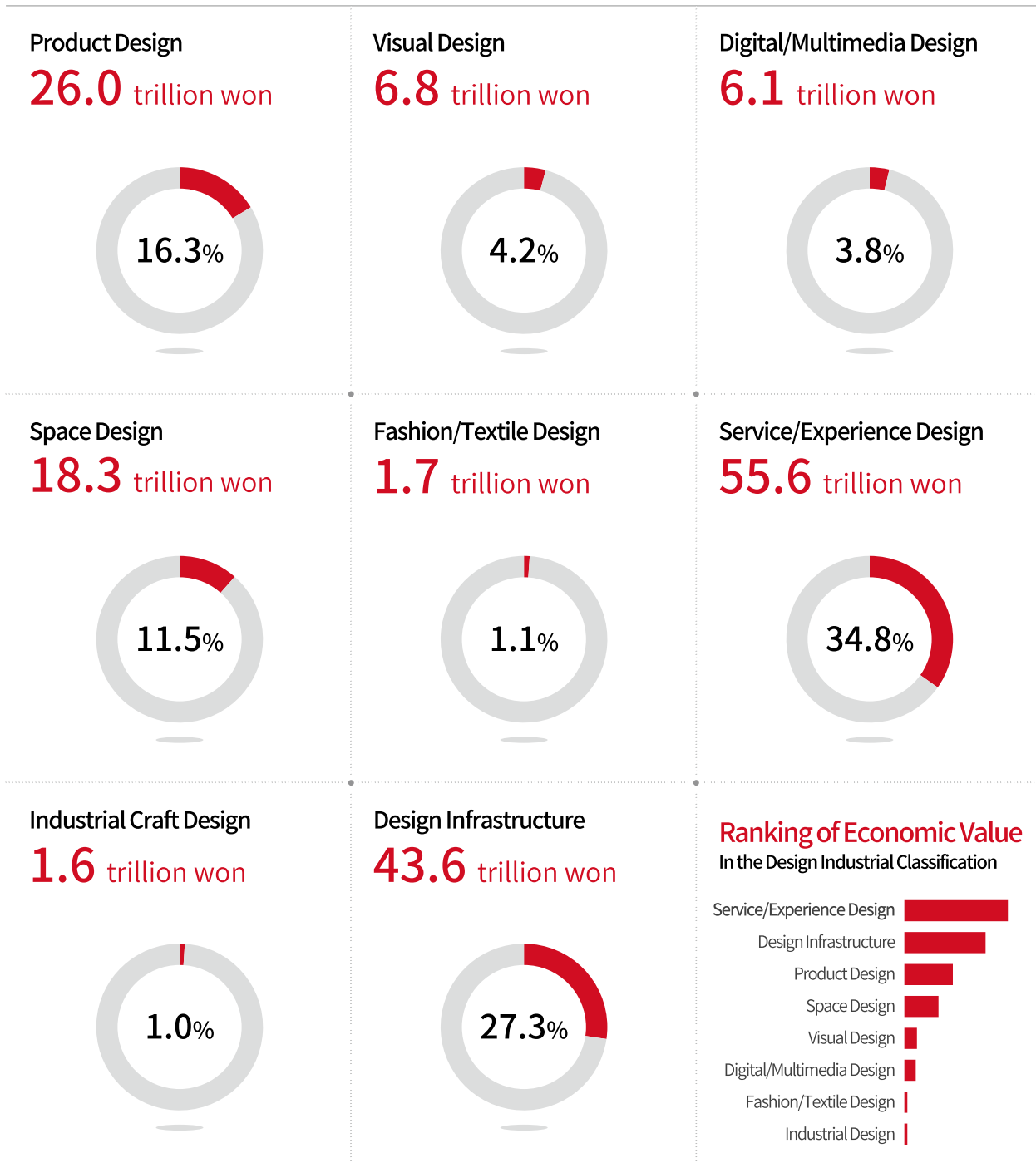
# 9. The Economic Value of Design

## The Economic Value of Design

2021 >>>

**159.7 trillion won** (2020 : 113.4 trillion won)

The Economic Value of Design = Revenue of the business in the Design Industrial Classification  
X Value-added ratio X Design contributions





# 1

## **OUTLINE OF SURVEY**

**1. SURVEY DESIGN**

**2. CONCEPTS AND TERMINOLOGY**

**3. RESPONDENT CHARACTERISTICS**

**4. RELATIVE STANDARD ERRORS OF KEY ITEMS**



## 1. Survey Purpose

The purpose is to establish objective and reliable data to determine the current state of the design industry, respond to user demand, and provide basic data for establishing design policies and strategies for the government, industry, academia, etc.

## 2. Survey Basis

- Article 20, paragraph 3 of the Enforcement Decree of the Industrial Design Promotion Act
- Approval statistics under Article 18 of the Statistics Act (No. 115026)

## 3. Survey History

- 1997 : Conducted the Design Census Study and the first Design Industry Statistics Survey in Korea
- 2002 : Conducted the 2nd Design Census Study
- 2005 : Conducted the 2005 Design Industry Statistics of Korea, changed the statistical name; the survey is changed to a biennial survey
- 2007 : Conducted the 2007 Design Industry Statistics of Korea, changed the statistical name, and designated the survey as nationally recognized statistics
- 2009 : Conducted 2009 Design Industry Statistics of Korea
- 2011 : Conducted 2011 Design Industry Statistics of Korea
- 2013 : Conducted the 2013 Design Industry Statistics of Korea, changed to an annual survey, established the special classification of design industry (8 major classifications), and approved changes to national statistics
- 2014 : Conducted the 2014 Design Industry Statistics of Korea
- 2015 : Conducted the 2015 Design Industry Statistics of Korea
- 2016 : Conducted the 2016 Design Industry Statistics of Korea
- 2017 : Conducted the 2017 Design Industry Statistics of Korea
- 2018 : Conducted the 2018 Design Industry Statistics of Korea
- 2019 : Conducted the 2019 Design Industry Statistics of Korea and a regular quality check of national statistics
- 2020 : Conducted the 2020 Design Industry Statistics of Korea and changed the statistical name
- 2021 : Conducted the 2021 Design Industry Statistics of Korea
- 2022 : Conducted the 2022 Design Industry Statistics of Korea and changed the statistical name



## 4. Survey Period and Target Period

- **Survey Duration**
  - General and Companies Utilizing Design : 2022. 08. 22. ~ 2022. 12. 02.
  - Specialized Design Companies : 2022. 08. 22. ~ 2022. 12. 02.
  - Public sector : 2022. 08. 22. ~ 2022. 12. 02.
- **Survey target period** : 2021. 01. 01. ~ 2021. 12. 31.

## 5. Survey Target and Scope

Survey	Desk Research
<ul style="list-style-type: none"> <li>• Investigate the design use of general companies</li> <li>• Survey of Companies Utilizing Design among general companies</li> <li>• Survey of Specialized Design Companies</li> <li>• Survey of the central administration and local governments</li> </ul>	<ul style="list-style-type: none"> <li>• The status of design-related education facilities</li> <li>• Estimate the economic value of design - Calculate the value-added ratio by the Design Industrial Classification</li> </ul>

## 6. Survey Items

Item	Details	
<b>Survey of design utilization</b>	<ul style="list-style-type: none"> <li>• Design department status as of December 2021</li> <li>• Working status of designers as of December 2021</li> <li>• Experience with commissioning Specialized Design Companies or freelancers for design development within the recent two years</li> <li>• Status of being a middle market enterprise</li> </ul>	
<b>Companies Utilizing Design status Survey</b>	<ul style="list-style-type: none"> <li>• General status of the business</li> <li>• Design investment performance</li> <li>• Design stature and contributions</li> <li>• Government policy and demand for support</li> <li>• COVID-19-related questions</li> </ul>	<ul style="list-style-type: none"> <li>• Status of design use</li> <li>• Design utilization level</li> <li>• Design workforce status</li> <li>• The status of design education</li> </ul>
<b>Specialized Design Companies status Survey</b>	<ul style="list-style-type: none"> <li>• General status of the business</li> <li>• Design business performance</li> <li>• The status of design education</li> <li>• COVID-19-related questions</li> </ul>	<ul style="list-style-type: none"> <li>• Status of key fields of design and workforce</li> <li>• Design international exchange</li> <li>• Government policy and demand for support</li> </ul>
<b>Central administration and local governments status Survey</b>	<ul style="list-style-type: none"> <li>• Status of design use</li> <li>• Related to design education</li> </ul>	<ul style="list-style-type: none"> <li>• Status of design project orders</li> </ul>

## 7. Population and Survey Sample

Item	Populations	Survey sample	Sample ratio (%)
Survey of general companies' use(a)	405,491	20,835	5.1%
Survey	151,477	1,882	1.2%
Specialized Design Companies(b)	19,465	626	3.2%
Central administration and local government(c)	283	264	93.3%
<b>Total(a+b+c)</b>	<b>425,239</b>	<b>21,725</b>	<b>5.1%</b>

## 8. Overview of Sample Design by Survey Target

- Survey Methods : Combined visiting surveys and email/fax/phone surveys

Item	Sampling methods	Target sample size	Number of completed surveys
<b>Companies Utilizing Design' utilization status and survey</b>	<ul style="list-style-type: none"> <li>• Two-phase sampling</li> <li>• [Primary]</li> <li>• Design utilization survey</li> <li>- Stratified sampling/modified proportional allocation</li> <li>• [Secondary]</li> <li>Survey of Companies Utilizing Design among general companies - Stratified sampling/ modified proportional allocation</li> </ul>	<ul style="list-style-type: none"> <li>• [Primary]</li> <li>Design utilization survey</li> <li>- 20,000 companies</li> <li>• [Secondary]</li> <li>Survey of Companies Utilizing Design</li> <li>- 1,800 companies</li> </ul>	<ul style="list-style-type: none"> <li>• [Primary]</li> <li>Design utilization survey</li> <li>- 20,835 companies</li> <li>• [Secondary]</li> <li>Survey of Companies Utilizing Design</li> <li>- 1,882 companies</li> </ul>
	<ul style="list-style-type: none"> <li>• Creating survey Questionnaire : Business owners or managers and higher-level staff and employees in charge of designing</li> </ul>		
<b>Specialized Design Companies Survey</b>	<ul style="list-style-type: none"> <li>• Stratified sampling</li> <li>• Modified proportional allocation</li> </ul>	<ul style="list-style-type: none"> <li>• 600 companies</li> </ul>	<ul style="list-style-type: none"> <li>• 626 companies completed</li> </ul>
<ul style="list-style-type: none"> <li>• Creating survey tables : Business owners or managers and higher-level staff</li> </ul>			
<b>Central administration and local governments Survey</b>	<ul style="list-style-type: none"> <li>• Complete enumeration</li> </ul>	<ul style="list-style-type: none"> <li>• Central administration (18 ministries, 4 ministries, and 18 administrations, agencies, services, offices)</li> <li>- All 40 institutions</li> <li>• Local governments (administrative cities/ autonomous regions)</li> <li>- All 243 agencies</li> </ul>	<ul style="list-style-type: none"> <li>• Central administration (18 ministries, 4 ministries, and 18 administrations, agencies, services, offices)</li> <li>- 30 organizations completed</li> <li>• Local governments (administrative cities/ autonomous regions)</li> <li>- 234 organizations completed</li> </ul>
<ul style="list-style-type: none"> <li>• Public officials in charge of design duty</li> </ul>			

## 02

# Concepts and Terminology

## 1. General Companies

- Businesses with 5 or more workers corresponding to the Design Industrial Classification according to the 2019 Census on Establishments\*

\*Population data should use the same 2021 data as the survey base year, but the most recent Nationwide Business Survey data available (2019) from Statistics Korea were used.

## 2. Companies Utilizing Design

- Businesses identified as using design among general companies in the survey of design use

### 2-1. Stage of Identifying Companies Utilizing Design

- General companies are judged by whether they have a “design department,” “hire a designer,” or “outsource to a Specialized Design Companies,” and the verification process follows the stages below

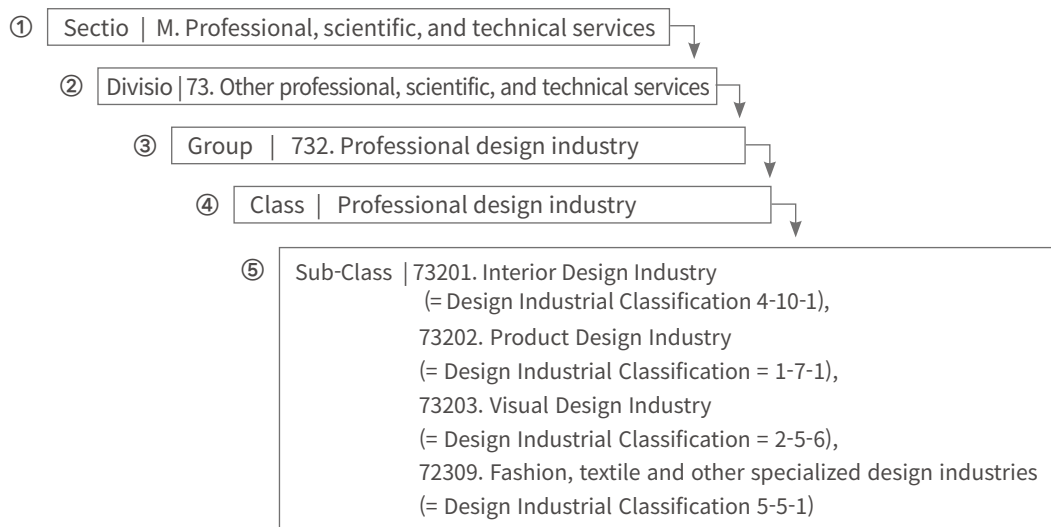
<b>Step 1</b>	<p>Does your company have a <b>design department</b> as of December 2021?</p> <p><input type="checkbox"/> YES ► Companies Utilizing Design <input type="checkbox"/> NO</p>
<b>Step 2</b>	<p>Is a designer working as an employee in your company as of December 2021?</p> <p><input type="checkbox"/> YES ► Companies Utilizing Design <input type="checkbox"/> NO</p>
<b>Step 3</b>	<p>Does your company have the experience of commissioning service to a <b>specialized design</b> company or <b>freelancer</b> for your business or promotion of the company during 2020 and 2021?</p> <p><input type="checkbox"/> YES ► Companies Utilizing Design <input type="checkbox"/> NO</p> <p>► Go to Step 4 question if answering "No" to all Steps 1–3</p>
<b>Step 4</b>	<p>Does your business have the experience of releasing new products or changing the design of an existing product in the recent two years?</p> <p><input type="checkbox"/> YES ► Step 5 question <input type="checkbox"/> NO ► Company not using design</p> <p style="text-align: right;">► End the survey of utilization</p> <p>► Go to Step 5 if having the experience of releasing new products or changing designs</p>
<b>Step 5</b>	<p>What kind of methods (in-house, outsourcing) did you use to design the new product or change designs?</p> <p><input type="checkbox"/> Subjective response, listen to the response of the responder and then determine whether the company uses design by referring to the design use classification criteria below and apply to Step 1–3 questions</p>

### 3. Designer

- Among those hired as designers, one who studied a design-related major or has a certificate related to design work, or one who did not study design-related major or has a certificate but has at least two years of experience in design work

### 4. Specialized Design Companies

- Businesses corresponding to the professional design industry in the 2019 Nationwide Business Survey
- Specialized Design Companies are composed of 1 group, 1 class, and 4 sub-classes based on the (10th) Korean Standard Industrial Classification.
- The 4 sub-classes were matched 1:1 with the 4 groups of the Design Industrial Classification



### 5. Korean Standard Industrial Classification <sup>1</sup>

- The Korean Standard Industrial Classification is a classification for statistical purposes based on the International Standard Industrial Classification (ISIC) recommended by the United Nations (UN) to ensure the accuracy of statistical data and comparability between countries in accordance with the Statistics Act.
- Consists of (21) sections - (77) divisions - (232) groups - (495) classes - (1,196) sub-classes (based on the 10th classification)

### 6. Design Industrial Classification

- Design Industrial Classification is a special classification established for design promotion strategy and industry size and statistics calculation by classifying design-related industries and Specialized Design Companies into large, medium, and small among the Korean Standard Industrial Classification.
- Design Industrial Classification is composed of (8) sections, (42) divisions, and (154) groups (including 4 Specialized Design Companies industries)
- The Design Industrial Classification was first established in 2013 and has been used to design surveys and produce results ever since

<sup>1</sup> Statistics Korea. (2017). Refer to the Korean Standard Industrial Classification, p. 3-11.

## 7. Corporate Type

- **Sole proprietorship**

- A business run by an individual without a corporate body (including a business run jointly by individuals)
- A sole proprietorship that has a sales contract with a company for products, goods, etc. and is managed independently under the responsibility of the sole proprietor

- **Incorporated company**

- A for-profit corporation established under the provisions of the Commercial Act, including a joint stock company, limited liability company, partnership, merged company, and foreign company
- A foreign company is a company headquartered in a foreign country and established in Korea, including branch (offices), sales offices, etc. established in Korea

- **Non-company corporations**

- Corporations other than companies established under the provisions of the Civil Act or special laws, such as foundations, corporations, school corporations, medical corporations, social welfare corporations, and various public corporations

- **Unincorporated associations**

- Various societies, unions, sponsorships, cultural organizations, labor organizations, etc. without legal status

## 8. Business Entity Classification

- **Sole proprietorship (1 corporation, 1 business)**

- When there is only one business in one location with no headquarters (office) or branch (offices), sales offices, or field offices in other locations

- **Headquarters (office), head office, central association (1 company multi-businesses)**

- A business that has one or more branch (offices), sales offices, field offices, etc. under the same management and substantially oversees the entire business
- A business that actually performs general management tasks such as planning, accounting, finance, purchasing, advertising, judicial affairs, etc.

## 9. Worker Classification

- **Regular worker**

- A person who has an employment contract with a business for one year or more, or a person who is subject to personnel management regulations or receives various benefits such as bonuses without an employment contract for a certain period of time

- **Temporary and day-to-day workers**

- A person whose employment contract is for less than one year and who is paid by the business

## 10. Business Performance

- **Revenue** : Total revenue from business activities for full year of 2021
- **Labor cost** : Includes allowances and commissions paid to other workers as labor costs, such as salaries, fringe benefits, and allowance for severance and retirement benefits, for the full year of 2021
- **R&D cost** : The sum of research, development, and general development expenses
- **Operating profit** : Profit of excluding operating expenses from the total revenue

## 11. Business Size Classification Method

- Article 2 of the Framework Act on Small and Medium Enterprises categorizes business size into medium and small enterprises based on industry and revenue
- Middle market enterprises were identified by a questionnaire during the survey stage of checking the use of general companies

	Industry	Medium enterprise	Small enterprise	Large enterprises
Manufacturing	Other machinery and equipment manufacturing industry			
	Metal processing products manufacturing industry (excluding machinery and furniture manufacturing industry)			
	Food manufacturing industry			
	Automotive and trailer manufacturing industry	12-100 billion won or less		
	Electronics, computer, video, audio and telecommunications equipment manufacturing industry			
	Cokes, briquettes, and petroleum refinery manufacturing industry			Apart from medium and small enterprises, others are categorized as large enterprises
	Chemicals and chemical product manufacturing industry(excluding drug manufacturing industry)		12 billion won or less	
	Primary metal manufacturing industry			
	Furniture manufacturing industry			
	Leather, bag, and shoe manufacturing industry	12-150 billion won or less		
	Apparel, apparel accessories, and fur products manufacturing industry			
	Electrical equipment manufacturing industry			
	Nonmetallic mineral products manufacturing industry			
	Beverage manufacturing industry	12-80 billion won or less		
Medical substance and drug manufacturing industry				

	Industry	Medium enterprise	Small enterprise	Large enterprises
<b>Manufacturing</b>	Rubber and plastic product manufacturing industry			Apart from medium and small enterprises, others are categorized as large enterprises
	Other transportation equipment manufacturing industry			
	Tobacco manufacturing industry	8-100 billion won or less		
	Lumber and wooden product manufacturing industry (excluding furniture manufacturing industry)		8 billion won or less	
	Textile products manufacturing industry (excluding apparel manufacturing industry)			
	Pulp, paper, and paper products manufacturing industry	8-150 billion won or less		
	Other product manufacturing industry			
	Medical, precision, optical device and watchmaking manufacturing industry	8-80 billion won or less		
	Print and recorded media reproduction industry			
<b>Others part from manufacturing</b>	Electric, gas, steam, and water utilities industry	12-100 billion won or less	12 billion won or less	Apart from medium and small enterprises, others are categorized as large enterprises
	Construction industry	8-100 billion won or less	8 billion won or less	
	Mining industry			
	Agriculture/Forestry/Fishing industry			
	Transportation industry	8-80 billion won or less	3 billion won or less	
	Sewage waste treatment, raw material recycling, and environmental restoration industry			
	Finance/Insurance industry	8-40 billion won or less	8 billion won or less	
	Wholesale and retail industry	5-100 billion won or less	5 billion won or less	
	Publishing/video/broadcasting and information services industry	5-80 billion won or less		
	Real estate/rental industry	3-40 billion won or less		
	Business facilities management and business support services industry		3 billion won or less	
	Arts/Sports & Leisure-related services industry	3-60 billion won or less		
	Specialized scientific and technical services industry			
	Healthcare/Social services industry	1-60 billion won or less		
	Repair and other personal service industries industry		1 billion won or less	
	Education Service industry	1-40 billion won or less		
	Accommodations and restaurants			
Public administration, defense and social security administration*	50-299 people or less	49 people or less		

\* In the case of public administration, national defense, and social security administration, the Framework Act on Small and Medium Enterprises does not have criteria to classify enterprises. Thus, they are classified based on the number of workers in the same way that size was classified based on the number of workers in the past.

