icograda IDA | Hi Seoul Soul of Asia

Seoul Design Survey

Framework research to analyze Seoul's design status within the World Design Survey pilot project.

SEOUL METROPOLITAN GOVERNMENT

SEOUL DESIGN SURVEY

Framework research to analyze Seoul's design status
within the World Design Survey pilot project.

2009. 9.

SEOUL METROPOLITAN
GOVERNMENT

Table of Contents

1. Seoul Design Survey Overview

1.1 Objective 9
1.2 Description 10
1.3 Research Methods 11
1.4 Survey Methods 11
1.4.1 Phase 1 Data Research Method: Survey 11
1.4.2 Phase 2 Data Research Method: Statistical Data 12
1.4.3 Analysis Method and Important Conditions 12
1.5 Research Implementation System 13
1.5.1 Implementation Methods 13
1.5.2 Implementation Process 13

2. Achievements of the Seoul Design Survey

2.1 Research for the Seoul Design Survey Framework 15
2.1.1 Theoretical Background: System Approach 15
2.1.2 Design Analysis Model 16
2.1.2.1 Design Industry Sector Analysis Model 16
2.1.2.2 Design Culture Sector Analysis Model 17
2.1.2.3 Design Education Sector Analysis Model 18
2.1.2.4 Design Policy Sector Analysis Model 19
2.1.3 Analysis Indicators for Design Survey 20
2.1.3.1 Design Industry Sector Analysis Indicators 20
2.1.3.2 Design Culture Sector Analysis Indicators 21
2.1.3.3 Design Education Sector Analysis Indicators 21
2.1.3.4 Design Policy Sector Analysis Indicators 22
2.1.4 Significance and Usage Value of the Design Analysis Framework 23
2.2 Seoul Design Survey Analysis Results 24
2.2.1 Analysis of Seoul's Design per Sector 24
2.2.2 Seoul's Design Indicators 28
2.2.3 Limitations 32
2.2.4 Future Projects and Forecast 33

3. Seoul's Design Status and Conditions

3.1 Design Industries of Seoul 35
3.1.1 Industry Resource 35
3.1.1.1 Corporation Status (general companies utilizing design) 35
3.1.1.1.1 Number of Companies 35
3.1.1.1.2 Budget (investment in design) 35
3.1.1.1.3 Ratio of Independent Development of Design 36
3.1.1.2 Corporation Status (design specializing companies) 36
3.1.1.2.1 Number of Companies 36
3.1.1.2.2 Base Capital 37
3.1.1.2.3 Industry Concentration Rate 38
3.1.1.3 Human Resource Status 38
3.1.1.3.1 Number of Designers 38
3.1.1.3.2 Education Level Distribution 39
3.1.1.3.3 Employment Status 40
3.1.1.3.4 Salary Level 40
3.1.1.3.5 Designer's Capacity 41
3.1.1.3.6 Designer's Satisfaction 42
3.1.2 Achievements (output) 42
3.1.2.1 Revenue Output 42
3.1.2.1.1 Revenue Amount 42
3.1.2.1.2 Export Status 43
3.1.2.2 Design Output 44
3.1.2.2.1 Intellectual Property Rights 44
3.1.2.2.2 Number of GD Mark Received 44
3.1.3 Satisfaction Rate (consumers) 45
3.1.3.1 Consumer Satisfaction Rate 45
3.1.3.1.1 Satisfaction Rate / Aesthetic 45
3.1.3.1.2 Satisfaction Rate - Functionality 45
3.2 Design Culture of Seoul 47
3.2.1 Cultural Resource 47
3.2.1.1 Infrastructure 47
3.2.1.1.1 Design Museums 47
3.2.1.1.2 Design Art Centers / Galleries 48
3.2.1.1.3 Design Libraries / Data Centers 49
3.2.1.2 Media 50
3.2.1.2.1 Design Broadcasting Contents 50
3.2.1.2.2 Design Publishing Contents 51
3.2.1.2.3 Design Online Contents 54
3.2.1.3 Events 55
3.2.1.3.1 Design Competitions 55
3.2.1.3.2 Design Events 56
3.2.2 Achievements (experience) 58
3.2.2.1 Experience in Infrastructure 58
3.2.2.1.1 Experience Rate in Design Museums 58
3.2.2.1.2 Experience Rate in Design Art Centers / Galleries 59

3.2.2.1.3 Experience Rate in Design Libraries / Data Centers 59
3.2.2.2 Experience in Media 60
3.2.2.2.1 Experience Rate in Design Broadcasting Contents 60
3.2.2.2.2 Experience Rate in Design Publishing Contents 61
3.2.2.2.3 Experience Rate in Design Online Contents 62
3.2.2.3 Event Experience 62
3.2.2.3.1 Experience Rate in Design Competitions 62
3.2.2.3.2 Experience Rate in Design Events 62
3.2.3 Satisfaction Rate (citizens) 63
3.2.3.1 Satisfaction Rate in Infrastructure 63
3.2.3.1.1 Satisfaction Rate in Design Museums 64
3.2.3.1.2 Satisfaction Rate in Design Art Centers / Galleries 65
3.2.3.1.3 Satisfaction Rate in Design Libraries / Data Centers 65
3.2.3.2 Media Satisfaction 66
3.2.3.2.1 Satisfaction Rate in Design Broadcasting Contents 66
3.2.3.2.2 Satisfaction Rate in Design Publishing Contents 66
3.2.3.2.3 Satisfaction Rate in Design Online Contents 67
3.2.3.3 Event Satisfaction 67
3.2.3.3.1 Satisfaction Rate in Design Competitions 67
3.2.3.3.2 Satisfaction Rate in Design Events 68
3.3 Design Education of Seoul (focused on post-high school education) 69
3.3.1 Education Resource 69
3.3.1.1 Education Institutes 69
3.3.1.1.1 Number of Universities 69
3.3.1.2 Human Resource for Education 72
3.3.1.2.1 Number of Professors 72
3.3.1.2.2 Number of Students 73
3.3.1.3 Curriculum 74
3.3.1.3.1 Cultural Comprehension and Creativity 74
3.3.1.3.2 Comprehension and Usage Ability of Technology 75
3.3.1.3.3 Management Ability and Legal Knowledge 75
3.3.1.3.4 Communication Capability 75
3.3.1.3.5 Basic Knowledge in Design 75
3.3.1.4 Education Environment 76
3.3.1.4.1 Lecture and Project Teaching Hours / Burden 76
3.3.1.4.2 Standards / Level of Research and Creativity Demand 77
3.3.1.4.3 Quality of Education Facilities and Research Materials 77
3.3.1.4.4 University's Financial Support for Research and Creative Activities 77
3.3.2 Achievements (output) 77
3.3.2.1 Research Output 77
3.3.2.1.1 International Journals 78
3.3.2.1.2 Domestic Journals 78
3.3.2.2 Human Resource Fostering Output 80
3.3.2.2.1 Bachelor Degree Graduates (including associate degree) 80
3.3.2.2.2 Master Degree Graduates 81
3.3.2.2.3 Doctorate Degree Graduates 81
3.3.3 Satisfaction Rate (students) 82
3.3.3.1 Curriculum 82
3.3.3.1.1 Cultural Comprehension and Creativity 83
3.3.3.1.2 Comprehension and Usage Ability of Technology 83
3.3.3.1.3 Management Ability and Legal Knowledge 84
3.3.3.1.4 Communication Capability 84
3.3.3.1.5 Basic Knowledge in Design 84
3.3.3.2 Learning Conditions 85
3.3.3.2.1 Learning Facilities 85
3.3.3.2.2 Learning Materials 86
3.3.3.2.3 Specialized Books and Project Materials 86
3.4 Design Policy Status of Seoul 87
3.4.1 Major Design Policies of Seoul 87
3.4.1.1 Design Policy Implementation System of Seoul 88
3.4.2 Policy Resource 92
3.4.2.1 Policy Departments 92
3.4.2.1.1 Design Budget 92
3.4.2.1.2 Human Resource at the Managing Department 93
3.4.2.1.3 Number of Years of Employment of Personnel in Charge 94
3.4.2.1.4 Number of Personnel w/ Design Major at the Managing Department 95
3.4.2.2 Policy Operation 95
3.3.2.2.1 Associate and Bachelor Degree Graduates 80
3.4.2.2.2 Appropriateness (appropriateness of urban development and design related projects) 97
3.4.2.2.3 Consistency (consistency in design related projects) 97
3.4.2.2.4 Logicalness (logicalness of Seoul guideline and budget) 97
3.4.2.2.5 Cooperativeness (cooperation with similar organizations) 98
3.4.3.1 Policy Contribution Rate 98
Referenced Documents <list per each sector> 101
Index 102

Foreword

Korea is now in the midst of the design era. While the world is faced with global recession and economic crisis, design has found its solid footing in the center of the corporate activities of small and large companies as well as in the policy affairs of the central and district government agencies. In response to the arrival of the design era and in light of the city's designation as the 2010 World Design Capital, Seoul is actively pursuing and implementing various design related projects and policies.

Design Seoul is the city's initiative to transform Seoul into a Soft City based on culture and design. Seoul's vision is to reflect the shift in the roles and values of design to the city's policies and transform the city to become the 'Green City', 'Elegant Cultural City', 'Dynamic High-Tech City', and the 'Knowledge-Based Global City' through design. Until now, design was recognized only from the industrial design perspective for its functions and roles to elevate the economic values of products. However, the social and economic environment has shifted from "the best" to 'the unique' and the significance of design has been proliferating in diverse fields as well as social classes and has become a culture of system, experience and value design.

Today, design has become an essential factor not only in business fields but also in all areas including culture, politics, administration, society, and education. As a result, developing strategies for promoting and advancing design is now being recognized as one of the core necessities for corporations as well as governments. Therefore, objective and in-depth data in all areas of design will become a highly important foundation for developing policies to achieve innovation in the design industry as well as in the cultural and education sectors. Instead of identifying the status of Seoul' s design capacity and its pros and cons compared to advanced international cities through scientific analysis, previous efforts ended at just simply estimating the status. If there are no fundamental data when developing future design strategies and the efforts only end at just paraphrasing unfounded wordings, then it will not be possible to develop logical and scientific visions and strategies.

Considering such conditions, undertaking the research efforts for the Seoul Design Survey is recognized to be highly important and timely appropriate. As a part of the 2010 World Design Capital projects, Seoul proposed to conduct an in-depth research and develop the Seoul Design Survey that will facilitate the understanding of the economic scale and characteristics of the region' s design economy as well as its potentials from a global standpoint.

The Seoul Design Survey will employ the international channel utilized for the IDA World Design Survey pilot project participated by the international design communities to develop the design map of the world. By detailing the comparison of leading design nations and design cities, the Seoul Design Survey will provide a valuable data that will facilitate the understanding of the unique design characteristics of Seoul Metropolitan City and as the framework data for establishing policies to enhance the design capacity of the city.

SEOUL DESIGN SURVEY

1. Seoul Design Survey Overview

1. Seoul Design Survey Overview

1.1 Objective

Since the launch of the World Design Survey pilot project lead by the IDA and the Icograda, each member organizations of the Icograda have been placing vast amount of time, resources and efforts to develop an objective and scientific international research framework for identifying the design status and level for each region from the global perspective. Taking such initiative into consideration and as the key participating city of the World Design Survey pilot project, it is essential for Seoul to develop analysis framework to measure each sectors related to the design capacity of the city.

The objective of the Seoul Design Survey is to research and develop a framework that will facilitate the understanding of the city's design status and capacity, both objectively and comprehensively. To achieve this, Seoul's unique analysis model that allows measuring of various status and conditions of the city's design sector will be developed and based on such model, data pertaining to the level and status of Seoul's design industry, culture, education, and policy will be researched and analyzed in more realistic and objective manner. In the future, the Seoul Design Survey is anticipated to facilitate the gathering of necessary basic data for establishing the city's design policies.

In addition, the framework will not be limited to assessing the design capacity only for Seoul but is anticipated to be utilized for comprehensive and individual factor analysis and have the strategic structure for comparing the design statuses of key advanced nations and cities.

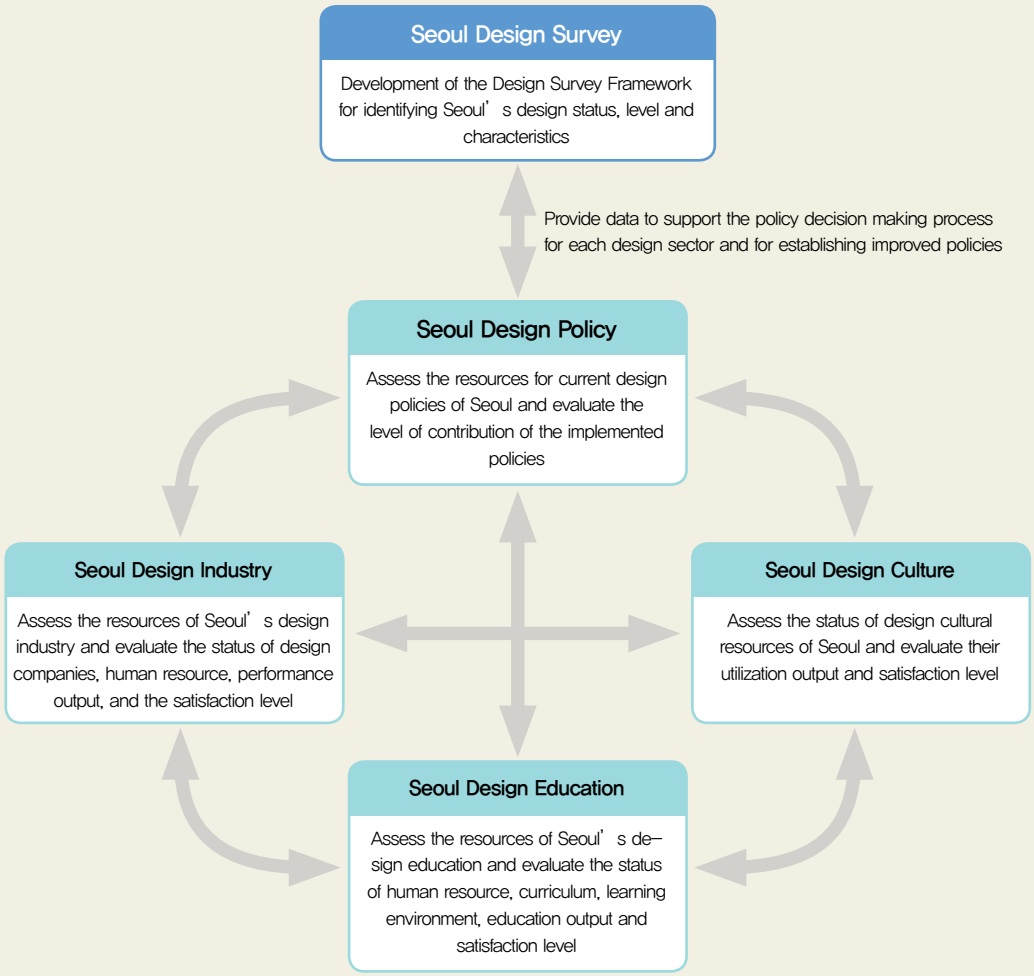
Accordingly, the logically developed analysis framework that can easily detail the unique cultural differences, size, effects and characteristics of the design sector for each region through the comparison of nations and cities with a global perspective, is anticipated to contribute towards obtaining significant research output for the Asia Design Survey 2009 as well as for the World Design Survey 2010, and at the same time, will play a leading role in establishing a global recognition of Seoul as the 2010 World Design Capital.

[Figure 1] Objectives per each phase of the Seoul Design Survey Project

1.2 Description

The Seoul Design Survey will be composed of 3 chapters. Chapter 1 details the background, objective and summary of the Seoul Design Survey. Chapter 2 includes the framework for systematically assessing the design status. Chapter 2 will present the Design Index of the Seoul Design Survey, established through the analysis outcome based on the framework's logical and scientific methodologies and by organizing the individual index categories.

Chapter 3 presents the detailed outcome of the data analyzed through the design index developed in the Chapter 2. It displays the diverse contents and significances of the data per sectors of design industry, culture, education, and policy to facilitate the understanding of Seoul's design status for each sector.



[Figure 2] Research flow of the Seoul Design Survey

1.3 Research Methods

The Seoul Design Survey is undertaken with following phases. First, documented information and existing data are analyzed and theoretical analysis model is developed. Based on the theoretical model, the status data are collected and verified. Then survey is conducted with subject institutes and individuals and the outcome analyzed. Finally, comprehensive analysis is conducted and the design index is developed.

Phase 1	**Documented information and existing data research and analysis**
Phase 2	**Establishing the index categories through the research and development of the framework for the Design Survey**
Phase 3	**Gather of data per each sectors of design industry, culture and education and commencement of survey**
Phase 4	**Comprehensive significance analysis and the establishment of the design indicators**

1.4 Survey Methods

1.4.1 Phase 1 Data Research Method: Survey

1. Objective: Collecting data to identify the status of Seoul's design status based on the framework for the Seoul Design Survey
2. Period: March 02 ~ April 24, 2009
3. Region: Seoul Metropolitan City
4. Methods:
   - Conduct survey using predefined questionnaires in various methods including 1:1 interview, on-line, fax, and e-mail
   - Corporate subjects for the survey shall be selected from the pre-acquired list of corporation
   - University subjects for the survey shall be selected after defining the design related universities and majors
   - Survey on public employees shall be conducted on the managerial level personnel in design related departments
   - Survey on citizens shall be conducted on the panel members of the MBrain Co., Ltd., a market research specializing company
5. Survey Subjects:

Corp.	General Company	Companies with over 300 em-ployees	Managers 100	Designer 100		400 Samples
	Specializing Company	Design Specializing Company	Managers 100	Designer 100		
Public In-stitute	City Hall	Managerial personnel at design related dept.	74			74 Samples
Universities	2 Year Col-lege	Visual, Product, Textile, Environ-mental Design, and Multimedia related majors	Students 80	Professors 25		250 Samples
	4 Year Uni-versities		Students 80	Graduate Students 40	Professors 25	
Citizens	Males and females between the ages of 20~60 and have resided in Seoul for over 5 years		Male 308	Female 314		622 Samples

[Table 1] Initial research subjects for the Seoul Design Survey

1.4.2 Phase 2 Data Research Method: Statistical Data

The Phase 2 data was obtained through the independent research by other organizations or individuals for a specific reason and is used as a reference material only. For each of the categories, the Phase 2 data were obtained from various organizations including the Ministry of Culture, Sports and Tourism (MCST), Korea National Statistical Office (NSO), Korea Intellectual Property Office (KIPO), Korea Institute of Design Promotion (KIDP), Korea Education Development Institute (KEDI), and the Korea Education & Research Information System. In certain categories, the data was obtained through the Seoul Design Center has conducted its own independent research.

1.4.3 Analysis Method and Important Conditions

1. Allowed Margin of Error

Target	Category		Survey Group
Companies	General Companies	Managers	Maximum margin of error allowed is 1/4 ±9.30%p on 95% reliability
		Designers	
	Design Specializing Companies	Managers	Maximum margin of error allowed is 1/4 ±9.480%p on 95% reliability
		Designers	
Civil Service Employees	City Hall Employees		Maximum margin of error allowed is 1/4 ±7.96%p on 95% reliability
Universities	University Students		Maximum margin of error allowed is 1/4 ±6.81%p on 95% reliability
	Professors		Maximum margin of error allowed is 1/4 ±13.20%p on 95% reliability
Citizens			Maximum margin of error allowed is 1/4 ±3.70%p on 95% reliability

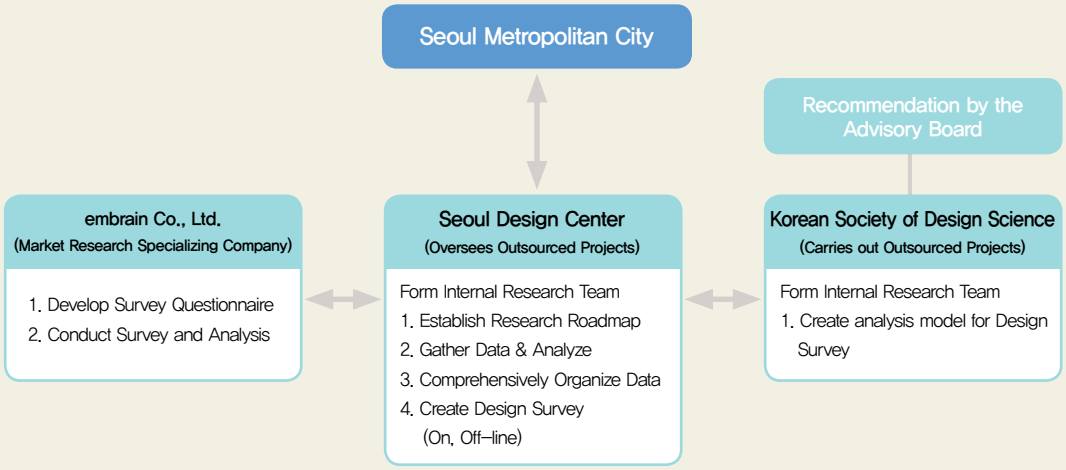
[Table 2] Allowed Margin of Error

2. Analysis method: Computer statistics process via SPSS 12.0
3. Important conditions
   - Likert Scale was applied with max score of 5 points for questions pertaining to satisfaction rate and degree of importance, for each point category, the % of response and score were averaged
   - The % value for the response rate will be expressed to 1 decimal point (tenth) value and the average score on the survey with the max score of 5 points will be expressed to 2 decimal point (hundredth) value.
   - In case of miscellaneous response, not all the responses will be reflected but the notable responses will be recorded.
   - Refuse/Not sure: In case of survey conducted on the companies, there were some questions which answers were either refused or responded as not sure.
   - Repeated%: If 2 or more answers are made to a single question, 100% can be obtained when adding all % of all the answered questions.
   - The response % expressed in the Table is rounded off figure and may not total 100.0% when totaled.
   - When the number (N) of respondents for the detailed item per each category sector is different, the formula for obtaining average is as follows. If the values for detailed category are A and B with the number of respondents for A equals x and for B equals y, the average value of A and B $=\{(A\times x)+(B\times y)\}\div(x+y)$

1.5 Research Implementation System

1.5.1 Implementation Methods

The following organizational structure is utilized to conduct the research to understand and identify the status and level of Seoul's design.



[Figure 3] Research & Implementation System

1.5.2 Implementation Process

The research process is as follows.

- Establish the basic plan for the Seoul Design Survey Jun. 2008
- Gather data pertaining to Seoul's design status (Phase 1) Oct. ~ Dec. 2008
- World Design Survey Seoul Forum Jul. 10 ~ 11, 2008
  - Presentation of the World Design Survey pilot project research and discussion

- Review previously conducted research (education sector) for the Seoul Design Survey Oct. ~ Dec. 2008
  - Develop analysis model for the design education sector and apply the model on pilot projects

- Research for the Seoul Design Survey Framework Mar. ~ May 2009
  - Research and develop framework for the Design Survey

- Initial research and survey for the Seoul Design Survey Mar. ~ May 2009
  - Gather status data for each design sectors of Seoul and conduct survey

- Data analysis and verification process for the initial research May ~ Jun. 2009
  - Analysis and verification of status data

- Comprehensively organizing the Seoul Design Survey Jul. ~ Aug. 2009
  - Indexing Seoul's design status data

- Preparation and publication of the Seoul Design Survey Sep. 2009

SEOUL DESIGN SURVEY

2. Achievements of the Seoul Design Survey

2. Achievements of the Seoul Design Survey

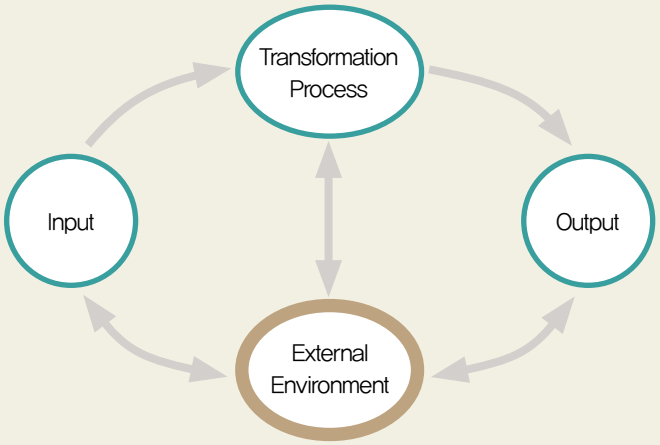
2.1 Research for the Seoul Design Survey Framework

2.1.1 Theoretical Background : System Approach

The Seoul Design Survey categorized the design sectors in Seoul region as the design industry, design culture, design education, and design policy and regarded these sectors as a system and developed analysis model for the sub-categories of each sector. In addition, to facilitate the understanding of Seoul' s design characteristics and status information, the design index items were established.
The analysis model applied in the Seoul Design Survey was designed based on the System Approach method, which has been widely used in diverse areas for the development of index systems.