## 12. Design-related Investment Amount and Business Expenses

- Design labor cost - The labor cost of designers hired for the full year of 2021
- Design service cost - Includes service cost paid to Specialized Design Companies and labor cost paid to freelancers, etc. in 2021  
※The survey separates the service cost for Specialized Design Companies from other service costs.
- Design machinery/devices and software -Costs of purchasing and administering machinery, devices, computer systems, and application software for design research and development in 2021
- Land/building for design research and development- Expenditures in 2021 for purchase of land for design research development, building cost and major repairs of the buildings, etc.
- Other design-related current costs - Other costs for materials, handouts, supply purchases, education, business trips, etc. for design research in 2021

## 13. Application/Registration Classification

- **Application** : Act of submitting documents required by law to state authorities for the purpose of registering industrial property rights
- **Registration** : An administrative decision that grants rights when an administrative body has examined the requested documents requested for application and is satisfied with them

## 14. GD(Good Design) Mark

- The Good Design (GD) product selection system has been implemented since 1985
- A system that certifies products that are currently sold or planned to be sold at home and abroad as good design products by evaluating their design in terms of formativeness, economy, convenience, etc. and grants the GD mark to selected products

## 15. Standard Contract for Design Services

- A total of four design standard contracts related to product design, performance-based (product) design, visual design, and multimedia design created to improve unfair practices prevalent in the design industry



## 03

## Respondent characteristics

## 1. General Companies

## - Sample of Completed Surveys on Design Use

Item	Sample of completed surveys on utilization		
	Number of cases	%	
<b>Total</b>	<b>20,835</b>	<b>100.0</b>	
<b>By region</b>	Seoul	4,211	20.2
	Incheon/Gyeonggi/Gangwon	7,234	34.7
	Busan/Ulsan/Gyeongnam	2,964	14.2
	Daegu/Gyeongbuk	2,010	9.6
	Gwangju/Jeolla/Jeju	2,078	10.0
	Daejeon/Sejong/Chungcheong	2,338	11.2
<b>By industrial Classification</b>	Product design	3,264	15.7
	Visual design	1,247	6.0
	Digital/Multimedia design	467	2.2
	Space design	4,407	21.2
	Fashion/Textile design	576	2.8
	Service/Experience design	4,257	20.4
	Industrial craft design	1,031	4.9
	Design infrastructure (design-based technology)	5,586	26.8
<b>By size</b>	Small enterprise	15,310	73.5
	Medium enterprise	4,095	19.7
	Middle market enterprise	566	2.7
	Large enterprise	864	4.1

## 2. Companies Utilizing Design - Sample of Completed Surveys

Item		Sample of Completed Surveys	
		Number of cases	%
<b>Total</b>		<b>1,882</b>	<b>100.0</b>
<b>By region</b>	Seoul	749	42.9
	Incheon/Gyeonggi/Gangwon	644	30.8
	Busan/Ulsan/Gyeongnam	102	8.6
	Daegu/Gyeongbuk	92	5.7
	Gwangju/Jeolla/Jeju	84	4.1
	Daejeon/Sejong/ Chungcheong	211	8.0
<b>By Industrial Classification</b>	Product design	410	21.7
	Visual design	253	13.6
	Digital/Multimedia design	155	8.0
	Space design	374	19.9
	Fashion/Textile design	189	10.0
	Service/Experience design	210	11.0
	Industrial craft design	56	3.0
	Design infrastructure (design-based technology)	235	12.8
<b>By size</b>	Small enterprise	40	61.5
	Medium enterprise	73	32.5
	Middle market enterprise	504	3.4
	Large enterprise	1,265	2.6
<b>Department</b>	Has a design department	349	18.5
	No design department	1,533	81.5
<b>Hiring</b>	Hiring designers	1,461	70.4
	Not hiring designers	421	29.6
<b>Outsourcing</b>	Design is outsourced	582	40.0
	No design outsourcing	1,300	60.0

### 3. Specialized Design Companies - Sample of Completed Surveys

Item	Sample of Completed Surveys		
	Number of cases	%	
<b>Total</b>	<b>626</b>	<b>100.0</b>	
<b>By region</b>	Seoul	356	56.9
	Incheon/Gyeonggi/Gangwon	94	15.0
	Busan/Ulsan/Gyeongnam	67	10.7
	Daegu/Gyeongbuk	33	5.3
	Gwangju/Jeolla/Jeju	48	7.7
	Daejeon/Sejong/ Chungcheong	28	4.5
<b>By industry</b>	Product design	154	24.6
	Visual design	213	34.0
	Interior design	165	26.4
	Fashion, textiles, and other professional design industries	94	15.0
<b>By size</b>	1 person	121	19.3
	2-4 people	217	34.7
	5-9 people	154	24.6
	10-19 people	63	10.1
	20 people or more	71	11.3
<b>By type</b>	Sole proprietorships	332	53.0
	Incorporated company	291	46.5
	Non-company corporations	3	0.5

## 4. Central Administration - Sample of Completed Surveys

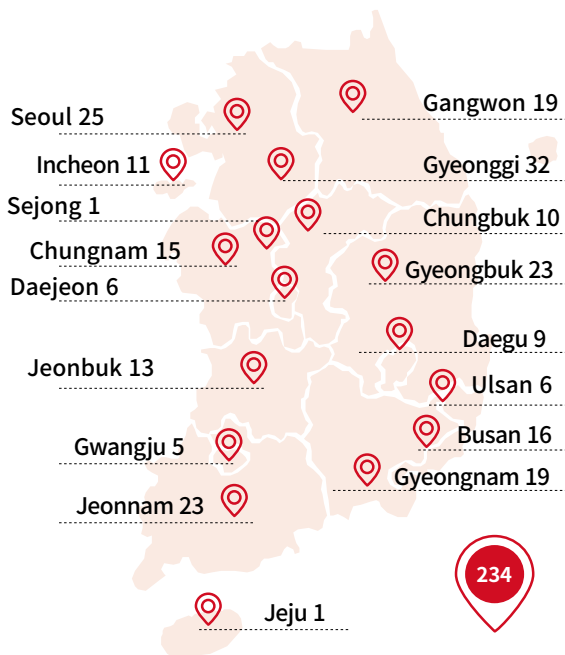
- Surveyed 30 out of 40 total organizations

Item	Number of cases
<b>Ministry</b>	<ul style="list-style-type: none"> <li>• 15 ministries / 18 ministries</li> <li>- Participating in the survey : Ministry of Employment and Labor, Ministry of Science and ICT, Ministry of Education, Ministry of Land, Infrastructure, and Transport, Ministry of Economy and Finance, Ministry of Agriculture, Food and Rural Affairs, Ministry of Culture, Sports and Tourism, Ministry of Justice, Ministry of Health and Welfare, Ministry of Trade, Industry and Energy, Ministry of Gender Equality and Family, Ministry of Foreign Affairs, Ministry of Unification, Ministry of Public Administration and Security, Ministry of Environment</li> <li>- Non-responding to the survey : Ministry of National Defense, Ministry of SMEs and Startups, Ministry of Maritime Affairs and Fisheries</li> </ul>
<b>Ministry</b>	<ul style="list-style-type: none"> <li>• 3 ministries / 4 ministries</li> <li>- Participating in the survey : Ministry of Patriots and Veterans Affairs, Korea Ministry of Government Legislation, Ministry of Personnel Management</li> <li>- Non-responding to the survey : Ministry of Food and Drug Safety</li> </ul>
<b>Administration / agency / service / office</b>	<ul style="list-style-type: none"> <li>• 12 administration/agency/service/office / 18 administration/agency/service/office</li> <li>- Participating in the survey : Public Prosecutor's Office, National Police Agency, Korea Customs Service, Korea Meteorological Administration, Military Manpower Administration, Korea Forest Service, Saemangeum Development and Investment Agency, Korea Disease Control and Prevention Agency, Statistics Korea, Korea Intellectual Property Office, Korea Coast Guard, National Agency for Administrative City Construction</li> <li>- Non-responding to the survey : National Tax Service, Rural Development Administration, Cultural Heritage Administration, Defense Acquisition Program Administration, National Fire Agency, Public Procurement Service</li> </ul>

## 5. Local Government – Sample of Completed Surveys

- Survey completed for 234 of 243 local governments<sup>2</sup>

[ Completed Surveys Per Region of Local Government ]  
Number of completed surveys/Number of the entire local governments



City/Province	City/County/District (Administrative district/autonomous district)			Total	
	City	County	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		4/5	5/6	
Daejeon	1/1		5/5	6/6	
Ulsan	1/1	1/1	4/4	6/6	
Sejong	1/1			1/1	
Gyeonggi	1/1	28/28	3/3	32/32	
Gangwon	1/1	7/7	11/11	19/19	
Chungbuk	1/1	3/3	6/8	10/12	
Chungnam	1/1	7/8	7/7	15/16	
Jeonbuk	1/1	5/6	7/8	13/15	
Jeonnam	1/1	5/5	17/17	23/23	
Gyeongbuk	1/1	10/10	12/13	23/24	
Gyeongnam	1/1	8/8	10/10	19/19	
Jeju	1/1			1/1	
<b>Total</b>	<b>17/17</b>	<b>73/75</b>	<b>78/82</b>	<b>66/69</b>	<b>234/243</b>

2\_ No response from Mapo-gu, Seoul; Nam-gu, Busan; Seo-gu, Gwangju; Goesan-gun and Bo-eun-gun, Chungbuk; Cheonan-si Chungnam; Gochang-gun, Jeonbuk; Gunsan-si; Yecheon-gun, Gyeongbuk

## 04

## Relative Standard Errors of Key Items

## [Publication Scope of Major Items]

- Survey results are published by sections of the Design Industrial Classification and by size, region, and type of design utilization, and at the time of publication, relative standard errors for key variables are presented.
- The main items of this survey are as follows
  - Survey on General Companies' Use (primary survey) : Design-utilization rate
  - Survey of Companies Utilizing Design (secondary survey) : Design Investment Amount, Number of Designers
  - Survey of Specialized Design Companies : Revenue, number of workers, number of designers

## ▷ Relative standard error of the design-utilization rate of Companies Utilizing Design (primary survey)\*

Item		Mean	Sampling error	Confidence interval		Relative standard error
<b>Total</b>		<b>0.37</b>	<b>0.00</b>	<b>0.37</b>	<b>~ 0.37</b>	<b>0.3%p</b>
<b>Industry</b>	Product design	0.33	0.00	0.32	~ 0.33	0.9%p
	Visual design	0.50	0.00	0.49	~ 0.50	0.7%p
	Digital/Multimedia design	0.66	0.00	0.66	~ 0.67	0.5%p
	Space design	0.29	0.00	0.29	~ 0.29	0.8%p
	Fashion/Textile design	0.58	0.00	0.58	~ 0.59	0.7%p
	Service/Experience design	0.42	0.00	0.41	~ 0.42	0.5%p
	Industrial craft design	0.22	0.01	0.21	~ 0.23	2.6%p
	Design infrastructure (design-based technology)	0.39	0.00	0.39	~ 0.39	0.5%p
<b>Region</b>	Seoul	0.52	0.00	0.52	~ 0.52	0.3%p
	Incheon/Gyeonggi/Gangwon	0.37	0.00	0.36	~ 0.37	0.5%p
	Busan/Ulsan/Gyeongnam	0.29	0.00	0.29	~ 0.29	0.8%p
	Daegu/Gyeongbuk	0.30	0.00	0.30	~ 0.31	1.2%p
	Gwangju/Jeolla/Jeju	0.34	0.00	0.34	~ 0.35	1.2%p
	Daejeon/Sejong/Chungcheong	0.35	0.01	0.34	~ 0.36	2.4%p
<b>Size</b>	Large enterprise	0.34	0.00	0.34	~ 0.34	0.3%p
	Middle market enterprise	0.53	0.00	0.53	~ 0.53	0.4%p
	Medium enterprise	0.56	0.00	0.56	~ 0.57	0.8%p
	Small enterprise	0.65	0.01	0.64	~ 0.65	1.1%p

\* Converted design utilization to "1" and design non-utilization to "0" to calculate mean and deviation.

▷ Relative standard error of the design investment amount of Companies Utilizing Design  
(secondary survey)

(Unit : million won)

Item		Mean	Sampling error	Confidence interval		Relative standard error
<b>Total</b>		<b>88.13</b>	<b>88.13</b>	<b>66.88</b>	~ <b>109.39</b>	<b>24.11%p</b>
Industry	Product design	158.39	158.39	30.35	~ 286.43	80.84%p
	Visual design	102.01	102.01	89.31	~ 114.71	12.45%p
	Digital/Multimedia design	102.95	102.95	93.01	~ 112.88	9.65%p
	Space design	87.95	87.95	80.02	~ 95.89	9.02%p
	Fashion/Textile design	66.23	66.23	53.30	~ 79.17	19.54%p
	Service/Experience design	73.65	73.65	64.59	~ 82.71	12.30%p
	Industrial craft design	67.56	67.56	58.94	~ 76.18	12.76%p
	Design infrastructure (design-based technology)	68.89	68.89	60.68	~ 77.10	11.92%p
Region	Seoul	103.76	103.76	72.89	~ 134.62	29.75%p
	Incheon/Gyeonggi/Gangwon	75.34	75.34	25.77	~ 124.91	65.80%p
	Busan/Ulsan/Gyeongnam	65.38	65.38	54.93	~ 75.83	15.98%p
	Daegu/Gyeongbuk	61.98	61.98	45.98	~ 77.99	25.82%p
	Gwangju/Jeolla/Jeju	49.27	49.27	39.41	~ 59.14	20.02%p
	Daejeon/Sejong/Chungcheong	88.33	88.33	76.10	~ 100.56	13.85%p
Size	Large enterprise	1,853.50	1,853.50	58.64	~ 3648.36	96.84%p
	Middle market enterprise	416.52	416.52	346.39	~ 486.66	16.84%p
	Medium enterprise	138.40	138.40	128.48	~ 148.32	7.16%p
	Small enterprise	57.15	57.15	55.02	~ 59.28	3.73%p
Hiring designers	Hiring designers	73.31	73.31	12.68	~ 133.94	82.71%p
	Not hiring designers	97.62	97.62	92.97	~ 102.27	4.76%p
Design outsourcing	Outsourced	112.26	112.26	84.28	~ 140.25	24.93%p
	No outsourcing	19.49	19.49	16.29	~ 22.68	16.39%p

▷ Relative standard error of the number of designers in Companies Utilizing Design  
(secondary survey)

(Unit : person)

Item		Mean	Sampling error	Confidence interval			Relative standard error
<b>Total</b>		<b>1.79</b>	<b>0.3</b>	<b>1.51</b>	~	<b>2.07</b>	<b>15.52%p</b>
<b>Industry</b>	Product design	2.47	1.6	0.82	~	4.11	66.64%p
	Visual design	1.97	0.2	1.74	~	2.20	11.56%p
	Digital/Multimedia design	2.32	0.2	2.12	~	2.53	8.92%p
	Space design	2.03	0.2	1.85	~	2.22	9.28%p
	Fashion/Textile design	1.54	0.3	1.27	~	1.81	17.79%p
	Service/Experience design	1.39	0.2	1.19	~	1.58	13.85%p
	Industrial craft design	1.53	0.2	1.35	~	1.70	11.42%p
	Design infrastructure (design-based technology)	1.60	0.2	1.43	~	1.78	11.00%p
<b>Region</b>	Seoul	2.11	0.4	1.72	~	2.49	18.15%p
	Incheon/Gyeonggi/Gangwon	1.45	0.7	0.78	~	2.11	46.19%p
	Busan/Ulsan/Gyeongnam	1.45	0.2	1.27	~	1.62	12.16%p
	Daegu/Gyeongbuk	1.40	0.3	1.13	~	1.67	19.46%p
	Gwangju/Jeolla/Jeju	1.08	0.2	0.92	~	1.25	15.47%p
	Daejeon/Sejong/Chungcheong	1.98	0.3	1.72	~	2.23	13.08%p
<b>Size</b>	Large enterprise	24.43	23.0	1.38	~	47.47	94.35%p
	Middle market enterprise	8.98	1.3	7.64	~	10.32	14.92%p
	Medium enterprise	2.82	0.2	2.61	~	3.03	7.38%p
	Small enterprise	1.25	0.0	1.21	~	1.30	3.41%p
<b>Design Outsourcing</b>	Outsourced	0.98	0.8	0.20	~	1.76	79.77%p
	No outsourcing	2.31	0.1	2.22	~	2.41	4.14%p

▷ Relative standard error of the revenue of Specialized Design Companies

(Unit : million won)

Item		Mean	Sampling error	Confidence interval		Relative standard error
<b>Total</b>		<b>350.48</b>	<b>65.4</b>	<b>285.05</b>	<b>~ 415.91</b>	<b>18.67%p</b>
<b>Industry</b>	Product design	453.28	220.1	233.21	~ 673.36	48.55%p
	Visual design	213.70	50.3	163.41	~ 263.99	23.53%p
	Interior design	591.47	150.1	441.40	~ 741.54	25.37%p
	Fashion, textiles, and other design	384.00	179.8	204.19	~ 563.82	46.83%p
<b>Region</b>	Seoul	405.16	99.0	306.18	~ 504.14	24.43%p
	Incheon/Gyeonggi/Gangwon	352.68	208.3	144.36	~ 560.99	59.07%p
	Busan/Ulsan/Gyeongnam	206.20	45.6	160.61	~ 251.79	22.11%p
	Daegu/Gyeongbuk	394.32	244.9	149.41	~ 639.23	62.11%p
	Gwangju/Jeolla/Jeju	318.61	105.4	213.17	~ 424.04	33.09%p
	Daejeon/Sejong/Chungcheong	219.54	49.0	170.51	~ 268.57	22.33%p
<b>Size</b>	1 person	120.00	9.8	110.18	~ 129.82	8.19%p
	2-4 people	448.28	38.4	409.87	~ 486.68	8.57%p
	5-9 people	1,049.05	102.1	946.98	~ 1151.13	9.73%p
	10-14 people	2,531.17	518.7	2,012.43	~ 3,049.91	20.49%p
	15 people or more	6,694.63	1,171.6	5,523.00	~ 7,866.27	17.50%p
<b>Revenue Composition</b>	Design revenue 50% ↑	311.50	47.0	264.53	~ 358.48	15.08%p
	Other revenue 50% ↑	398.46	139.6	258.90	~ 538.01	35.02%p
	Half-half	641.30	738.3	-97.02	~ 1,379.61	115.13%p

▷ Relative standard error of the number of workers in Specialized Design Companies

(Unit : person)

Item		Mean	Sampling error	Confidence interval		Relative standard error
<b>Total</b>		<b>2.25</b>	<b>0.2</b>	<b>2.02</b>	<b>~ 2.49</b>	<b>10.35%p</b>
<b>Industry</b>	Product design	2.59	0.4	2.20	~ 2.98	15.14%p
	Visual design	1.96	0.3	1.71	~ 2.22	13.21%p
	Interior design	2.69	0.7	2.01	~ 3.37	25.22%p
	Fashion, textiles, and other design	2.29	0.8	1.48	~ 3.09	35.09%p
<b>Region</b>	Seoul	2.48	0.4	2.09	~ 2.86	15.53%p
	Incheon/Gyeonggi/Gangwon	1.87	0.3	1.55	~ 2.19	17.07%p
	Busan/Ulsan/Gyeongnam	1.73	0.2	1.49	~ 1.98	13.95%p
	Daegu/Gyeongbuk	3.44	1.4	2.07	~ 4.81	39.80%p
	Gwangju/Jeolla/Jeju	2.64	0.7	1.92	~ 3.36	27.23%p
	Daejeon/Sejong/Chungcheong	1.61	0.4	1.21	~ 2.01	24.94%p
<b>Size</b>	1 person	1.00	-	1.00	~ 1.00	0.00%p
	2-4 people	2.93	0.1	2.88	~ 2.99	1.87%p
	5-9 people	6.42	0.1	6.32	~ 6.52	1.53%p
	10-14 people	11.74	0.1	11.60	~ 11.88	1.17%p
	15 people or more	34.87	3.9	30.99	~ 38.74	11.12%p
<b>Revenue Composition</b>	Design revenue 50% ↑	2.22	0.2	2.00	~ 2.44	9.84%p
	Other revenue 50% ↑	2.29	0.5	1.83	~ 2.76	20.13%p
	Half-half	2.72	2.1	0.66	~ 4.77	75.78%p



▷ Relative standard error of the number of designers in Specialized Design Companies

(Unit : person)

Item		Mean	Sampling error	신뢰구간		Relative standard error
<b>Total</b>		<b>1.64</b>	<b>0.1</b>	<b>1.56</b>	<b>~ 1.72</b>	<b>4.87%p</b>
<b>Industry</b>	Product design	1.90	0.2	1.73	~ 2.07	8.84%p
	Visual design	1.59	0.1	1.45	~ 1.74	9.04%p
	Interior design	1.61	0.1	1.48	~ 1.74	8.18%p
	Fashion, textiles, and other design	1.50	0.2	1.31	~ 1.69	12.77%p
<b>Region</b>	Seoul	1.73	0.1	1.61	~ 1.85	6.81%p
	Incheon/Gyeonggi/Gangwon	1.45	0.2	1.30	~ 1.61	10.42%p
	Busan/Ulsan/Gyeongnam	1.40	0.1	1.26	~ 1.54	10.27%p
	Daegu/Gyeongbuk	2.17	0.7	1.52	~ 2.82	30.11%p
	Gwangju/Jeolla/Jeju	1.94	0.3	1.69	~ 2.20	13.09%p
	Daejeon/Sejong/Chungcheong	1.34	0.2	1.11	~ 1.57	17.15%p
<b>Size</b>	1 person	1.00	-	1.00	~ 1.00	0.00%p
	2-4 people	2.18	0.1	2.11	~ 2.24	2.98%p
	5-9 people	4.42	0.1	4.27	~ 4.56	3.25%p
	10-14 people	6.41	0.4	6.03	~ 6.79	5.94%p
	15 people or more	11.90	1.0	10.92	~ 12.89	8.28%p
<b>Revenue Composition</b>	Design revenue 50% ↑	1.73	0.1	1.61	~ 1.84	6.57%p
	Other revenue 50% ↑	1.52	0.1	1.41	~ 1.63	7.16%p
	Half-half	2.07	1.5	0.56	~ 3.58	73.02%p

• Based on the relative sampling error of the sample survey of Statistics Canada's

- 0.00% ~ 4.99% : Excellent
- 5.00% ~ 9.99% : Very Good
- 10.00% ~ 14.99% : Good
- 15.00% ~ 24.99% : Acceptable
- 25.00% ~ 34.99% : Use with Caution
- 35.00% or more : Too Unreliable to Publish

# 2

## KEY FINDING OF THE SURVEY

1. DESIGN INDUSTRY SIZE
2. DESIGN INDUSTRY SIZE BY SURVEY TARGET
3. SIZE OF DESIGN EXPORT & IMPORT
4. THE ECONOMIC VALUE OF DESIGN
5. STATUS OF GRADUATES AND EMPLOYMENT OF DESIGN DEPARTMENTS



## 1. Industry Size

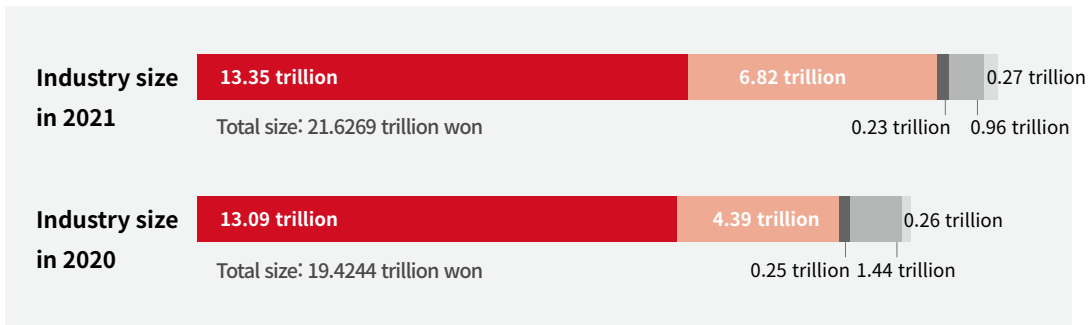
- Design Industry Size in 2021 : 21.6269 trillion won

The sum of 13.501 trillion won design investment amount of Companies Utilizing Design\* and 6.8221 trillion won revenue of Specialized Design Companies, 233 billion won budget of dedicated design departments in the public sector, 956.3 billion won size of the freelance industry, and 265.4 billion won annual salaries of higher education faculty and design research expenses

\*Design investment amount excluding Specialized Design Companies' service cost (996.5 billion won) of Companies Utilizing Design.

- Design Industry Size

■ Companies Utilizing Design    ■ Specialized Design Companies  
■ Public sector    ■ Freelancer    ■ Education sector



- Design Workforce Size : 346,489 employees

The design workforce size is estimated to be the sum of 271,230 designers in Companies Utilizing Design, 31,888 designers in Specialized Design Companies, 655 employees in public sector's dedicated design departments, 40,461 freelance designers, and 2,237 faculty members in design-related universities.

- Design Workforce Size

■ Companies Utilizing Design    ■ Specialized Design Companies  
■ Public sector    ■ Freelancer    ■ Education sector



## ▷ Size of the Design Industry and Workforce

(Unit : million won, person)

Item	2020		2021		Increase/Decrease rate		
	Design industry size	Design workforce	Design industry size	Design workforce	Design industry size	Design workforce	
Survey	Companies Utilizing Design(a)	13,085,678	268,176	13,350,069	271,230	2.0%	1.1%
	Specialized Design Companies (b)	4,389,712	17,217 *(28,775)	6,822,054	31,888 *(43,889)	55.4%	85.2%
	Public sector(c)	250,095 **(24,723)	588	232,963 *(30,648)	655	-6.9%	11.4%
<b>Survey total (a+b+c)</b>	<b>17,725,484</b> <b>** (17,500,112)</b>	<b>285,982</b> <b>* (297,540)</b>	<b>20,405,085</b> <b>** (20,202,770)</b>	<b>303,773</b> <b>* (315,774)</b>	<b>15.1%</b>	<b>6.2%</b>	
Freelancers(d)****	1,441,433	62,516	956,341	40,478	-33.7%	-35.3%	
Higher education(e)	257,455	2,337	265,449	2,237	3.1%	-4.3%	
<b>Total(a+b+c+d+e)</b>	<b>19,424,373</b> <b>** (19,199,001)</b>	<b>350,835</b> <b>* (362,393)</b>	<b>21,626,876</b> <b>** (21,424,561)</b>	<b>346,489</b> <b>* (358,490)</b>	<b>11.3%</b>	<b>-1.2%</b>	

\* Total number of workers in Specialized Design Companies including non-designers

\*\* Public sector industry size, excluding design service cost paid to Specialized Design Companies, etc.

\*\*\* Starting from this year's survey, the registration-based data from the 2020 Economic Census is used as the population, and freelance designers with business registration are considered to be included in the registration criteria for Specialized Design Companies.

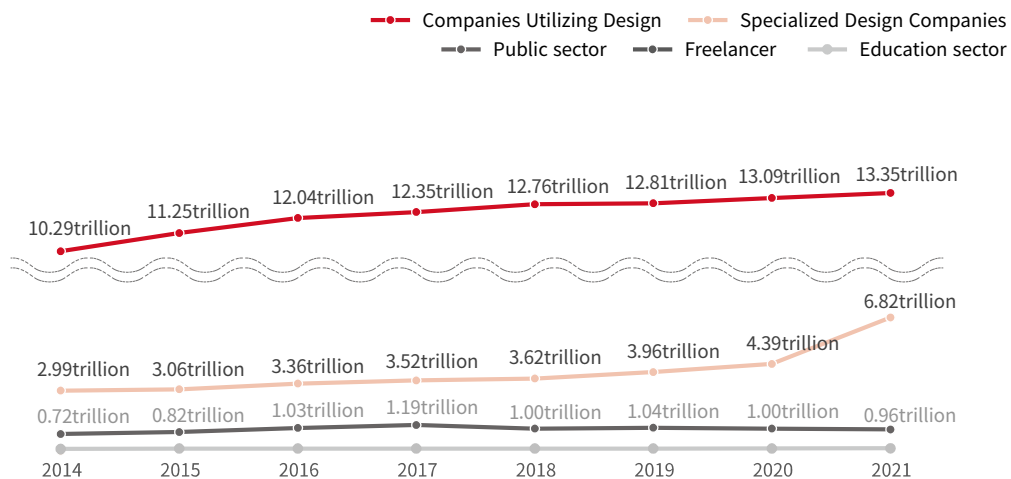
\*\*\*\* Starting this year, freelancers are not counted in the traditional way, but are calculated by estimating the number of freelancers who operate a business without a business license. Calculations for the freelance workforce without a business license are presented on p.41.

## 2. Trends of the Industry Size

- The design industry is constantly growing in size. The industry size of Companies Utilizing Design is estimated to be 13.35 trillion won in 2021, accounting for 61.7% of the entire design industry size.
- Compared to 2020, the size of the professional design company industry was shown to be 6.82 trillion won (4.39 trillion won in 2020).

### ▶ Trends of the Industry Size

(Unit : trillion won)



### ▷ Trends of the Industry Size

(Unit : million won)

Item	2014	2015	2016	2017	2018	2019	2020	2021
<b>Companies Utilizing Design (a)</b>	10,292,018	11,252,597	12,041,094	12,348,980	12,758,020	12,808,262	13,085,687	13,350,069
<b>Specialized Design Companies (b)</b>	2,990,423	3,059,925	3,357,819	3,524,707	3,624,542	3,962,759	4,389,712	6,822,054
<b>Public sector (c)</b>	138,281 *(17,782)	271,727 *(36,709)	232,050 *(43,120)	234,287 *(42,944)	229,214 *(31,988)	230,881 *(35,144)	250,095 *(24,723)	<b>232,963</b> *(30,648)
<b>Subtotal (a+b+c)</b>	<b>13,420,722</b> *(13,300,223)	<b>14,584,249</b> *(14,349,231)	<b>15,630,964</b> *(15,442,034)	<b>16,107,975</b> *(15,916,632)	<b>16,611,776</b> *(16,414,550)	<b>17,001,902</b> *(16,806,165)	<b>17,725,484</b> *(17,500,112)	<b>20,405,085</b> *(20,202,770)
<b>Freelancers (d)</b>	715,641	820,990	1,034,235	1,189,519	999,053	1,040,812	1,441,433	956,341
<b>Higher education (e)</b>	233,758	246,359	248,517	247,577	251,733	248,212	257,455	265,449
<b>Total (a+b+c+d+e)</b>	<b>14,370,121</b> *(14,249,622)	<b>15,651,598</b> *(15,416,580)	<b>16,913,716</b> *(16,724,786)	<b>17,545,071</b> *(17,353,728)	<b>17,862,562</b> *(17,665,336)	<b>18,290,926</b> *(18,095,189)	<b>19,424,373</b> *(19,199,001)	<b>21,626,876</b> *(21,424,561)

\* Public sector industry size, excluding design service cost paid to Specialized Design Companies, etc.

## 1. Companies Utilizing Design

### 1) Design-utilization Rate

- (Based on business with 5 or more employees nationwide)

Out of 810,558 businesses with 5 or more employees, there are 151,477 Companies Utilizing Design with a design-utilization rate of 18.7%.

- (Based on the Design Industrial Classification)

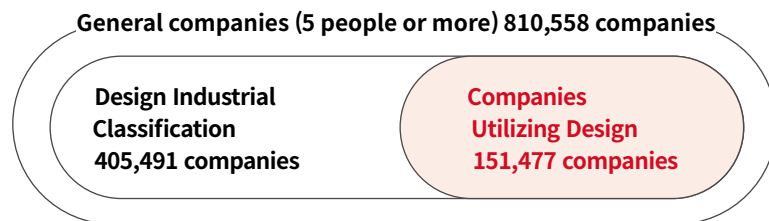
The design-utilization rate for businesses (405,491) corresponding to the Design Industrial Classification was found to be 37.4%.

#### ► Trends of the Design-Utilization Rate

Item	2020		2021	
	Businesses with 5 or more employees nationwide	Businesses with 5 or more employees in the Design Industrial Classification	Businesses with 5 or more employees nationwide*	Businesses with 5 or more employees in the Design Industrial Classification
<b>Design-utilization Rate</b>	18.8%	39.9%	18.7%	37.4%

\* Design utilization calculations exclude Specialized Design Companies.

#### ► Design-Utilization Rate



- Among Companies Utilizing Design, 23.2% have a design department, 43.8% hire designers, and 62.7% outsource design.

#### ► Design-utilization Rates and Designer Hiring Rate (Based on the Survey of General Companies' Use)<sup>3</sup>

Companies Utilizing Design	Companies with design departments	Designer hiring companies	Design outsourcing ordering companies
<b>151,477</b>	35,160(23.2%)	66,416(43.8%)	95,029(62.7%)

<sup>3</sup> Secondary survey is being extracted based on industry and size, rather than using the design-utilization criteria of the primary survey. Therefore, the results of design-utilization criteria such as design departments, hiring designers, and design outsourcing in the Survey of General Companies' Use (primary survey) differ from the results of the Survey of Companies Utilizing Design (secondary survey).

▷ Design-utilization Rates of Businesses with 5 or More Employees

(Unit : company)

	Number of businesses	Number of businesses		Design-utilization rate
		5 or more employees in the Design Industrial Classification*	Companies Utilizing Design	
Sections of the Standard Industrial Classification	Agriculture, forestry, and fishing industry	3,240	546	16.9%
	Mining industry	624	0	0.0%
	Manufacturing industry	160,307	40,291	25.1%
	Electric, gas, steam, and water utilities industry	1,004	0	0.0%
	Sewage and waste treatment, raw material recycling and environmental restoration industry	5,434	0	0.0%
	Construction industry	70,706	16,481	23.3%
	Wholesale and retail industry	129,477	22,291	17.2%
	Transportation industry	23,161	1,637	7.1%
	Accommodation and restaurant industry	86,759	93	0.1%
	Publishing, video, broadcasting, and information services industry	23,098	11,056	47.9%
	Finance and insurance industry	27,590	6,918	25.1%
	Real estate and leasing industry	26,685	4,789	17.9%
	Professional, scientific, and technical services industry (excluding professional design industry)	44,454	12,919	29.1%
	Business facilities management and business support services industry	24,749	6,430	26.0%
	Public administration, defense, and social security administration (excluding central administration and local governments)	5,995	131	2.2%
	Education services industry (excluding universities)	45,156	10,222	22.6%
	Healthcare and social services industry	94,088	12,000	12.8%
	Arts, sports, and leisure-related services industry	12,845	2,912	22.7%
Associations and organizations, repair and other personal service industries industry	25,186	2,760	11.0%	
By size	Small enterprise	659,879	113,038	17.1%
	Medium enterprise	144,077	36,729	25.5%
	Large enterprise	6,602	1,710	25.9%
<b>Total</b>		<b>810,558</b>	<b>151,477</b>	<b>18.7%</b>

▷ Design-utilization Rates in the Design Industrial Classification

(Unit : company)

	Number of businesses	Number of businesses		Design-utilization rate
		5 or more employees in the Design Industrial Classification*	Companies Utilizing Design	
By Industrial Classification	Product design	56,812	18,557	32.7%
	Visual design	21,907	10,913	49.8%
	Digital/Multimedia design	10,563	6,997	66.2%
	Space design	93,211	26,847	28.8%
	Fashion/Textile design	11,607	6,754	58.2%
	Service/Experience design	83,870	34,823	41.5%
	Industrial craft design	18,355	4,048	22.1%
	Design infrastructure (design-based technology)	109,166	42,538	39.0%
By size	Small enterprise	332,913	112,320	33.7%
	Medium enterprise	61,406	32,630	53.1%
	Middle market enterprise	8,525	4,816	56.5%
	Large enterprise	2,647	1,710	64.6%
<b>Total</b>		<b>405,491</b>	<b>151,477</b>	<b>37.4%</b>



## 2) Design Industry Size of Companies Utilizing Design

- The size of the Companies Utilizing Design industry is 13.3501 trillion won (average design investment of 88.13 million won).
- Industry size is dominated by product design (2.9393 trillion won) and design infrastructure (2.9306 trillion won), followed by service/experience design (2.5647 trillion won) and space design (2.3612 trillion won).
- The average design investment amount by industry is product design (158.39 million won), followed by digital/multimedia design (102.95 million won), visual design (102.01 million won), etc.
- The larger the business, the higher the average design investment (57.08 million won for small enterprises, 139.41 million won for medium enterprises, 402.58 million won for middle market enterprises, and 1.86111 billion won for large enterprises).

### ▷ Design Industry Size of Companies Utilizing Design

(Unit : company, million won)

Item	2020			2021			Year-over-year increase/decrease rate	
	Number of Companies Utilizing Design	Average Design investment amount	Industry size	Number of Companies Utilizing Design	Average Design investment amount	Industry size		
By Industrial Classification	Product design	18,928	147.43	2,790,575	18,557	158.39	2,939,308	5.3%
	Visual design	10,061	150.58	1,515,006	10,913	102.01	1,113,188	-26.5%
	Digital/Multimedia design	4,916	142.94	702,634	6,997	102.95	720,313	2.5%
	Space design	30,535	78.51	2,397,195	26,847	87.95	2,361,210	-1.5%
	Fashion/Textile design	5,653	98.90	559,047	6,754	66.23	447,369	-20.0%
	Service/Experience design	25,227	92.03	2,321,731	34,823	73.65	2,564,672	10.5%
	Industrial craft design	5,713	52.47	299,751	4,048	67.56	273,441	-8.8%
	Design Infrastructure	46,562	53.69	2,499,739	42,538	68.89	2,930,568	17.2%
By size	Small enterprise	113,093	60.87	6,884,256	119,836	57.08	6,840,240	-0.6%
	Medium enterprise	32,036	120.92	3,873,884	28,769	139.41	4,010,715	3.5%
	Middle market enterprise	1,507	570.65	860,249	1,951	402.58	785,541	-8.7%
	Large enterprise	958	1,531.07	1,467,289	921	1861.11	1,713,572	16.8%
<b>Total</b>	<b>147,595</b>	<b>88.66</b>	<b>13,085,678</b>	<b>151,477</b>	<b>88.13</b>	<b>13,350,069</b>	<b>2.0%</b>	

### 3) Design Workforce of Companies Utilizing Design

- The average number of designers per Companies Utilizing Design is 2.08, representing an estimated design workforce of 271,230. The average number of designers hired by companies is 2.42.
- By industry, designers are more likely to work in the order of design infrastructure (68,236 designers), space design (54,613 designers), etc.
- The average design workforce by size is highest for large enterprises at 24.43, followed by small enterprises at 1.25.

#### ▷ Design Workforce of Companies Utilizing Design

(Unit : person)

Item	2020			2021			Year-over-year increase/decrease rate	
	Hiring companies' average number of designers	Using companies' average number of designers	Workforce size	Hiring companies' average number of designers	Using companies' average number of designers	Workforce size		
By Industrial Classification	Product design	3.47	2.10	39,698	3.07	2.47	45,792	15.4%
	Visual design	2.82	2.22	22,296	3.05	1.97	21,485	-3.6%
	Digital/ Multimedia design	3.57	3.29	16,183	2.55	2.32	16,251	0.4%
	Space design	2.85	1.94	59,164	2.71	2.03	54,613	-7.7%
	Fashion/ Textile design	2.51	2.26	12,786	2.14	1.54	10,399	-18.7%
	Service/ Experience design	3.88	2.07	52,148	2.26	1.87	48,267	-7.4%
	Industrial craft design	1.87	1.36	7,748	1.97	1.53	6,186	-20.2%
	Design Infrastructure	2.36	1.25	58,153	1.99	2.22	68,236	17.3%
By size	Small enterprise	2.22	1.37	155,204	1.75	1.25	149,902	-3.4%
	Medium enterprise	3.93	2.52	80,572	3.38	2.82	81,810	1.5%
	Middle market enterprise	12.59	9.63	14,518	10.12	8.98	16,936	16.7%
	Large enterprise	55.84	18.66	17,882	35.16	24.43	22,582	26.3%
<b>Total</b>	<b>2.92</b>	<b>1.82</b>	<b>268,176</b>	<b>2.42</b>	<b>2.08</b>	<b>271,230</b>	<b>1.1%</b>	

## 2. Size and Workforce of Specialized Design Companies

### 1) Design Industry Size of Specialized Design Companies

- The size of the design-specialized company industry reached 6.822 trillion won, an increase of 55.4% year-on-year. Meanwhile, the number of Specialized Design Companies increased to 19,465, a 169.3% increase from 2020 (7,229), with a significant increase in the number of visual design businesses by industry (2,627 → 10,015).
- By industry, interior design has the largest industry size (2.3588 billion won).

#### ▷ Design Industry Size of Specialized Design Companies

(Unit : company, million won)

Item	2020			2021			Year-over-year increase/decrease rate	
	Number of Specialized Design Companies	Average revenue	Industry size	Number of Specialized Design Companies	Average revenue	Industry size		
By industry	Product design	1,581	581.26	918,971	3,258	453.28	1,476,748	60.7%
	Visual design	2,627	353.38	928,340	10,015	213.70	2,140,183	130.5%
	Interior design	2,115	949.98	2,009,206	3,988	591.47	2,358,782	17.4%
	Fashion, textiles, and other design	906	588.52	533,195	2204	384.00	846,341	58.7%
<b>Total</b>	<b>7,229</b>	<b>607.24</b>	<b>4,389,712</b>	<b>19,465</b>	<b>350.48</b>	<b>6,822,054</b>	<b>55.4%</b>	

### 2) Design Workforce Size of Specialized Design Companies

- The design workforce of Specialized Design Companies is estimated to be 31,888 professionals (average of 1.64 designers per business).
- The design workforce increased across all industries, with visual design seeing the largest increase (6,555 → 15,971).

#### ▷ Design Workforce Size of Specialized Design Companies

(Unit : company, person)

Item	2020			2021			Year-over-year increase/decrease rate	
	Number of Specialized Design Companies	Average number of designers	Workforce size	Number of Specialized Design Companies	Average number of designers	Workforce size		
By industry	Product design	1,581	2.70	4,268	3,258	1.90	6,184	44.9%
	Visual design	2,627	2.50	6,555	10,015	1.59	15,971	143.1%
	Interior design	2,115	2.20	4,663	3,988	1.61	6,432	37.9%
	Fashion, textiles, and other design	906	1.91	1,731	2204	1.50	3,301	90.7%
<b>Total</b>	<b>7,229</b>	<b>2.38</b>	<b>17,217</b>	<b>19,465</b>	<b>1.64</b>	<b>31,888</b>	<b>85.2%</b>	

### 3. Industry Size and Workforce of the Public Sector

- The budget for dedicated design departments in the public sector was 95.7 billion won for the central administration and 137.2 billion won for local governments, totaling 233 billion won, a decrease from the previous year (250.1 billion won).
- The total workforce in dedicated design departments was 655, including 75 in the central administration and 580 in local governments, an increase from the previous year (588).

#### ▷ Design Investment Size and Workforce Status of the Public Sector

(Unit : million won, person)

Item	2020		2021	
	Dedicated design departments' total budget	Dedicated departments' total number of employees	Dedicated design departments' total budget	Dedicated departments' total number of employees
<b>Central administration</b>	81,069 *(2,064)	25	95,739 *(1,124)	75
<b>Local governments</b>	169,026 *(22,659)	563	137,224 *(29,524)	580
<b>Total</b>	<b>250,095</b> <b>*(24,723)</b>	<b>588</b>	<b>232,963</b> <b>*(30,648)</b>	<b>655</b>

## 4. Freelance Workforce Size

$$\text{Number of Freelancers} = \frac{\text{Number of employees in Specialized Design Companies \& Number of designers in General companies} \times \frac{\text{Number of designers who are self-employed with no employer}}{\text{Total number of Designer}} - \text{Number of One-person Specialized Design Companies without a place of business}}$$

- There were 43,899 freelance designers.
  - Number of freelancers : 43,899 = (31,889 workers in Specialized Design Companies + 271,230 designers in Companies utilizing design)\*16.5%
- Percentage of the self-employed with no employer among designers (Regional Employment Survey Code : 285) 16.5% (21.1% in 2020)

### ▷ Job Hiring Status of Freelance Designers

Item	Self-employed with no employer	Other than the self-employed with no employer Commercial, temporary, and day-to-day workers, and Self-employed with an employer, unpaid family workers	Total
Workforce status (percentage)	42,155(16.5%)	213,909(83.5%)	256,064(100.0%)

- The Number of Freelancers is calculated excluding the number of One-person Specialized Design Companies without a place of business.

### ▷ Freelance Workforce Size

Year	Freelance Designers (Including One-person Specialized Design Companies without a place of business)	The Number of One-person Specialized Design Companies			Freelance Designers (Excluding One-person Specialized Design Companies without a place of business)
		Total	Workforce with place of business <sup>4</sup>	Workforce without a place of business	
2021	51,877 (down 10,639 year-over-year)	13,887 (up 11,957 year-over-year)	2,488	11,399	40,478
2020	62,516	1,930	1,930	-	-

$$\text{The Freelancer Designer Industry Size} = \text{Number of Freelancers(estimated)} \times \text{The Average monthly wage of Self-employed Designers with no Employer} \times 12\text{months}$$

- The freelancer designer industry size was shown to be 956.3 billion won.
  - 956.3 billion won, freelance industry size = 40,478 freelancers
    - × 1.97 million won, the average monthly wage of self-employed designers with no employer
    - × 12 months
    - ※ Average monthly wage of self-employed designers with no employer is sourced from the Regional Employment Survey.

4\_ Beginning with the 2020 Economic Census, registration-based business counts will be published, so this year's design-specialized company workforce is estimated to include freelancers who operate with a business license and without a place of business. Therefore, starting this year, the industry size is calculated by estimating the freelance design workforce without a business license. The one-person design-specialized company workforce without a place of business was estimated by the average of the growth rate of the one-person business workforce in the recent three years.

- Year-over-year growth in the design-specialized one-person business workforce: 29.6% in 2020, 46.4% in 2019, 10.7% in 2018, 28.9% in 2021

## 5. Education Sector Size and Workforce

Education Sector  
**265.449 billion won**

Annual salary of professors in design departments(238.572 billion won)  
+ Research Expenses of design departments(26.877 billion won)

- The total size of the design industry in the education sector was analyzed to be 265.449 billion won. 238.572 billion won, annual salary of professors in design departments + 26.877 billion won, research expenses of design departments

※The education sector's workforce size is the sum of the number of full-time professors, associate professors, assistant professors, and non-tenure faculty in design-related departments at community colleges and four-year universities<sup>5</sup>.

### ▷ Annual Salary of Professors in Design Departments

(Unit : million won, people)

Item	2020			2021			
	Average of professor salary	Design departments' number of faculty	Design departments' professors' estimated annual salary	Average of professor salary	Design departments' number of faculty	Design departments' professors' estimated annual salary	
4-year university	Full-time professor	121.8	717	87,337	130.9	695	91,007
	Associate professor	101.8	331	33,688	109.4	335	36,653
	Assistant professor	85.5	426	36,402	91.9	398	36,560
	Non-tenure faculty	64.0	102	6,531	68.8	99	6,808
	<b>Subtotal</b>	-	<b>1,576</b>	<b>163,958</b>	-	<b>1,527</b>	<b>171,028</b>
Community	Full-time professor	115.6	219	25,307	124.2	211	26,211
	Associate professor	94.3	214	20,170	101.3	182	18,440
	Assistant professor	76.7	204	15,637	82.4	197	16,233
	Non-tenure faculty	51.5	124	6,389	55.4	120	6,660
	<b>Subtotal</b>	-	<b>761</b>	<b>67,503</b>	-	<b>710</b>	<b>67,545</b>
<b>Total</b>	-	<b>2,337</b>	<b>231,462</b>	-	<b>2,237</b>	<b>238,572</b>	

※The annual salary of professors in design department and the number of design department faculty members were calculated using the Education Statistics DB of the Korea Educational Development Institute.

### ▷ Design Department's Research Expenses

(Unit : million won)

Item	2020	2021	increase/decrease rate	
4-year university	Central government support	12,332	13,607	10.3%
	Local government support	3,322	1,791	-46.1%
	Private support	5,771	6,096	5.6%
	Foreign support	30	9	-70.0%
	On-campus support	3,279	4,067	24.0%
<b>Subtotal</b>	24,734	25,570	3.4%	
Community	Professor	1,259	1,307	3.8%
<b>Total</b>	<b>25,993</b>	<b>26,877</b>	<b>3.4%</b>	

※ Refer to the results of the 2021 National University Research Activity Survey Analysis Report.

5\_ Full-time faculty includes deans, professors, associate professors, assistant professors, and full-time lecturers before 2012, but excludes full-time lecturers as the "full-time lecturer system" was abolished in 2013. Thus, it now includes deans, professors, associate professors, and assistant professors. Non-full-time faculty includes adjunct professors, visiting professors, part-time lecturers, honorary professors, guest professors, and temporary professors. The number of full-time lecturers is not provided by the Education Statistics Service of the Korea Educational Development Institute and is thus estimated by the increase or decrease rate of enrolled students from 2020 compared to 2021.

## 03

## Size of Design Export &amp; Import

Companies utilizing design'  
Import amount

Number of using companies × Ratio of importers × (Average design investment amount × Percentage of overseas outsourcing design development)

- The size of the Companies utilizing design' design revenue is estimated at 13.9 billion won.

## ▷ Design import size

(Unit : million won)

Item	Number of Companies utilizing design	Rate of importers	Design investment cost	Percentage of overseas outsourcing of design development when developing design	Estimated import size
Design import	151,477	0.24%	88.13	44.24%	13,922

Companies utilizing design'  
Export amount

Number of Specialized Design Companies × Ratio of exporters × (Average revenue × Percentage of overseas revenue out of revenue)

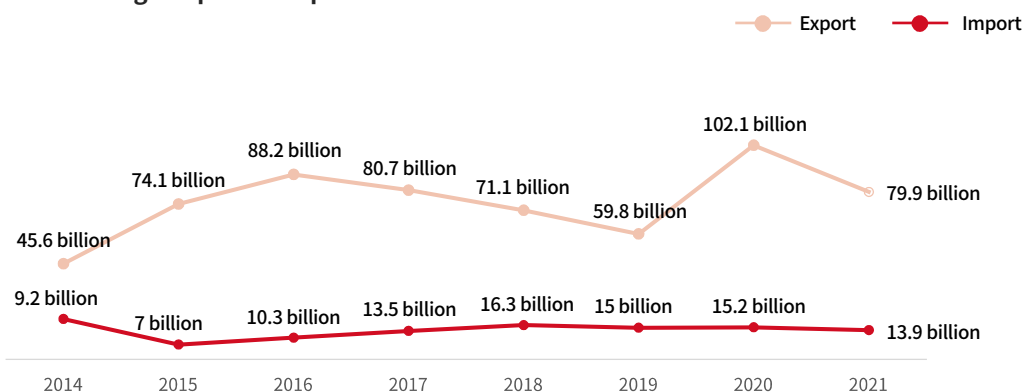
- Specialized Design Companies' design export size is estimated to be 79.9 billion won.

## ▷ Design export size

(Unit : million won)

Item	Number of design-specialized companies	Rate of exporters <sup>7</sup>	Revenue average	Percentage of overseas revenue out of revenue	Estimated export size
Design export	19,465	3.69%	350.48	31.71%	79,908

## ▷ Size of Design Export &amp; Import



6\_ Percentage of importers: Companies with 1% or more of outsourced design development and requests overseas companies among Companies utilizing design surveyed

7\_ Percentage of exporters: Companies with 1% or more revenue composition and foreign customer proportion among Specialized Design Companies surveyed

**Design's economic value**

Revenue of the business in the Design Industrial Classification  
× Value-added ratio × Design contributions

- The economic value of design in 2021 was analyzed to be 160 trillion won (113 trillion won in 2020).
- By industry, service/experience design (55.6 trillion won) and design infrastructure (43.6 trillion won) is high, followed by product design (26.0 trillion won), space design (18.3 trillion won), etc.

## ▷ The Economic Value of Design

Item	Revenue (Unit : million won)	Value-added ratio (Unit : %)	Design contributions (Unit : %)	Design's Economic value (Unit : million won)
Product design	307,734,004	29.5%	28.6%	25,988,610
Visual design	95,217,245	27.1%	26.2%	6,770,806
Digital/Multimedia design	36,103,255	48.7%	34.5%	6,067,483
Space design	153,544,112	42.5%	28.1%	18,342,373
Fashion/Textile design	26,194,347	20.5%	31.6%	1,695,326
Service/Experience design	361,341,295	64.3%	23.9%	55,563,308
Industrial craft design	17,168,872	31.7%	30.0%	1,632,693
Design infrastructure	327,666,886	56.7%	23.5%	43,607,794
<b>Total</b>	<b>1,327,980,789</b>	-	-	<b>159,668,393</b>

※ Revenue = Total revenue of businesses corresponding to the Design Industrial Classification (including Specialized Design Companies) × Design-utilization rate × Revenue growth rate in 2021 compared to 2020<sup>8</sup>

※ Design contributions: Results of the survey of Companies utilizing design as of 2021

※ Value-added ratio: Estimated from data of the Bank of Korea, the Design Industrial Classification's sub-classification and product classification codes were linked to calculate the value-added ratio for each section of the Design Industrial Classification. The value-added ratio is the proportion of value added to the total input of each product.

**8\_** For the total revenue of businesses corresponding to the Design Industrial Classification in the 2020 Economic Census, the revenue for 2021 was estimated using the growth rate of all industries' revenue from the corporate management analysis index announced by the Bank of Korea. The estimated revenue and the design-utilization rate for the year are applied to calculate the entire revenue of the design-utilization company.



## 1. Status of Graduates and the Employed of Design Departments at Colleges (Graduate Schools)

- The total number of graduates from design departments at colleges or graduate schools was 20,599 (21,112 in the previous year), and the employed were 12,243 (11,791 in the previous year).
- Meanwhile, there were 17,923 graduates, excluding enrollees to higher learning, the enlisted, the unemployable, the exemptible, and foreign students.