The System Approach is a method of viewing and analyzing the subject from system perspective. The System Approach method identifies the 5 elements of a certain system and determines the efficiency and effectiveness by analyzing under the input/process, output and environment system. In addition, the method reviews the correlations of the system elements and examines the mutual influence between the system environments by taking the synergy effects into consideration. When using the System Approach method, the objective can be clearly defined with regards to recognizing the analysis subject and it also differentiates the sub-systems and allows understanding of correlations of the systems. The System Approach method also achieves not sub-optimization but total optimization (Koontz et al. 1980). Even when developing the evaluation model, the System Approach method allows not only partial but overall correlations and provides goal approaching perspective.

Using the System Approach method, the below model can be created by separating the system into the fields of input-process, output and environment. This is simply called the I/O (Input-Output) model (Koontz et al. 1980, p.24; Jae-in Oh et al., 2005, p.199).



[Figure 4] I/O Model (Source: Koontz et al, 1980, p.24)

The Seoul Design Survey categorizes the various sectors of design in Seoul Metropolitan City into design industry, design culture, design education, and design policy and perceives it all as a single system. It then developed the analysis models per each sector and the design index categories to facilitate the understanding of the characteristics and status data of Seoul' s design.

2.1.2 Design Analysis Model

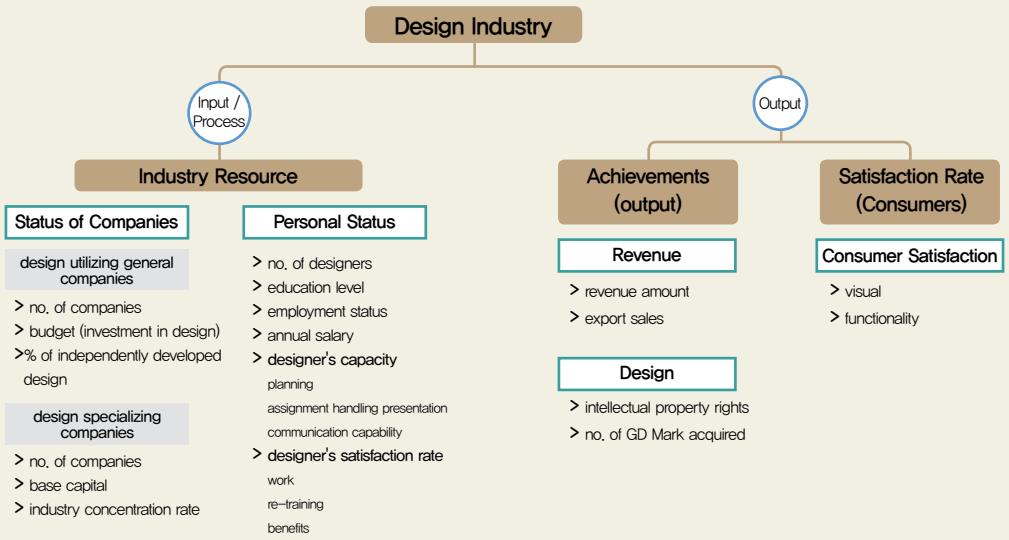
2.1.2.1 Design Industry Sector Analysis Model

When viewing from the system' s theoretical perspective, the design industry structure can be understood as follows. The objective of the design industry structure is to identify the status of the design industry and analyze the factors which may contribute to the stimulation of the design industry to foster the industry and strengthen the design competitiveness and ultimately, enhance the quality of life of the citizens.

The design industry can be categorized into the fields of Input/Process and Output.

The Input/Process field of the design industry is composed of the status of companies in design industry, designers and design related human resources. First, the status of the companies in the design industry are categorized into design specializing companies, which creates design, and design utilizing companies that applies design for the development and sales of their products. After categorizing, the total number of companies under each category, their budget, capital, and other conditional factors are reviewed. As for the human resources of the industry, the number of designers in the companies, their level of education, employment status, and satisfaction rate are examined.

The Output field is the field for measuring the production output of the design industry and it is categorized into Achievements (output) and Satisfaction Rate. In the Achievements (output) category, the revenue and export sales of design specializing companies as well as the status of the intellectual rights are examined. As for the satisfaction rate, the consumers are surveyed to evaluate the satisfaction rate they feel during the process of using the products produced by the design industry.

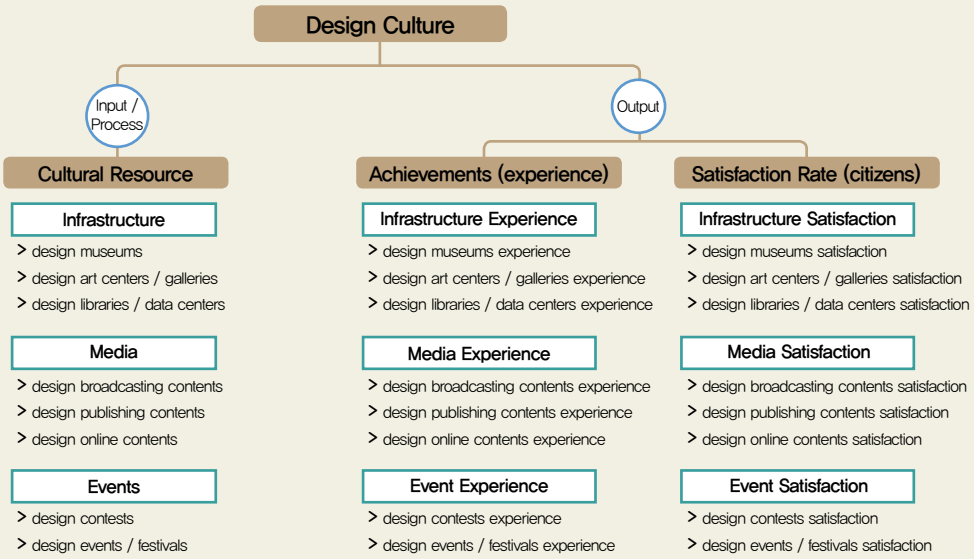


[Figure 5] Design Industry Field Data Analysis Model

2.1.2.2 Design Culture Sector Analysis Model

The objective of the design culture system is to improve the quality of life of citizens through design and to increase the overall awareness of design among the public. The resources in the design culture sector includes hardware resources, in which people can conduct design cultural activities, such as museums, art centers, galleries, libraries, and data center and the software resources including design related media, contests and events. The citizens, government, corporation, and professional designers are the key constituents that makes up the industry and each composing group has a differentiated roles of developing policies, implementing policies, operating design resources, and participating in design related activities. Through such roles, the awareness and cultural level of the region is formed. The awareness level of design as well as the cultural standards by the citizens, media, the design industry, design education and the design policies circumference the design culture and at the same time form the environmental factors that influence design.

The design resources including the design oriented infrastructures such as museums, art centers and libraries and the design media through broadcasting contents, publishing contents and online contents, as well as events, festival and competitions are listed under the Input/Process field of the design culture. The Output field of the design culture displays the experience level of the resources of the input/process design resources by the citizens and its related qualitative and quantitative satisfaction level.

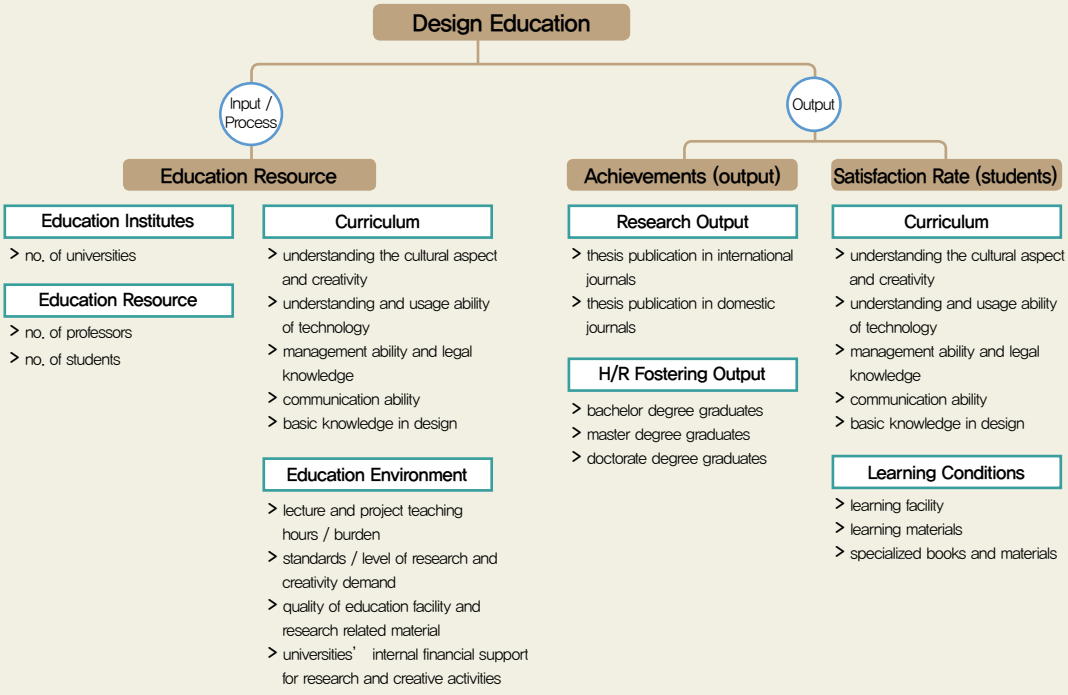


[Figure 6] Design Culture Field Data Analysis Model

2.1.2.3 Design Education Sector Analysis Model

The objective of the design education structure from the system perspective is to foster outstanding designers and create value as well as to improve the nation's industrial competitiveness and ultimately, contribute to the advancement of humanity. To achieve these objectives, educational institution will be established and financial as well as human resource will be invested. The key constituents of the education structure are professors and students and surrounding environment includes citizens, media, design industry, design culture, design policy, corporations, and government. To reach the objective of the education structure, all the constituents and related organizations must perform their roles and it must be managed to ensure satisfaction by everyone.

The Input/Process field of the design education is composed of evaluation categories of design education resource conditions such as the number of professors and students, education institutes, curriculum, and education environment. The Output field of design education structure is the where the achievements of the education system are expressed. It is composed of output from research and human resource fostering and the satisfaction rate of the curriculum and learning conditions felt by the students, who are the consumers of the design service, are displayed.

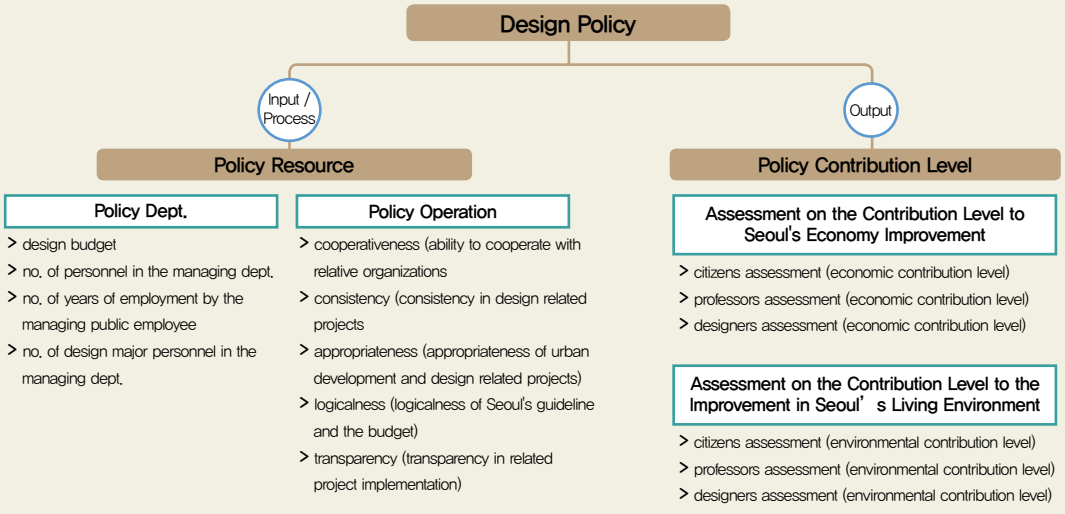


[Figure 7] Design Education Field Data Analysis Model

2.1.2.4 Design Policy Sector Analysis Model

The ultimate objective of the design policy is to improve the quality of life of the citizens. The policies that will faithfully achieve such objective will include the budget, implementation personnel and design related infrastructure resource and the public employees of the city government as well as the district gu offices as the composing members. All of these composing members must be managed so that they all will perform their assigned roles. To ensure that such roles are met and objectives reached, policies for the design industry, which is now far spreading throughout the international market, together with the design culture, which is diversifying, and the design education that reflects the rapidly changing society, must all be implemented based on the increasing awareness of the city' s citizens.

The Input/Process field of the design policy sector includes essential policy resources to implement de-sign related policies. The research examined the status of the implemented budget, number of public service employees and number of years they have been employed for. The research also reviewed the cooperativeness, consistency, logicalness, and transparency of the process from start to finish of design related projects by the public employees in charge of design policies. In the Output field, Seoul' s design policies' contribution level to the improvement in the economy and quality of life are evaluated from the citizens, professors and designers' perspective.



[Figure 8] Design Policy Field Data Analysis Model

2.1.3 Analysis Indicators for Design Survey

The Seoul Design Survey analyzed Seoul's design by separating it into 4 sectors of industry, culture, education, and policy and divided them into 11 categories and then into 27 sub-categories. It then established 82 detailed indicators on items that allowed statistical comparison and based on the analysis, the Design Data Analysis Indicators was developed.

Sector	Category	Sub-Category	Detailed Indicators
Design Industry	3	6	18
Design Culture	3	9	24
Design Education	3	8	25
Design Policy	2	4	15
Total	11	27	82

[Table 3] Number of Indicators Categories of the Seoul Design Survey

2.1.3.1 Design Industry Sector Analysis Indicators

The indicator categories and items are systemized to analyze the status of Seoul's design industry sector.

Sector	Category	Sub-Category		Item	Description
Design Industry	Industry Resource	Corp. Status	design utilizing gen. companies	no. of companies	measure the market size of the design utilizing general companies (in case of Seoul, research was conducted on companies with 300 or more employees)
				budget (investment in design)	
				independent development ratio	
			design specializing companies	no. of companies	measure the market size of the design specializing companies
				base capital	
				industry concentration rate	
		Personnel Status		no. of companies	identify the pivotal members of the design industry
				education level	
				employment status	
				annual salary	
				designers' capacity	
				designers' satisfaction rate	
	Achievement (output)	Revenue Status		revenue amount	measure the achievements of design specializing companies in numeric values
				export sales	
		Design Output		intellectual property rights	identify direct and visual achievements
				no. of GD Mark acquired	
	Satisfaction Rate (consumers)	Consumer Satisfaction Rate		visual	Seoul citizen's design satisfaction rate
				functionality	

[Table 4] Design Industry Sector Analysis Indicators

2.1.3.2 Design Culture Sector Analysis Indicators

The indicator categories and items are systemized to analyze the status of Seoul's design culture sector.

Sector	Category	Sub-Category	Item	Description
Design Culture	Cultural Resource	Infrastructure	design museums	identify the scale and introduce case examples
			design art centers / galleries	
			design libraries / data center	
		Media	design broadcasting contents	
			design publishing contents	
			design online contents	
		Event	design contests	
			design events	
	Output (exp.)	Infrastructure Experience	experience in design museums	experience rate
			experience in design art centers / galleries	
			experience in design libraries / data centers	
		Media Experience	experience in design broadcasting contents	
			experience in design publishing contents	
			experience in design online contents	
		Event Experience	experience in design contests	
			experience in design events	
	Satisfaction Rate (citizens)	Infrastructure Satisfaction Rate	satisfaction rate in design museums	satisfaction rate on the number (quantity) of facilities and contents available for use
			satisfaction rate in design art centers / galleries	
			satisfaction rate in design libraries / data centers	
		Media Satisfaction Rate	satisfaction rate in design broadcasting contents	
			satisfaction rate in design publishing contents	
			satisfaction rate in design online contents	
		Event Satisfaction Rate	satisfaction rate in design contests	
			satisfaction rate in design events	

[Table 5] Design Culture Sector Analysis Indicators

2.1.3.3 Design Education Sector Analysis Indicators

The indicator categories and items are systemized to analyze the status of Seoul's design education sector.

Sector	Category	Sub-Category	Item	Description
Design Educa-tion	Education Resource	Education Institute	no. of universities	overall quantity of facilities in design education universities
		Education HR	no. of professors	number of professors and students in design departments of universities in Seoul
			no. of students	
		Curriculum	level of culture comprehension and cultural creativity	curriculum assessment by professors
			level of comprehension and usage ability of technology	
			management capability and legal knowl-edge	
			communication capability	
			basic knowledge in design	

Sector	Category	Sub–Category	Item	Description
Design Educa–tion	Education Resource	Learning Environ–ment	lectures and project teaching hours / burden	learning environment assessment by professors
			standards / level of research and creativity demands	
			standards of learning facilities and materials for research	
			financial support for research and creative activities by school	
	Achieve–ments (output)	Research Output	publication in international journals	number of publications in academic journals (pri–mary author is a member of university in Seoul)
			publication in domestic journals	
		HR Foster–ing Output	bachelor degree graduates	number of design HR (students) fostered through design education in universities in Seoul
			master degree graduates	
			doctorate degree graduates	
	Satisfac–tion Rate (students)	Curriculum	level of culture comprehension and cultural creativity	students' satisfaction rate on curriculum
			level of comprehension and usage ability of technology	
			management capability and legal knowl–edge	
			communication capability	
			basic knowledge in design	
		Learning Conditions	learning space (classroom) and facilities	students' satisfaction rate on learning environment
			learning materials	
			specialized books and materials	

[Table 6] Design Education Sector Analysis Indicators

2.1.3.4 Design Policy Sector Analysis Indicators

The indicator categories and items are systemized to analyze the status of Seoul's design policy sector.

Sector	Category	Sub–Category	Item	Description
Design Policy	Policy Resource	Policy Analysis	design budget	ratio of design related budget from Seoul's total budget
			no. of personnel in the managing dept.	identify the professionalism of design policy
			no. of years of employment by managing personnel	
			no. of design majored personnel in the managing dept.	
		Policy Operation	cooperativeness (cooperation with relative institutes)	research on the awareness level of public employees
			consistency (consistency in design related projects)	
			appropriateness (appropriateness of urban development and design related projects	
			logicalness (logicalness of Seoul's guideline and budget)	
			transparency (transparency of related projects and budget implementation)	
	Policy Contribu–tion Level	Assessment on the contribu–tion level towards improvement of Seoul's eco–nomic conditions	citizens' assessment (economic contribution)	improvement effects of economic and living environment conditions of design policies
			professors' assessment (economic contribution)	
			designers' assessment (economic contribution)	
		Assessment on the contribution level towards improvement of Seoul's living environment	citizens' assessment (environment contribution)	
			professors' assessment (environment contribution)	
			designers' assessment (environment contribution)	

[Table 7] Design Policy Data Analysis Indicators

2.1.4 Significance and Usage Value of the Design Analysis Framework

The Seoul Design Survey, published as a part of the World Design Survey pilot project, comprehensively includes information pertaining to Seoul's design industry, culture, education, and policy gathered and analyzed with the framework. Seoul anticipates that the information provided through the Seoul Design Survey will become the basic data that will facilitate the analysis and the understanding of the status of Seoul's design.

- A standardized framework was necessary to objectively and comprehensively identify the current status and level of Seoul's design. The Seoul Design Survey will become the system for setting Seoul's basic plan for urban policy as well as policy objective and for its implementation and scientific monitoring.

- The Analysis Model and Indicator developed to be utilized for analysis framework can be used to identify and diagnose the design status and level as well as overall capacity of Seoul's design sector. In addition, it can be used to run comparative analysis of each region in Korea or on a nation to nation comparison of design capacity and it can be used as an important basic data and basis data for establishing design related policies.

- Proposed framework for the World Design Survey: Propose a standardized framework that will allow comparative analysis within a frame developed with certain degree of uniformity for specific region to the commissioners of the Icograda through the Asia Design Survey project (scheduled for 2009). By applying the framework as the World Design Survey pilot project, discussion will be made on determining the items and categories that can be applied to nations or cities of Asia region and the Asia Design Survey will be developed.
  The Seoul Design Survey is anticipated to contribute towards identifying design characteristics of a specific nation or region for the future World Design Survey project and at the same time, play a major role in elevating the recognition of Seoul's design.

2.2 Seoul Design Survey Analysis Results

2.2.1 Analysis of Seoul's Design per Sector

Design Industry of Seoul

- The average investment budget by design utilizing general companies in Seoul was 1 billion 587.33 million KRW (approx. 1.26 million U$D; 1 U$D=1260KRW), which is approximately 2.2 times the national average. In case of conglomerate corporations with exclusive design departments, the average budget was 2.654 billion KRW (approx. 2.1 million KRW; 1 U$D=1260KRW). In case of design utilizing general companies, there's a tendency of outsourcing large volume design projects.

- Even though the total number of employees in design specializing companies in Seoul numbered at 9,015 (71% of the nation's total), when viewing at their distribution per company size, companies with base capital less than 500 million KRW (approx. 400,000 U$D; 1 U$D=1260) accounted for 80.9%, and the companies with 5 or less total employees accounted for 61%, showing significantly inferior level of the industry. The average revenue for design specializing companies amounted to 610 million KRW (approx. 484,000 U$D; 1 U$D=1260 KRW), and it is on the rising trend. However, the revenue of large size design specializing companies with annual revenue of over 1 billion KRW (18.4% of total companies in Seoul) takes up approximately 70% of the entire revenue of the industry and it signifies that the industry's market share is largely occupied by small number of large size companies. As a result, the competitiveness of top few design specializing companies may become highly related to the competitive edge of Korea's major conglomerates.

- The education level of majority of designers were university graduates and as for the employment status of the designers, 96.6% of the designers employed by the design utilizing general companies and 91.6% of the designers employed by the design specializing companies had permanent status employment. In case of annual salary, the salary for designers employed by the design utilizing general companies was higher than the designers in design specializing companies (64% of entry level employees received 15 ~20 million KRW/yr; approx. 11,900 ~ 19,800 U$D; 1 U$D=1260 KRW). The average score for designers' capacity evaluated by the managers was 3.5 and the work satisfaction level evaluated by the designers was 3.26, showing the lowest score for compensation and benefit category. The number of design registration by companies in Seoul was 14,502, which is 38.5% of the nation's total design registration and as for the GD Mark, the companies acquired 421 GD Marks, which is 64.35% of the total GD Marks awarded in Korea.

Befitting the recognition of the Capital City of Korea, Seoul plays the pivotal role in Korea's design industry in terms of the design industry scale as well as its competitiveness. The city has significantly higher number of design specializing companies as well as their revenue amount and the number of industry professionals employed, compared to other regions. However, excluding few leading companies, the reality of the overall industry is still at an inferior level. Some major conglomerates' investment in design and its utilization is at the level of leading global companies but in all, only 55% of the general companies in Seoul utilize design and only 37% of the companies possess design exclusive departments. Design requires comparably lower investment than other investments such as technology development and has less turn-around time and allows creation of higher value. Therefore, it is necessary to expand the awareness in the importance of corporation's design management and develop strategies to utilize design in the business. It is also further necessary to improve companies' productivity through design and foster SMEs' design development activities to produce world's leading products.