### ► Status of Graduates and the Employed of Design Departments at Colleges (Graduate Schools) (Unit : person)

Item	Status of Graduates and the Employed		
	Graduates	Graduates (A)	Employed (B)
2021	20,599	17,923	12,243
2020	21,112	18,279	11,791
<b>Increase/Decrease</b>	<b>-513</b>	<b>-356</b>	<b>452</b>

### ► Status of Graduates and the Employed of Design Departments at Colleges (Graduate Schools) by Classification (Unit : person)

Item	Status of Graduates and the Employed												
	Graduates				Graduates (A)				Employed (B)				
	Bachelor's	Master's	Doctor's	Total	Bachelor's	Master's	Doctor's	Total	Bachelor's	Master's	Doctor's	Total	
<b>Total</b>	<b>19,888</b>	<b>483</b>	<b>228</b>	<b>20,599</b>	<b>17,546</b>	<b>266</b>	<b>111</b>	<b>17,923</b>	<b>11,952</b>	<b>201</b>	<b>90</b>	<b>12,243</b>	
<b>By school</b>	Community colleges	8,542	-	-	8,542	7,136	-	-	7,136	4,924	-	-	4,924
	Universities	10,520	-	-	10,520	9,654	-	-	9,654	6,428	-	-	6,428
	Industrial universities	90	-	-	90	81	-	-	81	55	-	-	55
	Various colleges and universities	28	-	-	28	26	-	-	26	19	-	-	19
	General graduate schools	-	483	228	711	-	266	111	377	-	201	90	291
	Technical universities	708	-	-	708	649	-	-	649	526	-	-	526
<b>By major classification</b>	General design	1,712	307	105	2,124	1,509	157	33	1,699	1,006	118	27	1,151
	Product design	3,019	38	25	3,082	2,631	23	12	2,666	1,810	18	11	1,839
	Visual design	3,423	16	12	3,451	3,021	12	5	3,038	2,025	10	3	2,038
	Digital/Multimedia design	2,874	15	5	2,894	2,577	11	4	2,592	1,680	8	3	1,691
	Space design	3,313	25	5	3,343	2,869	17	5	2,891	2,013	13	5	2,031
	Fashion/Textile design	3,704	33	8	3,745	3,287	17	8	3,312	2,300	11	5	2,316
	Service/Experience design	443	22	10	475	413	14	2	429	279	13	2	294
	Industrial craft design	718	20	58	796	624	9	42	675	384	5	34	423
Design infrastructure	682	7	-	689	615	6	-	621	455	5	-	460	

※ Data cited from the Korea Educational Development Institute

※ Survey-based date : December 31, 2021

※ Graduates are divided into employed and unemployed, and the unemployed are divided into enrollees to higher learning, the enlisted, the unemployable, the exemptible, foreign students, etc. When calculating the employment rate, we used graduates (A), which exclude enrollees to higher learning, the enlisted, the unemployable, the exemptible, and foreign students, etc.

※ Graduates (A) refer to the number of students who have graduated, excluding enrollees to higher learning, the enlisted, the unemployable, the exemptible, foreign students, etc.

※ Employed: Employed with health insurance, employed on campus, employed overseas, employed in agriculture, forestry, and fishery, employed in personal creative activities, one-person founder/businessperson, and freelancers.

## 2. Status of Graduation and Employment Rates of Design Majors in Colleges (Universities)

- The employment rate of design graduates was 68.3% , an increase of 3.8%p from the previous year.
- Employment rates by degree were 68.1% for bachelor's, 75.6% for master's, and 81.1% for doctor's.

### ▷ Status of Graduates and the Employed of Design Departments at Colleges (Graduate Schools)

(Unit : person)

Item	Status of Graduates and the Employment Rate		
	Graduates (A)	Employed (B)	Employment rate (C=B/A)
2021	17,923	12,243	68.3%
2020	18,279	11,791	64.5%
Increase/Decrease	-356	452	3.8%p

### ▷ Status of Graduates and the Employed of Design Departments at Colleges (Graduate Schools)

(Unit : person)

Item	Status of Graduates and the Employment Rate												
	Graduates (A)				Employed (B)				Employment rate (C=B/A, %)				
	Bachelor's	Master's	Doctor's	Total	Bachelor's	Master's	Doctor's	Total	Bachelor's	Master's	Doctor's	Total	
<b>Total</b>	<b>17,546</b>	<b>266</b>	<b>111</b>	<b>17,923</b>	<b>11,952</b>	<b>201</b>	<b>90</b>	<b>12,243</b>	<b>68.1</b>	<b>75.6</b>	<b>81.1</b>	<b>68.3</b>	
By school	Community colleges	7,136	-	-	7,136	4,924	-	-	4,924	69.0	-	-	69.0
	Universities	9,654	-	-	9,654	6,428	-	-	6,428	66.6	-	-	66.6
	Industrial universities	81	-	-	81	55	-	-	55	67.9	-	-	67.9
	Various colleges and universities	26	-	-	26	19	-	-	19	73.1	-	-	73.1
	General graduate schools	-	266	111	377	-	201	90	291	-	75.6	81.1	77.2
	Technical universities	649	-	-	649	526	-	-	526	81.0	-	-	81.0
By major classification	General design	1,509	157	33	1,699	1,006	118	27	1,151	66.7	75.2	81.8	67.7
	Product design	2,631	23	12	2,666	1,810	18	11	1,839	68.8	78.3	91.7	69.0
	Visual design	3,021	12	5	3,038	2,025	10	3	2,038	67.0	83.3	60.0	67.1
	Digital/Multimedia design	2,577	11	4	2,592	1,680	8	3	1,691	65.2	72.7	75.0	65.2
	Space design	2,869	17	5	2,891	2,013	13	5	2,031	70.2	76.5	100.0	70.3
	Fashion/Textile design	3,287	17	8	3,312	2,300	11	5	2,316	70.0	64.7	62.5	69.9
	Service/Experience design	413	14	2	429	279	13	2	294	67.6	92.9	100.0	68.5
	Industrial craft design	624	9	42	675	384	5	34	423	61.5	55.6	81.0	62.7
	Design infrastructure	615	6	-	621	455	5	-	460	74.0	83.3	-	74.1

- ※ Data cited from the Korea Educational Development Institute
- ※ Survey-based date : December 31, 2021
- ※ Graduates are divided into employed and unemployed, and the unemployed are divided into enrollees to higher learning, the enlisted, the unemployable, the exemptable, foreign students, etc. When calculating the employment rate, we used graduates (A), which exclude enrollees to higher learning, the enlisted, the unemployable, the exemptable, foreign students, etc.
- ※ Graduates (A) refer to the number of students who have graduated, excluding enrollees to higher learning, the enlisted, the unemployable, the exemptable, foreign students, etc.
- ※ Employment rate:  $\text{Employed} / \{\text{Graduates} - (\text{Enrollees to higher learning} + \text{The enlisted} + \text{The unemployable} + \text{The exemptable} + \text{Foreign students})\} * 100$
- ※ Employed: Employed with health insurance, employed on campus, employed overseas, employed in agriculture, forestry, and fishery, employed in personal creative activities, one-person founder/businessperson, and freelancers

# 3

## **SUMMARY OF SURVEY RESULTS**

**1. COMPANIES UTILIZING DESIGN**

**2. SPECIALIZED DESIGN COMPANIES**

**3. PUBLIC SECTOR**

# 1

## Companies Utilizing Design

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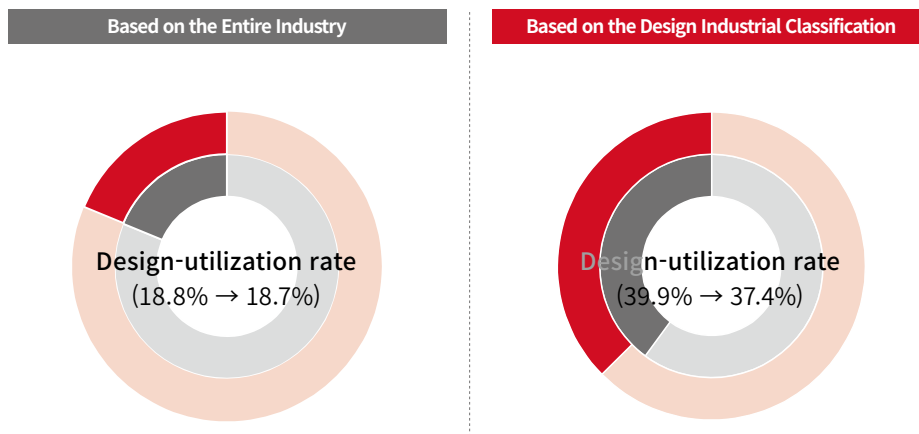
1. Design-utilization Rate
  2. Design Utilization Fields
  3. Financial and Investment Status
  4. Design Investment Amount
  5. Design Development Expenses and Number of Cases
  6. Designer/Specialized Design Companies involvement stage in the new product development process
  7. Design Workforce
  8. Status of Design Workforce Job Openings, Recruitment, and Retirements
  9. Design Workforce Recruitment Channels and Challenges
  10. Design Workforce Education and Challenges
  - 11-1. Outlook on the Design Investment Amount
  - 11-2. Outlook on Hiring Designers
  12. Percentage of Factors Influencing Product Sales
  13. Design Investment and Utilization Contributions
  14. Overseas Business Status
  15. Demand for Design-related Government Support
  16. Impact of COVID-19
-

# 1. Design-utilization Rate

- (Based on the entire industry) The design utilization rate (across all industries) was 18.7% in 2021 (18.8% in 2020)
- (Based on the design industrial classification) The design-utilization rate was 37.4% in 2021, down 2.5%p from 2020 (39.9%).

## ▶ Design-utilization Rates by the Entire Industry/Design Industrial Classification

(Unit : %)



## ▷ Design-utilization Rates by the Entire Industry/Design Industrial Classification

(Unit : %)

Item		Utilize Design	in Utilize Design
<b>Total</b>		<b>37.4</b>	<b>62.6</b>
By Industry	Product design	32.7	67.3
	Visual design	49.8	50.2
	Digital/Multimedia design	66.2	33.8
	Space design	28.8	71.2
	Fashion/Textile design	58.2	41.8
	Service/Experience design	41.5	58.5
	Industrial craft design	22.1	77.9
	Design infrastructure	39.0	61.0

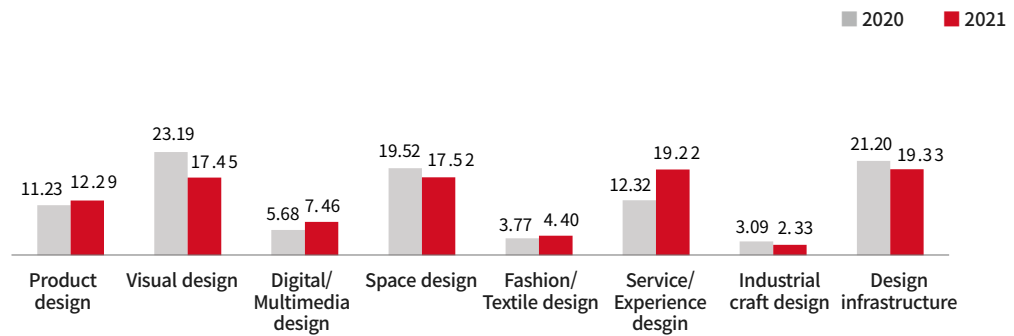
**Note** In 2020, the design utilization rate was calculated excluding unincorporated associations, but they were included in the calculation this year. Use caution when comparing.

## 2. Design Utilization Fields

- Companies utilizing design' main design utilization fields (based on multiple responses) were “Design infrastructure” (19.33%), “Service/Experience” (19.22%), etc. in order.
- “Visual design” “Space design” and “Design infrastructure” decreased while “Digital/Multimedia design” and “Service/Experience design” increased.

### ► Design Utilization Fields

(Unit : %)



### ▷ Design Utilization Fields

(Unit : %)

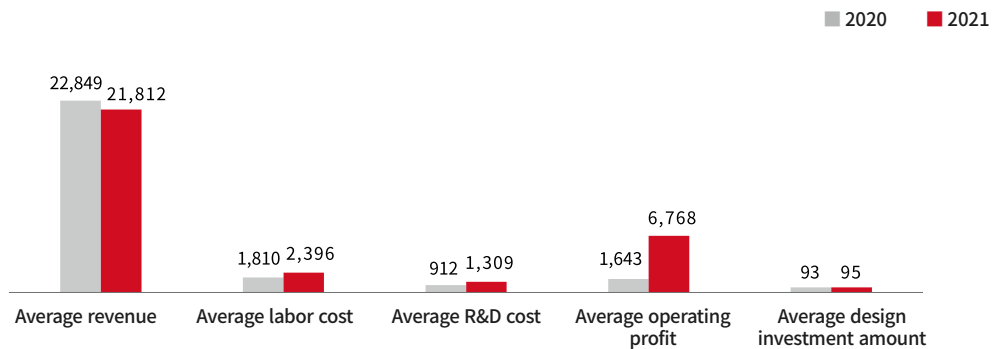
Item		Product Design	Visual Design	Digital media Design	Space Design	Fashion/Textile Design	Services/Experience Design	Industrial craft Design	Design infrastructure
<b>Total</b>		<b>12.29</b>	<b>17.45</b>	<b>7.46</b>	<b>17.52</b>	<b>4.40</b>	<b>19.22</b>	<b>2.33</b>	<b>19.33</b>
<b>By industry</b>	Product design	84.55	13.05	2.08	0.04	0.04	0.19	0.03	0.01
	Visual design	0.15	98.77	0.86	0.23	0.00	0.00	0.00	0.00
	Digital/Multimedia design	0.00	6.64	91.76	0.68	0.00	0.78	0.00	0.13
	Space design	0.67	2.38	2.09	94.00	0.35	0.46	0.00	0.05
	Fashion/Textile design	0.96	8.27	1.07	0.36	87.27	0.40	1.49	0.17
	Service/Experience design	0.24	15.31	3.95	2.43	0.24	77.80	0.00	0.03
	Industrial craft design	0.00	15.12	0.43	0.00	0.00	0.00	84.45	0.00
	Design infrastructure	6.08	13.24	5.59	0.82	1.36	4.19	0.00	68.72
<b>By size</b>	Large enterprise	10.64	21.78	3.93	4.86	1.60	22.75	3.72	30.72
	Middle market enterprise	11.25	19.55	21.00	12.40	2.28	22.68	0.12	10.72
	Medium enterprise	11.61	14.16	10.16	17.27	3.80	13.12	1.62	28.26
	Small enterprise	12.49	18.18	6.62	17.76	4.60	20.62	2.52	17.21

### 3. Financial and Investment Status

- Examining the financial and investment status of Companies utilizing design, “Revenue” averaged 21.8249 billion won and “design investment amount” averaged 94.71 million won (including the service cost of Specialized Design Companies).
- “Design investment amount” was higher in large companies with an average of 1.85711 billion won, compared to an average of 420.25 million won in mid-sized companies.

#### ▶ Financial and Investment Status

(Unit : million won)



#### ▷ Financial and Investment Status

(Unit : million won)

Item		Revenue	Labor cost	R&D cost	Operating profit	Design investment amount
<b>Total</b>		<b>21,812.49</b>	<b>2,395.60</b>	<b>1,309.19</b>	<b>6,768.00</b>	<b>94.71</b>
By industry	Product design	121,432.23	11,631.09	9,821.90	13,421.82	160.17
	Visual design	8,351.07	1,059.53	161.20	626.33	107.50
	Digital/ Multimedia design	5,534.11	953.49	264.74	366.90	112.13
	Space design	7,696.06	1,257.33	40.01	201.11	90.33
	Fashion/Textile design	5,256.00	523.90	37.75	164.86	70.52
	Service/Experience design	6,384.06	1,284.83	171.17	21,128.38	76.68
	Industrial craft design	11,312.23	881.99	119.02	590.01	68.85
	Design infrastructure	9,651.35	1,015.45	109.52	518.48	83.84
By size	Large enterprise	2,415,242.23	226,966.55	195,508.84	271,821.70	1,857.11
	Middle market enterprise	100,099.36	11,355.84	2,028.79	5,285.25	420.25
	Medium enterprise	19,266.10	2,614.02	289.96	849.26	157.44
	Small enterprise	2,707.78	466.86	44.56	6,177.05	60.78

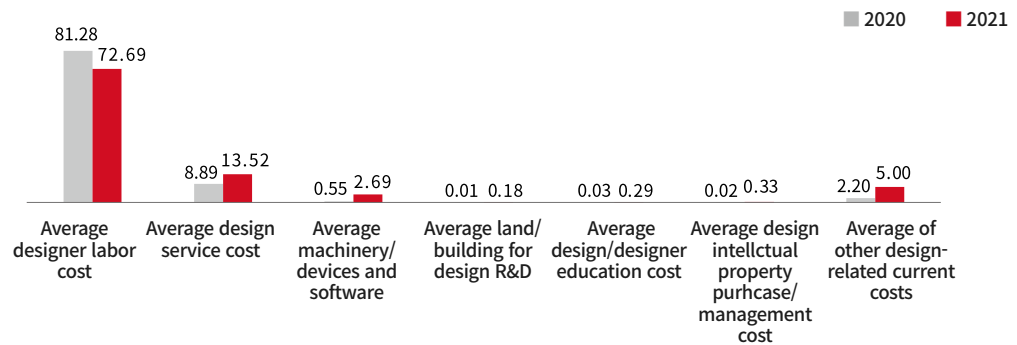


## 4. Design Investment Amount

- The highest design investment amount for Companies utilizing design is the “Designer labor cost” with an average of 72.69 million won, followed by “Design service cost” (an average of 13.52 million won).
- “Designer labor cost” (81.28 million won → 72.69 million won) decreased, while “Design service cost” (8.89 million won → 13.52 million won) increased.

### ► Design Investment Amount

(Unit : million won)



### ▷ Design Investment Amount in 2021

(Unit : million won)

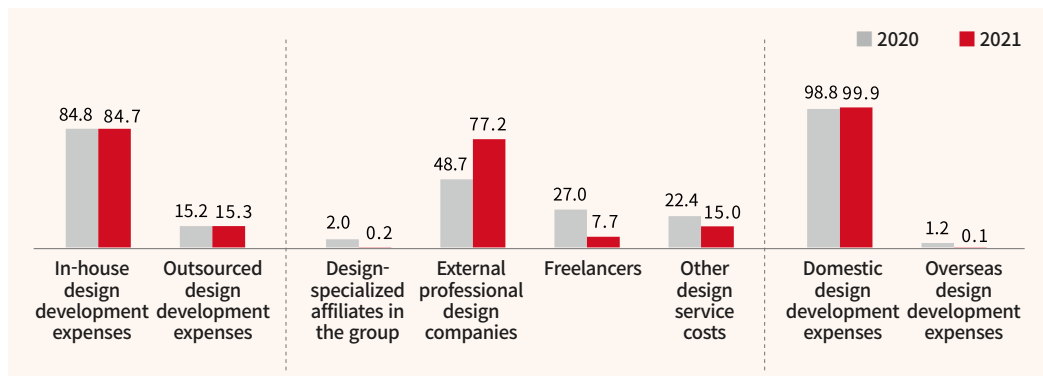
Item	Design investment amount	Designer labor cost	Design service cost					Design machinery/devices and software	Land for design research development/build-in	Design education cost	Design knowledge property right purchase and management fees	Design current expenses	
			Sub-total	In-group design-specialized affiliates	External professional design companies	Freelancers	Other						
<b>Total</b>	<b>94.71</b>	<b>72.69</b>	<b>13.52</b>	<b>0.01</b>	<b>6.58</b>	<b>0.65</b>	<b>1.28</b>	<b>2.69</b>	<b>0.18</b>	<b>0.29</b>	<b>0.33</b>	<b>5.00</b>	
<b>By industry</b>	Product design	160.17	142.56	4.43	0.06	1.78	0.44	0.66	4.97	0.00	0.33	0.64	7.24
	Visual design	107.50	77.34	18.91	0.05	5.49	0.77	0.37	4.49	0.00	0.84	0.36	5.57
	Digital/Multi-media design	112.13	89.56	14.50	0.02	9.18	0.24	0.22	1.96	0.00	0.30	0.94	4.86
	Space design	90.33	74.90	7.37	0.00	2.37	0.79	1.71	2.33	1.04	0.67	0.10	3.91
	Fashion/Textile design	70.52	56.35	8.90	0.00	4.29	0.39	1.19	2.30	0.01	0.11	0.04	2.82
	Service/Experience design	76.68	65.85	8.08	0.00	3.03	0.61	1.63	0.92	0.00	0.04	0.00	1.79
	Industrial craft design	68.85	62.33	2.31	0.00	1.30	0.00	0.21	2.34	0.00	0.10	0.12	1.66
	Design infrastructure	83.84	46.04	26.07	0.01	14.95	0.84	1.50	3.11	0.00	0.16	0.56	7.89
<b>By size</b>	Large enterprise	1,857.11	1,830.07	9.85	1.09	3.62	0.00	2.25	3.70	0.00	1.12	0.46	11.92
	Middle market enterprise	420.25	347.24	12.45	0.32	3.73	2.92	0.55	21.61	0.00	4.02	0.35	34.59
	Medium enterprise	157.44	108.15	32.96	0.02	19.04	1.07	1.56	4.28	0.96	0.48	0.46	10.15
	Small enterprise	60.78	46.21	8.86	0.00	3.63	0.52	1.21	1.99	0.00	0.18	0.29	3.24

## 5. Design Development Expenses and Number of Cases

- As for the percentage of design expenses, “In-house design development” was shown to be 84.7% and “Outsourced design development” was 15.3%.
- The highest outsourced development cost was “External professional design companies” (77.2%).
- When looking at the percentage by number of cases, we see similar results to the share of expenses, with a relatively high share of in-house design development (expense : 84.7%, number of cases : 87.7%).

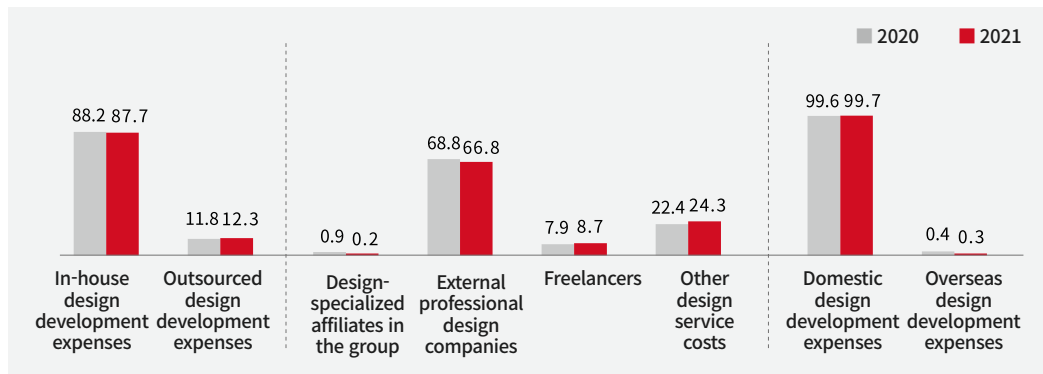
### ▶ Design Development Expenses (Percentage)

(Unit : %)



### ▶ Number of Design Developments (Percentage)

(Unit : %)



### ▷ Average Number and Expenses of Design Development as of 2021

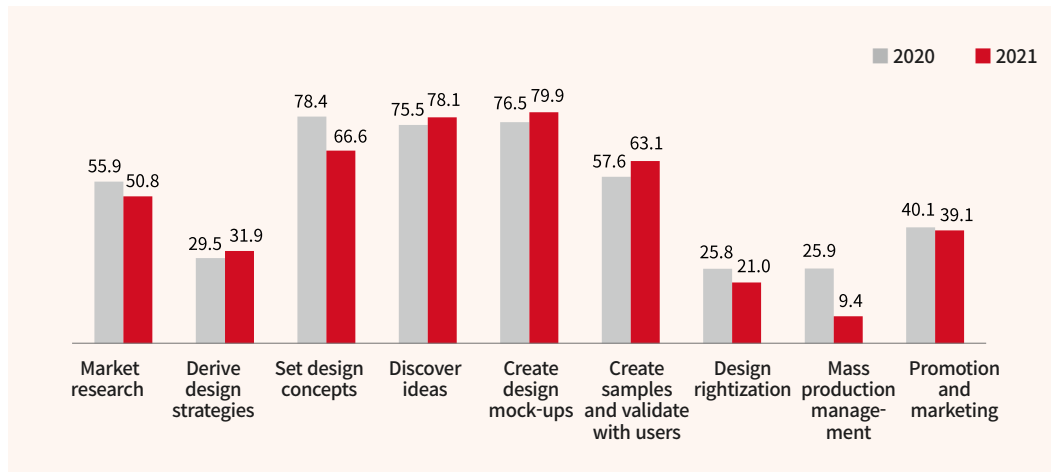
Item	In-house design development expenses	Out-sourced design development expenses	By outsourcing target				Domestic and overseas commissions	
			Specialized affiliates in the group	Outside professional design companies	Free-lancers	Other design service costs	Domestic design development expenses	Overseas design development expenses
<b>Expenses (Unit : million won)</b>	<b>47.25</b>	<b>8.52</b>	<b>0.01</b>	<b>6.58</b>	<b>0.65</b>	<b>1.28</b>	<b>8.52</b>	<b>0.01</b>
<b>Number of cases (Unit : Number of cases)</b>	<b>13.37</b>	<b>1.88</b>	<b>0.00</b>	<b>1.25</b>	<b>0.16</b>	<b>0.46</b>	<b>1.87</b>	<b>0.00</b>

## 6. Designer/Specialized Design Companies involvement stage in the new product development process

- In the designer’s involvement stage in new product development, “Create design mock-ups” (79.9%) and “Discover ideas” (78.1%) were the highest, followed by “Set design concepts” (66.6%) and “Create samples and validate with users” (63.1%).
- In the design-specialized company’s involvement stage, “Create design mockups” (64.2%), followed by “Set design concepts” (52.4%), “Create samples and validate with users” (43.8%), etc.