Additionally, it is essential for Seoul's design industry to expand the existing design market size and at the same time, create a new market. The reason for this is that at currently small scale design market size of Korea, it is difficult for the self-propelled growth of design specializing companies, who are the pivotal constituents of the design industry. As shown through this research, there is a comparably low awareness level by the companies and the general public with regards to the specialties of the design specializing companies and the disorganized market structure can only lead to price dumping competition, degrading quality and deteriorating profitability. Per design field, both the number of companies and number of employees were at the highest for the visual design field and

the environmental design showed higher budget and base capital when compared with the companies in the other design field. This is attributed to the industry' s uniqueness of requiring architectural design and construction that involve comparably larger scale companies.

In case of England, the Foreign Affairs Division of UKT&I has formed the Creative Industry Team (25 members in 13 countries) and is providing tailored design export support to the industry. Seoul Metropolitan City also needs to benchmark such successful overseas best practice and provide international market support for design specializing companies with global competitiveness.

For the long run, it is essential to foster advanced design industry, and promote the development of creative design to produce higher value products equalling those of advanced nations. In addition, it is also necessary to proliferate awareness that the design is not a simply a form or a tool but has a direct and indirect influence in enhancing individual' s quality of life. Finally, continuous and responsible efforts in design will become another form of an index that can measure the advancement stages of the awareness level in design.

Design Culture of Seoul

- In Seoul, there are 19 design related museums, 13 design art centers / galleries, and 16 design related libraries / data centers. There are numerous design related contents distributed through broadcasting, publications and online websites and number of contents and events for citizens are held each year in Seoul.

  However, the overall awareness in design culture assets by the people of Seoul showed low level with 51.4% for awareness level and experience rate in design related museums and 17.7% respectively, 54.2% and 27.2% respectively for awareness level and experience rate in art centers / galleries, 37.5% and 13.9% for libraries. These numbers clearly show that the experience rate is significantly lower than the awareness level. In case of quantitative and qualitative satisfaction rate, the evaluation showed dissatisfactory level for quantitative category and the qualitative category scored even lower.

  The concept of culture, which had once been a term describing sophisticated arts enjoyed by the nobles, has proliferated and became widely and generally accepted daily life activities for the general public. Like such, the concept of design is also being expanded from the designers' (producers') exclusive artworks to an output of a culture that widely reflects the ways of life. The end users have also changed from the position of accepting what ever the output designers produced to participation. The users actively participate in the designing process to the extent in which some even takes on the role of a producer. Accordingly, the mainstream of the design culture is expanding and shifting from the producer to end user.

  When considering such phenomenon, design can be viewed to have expanded its borders that were once exclusive only to industry professional. However, there still exists significant difference in the awareness in design between the designers and the general public. Therefore, it is necessary to provide more opportunities for gaining higher standard design education and experiences to the general public and promote the designers to lead the efforts in elevating the public' s awareness in design to reduce the gap in understanding design between the two groups. The advancement of design culture cannot be achieved with the mass fostering of outstanding designers but is determined by the general public' s awareness in design and will to participate in design related activities. Such social movement will lead to fostering of outstanding designers and become the drive force in creating advanced design culture.

  Only when uniquely creative and diverse design become the source of the competitiveness, when the culture is formed that can create high quality design through transformation of the general public' s way of life, motivated by sophisticated and diverse design, and when the 'reciprocating structure of culture and design' flows seamlessly, our culture will become more advanced and possess the characteristics of quality culture.

Design Education of Seoul

- Of total of 411 colleges and universities in Seoul, 87 (21%) have design related departments or majors. There are 388 (18% of nation' s total) professors in design related majors and among them 149 (professor to student ratio

= 1:51) are employed in associate degree level colleges and 239 (professor to student ratio = 1:45) are employed in bachelor degree level universities. The total number of students majoring in design related fields in colleges and universities in Seoul numbered at 24,884 (20% of the nation's total) and their distribution rate from highest concentration to lowest was in the order of 4 year bachelor degree universities, associate degree colleges, graduate schools, and distant learning (cyber) universities.
Such research results show that there is an inappropriate professor to students ratio (appropriate number of students per 1 professor is 12.8 ~ 15 and currently, there are 48 students per professor, or over 3 times the number of the appropriate ratio) in the design field of majors in colleges and universities in Seoul. This signifies that there is an urgent necessity to improve the human resource status in the design education field in Seoul to resolve the unbalanced professor to student ratio.

- In case of professors satisfaction rate category, the research showed average level of satisfaction with a score of 3.15 for curriculum and 3.04 for learning environment. In the curriculum satisfaction rate category, understanding and usage ability of technology received the highest satisfaction rating followed by basic knowledge in design, communication capability, cultural comprehension and creativity, and management ability and legal knowledge. The highest satisfaction rate in the learning environment satisfaction rate category was hours of lecture and project teaching followed by standard / level of research and creativity demand, quality of education facilities and research material, and the financial support for research and creative activities by universities scored the lowed satisfaction rate with 2.54. The survey also showed low satisfaction rate for the quantity of education facilities.

- In case of students satisfaction rate category, the research showed average level of satisfaction with a score of 3.24 for curriculum and 3.02 for learning environment. In the curriculum satisfaction rate category, basic knowledge in design received the highest satisfaction rating followed by communication capability, understanding and usage ability of technology, cultural comprehension and creativity, and management ability and legal knowledge. Like the satisfaction rate for the professors, satisfaction in the curriculum, which teaches understanding and usage ability of technology, was highest with the lowest satisfaction rate for the management ability and legal knowledge. The survey shows that the satisfaction rate was higher for the graduate school students compared to associate and bachelor degree students. The highest satisfaction rate in the learning environment satisfaction rate category was the quality of learning facilities and research material, specialized books and materials for projects, and the quality of learning facilities and research material.

- Among the design education output, there were 718 design related thesis published in the domestic academic journals by the colleges and universities in Seoul. In the 34 domestic journals, this number signifies 27% of total thesis published. As for the human resource fostering, total of 5,652 students have graduated with a degree in the design field of majors with bachelor degree (4,861) taking up 20.5% of the nation's total, 70.8% of nation's master degree graduates (738), and 89.8% of the nation's doctorate degree graduates (53). Notably, there was comparably higher output of higher degree graduates in Seoul than the other regions. This shows that there is an increase trend of students seeking higher degrees in the design field. To further strengthen this research, there is a necessity to closely examine whether the increased number in higher degree graduates also leads to increase in the employment rate of the industry.

Design is a creative activity that is continuously changing. As a result, its domain organically transforms and develops together with its environment. The focus in design no longer is placed on aesthetic expression and is limited only to modeling activities but has proliferated to include products, environment and all of the surrounding elements in people's daily life. In other words, design has transformed to include modeling activities that involves all of the elements associated with human, material, and society. However, in spite of such generation trend and changes, both the professor and student group showed lowest satisfaction rate in the 'Comprehensive view with other academic subjects' under the management ability and legal knowledge. Therefore, the design education in Seoul in the future needs to focus on more integrated curriculum with relative subjects as well as multi-subject curriculum. Furthermore, there must also be an improvement in the research environment for the professors together with the improvement in students' learning environment as well.

The demands of changes in the modern world are the realities that no one can ignore or escape from. The design

sector is transforming faster than any other sectors. As a result, design education, which must supply the human resource for the design sector, is faced with numerous issues in regional, cultural, and social aspects that the sector must overcome to be in line with such reality.

Design Policies of Seoul

- Of the total budget of Seoul, 0.37% is allocated to design related projects. The budget is more concentrated towards infrastructure development rather than enhancement of design. Currently, Seoul is at the initial stage of implementing design policy and as for the number of years of employment among the public employees in design division, below 2 years make up 82.4% of total design managing public employees in Seoul Metropolitan Government. With only 14.8% of design specialists within the design managing division of the city, the division may seem to be short-handed for actively pursuing the design related projects but nonetheless, there is overall positive awareness regarding design policy operation. Notably, the employees in design related division have particularly positive awareness with regards to the transparency and appropriateness of design policy implementation.

- Over 64.8% of Seoul's citizens are aware of the city's design projects and with regards to these projects, both the citizens and related companies have positive assessment of the projects. Citizens, professors and designers have all gave favorable assessment on Seoul's design policies with regards to its contribution towards the improvement of living environment and economic conditions.

Seoul Metropolitan Government has fully launched the urban design projects with the establishment of the Seoul Design Headquarters in May of 2007, and then increased its drive as the city became designated as the World Design Capital at the end of 2007. As of December of 2008, all of the district gu's (similar to county in USA) of Seoul possessed design related teams. More than ever, Seoul is actively implementing design policies and as a result, the city is displaying increased awareness in design. Furthermore, by pursuing two fields of public design and design industry through the city's Seoul Design Headquarters and the Urban Competitiveness Headquarters, the city has acquired balanced foundation to comprehensively promote design

The design projects being implemented by the Seoul Metropolitan City is receiving support by both the general public and the design professionals (professors and designers) in terms of awareness in design. Additionally, the city has newly formed design related organizations and is amending and transforming the fundamental system of urban policies. Based on such system, Seoul is pursuing the growth strategies of economic stimulation and urban environment improvement through design and seeks to enhance and solidify the city brand image of Seoul by utilizing design.

The status of Seoul's design sector viewed through the Seoul Design Survey shows significant growth possibilities. It shows increase in interest as well as investment in design by the general companies, active expansion to overseas markets by the design specializing companies, increase in fostering creative human resource, and transformation in the design awareness among the general public. The city seeks to improve competitiveness, acquire specialization, and develop strategic foundation in the design and relative fields through active cooperation among the members of the design industry as well as through the policy development by the metropolitan government.

Due to the uniqueness of the design work, it is not an easy task to form an objective and preset input/output guideline for the design industry. As a result, the Seoul Design Survey has developed a framework for assessing the capacities of the design activities and design constituents of the design industry, culture, education, and policies that comprise the design unique characteristics and status of Seoul. The framework will become the basic foundation for the future design related research activities and will not only contribute to the World Design Survey project but at the same time, will play a key role in elevating Seoul's recognition as the international design city.

2.2.2 Seoul's Design Indicators

No	Sector	Category	Sub–Category		Indicator Item	Indicator Value	Description	Remarks
1	Design Industry	Industry Resource	Corp. Status	design utilizing general companies	no. of companies	55%	no. of companies with design development projects	measures the market size of design utilizing companies among the general companies (in case of Seoul, only the companies with 300 or more employees were surveyed)
2					budget (investment in design)	below 500 million KRW: 61.45%	1 year budget for design department (average not available due to high differences)	
3					ratio of independently developed design	72.5% based on no. of projects, 39.3% based on cost	rate of independent development by the design department (in–house)	
4				design specializing companies	no. of companies	1,545	no. of design specializing companies (NSO 2007)	measures the market size of design specializing companies
5					base capital	Below 500 million KRW: 80.9%	base capital of design specializing companies (average not available due to high differences)	
6					industry concentration rate	top 18.4% of the entire design specializing companies make up 70% of the total industry revenue	top revenue size companies (NSO 2007)	
7			Personnel Status		no. of designers	9,015	no. of employees in design specializing companies (NSO 2007)	identifies the core constituents of the design industry
8					education level	**general companies:** bachelor degree: 72.9% master degree: 14.2% high school: 5.9% associate degree: 5.7% doctorate degree: 1.2% **design specializing companies:** bachelor degree: 76.5% associate degree: 12.2% master degree: 8.5% high school: 2.5% doctorate degree: 0.2%	high school, associate degree, bachelor degree, master degree, doctorate degree distribution rate	
9					employment status	**general companies:** permanent status: 96.6% contractual: 3.4% **design specializing companies:** permanent status: 91.6% contractual: 8.4%	permanent status employment and contractual employment distribution rate	
10					annual salary	**general companies:** initial salary: 20~25 m KRW (33%); 3rd year: 25~30 m KRW (30%) **design specializing companies:** initial salary: 15~20 m KRW (64%); 3rd year: 20~25 m KRW (47%)	annual salary per years of employment	
11					designer capacity	3.5 (max = 5) (planning: 3.4; projects: 3.75; presentation: 3.32; communication: 3.53)	identify designers capacity required by companies (assessment of planning, projects, presentation, and communication abilities)	
12					designer satisfaction rate	3.26 (max = 5) (work load: 3.17; work contents: 3.48; retraining: 3.35; degree of contribution from retraining: 3.58; benefits: 2.72)	displays the quality of constituents' work environment 〈assessment on work satisfaction (work load, contents); retraining satisfaction (satisfaction on retraining contents; degree of contribution from retraining), benefits〉	
13		Achievements (output)	Revenue		revenue amount	average: 610 m KRW	annual revenue per design specializing company (NSO 2007)	measures numeric output of design specializing companies
14					export status	rate of total no. of sales: 3.5% rate of total cost: 2.6%	ratio of total sales from outsourced projects from overseas clients	
15			Design Output		IP rights	14,502	design registration in Seoul region (NSO 2007)	identifies visual output
16					No.of GD Marks	421	no. of products receiving GD Mark award in Seoul region in 2008 (KIDP)	
17		Satisfaction Rate (consumer)	Consumer Satisfaction Rate		aesthetics	3.65 (max = 5) (importance in creativity: 3.65 / satisfaction rate: 3.64; importance in visual beauty: 3.8 / satisfaction rate: 3.65)	assessment of creativity and visual beauty	Seoul citizens' design satisfaction rate (weighted average was applied to each survey item)
18					functionality	3.85 (max = 5) (importance in practicality: 4.59 / satisfaction rate: 3.97; importance in cost efficiency:	assessment of practicality and cost efficiency	