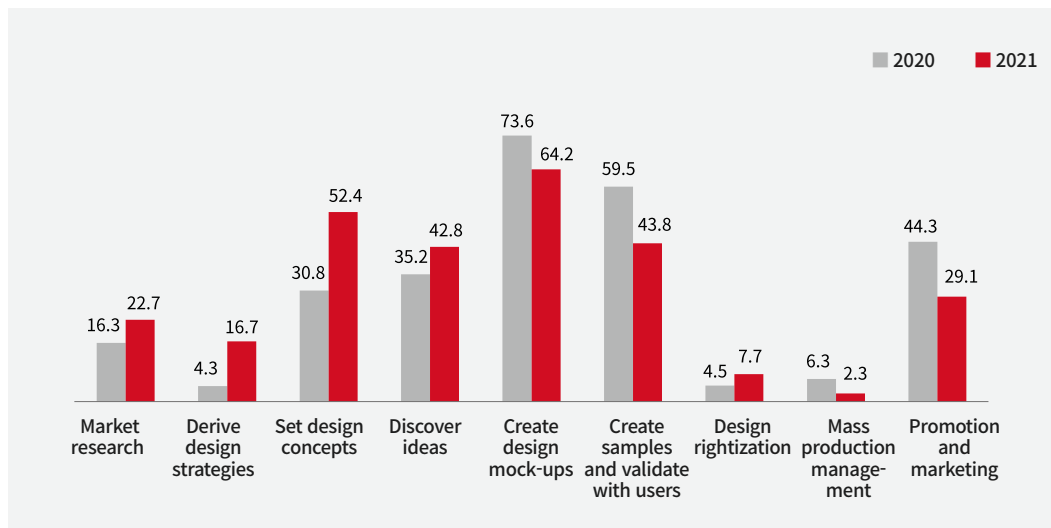
### ► Designer’s involvement stage in the new product development process

(Duplicate responses, unit: %)



### ► Design-specialized company’s involvement stage in the new product development process

(Duplicate responses, unit: %)

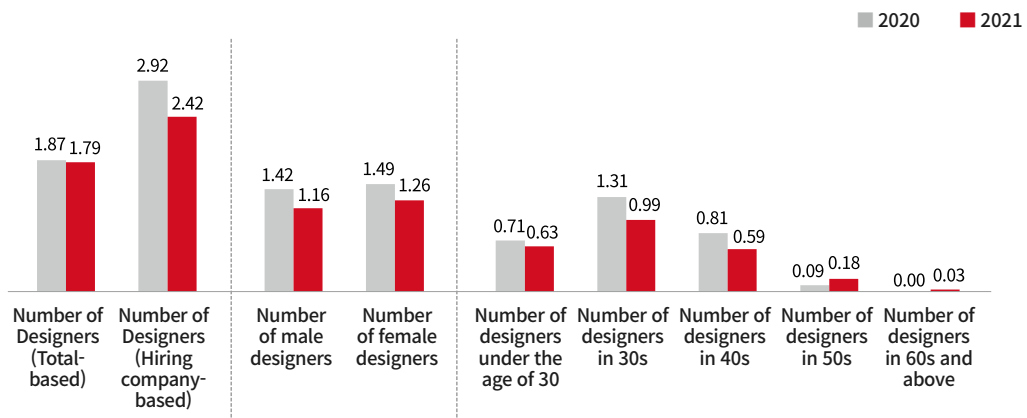


## 7. Design Workforce

- The average number of designers is 1.79 across all Companies utilizing design, compared to 2.42 across designer-hiring companies.
- By hiring companies, female designers (1.26) outnumber men (1.16), and by age, those in their 30s (0.99) were the most common.

### ► Design Workforce

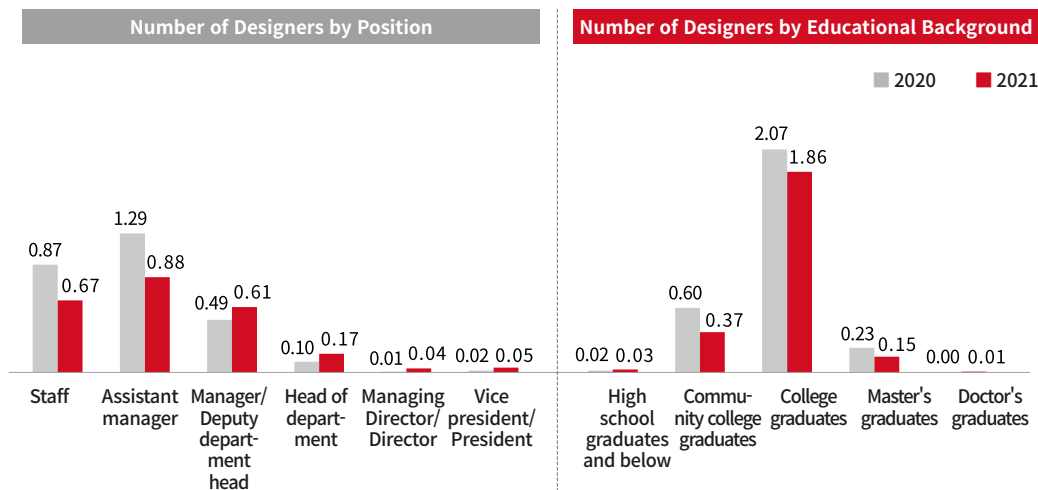
(Unit : person)



- By position, the most common was “Assistant manager” (0.88), followed by “Staff” (0.67).
- By educational background, “College graduate” (1.86) was the most common.

### ► Design Workforce by Position and Educational Background

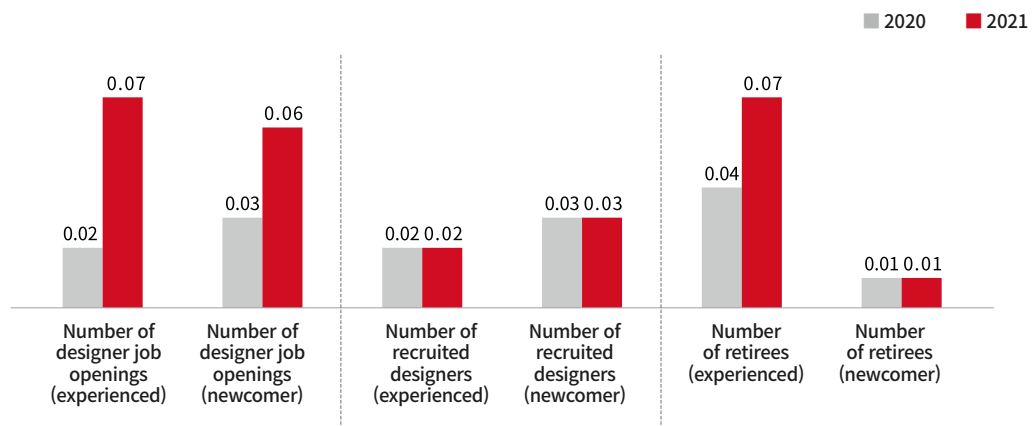
(Unit : person)



## 8. Status of Design Workforce Job Openings/Recruitment/Retirements

- When examining the status of design workforce job openings, recruitment, and retirements, the average “Number of recruiting designers (experienced)” and “Number of retiring designers” were both is 0.07.
- “Number of recruiting designers (experienced)” is 0.02, which is lower than the retired ones (0.07).

► Status of Design Workforce Job Openings/Recruitment/Retirements (Unit : person)



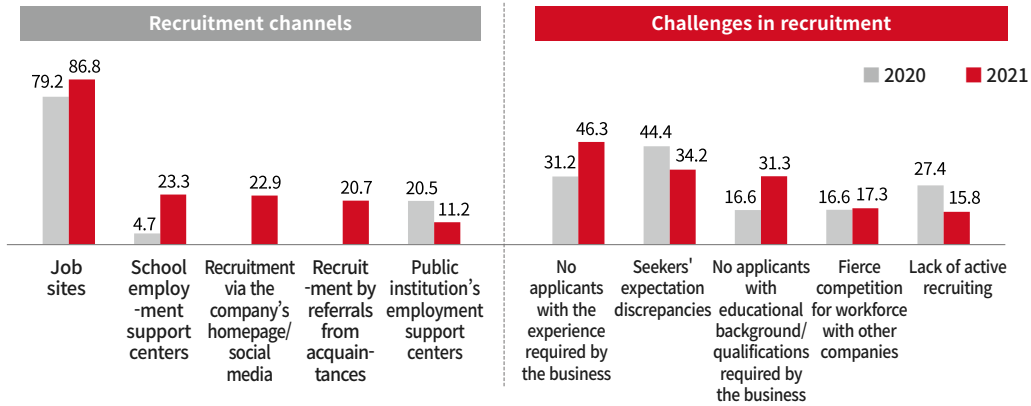
▷ Status of Design Workforce Job Openings/Recruitment/Retirements (Unit : person)

Item	Job opening		Recruitment		Retirement		
	Experienced designer	New designer	Experienced designer	New designer	Experienced designer	New designer	
<b>Total</b>	<b>0.07</b>	<b>0.06</b>	<b>0.02</b>	<b>0.03</b>	<b>0.07</b>	<b>0.01</b>	
<b>By industry</b>	Product design	0.05	0.05	0.03	0.03	0.05	0.00
	Visual design	0.14	0.08	0.06	0.06	0.16	0.00
	Digital/Multimedia design	0.12	0.03	0.06	0.03	0.11	0.01
	Space design	0.10	0.06	0.00	0.05	0.11	0.03
	Fashion/Textile design	0.02	0.03	0.05	0.01	0.08	0.01
	Service/Experience design	0.03	0.01	0.01	0.01	0.02	0.00
	Industrial craft design	0.03	0.01	0.09	0.00	0.03	0.00
	Design infrastructure	0.06	0.10	0.01	0.03	0.07	0.00
<b>By size</b>	Large enterprise	0.23	0.23	0.24	0.18	0.12	0.05
	Middle market enterprise	0.32	0.24	0.15	0.25	0.36	0.03
	Medium enterprise	0.11	0.06	0.02	0.04	0.11	0.01
	Small enterprise	0.05	0.06	0.02	0.02	0.06	0.01

## 9. Design Workforce Recruitment Channels and Challenges

- As in previous years, the most common design workforce recruitment channel was “Job sites” (86.8%).
- The top challenge in recruitment was “No applicants with the experience required by the business” (46.3%).

▶ Design Workforce Recruitment Channels and Challenges (Top 5, duplicate responses, unit: %)



▷ Design Workforce Recruitment Channels and Challenges (Top 5, duplicate responses, unit: %)

Item	Recruitment channels					Challenges in recruitment					
	Job sites	School employment support centers	Company's homepage/social media recruitment	Recruitment by referrals from acquaintances	Public institution's employment support centers	No applicants with the experience required by the business	Job seekers' expectation discrepancies	No applicants with educational background/qualifications required by the business	Fierce competition for workforce with other companies	Lack of active recruiting	
<b>Total</b>	<b>86.8</b>	<b>23.3</b>	<b>22.9</b>	<b>20.7</b>	<b>11.2</b>	<b>46.3</b>	<b>34.2</b>	<b>31.3</b>	<b>17.3</b>	<b>15.8</b>	
By industry	Product design	74.2	9.0	32.3	17.5	15.3	45.3	42.3	30.9	12.5	15.2
	Visual design	84.7	8.9	47.5	18.5	13.4	33.2	25.6	27.2	8.5	12.8
	Digital/Multi-media design	81.3	14.0	30.6	18.7	6.8	36.2	31.4	33.1	20.7	23.5
	Space design	83.3	14.7	16.5	24.2	33.8	41.3	46.9	39.9	17.9	14.5
	Fashion/Textile design	95.1	9.1	21.4	17.8	0.0	29.3	27.3	23.0	7.3	19.3
	Service/Experience design	87.1	15.2	29.5	5.2	9.6	41.9	31.0	14.4	8.1	13.0
	Industrial craft design	92.5	8.6	8.5	21.7	0.2	39.6	48.8	14.8	11.7	5.6
	Design infrastructure	93.8	47.6	13.4	30.7	0.1	60.0	27.1	40.3	28.0	18.3
By size	Large enterprise	68.0	20.1	47.3	15.9	6.5	69.0	22.1	62.6	18.9	0.0
	Middle market enterprise	74.9	27.5	60.9	6.8	18.4	54.9	35.5	41.4	7.9	5.2
	Medium enterprise	90.0	29.1	26.9	17.6	14.0	56.8	35.8	40.7	17.5	14.1
	Small enterprise	86.2	21.6	20.8	21.8	10.3	43.0	33.8	28.3	17.5	16.7

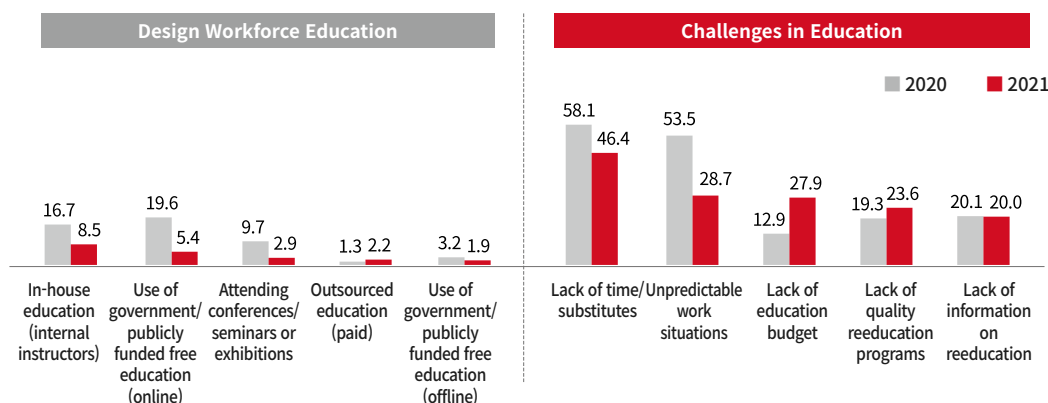
**Note** For recruitment channels, the items of “Recruitment via online”, “Recruitment through school ties and regional relations,” and “Recruitment information companies” were removed, and “School employment counseling centers” were changed to “School employment support centers,” “Public institution’s employment placement centers” to “Public institution’s employment support centers,” and “Government/municipal job fairs” to “Recruitment at job fairs.” In addition, we added “Job sites”, “Recruitment via the company’s homepage/social media”, and “Recruitment by referrals from acquaintances” Use caution when comparing trends.

## 10. Design Workforce Education and Challenges

- In 2020, the most common types of design workforce education were “In-house education (internal instructors)” (8.5%), “Government/publicly funded free education” (5.4%), etc.
- The top education challenge was “Lack of time and substitutes” (46.4%).

### ► Design Workforce Education and Challenges

(Top 5, duplicate responses, unit: %)



### ▷ Design Workforce Education and Challenges

(Top 5, duplicate responses, unit: %)

Item	Design Workforce Education					Challenges in Education					
	In-house education (Internal Instructors)	Use of government/publicly funded free education (online)	Attending conferences, seminars, or exhibitions	Out-sourced education (Paid)	Use of government/publicly funded free education (offline)	Lack of time/substitutes	Unpredictable work situations	Lack of education budget	Lack of quality reeducation programs	Lack of information on reeducation	
<b>Total</b>	<b>8.5</b>	<b>5.4</b>	<b>2.9</b>	<b>2.2</b>	<b>1.9</b>	<b>46.4</b>	<b>28.7</b>	<b>27.9</b>	<b>23.6</b>	<b>20.0</b>	
<b>By industry</b>	Product design	14.4	6.9	6.9	1.3	0.7	53.6	34.6	38.7	13.5	8.5
	Visual design	14.3	5.7	7.1	5.2	1.7	39.8	30.3	35.6	18.8	25.8
	Digital/Multi media design	17.6	8.4	5.6	4.5	1.8	47.0	46.1	30.0	14.8	21.6
	Space design	10.9	6.1	3.4	0.9	1.8	51.5	41.9	16.0	32.0	20.7
	Fashion/Textile design	7.9	7.4	1.3	2.0	1.1	49.2	41.1	31.5	7.4	10.0
	Service/Experience design	8.7	4.4	0.1	1.1	0.7	64.2	13.5	47.5	16.8	16.1
	Industrial craft design	6.3	5.3	10.5	0.1	2.3	44.6	23.4	63.0	19.7	5.1
	Design infrastructure	1.7	4.0	0.8	3.3	3.3	30.1	23.1	12.3	32.7	28.4
<b>By size</b>	Large enterprise	35.2	9.5	9.2	24.1	10.9	56.8	33.4	13.1	30.1	33.4
	Middle market enterprise	56.8	5.5	8.2	20.8	0.0	15.6	34.9	34.5	7.8	36.7
	Medium enterprise	15.3	5.8	3.8	4.4	1.3	38.4	31.8	16.8	29.8	24.6
	Small enterprise	5.4	5.2	2.5	1.1	2.0	49.1	27.7	31.0	22.1	18.3

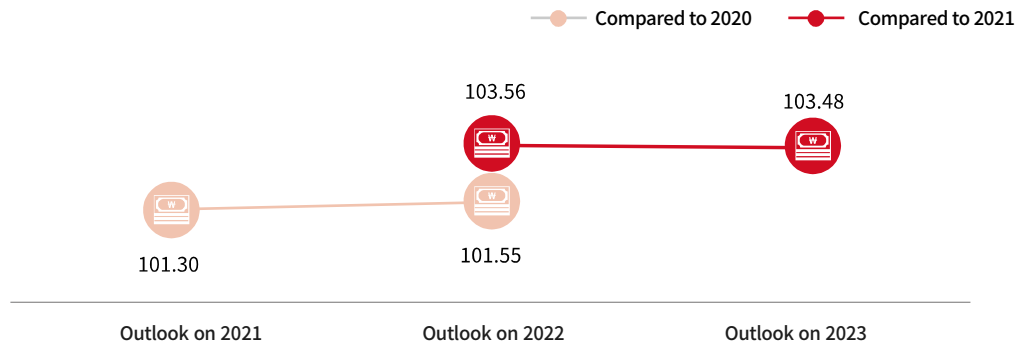
**Note** The item in design workforce education has changed, so caution is required when comparing trends. - “Communication skills including foreign languages” → “Foreign language competencies” among business competencies

## 11-1. Outlook on the Design Investment Amount

- Both outlooks on 2022 and 2023 design investment amounts of Companies utilizing design indicate an increase (103.56% in 2022 and 103.48% in 2023).
- Positive outlooks by size are higher for medium enterprises in 2022 (108.32%) and middle market enterprises in 2023 (106.20%).

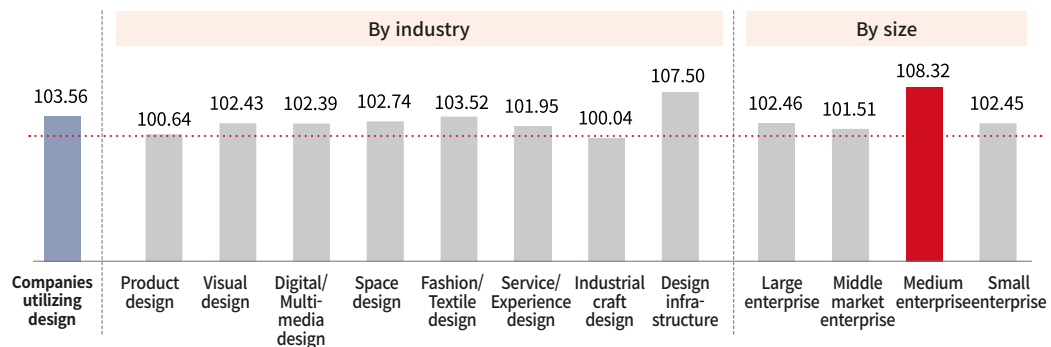
### ▶ Outlook on the Design Investment Amount

(Unit : %)



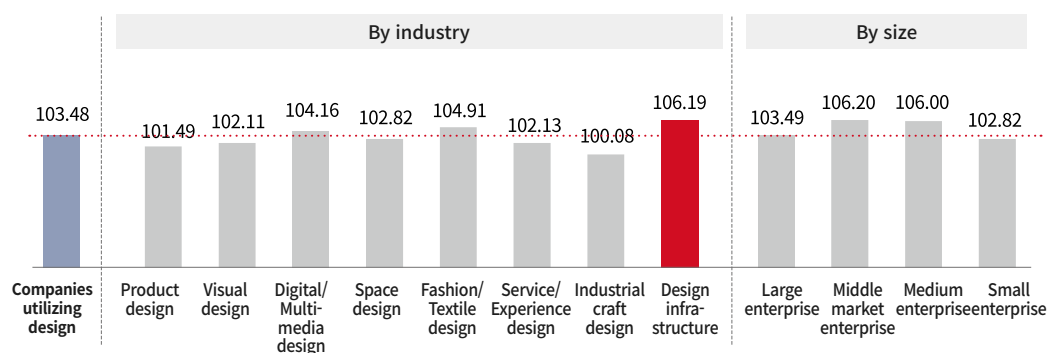
### ▶ Outlook on the Design Investment Amount in 2022

(Unit : %)



### ▶ Outlook on the Design Investment Amount in 2023

(Unit : %)



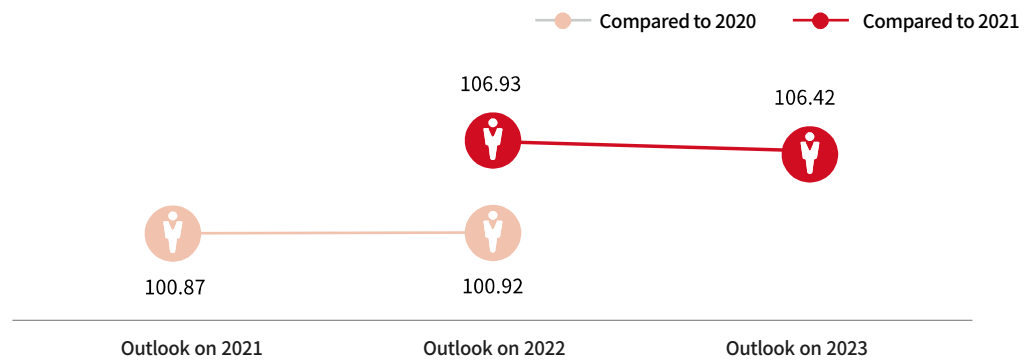


## 11-2. Outlook on Designer Hiring

- The outlook on hiring designers is expected to increase in both 2022 and 2023 (106.93% and 106.42%, respectively).
- By industry, space design has the highest positive outlook in both 2022 (117.30%) and 2023 (116.77%).

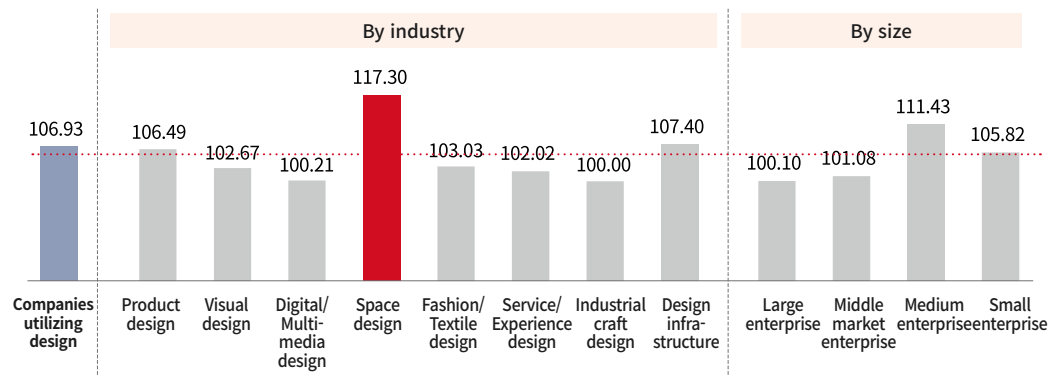
### ► Outlook on Designer Hiring

(Unit : %)



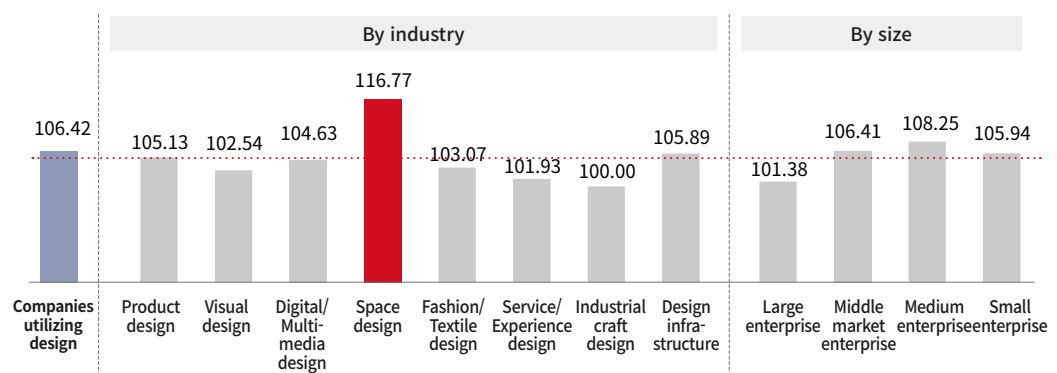
### ► Outlook on Designer Hiring in 2022

(Unit : %)



### ► Outlook on Designer Hiring in 2023

(Unit : %)

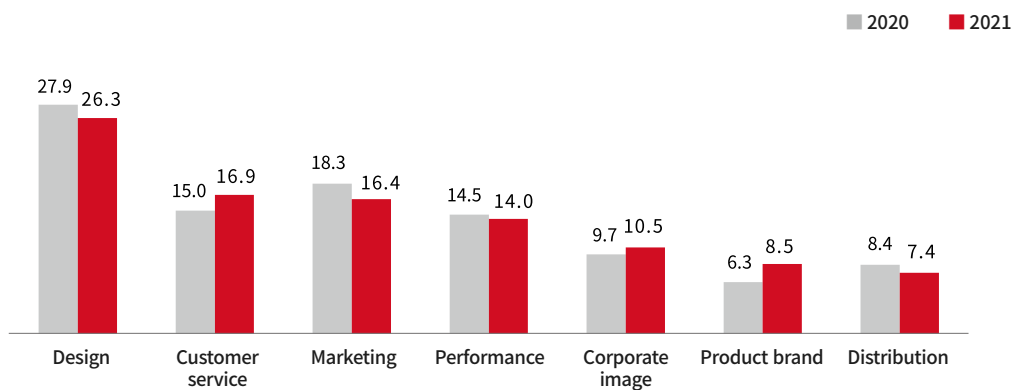


## 12. Percentage of Factors Influencing Product Sales

- As for factors influencing product sales, “Design” is the highest at 26.3%, followed by “Customer service” (16.9%), “Marketing” (16.4%), “Performance” (14.0%), etc.
- The percentage of the “design” factor (27.9% → 26.3%) decreased slightly year-over-year.

### ▶ Percentage of Factors Influencing Product Sales

(Unit : %)



### ▷ Percentage of Factors Influencing Product Sales

(Unit : %)

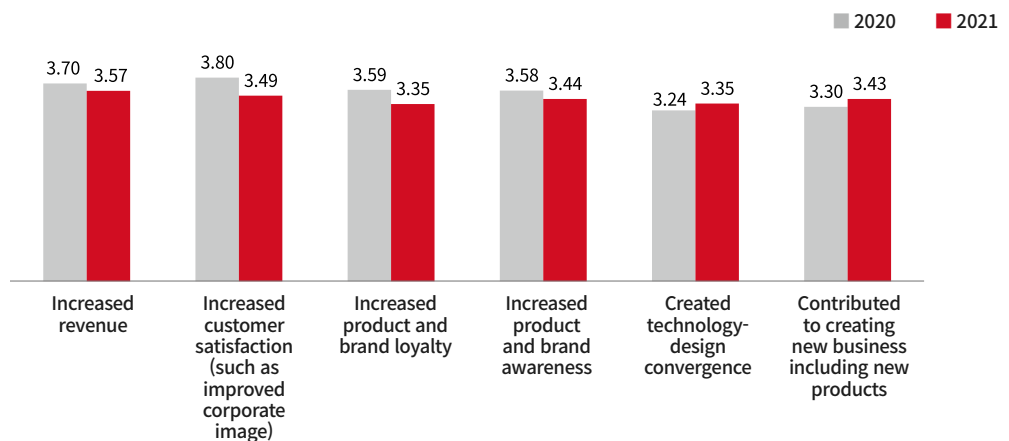
Item		Design	Customer service	Marketing	Performance	Corporate image	Product brand	Distribution
<b>Total</b>		<b>26.3</b>	<b>16.9</b>	<b>16.4</b>	<b>14.0</b>	<b>10.5</b>	<b>8.5</b>	<b>7.4</b>
By industry	Product design	28.6	17.0	14.9	6.2	11.0	12.5	9.9
	Visual design	26.2	17.0	15.8	7.5	10.0	12.9	10.6
	Digital/Multimedia design	34.5	18.0	16.8	9.5	7.4	7.5	6.3
	Space design	28.1	15.4	14.3	13.6	11.5	10.0	7.2
	Fashion/Textile design	31.6	13.7	13.3	10.3	6.7	10.6	13.9
	Service/Experience design	23.9	6.5	19.3	23.3	17.6	6.6	2.7
	Industrial craft design	30.0	21.0	12.2	7.2	9.5	10.3	9.7
	Design infrastructure	23.5	26.1	17.0	13.8	5.2	5.9	8.5
By size	Large enterprise	25.5	9.5	23.4	13.1	14.2	9.6	4.7
	Middle market enterprise	29.5	13.2	18.2	10.7	9.6	11.1	7.7
	Medium enterprise	26.8	19.9	16.3	12.1	8.9	8.4	7.6
	Small enterprise	26.1	16.3	16.4	14.5	10.9	8.5	7.4

## 13. Design Investment and Utilization Contributions

- Design investment and utilization contributions (out of 5) were indicated high in “Increased revenue” (3.57) and “Improved customer satisfaction (such as improved corporate image)” (3.49).
- As for design investment and utilization contributions, “Created technology-design convergence” (3.24 points → 3.35 points) and “Created new business including new products” (3.30 points → 3.43 points) increased year-over-year.

### ► Design Investment and Utilization Contributions

(Unit : points)



### ▷ Design Investment and Utilization Contributions

(Unit : points)

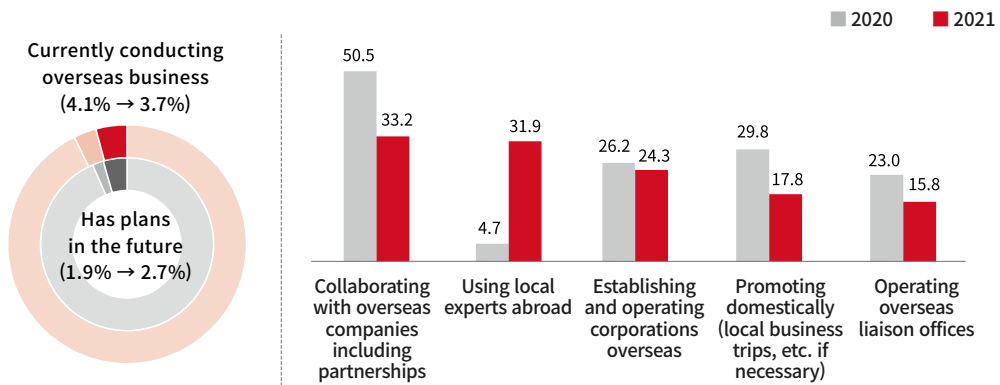
Item		In-creased revenue	Improved customer satisfaction	Increased product and brand loyalty	Increased product and brand awareness	Created technology-design convergence	Contributed to creating new businesses such as new products
<b>Total</b>		<b>3.57</b>	<b>3.49</b>	<b>3.35</b>	<b>3.44</b>	<b>3.35</b>	<b>3.43</b>
<b>By industry</b>	Product design	3.78	3.72	3.53	3.52	3.57	3.71
	Visual design	3.31	3.33	3.24	3.31	3.18	3.23
	Digital/Multimedia design	3.92	3.90	3.64	3.59	3.51	3.67
	Space design	3.58	3.62	3.42	3.49	3.37	3.52
	Fashion/Textile design	4.07	3.89	3.53	3.68	3.38	3.38
	Service/Experience design	3.59	3.61	3.39	3.42	3.30	3.30
	Industrial craft design	3.71	3.53	3.50	3.56	3.71	3.76
Design infrastructure	3.38	3.12	3.13	3.34	3.27	3.36	
<b>By size</b>	Large enterprise	3.78	3.68	3.39	3.76	3.18	3.38
	Middle market enterprise	4.35	4.10	3.70	4.07	3.62	3.82
	Medium enterprise	3.58	3.52	3.43	3.51	3.45	3.53
	Small enterprise	3.56	3.47	3.32	3.41	3.33	3.41

## 14. Overseas Business Status

- The percentage of respondents who are “Currently conducting” overseas business has decreased slightly year-over-year (4.1% → 3.7%), with the most common business methods being “Collaborating with overseas companies such as partnerships” (33.2%) and “Using local experts abroad” (31.9%).
- Region of exchange was highest in “Asia” (65.1%), followed by “Europe” (39.6%), “The Americas” (37.1%), etc.

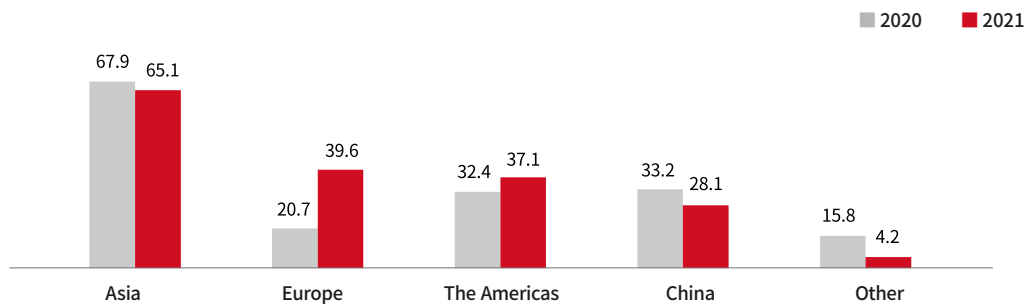
### ► Overseas Business Status and Method

(Duplicate responses, unit: %)



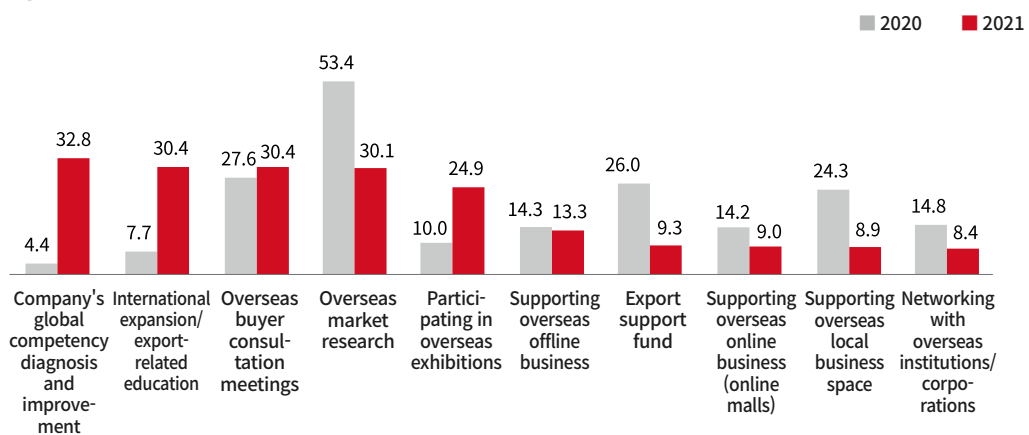
### ► Overseas Exchange Region

(Duplicate responses, unit: %)



### ► Demand for Government Support for International Expansion

(Duplicate responses, unit: %)

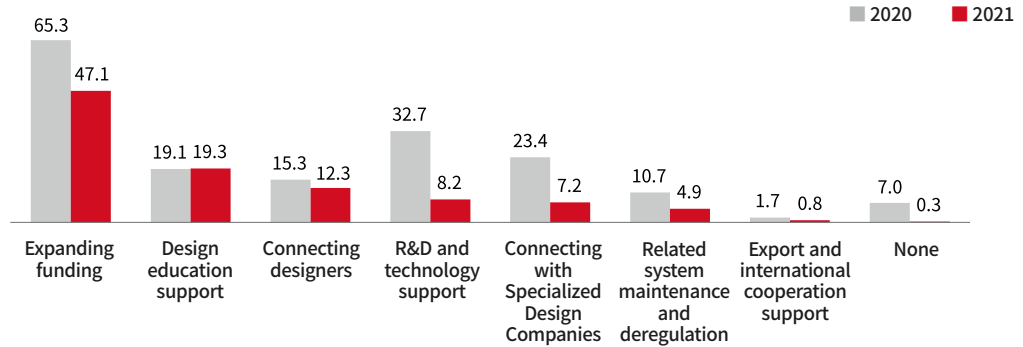


## 15. Demand for Design-related Government Support

- The design-related government support was highest for “Expanding funding (loans, grants, etc.)” (47.1%), followed by “Supporting design education” (19.3%), “Connecting designers” (12.3%).

### ▶ Demand for Design-related Government Support

(Duplicate responses, unit: %)



### ▷ Demand for Design-related Government Support

(Duplicate responses, unit: %)

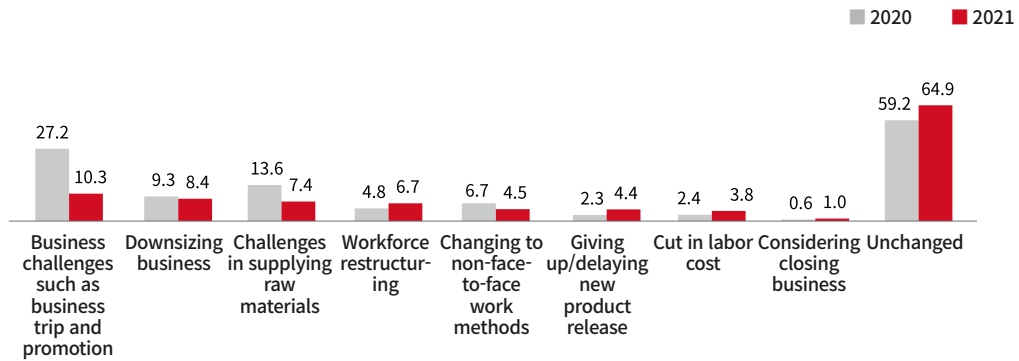
구분	Expanding funding	Supporting design education	Connecting with designers	R&D and technical support	Connecting with Specialized Design Companies	Related system maintenance and deregulation	Export and international cooperation support	None	
<b>Total</b>	<b>47.1</b>	<b>19.3</b>	<b>12.3</b>	<b>8.2</b>	<b>7.2</b>	<b>4.9</b>	<b>0.8</b>	<b>0.3</b>	
<b>By industry</b>	Product design	44.3	28.1	4.2	14.7	6.3	0.0	2.5	0.0
	Visual design	53.1	23.7	6.1	5.2	8.9	1.8	1.3	0.0
	Digital/Multi-media design	47.6	20.3	8.8	8.9	11.8	0.0	0.9	1.7
	Space design	55.1	14.0	12.9	10.0	6.6	0.8	0.4	0.0
	Fashion/Textile design	56.5	17.5	11.0	5.1	8.7	0.3	0.7	0.3
	Service/Experience design	27.4	15.4	23.8	7.6	9.6	15.1	0.0	1.1
	Industrial craft design	46.1	30.2	9.9	5.9	7.8	0.0	0.0	0.0
	Design infrastructure	56.2	19.9	8.6	6.0	4.5	3.9	0.9	0.0
<b>By size</b>	Large enterprise	32.7	26.8	28.1	5.0	1.5	3.6	2.4	0.0
	Middle market enterprise	44.8	44.4	2.1	5.6	1.2	1.8	0.2	0.0
	Medium enterprise	47.4	19.2	9.2	12.1	7.5	2.7	0.8	1.1
	Small enterprise	47.1	18.9	13.1	7.3	7.3	5.4	0.8	0.2

## 16. Impact of COVID-19

- Changes in management due to COVID-19 included “Business challenges such as business trip and promotion” (10.3%), “Downsizing business” (8.4%), and “Challenges in supplying raw materials” (7.4%).
- All financial and employment status except “R&D cost” is expected to be higher than pre-COVID-19.

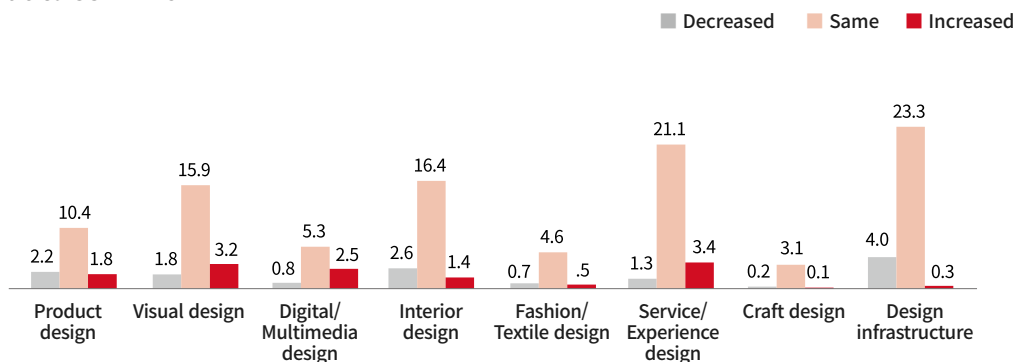
### ► Changes in Management Due to COVID-19

(Unit : %)



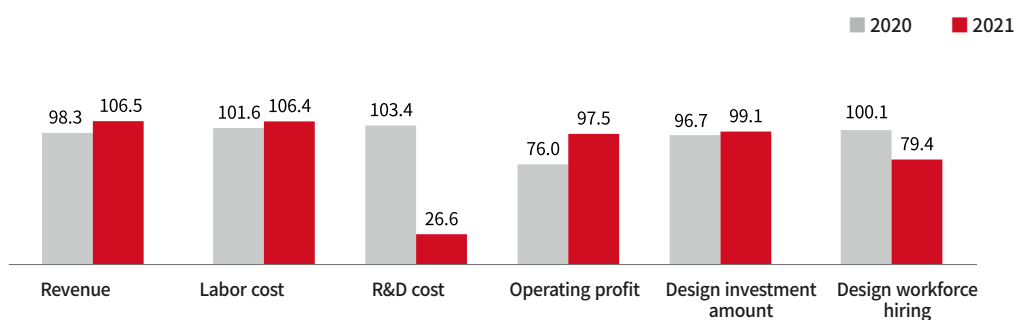
### ► Changes in the Percentage of Design Utilization Fields Due to COVID-19

(Unit : %)



### ► Financial and Hiring Status Compared to Pre-COVID-19

(Unit : %)



**Note** Based on 2021, we wrote 100% if it was the same as pre-COVID-19 (2019), 50% if it was half as much, 200% if it doubled, etc.

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# 2

## Specialized Design Companies

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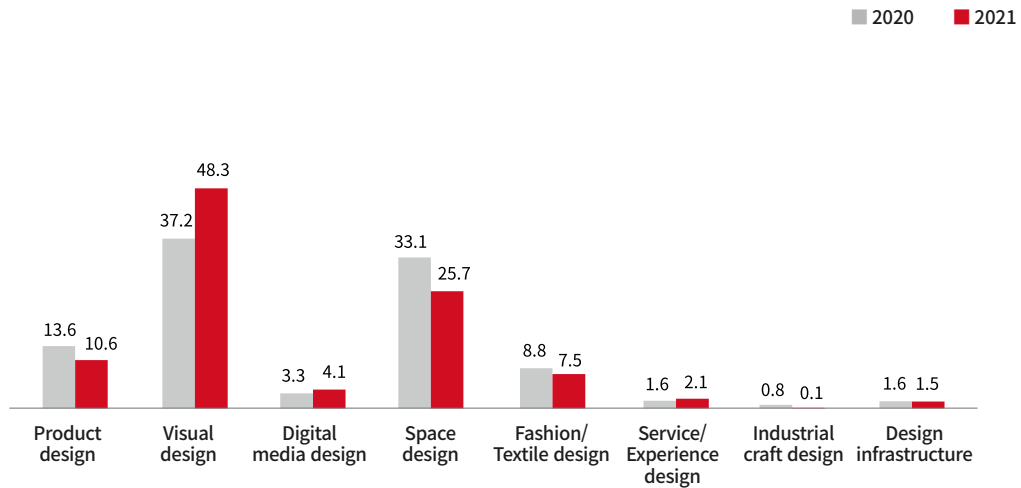
1. Specialized Design Companies' Fields for Providing Design
  2. Financial and Business Expense Status of Specialized Design Companies
  3. Percentage of Revenue and the Number of Cases by Revenue Composition
  4. Workforce Status
  5. Status of Design Workforce Job Openings, Recruitment, and Retirements
  6. Design Workforce Recruitment Channels and Challenges
  7. Design Workforce
  - 8-1. Outlook on Revenue
  - 8-2. Outlook on Design Business Expenses
  - 8-3. Outlook on Hiring Designers
  9. Overseas Business Status and Methods
  10. Demand for Design-related Government Support
  11. Impact of COVID-19
-

## 1. Specialized Design Companies' Fields for Providing Design

- As for Specialized Design Companies' fields for providing design, "Visual design" increased in 2021 by 48.3% compared to 2020 (37.2%), while "Space design" decreased (33.1% → 25.7%).

### ► Specialized Design Companies' Fields for Providing Design

(Unit : %)



### ► Specialized Design Companies' Fields for Providing Design

(Unit : %)

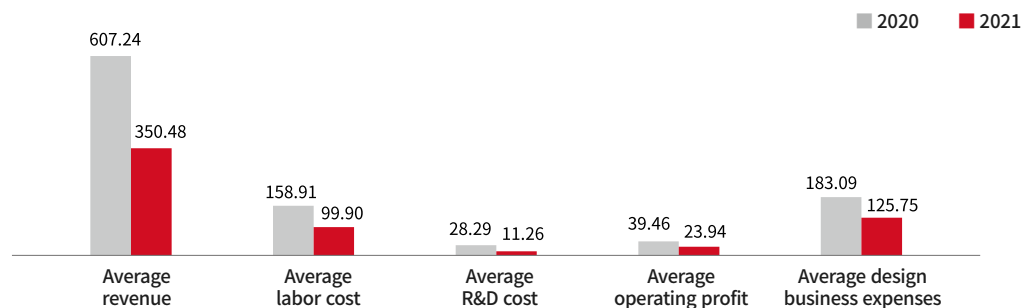
Item		Product design	Visual design	Digital media design	Space design	Fashion/Textile design	Services/Experience design	Industrial craft design	Design infrastructure
<b>Total</b>		<b>10.6</b>	<b>48.3</b>	<b>4.1</b>	<b>25.7</b>	<b>7.5</b>	<b>2.1</b>	<b>0.1</b>	<b>1.5</b>
<b>By industry</b>	Product design	36.3	33.1	3.8	14.5	3.6	5.4	0.1	3.1
	Visual design	6.4	73.4	6.1	11.0	0.7	1.3	0.1	1.0
	Interior design	4.3	11.0	0.7	67.5	12.8	1.9	0.1	1.8
	Fashion, textiles, and other design	3.3	24.8	1.8	33.4	34.3	1.3	0.0	1.1
<b>By size</b>	1 person	8.7	51.7	3.9	24.9	7.2	2.1	0.0	1.3
	2-4 people	14.8	40.2	3.9	26.8	10.2	1.8	0.2	2.1
	5-9 people	16.0	42.1	4.1	30.0	3.1	2.8	0.1	1.7
	10-14 people	20.2	33.2	8.3	30.6	2.2	1.8	0.2	3.5
	15 people or more	17.7	31.0	15.0	27.6	4.5	3.0	0.0	1.2



## 2. Financial and Business Expense Status of Specialized Design Companies

- In 2021, “Revenue” averaged 350.48 million won. “Labor cost” averaged 99.9 million won, “R&D cost” averaged 11.26 million won, and “Operating profit” averaged 23.94 million won.
- The increase in one-person businesses has led to a decrease in all financial status, including average revenue.

### ▶ Financial and Business Expense Status of Specialized Design Companies (Unit : million won)



### ▷ Financial and Investment Status in 2021 (Unit : million won)

Item		Revenue	Labor cost	R&D cost	Operating profit	Design business expenses
<b>Total</b>		<b>350.48</b>	<b>99.90</b>	<b>11.26</b>	<b>23.94</b>	<b>125.75</b>
<b>By industry</b>	Product design	453.28	102.43	12.38	18.19	107.61
	Visual design	213.70	88.68	9.62	20.75	117.11
	Interior design	591.47	125.16	13.31	43.31	160.20
	Fashion, textiles, and other design	384.00	101.39	13.40	11.85	129.51
<b>By size</b>	1 person	120.00	52.78	5.66	10.33	75.11
	2-4 people	448.28	131.16	14.07	36.49	167.40
	5-9 people	1049.05	265.49	36.50	87.09	330.28
	10-14 people	2531.17	414.52	65.66	146.12	460.20
	15 people or more	6694.63	1223.58	117.55	188.06	1077.68

### ▷ Business Expenses in 2021 (Unit : million won)

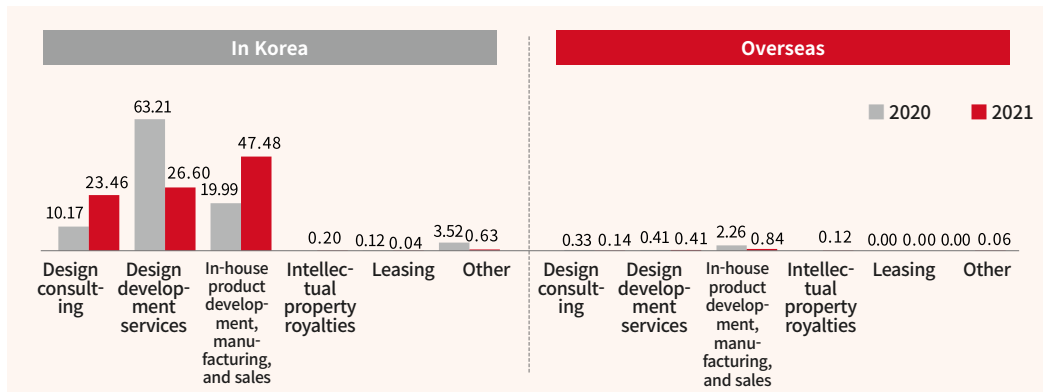
Item		Labor cost	Service charge	Other service costs	Equipment and software	Land/Buildings for R&D	Education cost	Intellectual property purchase management cost	Other current expenses
<b>Total</b>		<b>68.27</b>	<b>12.19</b>	<b>8.12</b>	<b>3.29</b>	<b>5.56</b>	<b>0.45</b>	<b>1.22</b>	<b>26.66</b>
<b>By industry</b>	Product design	71.67	4.58	8.60	3.51	8.01	0.53	1.92	8.78
	Visual design	61.95	8.86	8.88	2.83	2.55	0.38	0.96	30.69
	Interior design	83.47	23.58	6.25	3.43	9.79	0.61	0.82	32.26
	Fashion, textiles, and other design	64.47	17.95	7.37	4.76	7.95	0.36	2.07	24.59
<b>By size</b>	1 person	44.84	4.36	5.89	2.42	2.93	0.06	0.63	13.98
	2-4 people	87.48	22.37	10.13	3.36	10.79	0.54	1.03	31.70
	5-9 people	171.68	37.66	18.92	6.32	11.54	2.26	1.47	80.43
	10-14 people	242.61	16.23	28.15	11.40	10.86	4.44	4.74	141.77
	15 people or more	449.67	171.12	33.97	30.22	37.55	8.78	34.14	312.23

### 3. Percentage of Revenue and the Number of Cases by Revenue Composition

- By revenue composition, “Domestic product development, manufacturing, and sales” was the highest (47.48%), followed by “Domestic design development” (26.60%) and “Domestic design consulting” (23.46%).
- By number of revenue cases, “Develop, manufacture, and sell own products” was also the highest (71.06%).