No	Sector	Category	Sub-Category	Indicator Item	Indicator Value	Description	Remarks
19	Design Culture	Cultural Resource	Infrastructure	design museums	19	no. of design specializing and related museums	identify scale and introduce case examples
20				design art centers / galleries	13	no. of design specializing and related art centers / galleries (unable to identify small sized galleries)	
21				design libraries / data centers	16	no. of design specializing and related libraries / data centers	
22			Media	design broadcasting contents	16	no. of design specializing and related TV programs	
23				design publishing contents	351 single books; 69 magazines	no. of design specializing and related books / magazines published	
24				design online contents	48	no. of design integrated and specializing websites	
25			Event	design contests	367	no. of design contests and award ceremonies hosted by public and private institutes	
26				design events	146	no. of design specializing and related events (academic events, festivals, exhibitions, etc)	
27		Achievements (experience)	Infrastructure Experience	design museums experience rate	general public: 17.7%	no. of visitations to design specializing and related museum	experience rate
28				design art centers / galleries experience rate	general public: 27.2%	no. of visitations to design specializing and related art centers / galleries	
29				design libraries / data centers experience rate	general public: 13.9%	no. of visitations to design specializing and related libraries / data centers	
30			Media Experience	design broadcasting contents experience rate	general public: 80.7%	no. of viewings of design specializing and related TV programs	
31				design publishing contents experience rate	general public: 56.4%	no. of reading design specializing and related books / magazines	
32				design online contents experience rate	general public: 21.4%	no. of visitations to design integrated and specializing websites	
33			Event Experience	design contests experience rate	general public: 4.2%	no. of entry to public and private institute sponsored design contests	
34				design events experience rate	general public: 29.6%	no. of participation in design specializing and related events (academic events, festivals, exhibitions, etc)	
35		Satisfaction Rate (citizens)	Infrastructure Satisfaction Rate	design museums satisfaction rate	3.05(max = 5) (quantitative satisfaction rate: 3.05, qualitative satisfaction rate: 3.05)	average of quantitative and qualitative satisfaction rate by the general public	satisfaction rate on the quantity (no.) and quality of facilities, contents, and events
36				design art centers / galleries satisfaction rate	2.81(max = 5) (quantitative satisfaction rate: 2.71, qualitative satisfaction rate: 2.91)		
37				design libraries / data centers satisfaction rate	2.76(max = 5) (quantitative satisfaction rate: 2.50, qualitative satisfaction rate: 3.02)		
38			Media Satisfaction Rate	design broadcasting contents satisfaction rate	2.87(max = 5) (quantitative satisfaction rate: 2.72, qualitative satisfaction rate: 3.02)		
39				design publishing contents satisfaction rate	3.06(max = 5) (quantitative satisfaction rate: 2.95, qualitative satisfaction rate: 3.16)		
40				design online contents satisfaction rate	2.98(5max = 5) (quantitative satisfaction rate: 2.88, qualitative satisfaction rate: 3.07)		
41			Event Satisfaction Rate	design contests satisfaction rate	2.72(max = 5) (quantitative satisfaction rate: 2.76, qualitative satisfaction rate: 2.68)		
42				design events satisfaction rate	2.90(max = 5) (quantitative satisfaction rate: 2.80, qualitative satisfaction rate: 3.00)		

No	Sector	Category	Sub-Category	Indicator Item	Indicator Value	Description	Remarks
43	Design Education	Education Resource	Education Institutes	no. of universities	87	associate degree + bachelor degree + master or higher degree + distant learning (cyber) (Seoul, design related fields of majors)	overall quantity of design related higher education institutes
44			Education HR	no. of professors	388	associate degree + bachelor degree Seoul, design related fields of majors) professors for above universities are deemed to also teach associate degree and master or higher degree programs	no. of professors and students in design related field of majors in higher education institutes in Seoul
45				no. of students	24,884	associate degree + bachelor degree + master or higher degree + distant learning (cyber) (Seoul, design related fields of majors)	
46			Curriculum	cultural comprehension and creativity	3.15 (max = 5) (cultural comprehension and creativity: 3.19; understanding and usage ability of technology: 3.56; management ability and legal knowledge: 2.38; communication ability: 3.28; basic knowledge in design: 3.34)	satisfaction rate on the curriculum that teaches ability to understand social (cultural aspect) trend and can deduct and creatively resolve problems; and fosters capability to express through design	professors' assessment on the curriculum
47				understanding and usage ability of technology		ㄷ]satisfaction rate on the curriculum which teaches and allows the students to experience diverse technologies used by designer (here, technology includes all the associated technologies such as computer programs, sketch, modeling, prototype fabrication capability, etc.)	
48				management ability and legal knowledge		satisfaction rate on the curriculum from the perspective of integration with other fields of education (management, engineering, material science, and legal knowledge required by designers)	
49				communication ability		presentation skill, teamwork, industry-university cooperative projects, etc.	
50				basic knowledge in design		satisfaction rate on the curriculum of teaching basic academic knowledge in design	
51			Learning Environment	lecture and project teaching hours / burden	3.04 (max = 5) (lecture and project teaching hours / burden: 3.45;research and creativity demand standard / level: 3.21; quality of learning facilities and research materials: 2.97; financial support for research and creative activities by universities: 2.54)	comprehensive quantitative / qualitative assessment on the lecture hours and project teaching hours	professors' assessment on the learning environment
52				research and creativity demand standard / level		comprehensive quantitative / qualitative assessment on the research and creative activities required by universities	
53				quality of learning facilities and research materials		comprehensive quantitative / qualitative assessment on the quality of learning facilities (classroom, project room), and materials (for teaching and research)	
54				financial support for research and creative activities by universities		comprehensive quantitative / qualitative assessment on the financial support to professors' research / creative activities by universities	
55		Achievements (output)	Research Output	thesis publication in international journals	12	based on total of 4 international journals (primary author must be a member of higher education institute in Seoul)	no. of thesis published in international journals
56				thesis publication in domestic journals	718	based on total of 34 Korean journals (primary author must be a member of higher education institute in Seoul)	no. of thesis published in domestic journals
57			HR Fostering Output	bachelor degree graduates	4,861	associate degree + bachelor degree + master or higher degree + distant learning (cyber) (Seoul, design related fields of majors)	no. of design professionals (students) fostered through design education in higher education institutes in Seoul
58				master degree graduates	738	(Seoul, design related fields of majors)	
59				doctorate degree graduates	53	(Seoul, design related fields of majors)	
60		Satisfaction Rate (students)	Curriculum	cultural comprehension and creativity	3.24 (max = 5) (cultural comprehension and creativity: 3.18; understanding and usage ability of technology: 3.39; management ability and legal knowledge: 2.62; communication ability: 3.46; basic knowledge in design: 3.56)	satisfaction rate on the curriculum that teaches ability to understand social (cultural aspect) trend and can deduct and creatively resolve problems; and fosters capability to express through design	students' satisfaction rate on the curriculum
61				understanding and usage ability of technology		satisfaction rate on the curriculum which teaches and allows the students to experience diverse technologies used by designer (here, technology includes all the associated technologies such as computer programs, sketch, modeling, prototype fabrication capability, etc.)	
62				management ability and legal knowledge		satisfaction rate on the curriculum from the perspective of integration with other fields of education (management, engineering, material science, and legal knowledge required by designers)	
63				communication ability		presentation skill, teamwork, industry-university cooperative projects, etc.	
64				basic knowledge in design		satisfaction rate on the curriculum of teaching basic academic knowledge in design	
65			Learning Conditions	Learning Facilities	3.02 (max = 5) (learning facilities: 2.99; learning materials: 3.06; specialized books and project materials: 3.01)	quantitative / qualitative satisfaction rate on the learning facilities (classrooms) in school	students' satisfaction rate on the learning environment
66				Learning Materials		quantitative / qualitative satisfaction rate on the learning (lecture) materials	
67				Specialized Books and Project Materials		quantitative / qualitative satisfaction rate on the specialized books and project materials	

No	Sector	Category	Sub-Category	Indicator Item	Indicator Value	Description	Remarks
68	Design Policy	Policy Resource	Policy Department	design budget	0.37%	comprehensively includes the budget for Seoul Design Headquarters, which is the design supervising department of Seoul.	rate allocated to design from Seoul's total budget
69				no. of personnel in design managing department	122명	design managing department personnel status (Seoul Design headquarters)	identify professionalism of design policy
70				no. of years in employment of managing public employee	2 or less years: 82.4%	no. of years in employment of managing public employee of the managing department	
71				no. of personnel with design major in design managing department	14.8%	no. of personnel with design major in the design managing department of Seoul City Hall	
72			Policy Operation	cooperativeness (cooperativeness with similar organizations)	3.24 (max = 5)	cooperativeness with similar and sub organizations	research the awareness level of public employees, who are the core factor in policy operation
73				consistency (consistency in design related projects)	3.70 (max = 5)	consistency in implementation of design related projects in line with Seoul' s vision and urban development plan	
74				appropriateness (appropriateness of urban development and design related projects)	4.12 (max = 5)	appropriateness of currently being implemented design related projects for enhancing Seoul's competitive edge and improving the quality of life for Seoul citizens	
75				logicalness (logicalness of Seoul guideline and budget)	3.49 (max = 5)	logicalness of Seoul guideline and budget related to Seoul's design related projects	
76				transparency (transparency in related project and budget implementation)	4.14 (max = 5)	transparency in design related projects from start to finish	
77		Policy Contribution Rate	Assessment on the degree of contribution towards improvement of Seoul's economic conditions	citizens' assessment (economic contribution)	3.14 (max = 5) citizens: 3.06 professors: 3.24 designers: 3.38	degree of contribution towards the improvement in Seoul's economic conditions (no. of tourists attracted, creation of new jobs, etc.) by Seoul's design policy	improvement effects of design policy in terms of economic conditions and living environment
78				professors' assessment (economic contribution)			
79				designers' assessment (economic contribution)			
80			Assessment on the degree of contribution towards improvement of Seoul's living environment	citizens' assessment (economic contribution)	3.45 (max = 5) citizens: 3.38 professors: 3.44 designers: 3.67	degree of contribution towards the improvement in Seoul's living environment (improvement in urban beautification, safety, comfort, etc.) by Seoul's design policy	
81				professors' assessment (economic contribution)			
82				designers' assessment (economic contribution)			