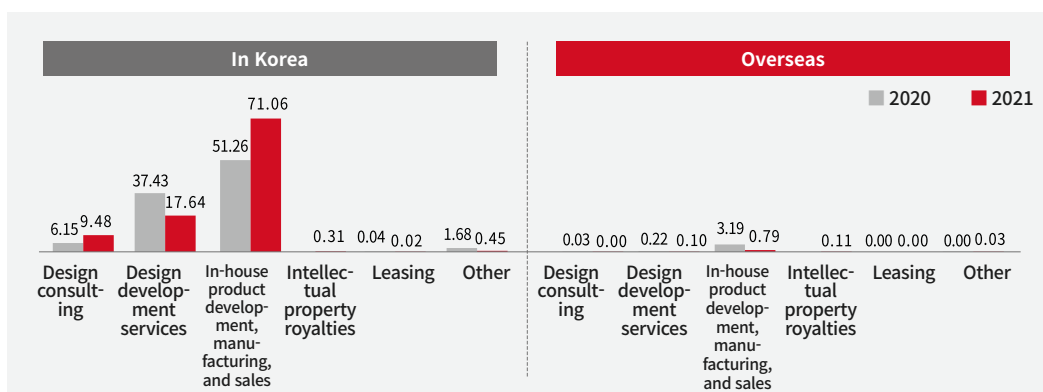
#### ▶ Percentage by Revenue Composition (Percentage of Revenue)

(Unit : %)



#### ▶ Percentage of Revenue by Composition (Based on Number of Cases)

(Unit : case)



#### ▷ Number of Cases and Revenue Averages by Revenue Composition

(단위 : 백만원)

Item	Domestic					Overseas				
	Design consulting	Design development	In-house product development/manufacturing/sales	Intellectual property royalties	Other	Design consulting	Design development	In-house product development/manufacturing/sales	Intellectual property royalties	Other
Revenue (Unit : million)	82.23	93.24	166.41	0.72	2.38	0.49	1.42	2.94	0.44	0.22
Number of cases (Unit : number of cases)	7.58	14.10	56.78	0.25	0.38	0.00	0.08	0.63	0.09	0.02

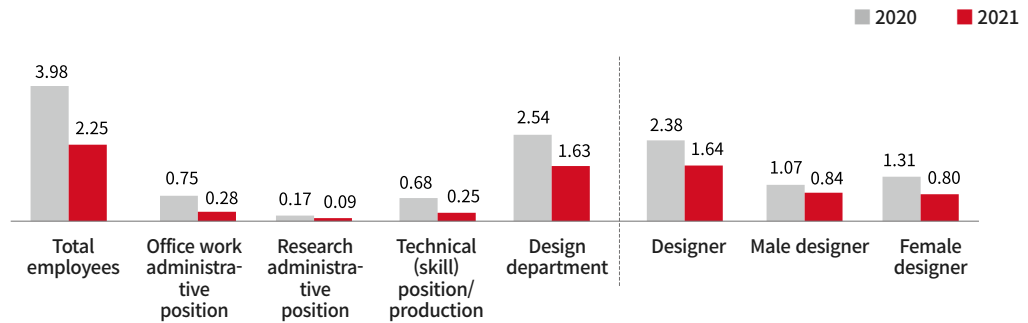
**Note** The items in the revenue composition have changed, requiring caution when comparing trends.  
 - “Design development (development, production, construction)” → “Design development services”  
 - “In-house product development, manufacturing, and sales” → “In-house product development and sales”  
 - “Leasing (real estate and products) / subscription services” → “Other”  
 - “Intellectual property royalties” was added

## 4. Workforce Status

- The total number of employees averaged 2.25, a decrease from the previous year (3.98).
- The number of designers has also decreased from 2020, with an average of 1.64.
- By age, “40s” (0.50) was high, and by education, “College graduate” (1.11).

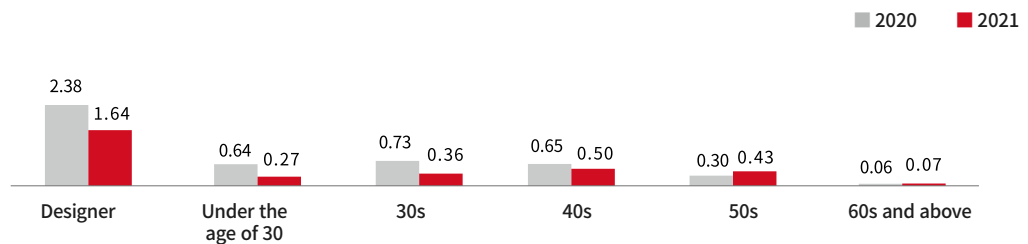
### ► Workforce Status

(Unit : person)



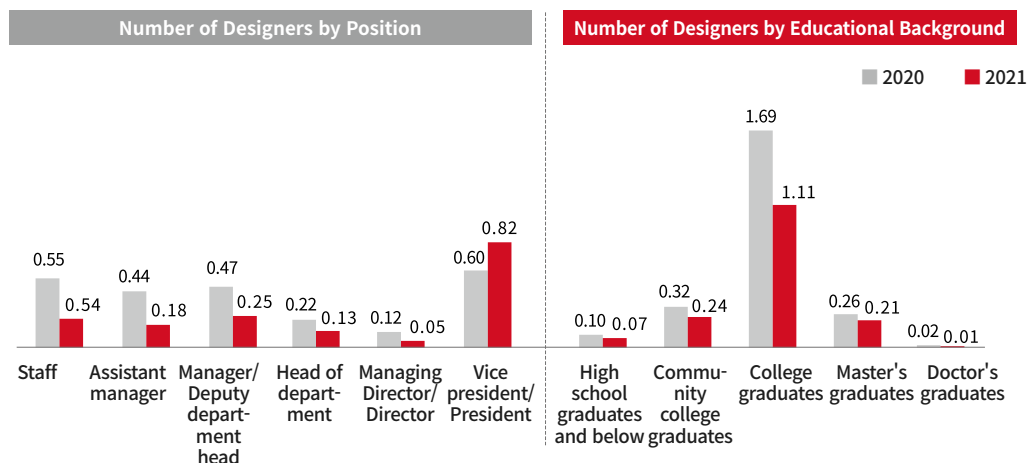
### ► Number of Designers by Age

(Unit : person)



### ► Number of Designers by Position and Educational Background

(Unit : person)



## 5. Status of Design Workforce Job Openings/Recruitment/Retirements

- The number of job openings at Specialized Design Companies was 0.17 for experienced and 0.09 for newcomer, but the actual number of recruitment was less than that at 0.08 for experienced and 0.08 for newcomer.
- Retirees were more likely to be experienced (0.11) than newcomer (0.06).

▶ Status of Design Workforce Job Openings/Recruitment/Retirements (Unit : person)



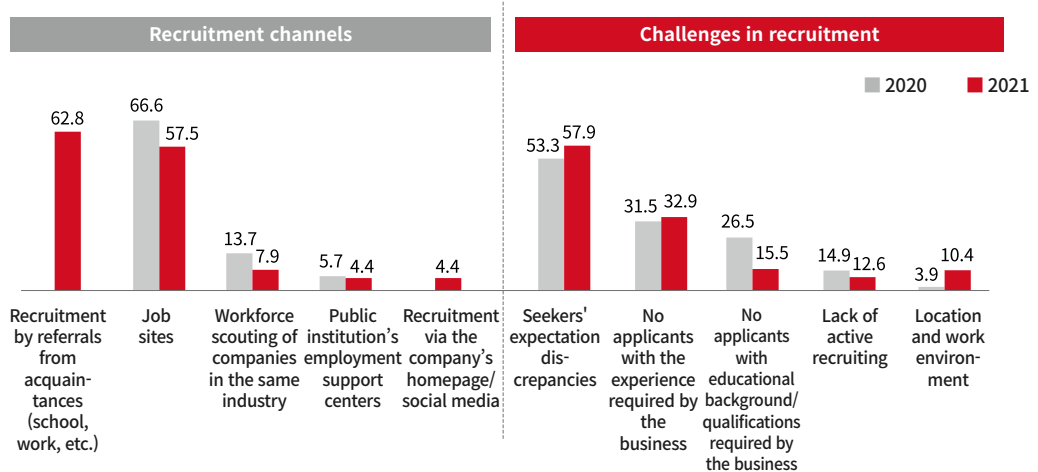
▷ Status of Design Workforce Job Openings/Recruitment/Retirements (Unit : person)

Item		Designer job openings (experienced)	Designer job openings (newcomer)	Number of recruited designers (experienced)	Number of recruited designers (newcomer)	Number of retirees (experienced)	Number of retirees (newcomer)
<b>Total</b>		<b>0.17</b>	<b>0.09</b>	<b>0.08</b>	<b>0.08</b>	<b>0.11</b>	<b>0.06</b>
<b>By industry</b>	Product design	0.24	0.10	0.11	0.10	0.13	0.05
	Visual design	0.18	0.10	0.08	0.09	0.11	0.06
	Interior design	0.12	0.06	0.08	0.05	0.08	0.04
	Fashion, textiles, and other design	0.11	0.11	0.07	0.10	0.10	0.08
<b>By size</b>	1 person	0.11	0.02	0.02	0.02	0.04	0.03
	2-4 people	0.17	0.16	0.11	0.13	0.20	0.05
	5-9 people	0.45	0.40	0.38	0.39	0.35	0.21
	10-14 people	0.81	0.82	0.62	0.86	0.65	0.40
	15 people or more	1.56	1.26	1.21	1.13	1.12	0.72

## 6. Design Workforce Recruitment Channels and Challenges

- The most common channel of recruiting design workforce was “Recruitment by referrals from acquaintances (school, work, etc.)” (62.8%), followed by “Job sites” (57.5%).
- As for challenges in recruitment, “Expectation discrepancies for wages and work hours” was the most common (57.9%), followed by “Lack of applicants with the experience required by the business” (32.9%).

► Design Workforce Recruitment Channels and Challenges (Top 5, duplicate responses, unit: %)



► Design Workforce Recruitment Channels and Challenges (Top 5, duplicate responses, unit: %)

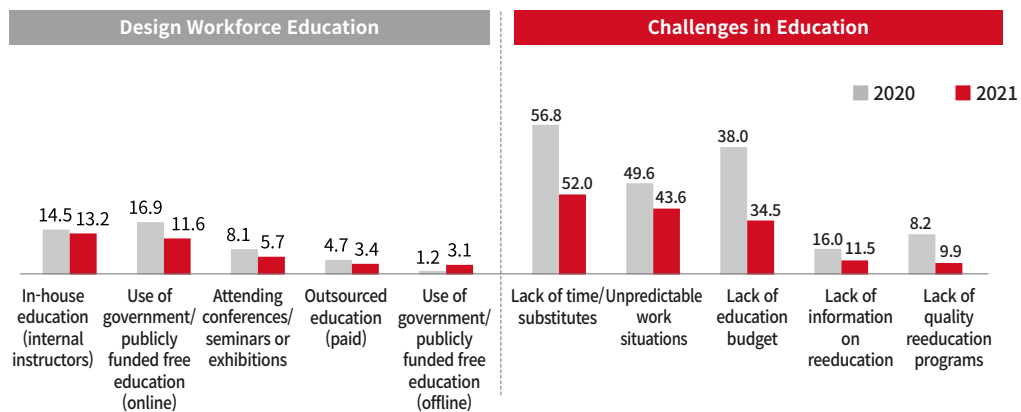
Item	Recruitment channels					Challenges in recruitment					
	Recruitment by referrals from acquaintances (school, workplace, etc.)	Job sites	Workforce scouting of companies in the same industry	Public Institution's Employment Support Centers	Recruitment via the company's homepage/social media	Job seekers' expectation discrepancies	No applicants with the experience required by None	No applicants with education background/qualifications required by None	Lack of active job-seeking	Location and work environment	
<b>Total</b>	<b>62.8</b>	<b>57.5</b>	<b>7.9</b>	<b>4.4</b>	<b>4.4</b>	<b>57.9</b>	<b>32.9</b>	<b>15.5</b>	<b>12.6</b>	<b>10.4</b>	
<b>By industry</b>	Product design	73.4	48.8	7.7	2.8	5.9	50.5	34.8	21.9	8.7	7.9
	Visual design	59.2	52.6	7.5	6.5	3.9	59.8	34.9	14.4	8.8	6.9
	Interior design	64.4	71.3	6.6	1.1	3.9	68.1	33.9	9.6	9.1	23.4
	Fashion, textiles, and other design	60.4	68.2	12.8	3.4	5.0	42.3	19.7	21.4	41.8	7.0
<b>By size</b>	1 person	64.2	52.8	7.4	4.0	2.1	57.4	28.4	12.0	12.9	10.5
	2–4 people	65.5	63.0	9.8	5.2	10.9	63.8	40.1	21.5	13.0	9.7
	5–9 people	43.5	85.6	7.8	5.9	8.8	49.9	52.1	28.1	8.3	12.1
	10–14 people	49.2	82.7	7.0	3.5	9.0	45.5	58.0	34.0	7.8	13.4
	15 people or more	41.3	84.6	11.1	7.3	3.7	43.4	59.0	38.7	10.7	6.5

## 7. Design Workforce Education and Challenges

- In 2020, the methods in which designer workforce education was conducted included “Attending conferences/seminars or exhibitions” (13.2%), “In-house education (internal instructors)” (11.6%), etc.
- For challenges in education, the most common challenges were “Lack of time and substitutes” (52.0%) and “Unpredictable work situations” (43.6%).

### ► Design Workforce Education and Challenges

(Top 5, duplicate responses, unit: %)



### ▷ Design Workforce Education and Challenges

(Top 5, duplicate responses, unit: %)

Item	Design Workforce Education					Challenges in Education					
	Attending conferences/seminars or exhibitions	In-house self-education (Internal Instructors)	Use of government/publicly funded free education (online)	In-house lectures (external instructors)	Use of government/publicly funded free education (offline)	Lack of time/substitutes	Unpredictable work situations	Lack of education budget	Lack of quality reeducation programs	Return on investment, including turnover after reeducation	
<b>Total</b>	<b>13.2</b>	<b>11.6</b>	<b>5.7</b>	<b>3.4</b>	<b>3.1</b>	<b>52.0</b>	<b>43.6</b>	<b>34.5</b>	<b>11.5</b>	<b>9.9</b>	
<b>By industry</b>	Product design	22.8	10.3	12.8	2.0	3.8	46.6	51.6	44.6	17.3	8.9
	Visual design	11.3	13.6	4.6	4.8	2.9	60.8	41.4	31.3	7.6	7.1
	Interior design	10.3	9.1	4.9	2.1	4.1	38.6	42.1	30.8	11.7	18.9
	Fashion, textiles, and other design	12.6	8.9	1.4	1.5	1.0	44.4	44.4	41.1	20.1	7.8
<b>By size</b>	1 person	11.4	6.3	2.9	2.4	1.9	50.6	39.1	35.6	9.8	9.2
	2-4 people	15.4	22.0	9.0	3.8	4.7	54.3	53.4	33.0	13.6	12.0
	5-9 people	20.7	28.0	22.2	8.6	9.9	60.0	56.8	29.7	17.8	10.9
	10-14 people	27.6	36.4	26.2	17.2	15.2	48.8	66.8	24.7	24.5	6.3
	15 people or more	28.4	44.7	11.6	17.9	3.8	62.7	52.8	27.6	27.7	11.6

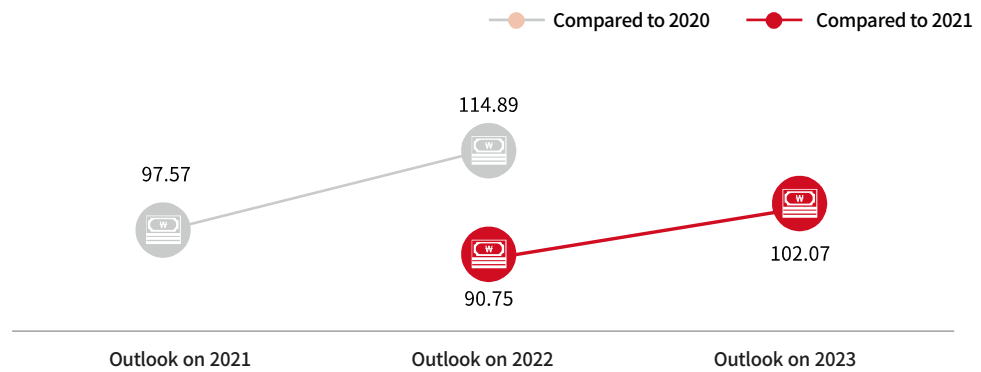
**Note** The item in design workforce education has changed, so caution is required when comparing trends. - “Communication skills including foreign languages” → “Foreign language competencies” among business competencies

## 8-1. Outlook on Revenue

- Revenue was expected to decrease (90.75%) in 2022 but is expected to increase (102.07%) in 2023.
- Overall positive outlook decreased year-over-year.

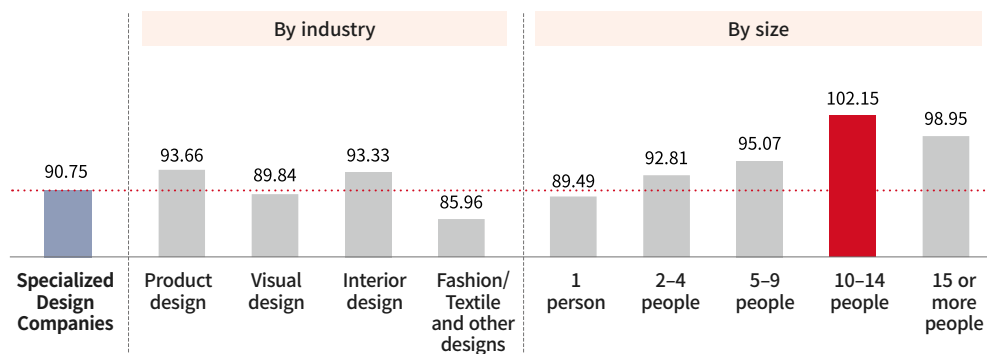
### ► Outlook on Revenue

(Unit : %)



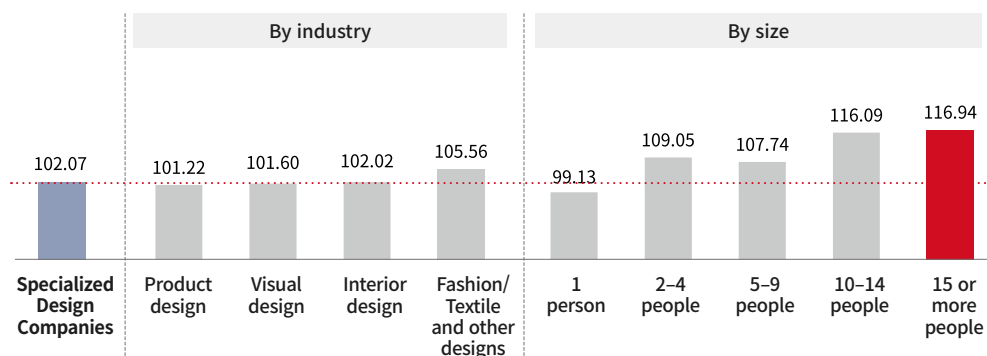
### ► Outlook on Revenue in 2022

(Unit : %)



### ► Outlook on Revenue in 2023

(Unit : %)

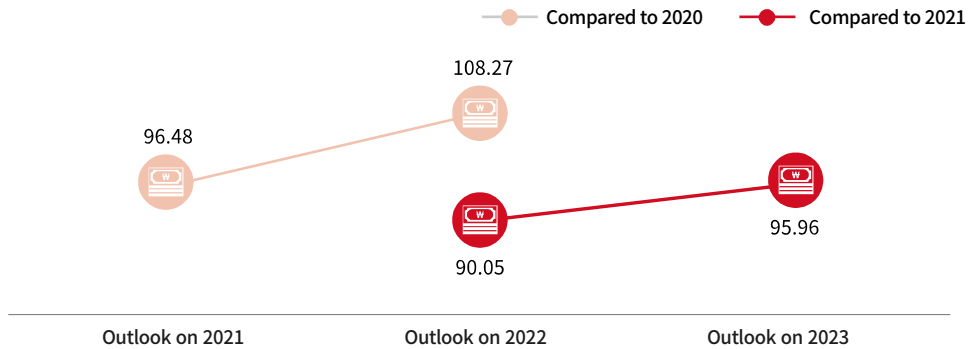


## 8-2. Outlook on Design Business Expenses

- Design business expenses are expected to decrease in both 2022 and 2023 (90.05% and 95.96%, respectively).
- By size, businesses with 10–14 employees show a positive outlook for both 2022 (102.05%) and 2023 (111.96%).

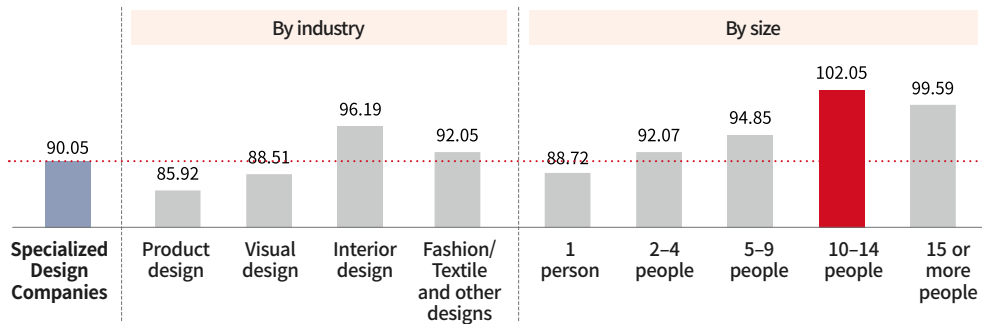
### ▶ Outlook on Design Business Expenses

(Unit : %)



### ▶ Outlook on Design Business Expenses in 2022

(Unit : %)



### ▶ Outlook on Design Business Cost in 2023

(Unit : %)



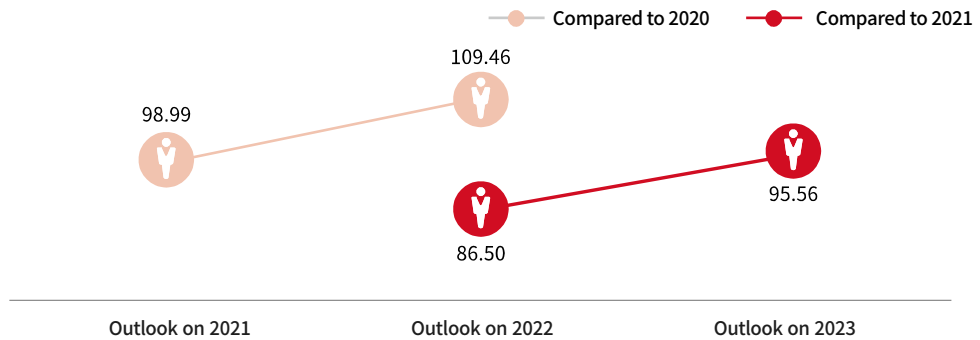


### 8-3. Outlook on Designer Hiring

- Outlook on designers is expected to decrease in both 2022 and 2023 (86.50% and 95.56%, respectively).
- A more positive outlook is shown in the interior design industry (97.91%) for 2022 and in 10–14 employees (107.01%) for 2023 than other industries or sizes.