[Table 8] Design Policy Assessment Indicators

2.2.3 Limitations

- Limitations of fundamental data for researching status and conditions
  - It is necessary to allocate sample by gathering precise data on the size of the organizations based on reliable national statistics and the list of research subjects must be made prior to conducting due diligence.
  - In case the organization does not have design exclusive department, it is difficult in locating the personnel in charge of design and therefore, personnel in charge of relative departments for each work field (personnel in charge of design outsourcing, public relations, website manager, product development, etc.) must be located
  - Sufficient time must be provided to the survey subject for questions such as those related to budget and sales ratio, which is difficult to provide immediate answer
  - Sensitive questions, such as those related to annual salary, must be placed towards the back of the entire questionnaire to reduce incompletion rate of the survey
  - It is necessary to pre define the range of majors of the design sector since different universities may have different names for the majors
  - A category for students' assessment on professors must be supplemented on the future research
  - There were some replies of 'cannot evaluate on a curriculum developed by other professor' by a number of professors and therefore, sufficient explanation must be provided and understanding achieved with regards to the reasons for the survey
  - In case numerous cultural infrastructures are available, they must be presented in more precise manner via photos or by including their locations
- Limitation on significance analysis due to undefined basic concept of relative categories
  - Although numerous discussion were made to establish various design composing factors and gather as well as analyze relative data to identify the design status, there was high difficulties in gathering and analyzing data because of inconsistency in data handling categories and in concept between design related institutions and statistics related institutes
  - Design related institutions and organizations must clearly define the basic concept, scope, and relative factors of design related categories (data) and share the defined output with statistics related institutes to acquire and share data with consistency
  - For example, the design related institutes and statistics related institutes must precisely define factors relative to design budget, which are highly important factors of Input in design policy sector It is difficult to identify, in detail, the items directly being inputted into design
  - To improve this, there must not only be efforts placed to create more measurable data but efforts must be made to comprehensively analyze to acquire objectivity and fairness based on sufficient discussion

2.2.4 Future Projects and Forecast

The analysis model developed through this research project was utilized to identify Seoul's design status. Fundamental framework was developed and measurable factors per each design sectors of industry, culture, education, and policy were established. Then survey research was conducted on the design constituents including the general public and 2nd phase data were gathered and analyzed. Through diverse discussion and review among the Design Survey research team members and the consigned research cooperation team as well as by acquiring opinions from industry experts, the initial framework was developed upon numerous significance analysis efforts. In order to improve the Design Survey Framework to the level of being applicable to a real industry environment and to elevate the completeness of the framework, there is a necessity to conduct repeated feasibility test and supplement the framework through organic and continuous research cooperation between design related institutions and organizations.

The Framework of the Seoul Design Survey allows time transcending changes in trend if periodically utilized with time interval and can provide the latest status data on Seoul's design related sectors. The change in Seoul's design standard can be monitored through periodic index output. In addition, it can also continuously present the level of advancement of the design sector through trend analysis of the detailed design index.
To achieve this, there is a necessity to continuously conduct data research by the Seoul Metropolitan Government and diagnose Seoul's design level and capacity and identify areas for improvement. In addition, repeated research is required to modify and adjust upper and lower index as well as the index and measured categories.

In this research, study to establish the basis for design index weighted average was excluded. As a result, there is a necessity to conduct further discussion and research in the future to set appropriate weighted average.

Finally, the research has set Seoul Metropolitan City as the subject city. If the targeted subject is expanded in the future, it will be possible to conduct nation to nation comparison. The Framework developed through the Seoul Design Survey research efforts is interpreted as the 'information system that displays Seoul's design level' but once the framework is defined and its application scope proven, the interpretation will then be expanded to signify 'an information system for conducting nation to nation comparison on design data'. Therefore, ways to advance the Framework, started as a one time research effort for the Seoul Design Survey, must be found to develop the model and index to periodic research tool and conduct international comparison research. To achieve this, it is deemed appropriate to conduct research on Beijing, Seoul and Tokyo (BeSeTo), which are the 3 major cities of World Design Survey's Northeast Asia region and conducting information comparison among the Icograda member nations in Asia, instead of immediately proliferating the model and index on a worldwide scale. After conducting the trial phase of the Design Data Analysis Model and Analysis Index through the information comparison among the 3 cities and the Icograda member nations in Asia, it can then be reviewed to be developed as an international standard model and index.

SEOUL DESIGN SURVEY

3. Seoul's Design Status and Conditions

3. Seoul's Design Status and Conditions

3.1 Design Industries of Seoul

3.1.1 Industry Resource

To identify the status of design industry, the sector will be divided into two categories of the General Companies Utilizing Design, which takes on the dual role of being the supplier and the consumer of the design industry, and the Design Specializing Companies, who's core business is supplying design.

3.1.1.1 Corporate Status (general companies utilizing design)

The 「Initial Research for the 2008 Seoul Design Survey」 included study on the design development status by the major corporations (over 300 employees) with comparably strong management organization and design capabilities in Seoul to identify the conditions of the general companies utilizing design. In addition, the design utilization status by the general companies in Seoul was also researched by referencing the previously conducted research reports.

3.1.1.1.1 Number of Companies

Index Item	No. of companies (general companies utilizing design)
Details	55% of general companies have work related to design development
Research Method	Survey conducted with major corporations (w/ 300 or more employees) in Seoul
Source	Initial research report for the Seoul Design Survey (2008)

General companies with design development project: 55%

55% of the major corporations in Seoul (companies with over 300 employees) have replied that they have had design development project in 2008. For design development category, research was made to identify not only the application of design for companies' product and service but also for all areas of design including promotional and marketing activities.

3.1.1.1.2 Budget (investment in design)

Index Item	Budget (investment in design by the general companies utilizing design)
Details	61.45% of general companies utilizing design had a budget of less than 500 million KRW for its design department
Research Method	Survey subject of general companies (utilizing design) in Seoul w/ design development projects
Source	Initial research report for the Seoul Design Survey (2008)

Companies with design exclusive departments: 37%; design utilizing general companies with department budget of less than 500 m KRW: 61.45%

Due to the characteristics of design projects, the budget for design investment is difficult to be measured precisely. In order to obtain more reliable values, the budget allocated to the design exclusive department (or the design team), when such department exists, was applied. Among the general companies in Seoul that utilizes design, 37.0% had design exclusive department and 63.0% did not. In case of companies with design exclusive departments, 61.45% (8.1+35.1/100–29.7) of responded companies replied to have a budget of below 500 million KRW for FY 2008. The average budget for investment in design among the surveyed companies was 82.2 million KRW. When removing significantly high and low budgets, the average amounted to 26.54 million KRW, showing significant range of differences among the surveyed companies and few corporations' investment in design was highly notable.

3.1.1.1.3 Ratio of Independent Development of Design

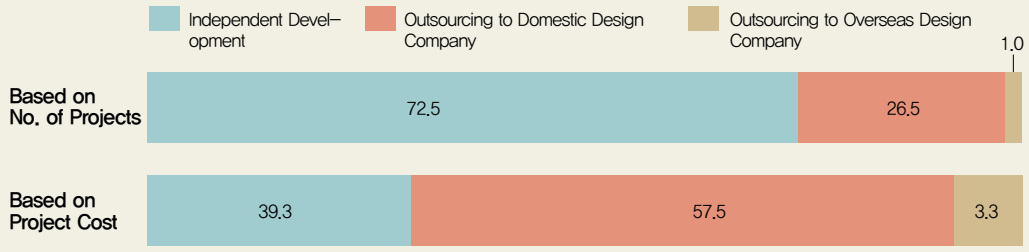
Index Item	Design self development rate (general companies utilizing design)
Details	Based on the number of cases self developed by the design department(in-house): 72.5%; based on the cost: 39.3%
Research Method	Survey subject of general companies (utilizing design) in Seoul w/ design development projects
Source	Initial research report for the Seoul Design Survey (2008)

Relying on outsourcing for large scale projects

The design utilizing general companies in Seoul was shown to independently develop company's own design in the rate of 72.5% when based on the number of projects and 39.3% when based on the project cost. In contrast, the rate of outsourcing to design specializing companies in Korea showed 26.5% when based on the number of projects and 57.5% when based on the project cost. Outsourcing to overseas companies showed comparably low volume of 1.0% when based on the number of projects and 3.3% when based on the project cost but ratio of number of projects to the project cost showed the highest with 3.3 times (3.3/1.0) more large volume outsourced to overseas design companies. In case of design utilizing general companies in Seoul, the ratio of independent development of design was higher when based on the number of projects than when based on the project cost and it is attributed to outsourcing large scale projects that requires large budgets.

Ratio of Independent Development of Design

[Unit: %]



[Figure 9] Independent development of design by design utilizing general companies [1]

3.1.1.2 Corporation Status (design specializing companies)

3.1.1.2.1 Number of Companies

Index Item	No. of companies (design specializing companies)
Details	1,545 (62% of the nation's total)
Research Method	Referenced the statistical data on the number of design specializing companies
Source	Korea National Statistical Office (2007)

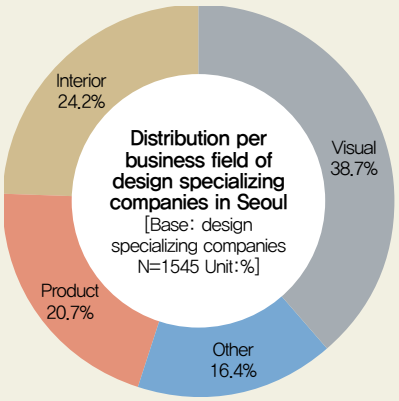
Number of design specializing companies in Seoul: 1,545; 62% of the nation's total

The number of design specializing companies in Seoul NSO 2007 is 1,545 and this is 62% of the total design specializing companies (2,493) in Korea.

1. Seoul Design Center, Initial research for the Seoul Design Survey, 2008

Category (Region)	2004	2006	2007
No. of design specializing companies (Seoul)	1,603 (65% of nation's total)	1,495 (64%)	1,545 (62%)
No. of design specializing companies (nationwide)	2,480	2,330	2,493

[Table 9] Number of design specializing companies [2]



[Figure 10] Distribution per business field of design specializing companies [3]

3.1.1.2.2 Base Capital

Index Item	Base capital (design specializing companies)
Details	80.9% of the design specializing companies had base capital of less than 500 million KRW
Research Method	Investigative research conducted on the design specializing companies
Source	Initial research report for the Seoul Design Survey (2008)

Design specializing companies with base capital below 500 million KRW: 80.9%

The base capital of design specializing companies in Seoul among the companies that have responded to the survey 80.9% (32+40/100-11) had base capital of below 500 million KRW. The average base capital of total subject companies was 345 million KRW. When removing the companies with highest and lowest base capital, the average amounted to 229 million KRW, which was about 1.8 times higher than the average base capital of design specializing companies KIDP 2007 in Korea, which was 127 million KRW. When viewing per design sector, 62.5% of companies in environment design sector had fairly high base capital with the average falling in the 100~500 million KRW range and 57.1% of companies in product design sector had low base capital with the average falling in the below 100 million KRW.

2. NSO, Statistics on service business, 2007

3. KIDP, Industrial Design Statistics Report: Design Specializing Companies, 2007, p.14

3.1.1.2.3 Industry Concentration Rate[4]

Index Item	Market share concentration rate (design specializing companies)
Details	Top 18.4% of the entire design specializing companies accounts for 70% of the entire revenue of the industry
Research Method	Referenced the statistics on the top tier revenue distribution data of the design specializing companies
Source	Korea National Statistical Office (2007)

Of the total design specializing companies, top 18.4% accounts for 70% of the total revenue

When viewing the revenue scale of design specializing companies in Seoul NSO 2007 81.6% (1,260/1,545) had annual revenue of below 1 billion KRW (approx. 794,000 U$D; 1 U$D = 1260 KRW), signifying that many are small sized companies . In addition, the 18.4% (285/1,545) of the total companies that had revenue exceeding 1 billion KRW accounted 70% (667,731/953,289) of the revenue by total companies. This signifies that the industry concentration rate among the design specializing companies are focused on few companies. The highest rate of design specializing companies in Seoul, 44.6% (690/1,545) had the revenue range between 100 ~ 500 million KRW had the highest

Category	below 20 m KRW	20–50 m KRW	50–100 m KRW	100–500 m KRW	500–1000 m KRW	Below 1000–5000 m KRW	5000–10000m KRW	10,000–20,000 m KR	Total
No. of Companies	59	132	213	690	168	268	10	7	1,545
Revenue (million KRW)	803	4,230	15,438	153,759	111,328	481,469	53,641	132,621	953,289

[Table 10] Revenue amount of design specializing companies [5]

3.1.1.3 Human Resource Status

3.1.1.3.1 Number of Designers

Index Item	Number of designers
Details	9,015 (71% of the nation's total)
Research Method	Referenced the statistical data on the number of employees in design specializing companies
Source	Korea National Statistical Office (2007)

The number of employees in design specializing companies in Seoul amounted to 9,015, which accounted for 71% of the nation's total.