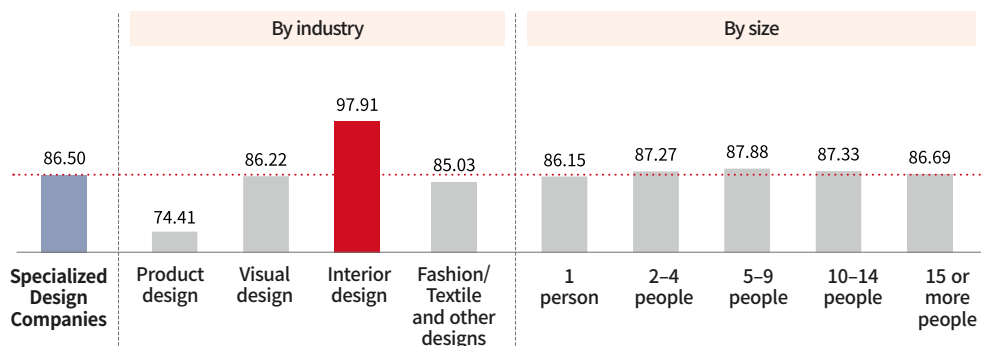
#### ► Outlook on Designer Hiring

(Unit : %)



#### ► Outlook on Designer Hiring in 2022

(Unit : %)



#### ► Outlook on Designer Hiring in 2023

(Unit : %)

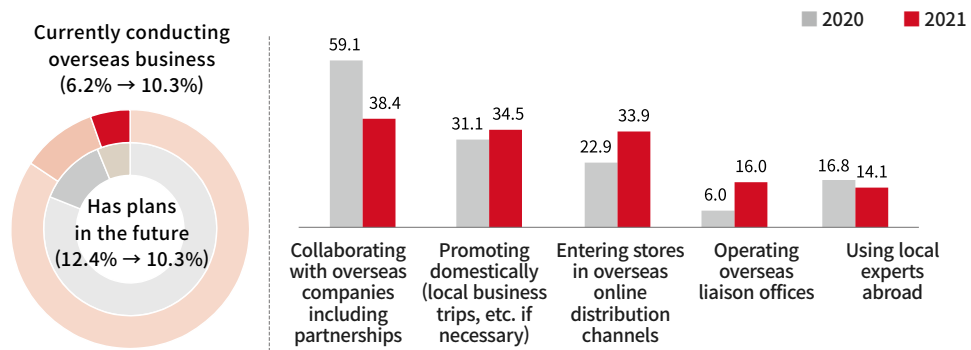


## 9. Overseas Business Status and Methods

- The rate of “Currently conducting” overseas business was 5.4%, a slight decrease from the previous year (6.2%). Business methods are “Collaborating with overseas companies such as partnerships” (38.4%), followed by “Pursuing domestically” (34.5%).
- Region for international expansion was the highest in “The Americas” (54.8%) and the desired region for expansion was the highest in “China” (39.2%).

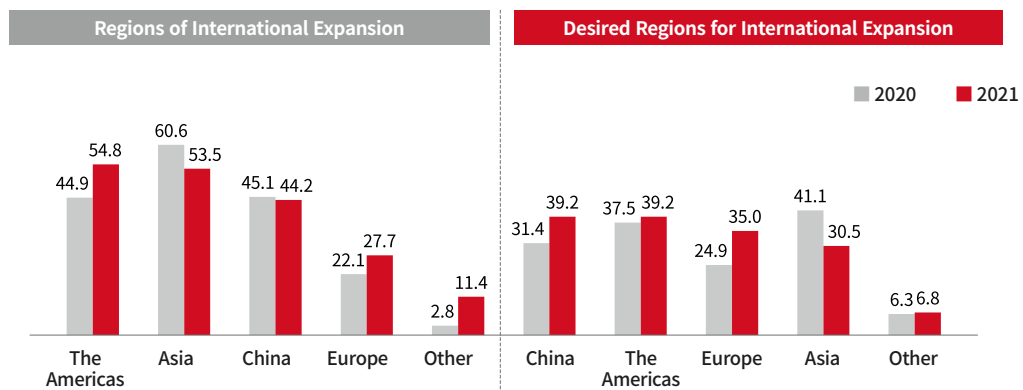
### ► Overseas Business Status and Methods

(Top 5, duplicate responses, unit: %)



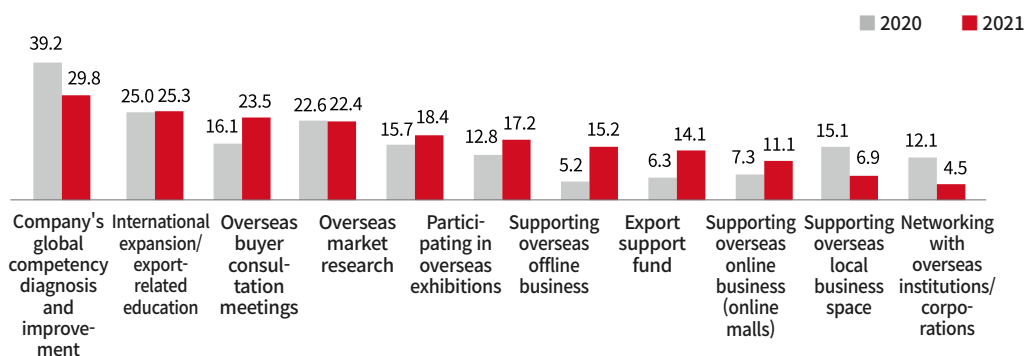
### ► Regions of and Desired Regions for International Expansion

(Duplicate responses, unit: %)



### ► Government Support for International Expansion

(Duplicate responses, unit: %)

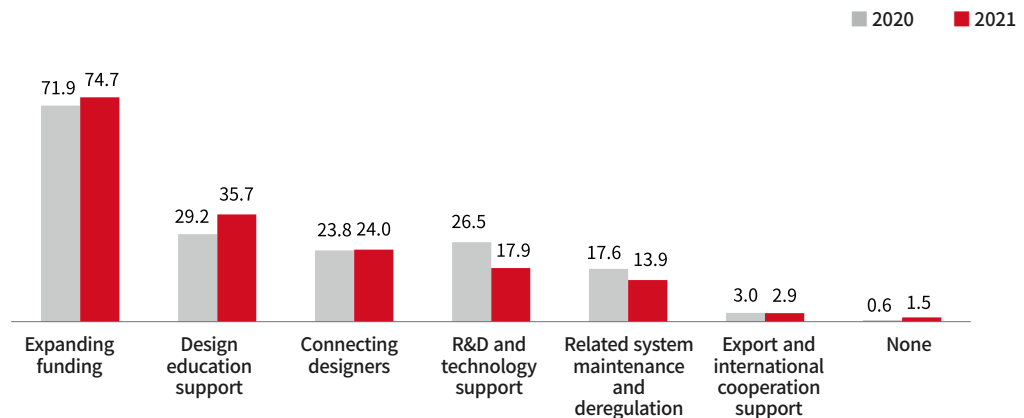


## 10. Demand for Design-related Government Support

- The highest demand for government support is for “Expanding funding (loans, grants, etc.)” (74.7%), followed by “Workforce training support” (35.7%), “R&D and technology support” (24.0%), “Bid information support” (17.9%), etc.

### ► Demand for Design-related Government Support

(Duplicate responses, unit: %)



### ▷ Demand for Design-related Government Support

(Duplicate responses, unit: %)

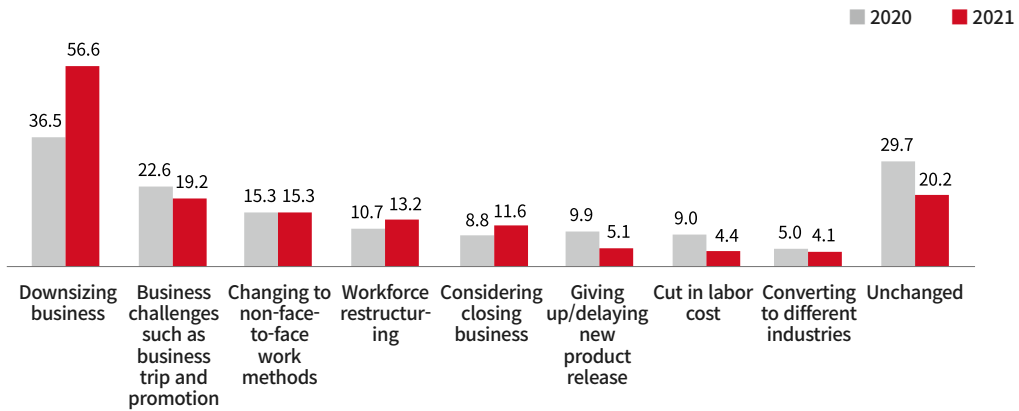
Item		Expand- ing fund- ing	Workforce training support	R&D and technical support	Bid infor- mation support	Related system mainte- nance and deregula- tion	Export and inter- national coopera- tion sup- port	Other
<b>Total</b>		<b>74.7</b>	<b>35.7</b>	<b>24.0</b>	<b>17.9</b>	<b>13.9</b>	<b>2.9</b>	<b>1.5</b>
<b>By industry</b>	Product design	75.4	37.9	29.8	21.9	9.4	2.8	0.1
	Visual design	73.6	36.5	27.9	13.0	15.6	2.9	0.1
	Interior design	75.0	37.8	18.0	21.4	13.4	3.5	6.8
	Fashion, textiles, and other design	77.7	24.8	8.7	27.6	14.0	1.5	0.0
<b>By size</b>	1 person	76.3	32.2	23.7	15.9	13.3	1.9	2.0
	2-4 people	70.2	43.5	24.2	23.4	15.5	5.4	0.0
	5-9 people	72.9	43.5	25.3	21.7	15.3	5.9	0.8
	10-14 people	70.1	57.0	24.2	15.2	18.2	0.0	0.0
	15 people or more	65.9	48.8	31.8	25.3	15.0	5.4	1.4

## 11. Impact of COVID-19

- The most common management change due to COVID-19 is “Downsizing business” (56.6%), followed by “Business challenges such as business trip and promotion” (19.2%), “Changing to non-face-to-face work methods” (15.3%), etc.
- All financial and employment status decreased except for “R&D cost.”

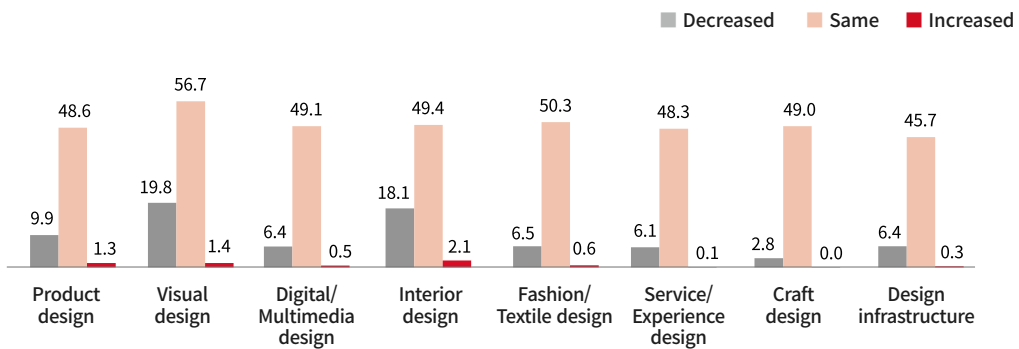
### ► Management Changes Due to COVID-19

(Unit : %)



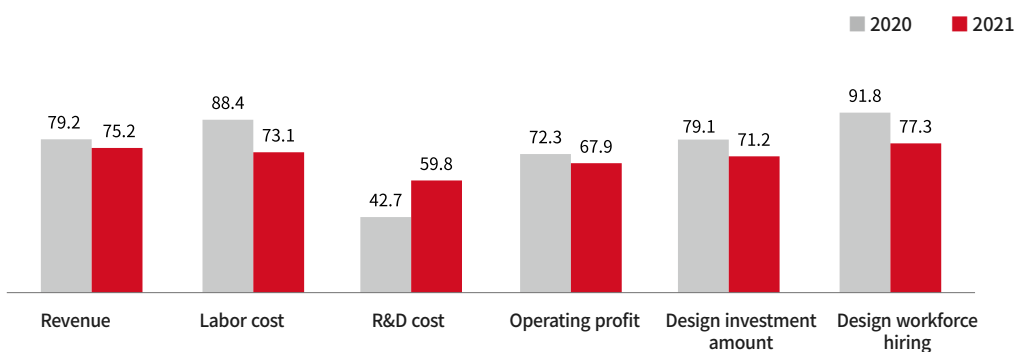
### ► Changes in the Percentage of Key Design Utilization Fields Due to COVID-19

(Unit : %)



### ► Financial and Hiring Status Compared to Pre-COVID-19

(Unit : %)



**Note** Based on 2021, we wrote 100% if it was the same as pre-COVID-19 (2019), 50% if it was half as much, 200% if it doubled, etc.

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# 3

## Public Sector

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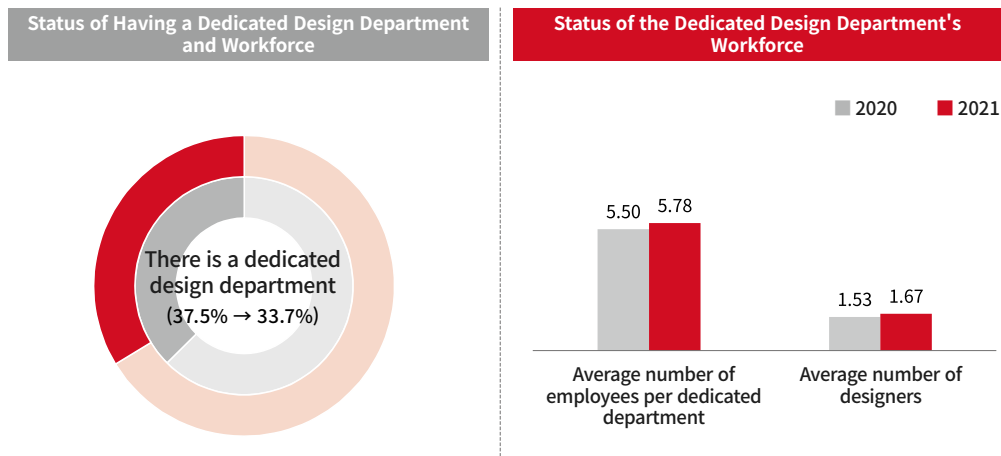
1. Status of Having a Dedicated Design Department and Workforce
  2. Budget Execution Amount by the Dedicated Design Department
  3. Percentage of Design Budgeting Methods and Design Ordering Methods
  4. Design Investment Effects
  5. Design-utilization Stage in the Public Policy Process
  6. Design Utilization Fields
  7. Factors to consider when selecting design-related outsourcing companies/experts
-

# 1. Status of Having a Dedicated Design Department and Workforce

- The percentage of the public sector with dedicated design departments decreased to 33.7% in 2021 compared to 2020 (37.5%).
- The average number of employees per dedicated department was 5.78 in 2021, up from 2020 (5.50), and also the average number of designers was 1.67 in 2021, up from 2020 (1.53).

## ► Status of Having a Dedicated Design Department and Workforce

(Unit: %, person)



## ▷ Status of Having a Dedicated Design Department and Workforce

(Unit: %, person)

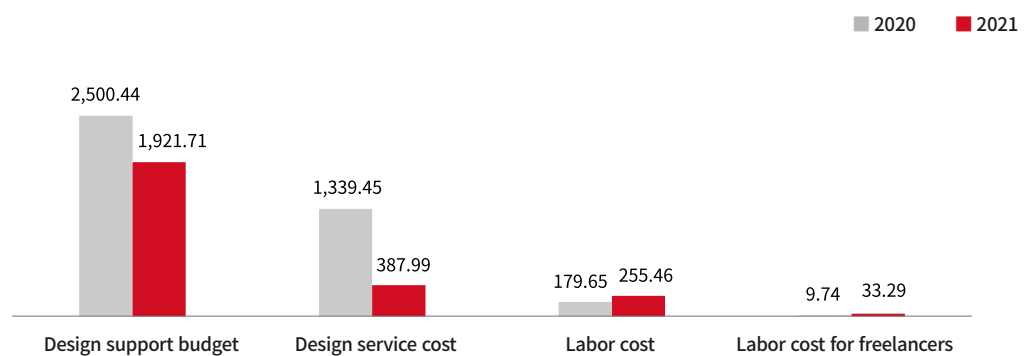
Item	2020			2021		
	Design dedicated design departments	Dedicated departments' average number of employees	Average number of designers	Design Dedicated departments' departments	Dedicated departments' average number of employees	Average number of designers
<b>Central administration and local governments</b>	<b>37.5</b>	<b>5.50</b>	<b>1.53</b>	<b>33.7</b>	<b>5.78</b>	<b>1.67</b>
Central administration	9.7	5.00	1.46	16.7	7.75	1.82
Local governments	41.2	5.52	1.54	35.9	5.62	1.64
State/Province	76.5	5.21	1.14	64.7	13.92	2.38
State/County/District	38.5	5.57	1.59	33.6	4.47	1.56

## 2. Budget Execution Amount by the Dedicated Design Department

- When looking at the budget execution amount of the public sector's dedicated design departments, the average "Design support budget" was 1,921.71 million won (2500 million and 440,000 won in 2020).
- Average "Design service cost" was 387.99 million won, average "Labor cost" was 254.46 million won, and average "Freelancer labor cost, etc." was 33.29 million won.

### ▶ Budget Execution Amount by the Dedicated Design Department

(Unit : million won)



### ▷ Budget Execution Amount by the Dedicated Design Department

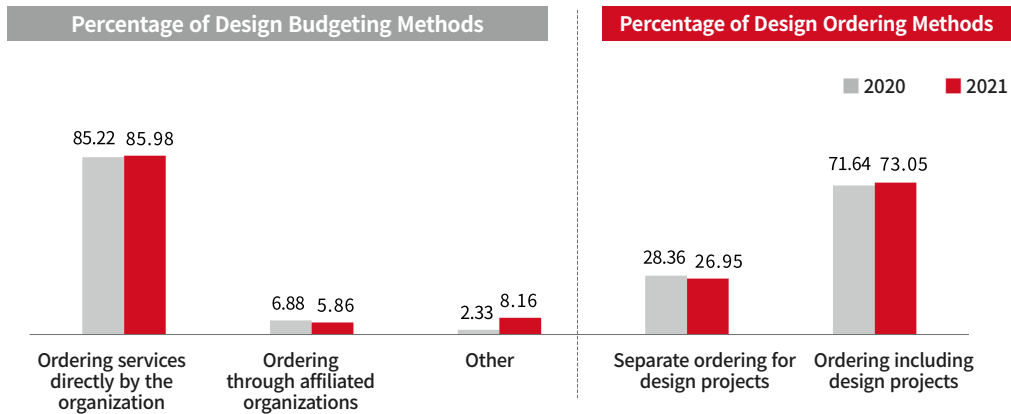
(Unit : million won)

Item		Design support budget	Design service charge	Labor cost	Freelancer labor cost, etc.
<b>Total</b>		<b>1,921.71</b>	<b>387.99</b>	<b>255.46</b>	<b>33.29</b>
Item	Central administration	18,777.20	155.40	321.40	59.80
	Local governments	918.40	401.83	251.54	31.71
	State/Province	1,561.45	446.36	859.82	91.45
	State/County/District	821.51	395.12	159.88	22.71

### 3. Percentage of Design Budgeting Methods and Design Ordering Methods

- In terms of design budgeting methods, “Ordering services directly by the organization” was the highest at 85.98%, followed by “Including design projects in services” at 73.05%.

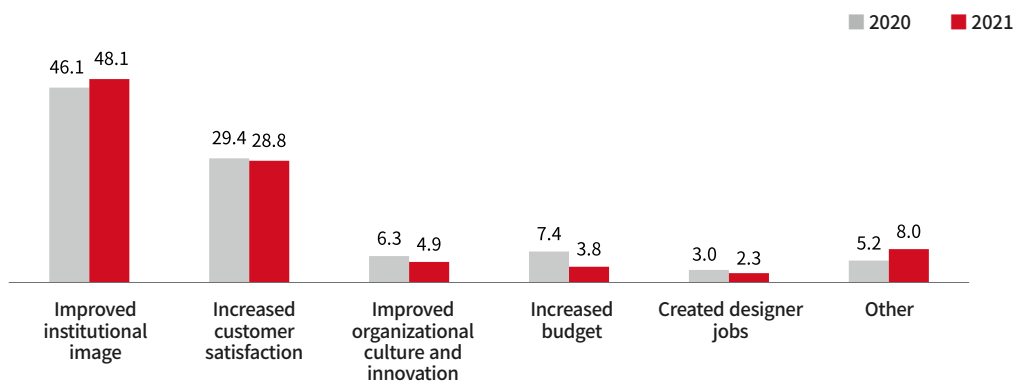
▶ Percentage of Design Budgeting Methods and Design Ordering Methods (Unit : %)



### 4. Design Investment Effects

- When looking at the impact of design investment effects, “Improved institutional image” was the highest at 48.1%, followed by “Increased customer satisfaction” at 28.8%.
- Compared to the previous year, “Improved institutional image” (46.1% → 48.1%) increased, but “Increased customer satisfaction” (29.4% → 28.8%) and “Improved organizational culture and innovation” (6.3% → 4.9%), etc. decreased.

▶ Design Investment Effects (Duplicate responses, unit: %)



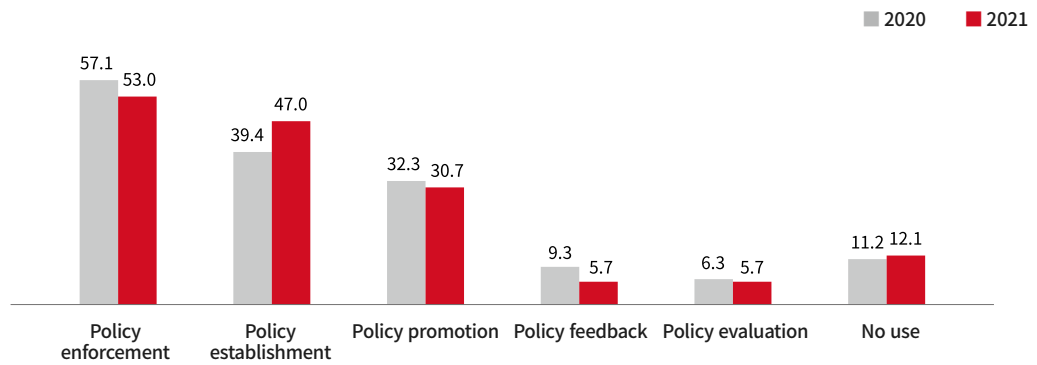


## 5. Design-Utilization Stage in the Public Policy Process

- In the public policy process, design-utilization stage was the highest in “Policy enforcement” (53.0%), followed by “Policy establishment” (47.0%), and “Policy promotion” (30.7%).
- “Policy enforcement” decreased (57.2% → 53.0%), while “Policy establishment” increased (39.4% → 47.0%) year-on-year.

### ► Design-Utilization Stage in the Public Policy Process

(Duplicate responses, unit: %)

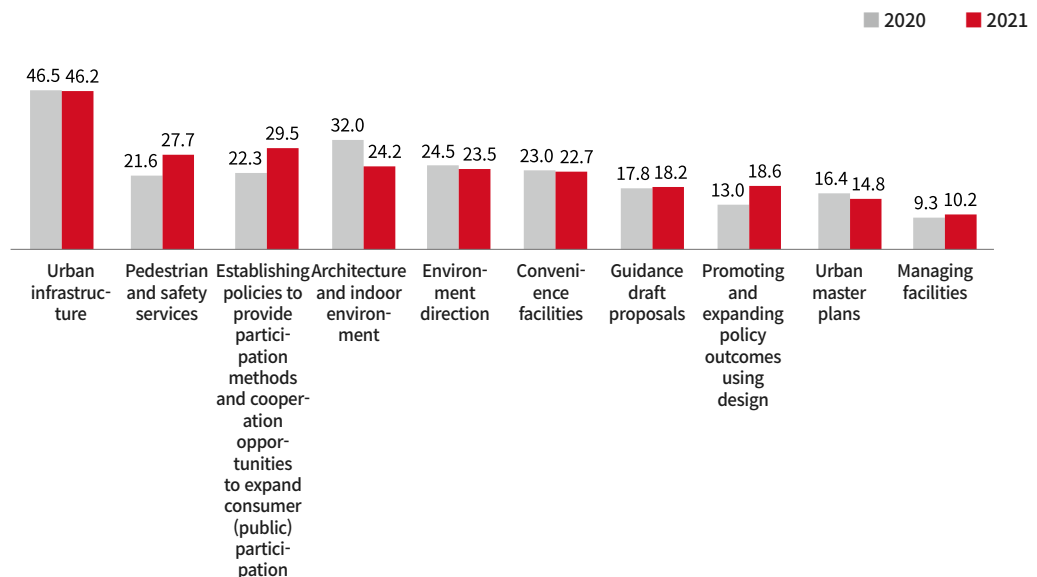


## 6. Design Utilization Fields

- As for design utilization fields, “urban-based facility” was the highest at 46.2%, followed by “establishing policies to provide participation methods and cooperation opportunities to expand consumer participation” (29.5%), “pedestrian and safety services” (27.7%), etc.

### ► Design Utilization Fields

(Top 10, duplicate responses, unit: %)



## 7. Factors to consider when selecting design-related outsourcing companies/experts

- When selecting design-related outsourcing companies/experts, the top three factors considered were, in order, “excellence of proposal” (51.1%), “expertise of the participating personnel” (42.0%), and “cost of services” (29.2%), etc.
- Overall, the results are similar to 2020, with a decrease in “employment history” (14.1% → 7.6%) and an increase in “service provider’s reputation and brand awareness” (8.6% → 12.5%).

### ► Factors to consider when selecting design outsourcing companies/experts

(Duplicate responses, unit: %)