The total number of employees in design specializing companies in Seoul NSO 2007 was 9,015, which accounted for 71% of the total number of employees (12,703) in all of the design specializing companies in Korea.

Category	2004	2006	2007
No. of employees in design specializing companies (Seoul)	7,134 (69% of nation's total)	7,832 (72%)	9,015 (71%)
No. of employees in design specializing companies (Nationwide)	10,305	10,841	12,703

Note: The number of employees in design specializing companies may include none designer employees.

[Table 11] Number of employees in design specializing companies [6]

4. Industry concentration: 4, 8, 12, or small portion of the companies in the industry taking up the majority of the total revenue. The industry concentration is a method of measuring the degree of specific industry's revenue concentration on small number of companies of the industry and it can be computed in various ways. (Meil Business Internet News · Business Terminology)

5. NSO, Statistics on service business, 2007 6. NSO, Statistics on service business

Per design sector, the visual design sector had the highest number of designers with 35.8% (4,549/12,703), for entire number of employees in the industry in Korea and 37.8% (3,412/9,015) for companies in Seoul.

Category	Interior	Product	Visual	Other	Total
No. of employees in design specializing companies (Seoul)	2,169 (71% of nation's total)	2,040 (63%)	3,412 (75%)	1,394 (75%)	9,015 (71%)
No. of employees in design specializing companies (Nationwide)	3,072	3,222	4,549	1,860	12,703

Note: The number of employees in design specializing companies may include none designer employees.

[Table 12] Number of designers in design specializing companies per design sector [7]

When viewing at the number of companies per number of employees, companies with 1–4 employees had the highest number with 61% (943/1,545) of the total and only 0.45% (7/1,545) had over 50 employees.

Per No. of Employees	1–4	5–9	10–19	Over 20	20–49	Over 50	Total
No. of Companies	943	370	172	60	53	7	1,545
No. of Employees	2,196	2,369	2,227	2,223	1,512	711	9,015

Note: The number of employees in design specializing companies may include none designer employees.

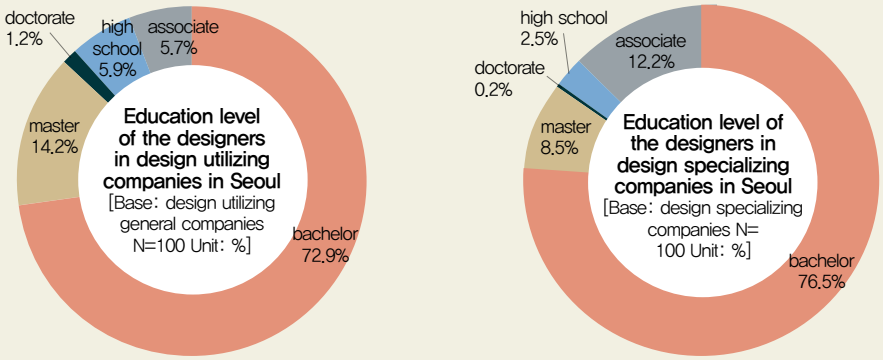
[Table 13] Status of design specializing companies per number of employees [8]

3.1.1.3.2 Education Level Distribution

Index Item	Designers' education level distribution
Details	General companies: Bachelor – 72.9%〉 Master – 14.2%〉 High School – 5.9%〉 Associate – 5.7%〉 Doctorate – 1.2% Design specializing companies: Bachelor – 76.5%〉 Associate – 12.2%〉 Master – 8.5%〉 High School – 2.5%〉 Doctorate – 0.2%
Research Method	Researched the rate of the education level of designers employed by the general companies utilizing design and the design specializing companies
Source	Initial research report for the Seoul Design Survey (2008)

Majority of designers are university graduates.

The research showed that 72.9% of the designers employed by the design utilizing general companies and 76.5% of designers employed by design specializing companies in Seoul had bachelor degree. As for the designers with master and doctorate degrees, the design utilizing general companies had 15.4%, which is 6.7% more than the design specializing companies with 8.7%.



[Figure 11] Education level of designers [9]

7. NSO, Statistics on service business, 2007
8. NSO, Statistics on service business, 2007
9. Seoul Design Center, Initial research for the Seoul Design Survey, 2008

3.1.1.3.3 Employment Status

Index Item	Employment status
Details	General companies: Permanent status – 96.6%; Contractual 3.4% Design specializing companies: Permanent status – 91.6%; Contractual 8.4%
Research Method	Researched the rate of the employment status of designers employed by the general companies utilizing design and the design specializing companies
Source	Initial research report for the Seoul Design Survey (2008)

The ratio of permanent status employees in the design utilizing general companies was shown to be higher than the design specializing companies.

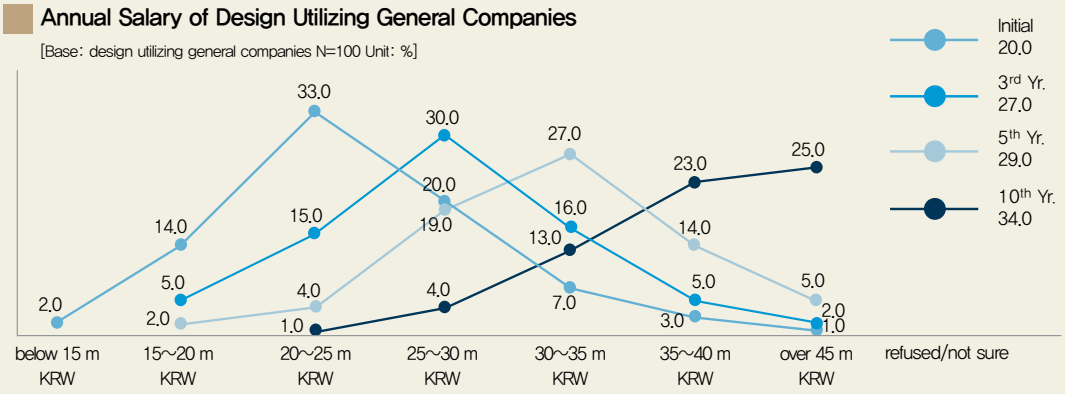
The research showed that 96.6% of the designers employed by the design utilizing general companies and 91.6% of the designers employed by the design specializing companies in Seoul had permanent status employment. Since stability in employment can result in higher competitiveness of the designers, it can be viewed that the design utilizing general companies have higher designer competitive edge than the design specializing companies.

3.1.1.3.4 Salary Level

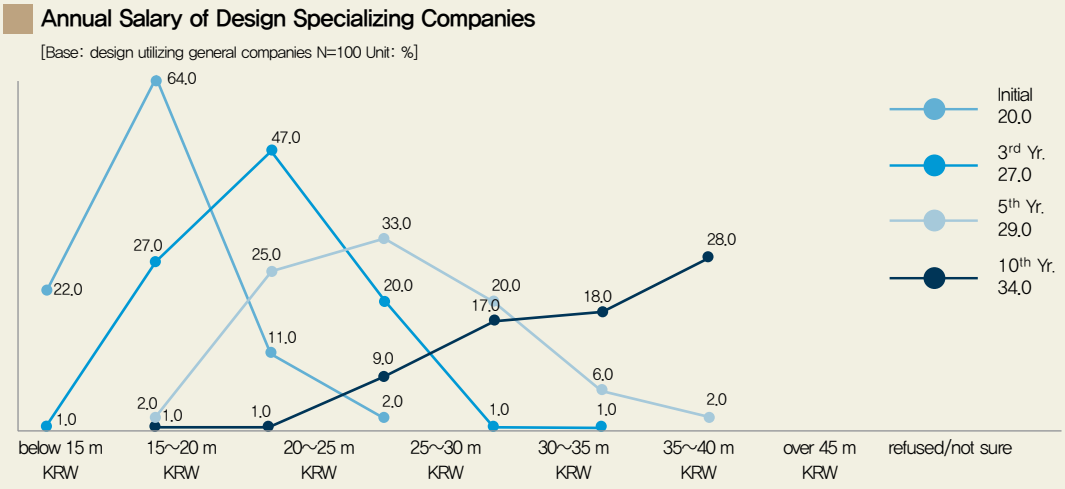
Index Item	Designers' salary level
Details	General companies: 33% of the entry level had average salary between 20–25 million KRW; 30% of 3rd yr. designers had average salary between 25–30 million KRW Design specializing companies: 64% of the entry level had average salary between 15–20 million KRW; 47% of 3rd yr. designers had average salary between 20–25 million KRW
Research Method	Researched the salary level of designers employed by the general companies utilizing design and the design specializing companies per years of experience
Source	Initial research report for the Seoul Design Survey (2008)

Annual salary of designers at design utilizing general companies 〉 Annual salary of designers at design specializing companies.

The survey for the initial annual salary of designers in the design utilizing general companies in Seoul showed highest number of respondents (30.0%) to receive 20~25 million KRW (approx. 15,800~19,800 U$D; 1 U$D = 1260 KRW). 30.0% of the respondents of 3rd year designers showed annual salary of 25~30 million KRW (approx. 19,800~23,800 U$D; 1 U$D = 1260 KRW). In case of design specializing companies, the highest number of respondents (64.0%) to receive 15~20 million KRW (approx. 11,900~15,800 U$D; 1 U$D = 1260 KRW). 47.0% of the respondents of 3rd year designers showed annual salary of 20~25 million KRW (approx. 15,800~19,800 U$D; 1 U$D = 1260 KRW), signifying that the designers for the design specializing companies had comparably lower annual salary than the design utilizing general companies.



[Figure 12] Annual salary of designers at designer utilizing general companies [10]



[Figure 13] Annual salary of designers at designer specializing companies [11]

3.1.1.3.5 Designer's Capacity

Index Item	Designer' capacity
Details	Designer' s capacity demanded by the companies was 3.5 pts. (max = 5)
Research Method	Designer' s planning, project execution, presentation, and communication capabilities were measured and averaged
Source	Initial research report for the Seoul Design Survey (2008)

Designers' capacity: 3.5 (max = 5)

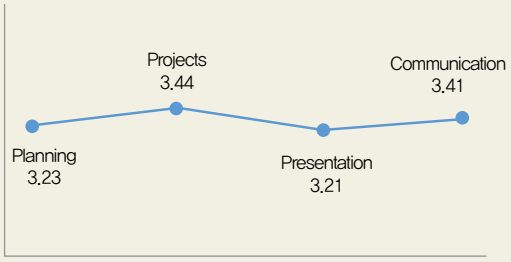
Overall score on designers' capacity given by the mangers or personnel in charge of the design departments in design utilizing companies and design specializing companies in Seoul for their companies' designers was 3.5 points. The capacity of the designers at design utilizing general companies was 3.32, and for the designers at design specializing companies was 3.67, signifying slightly higher overall capacity level by the designers at design utilizing companies. Among the various business types

10. Seoul Design Center, Initial research for the Seoul Design Survey, 2008
11. Seoul Design Center, Initial research for the Seoul Design Survey, 2008

specialized by the design specializing companies, designers' planning, presentation, and communication capability for the 'environment' field received the highest score.

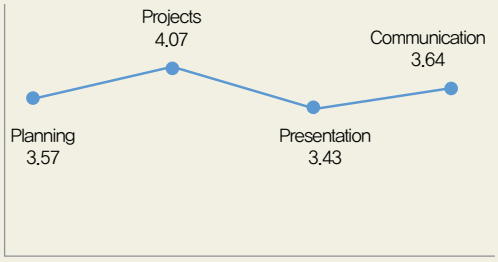
Designers' Capacity of Designers in Design Utilizing General Companies

[Base: design utilizing general companies N=100 average (points), max = 5]



Designers' Capacity of Designers in Design Specializing Companie

[Base: design specializing companies N=100 average (points), max = 5]



[Figure 14] Designers' capacity [12]

3.1.1.3.6 Designer's Satisfaction

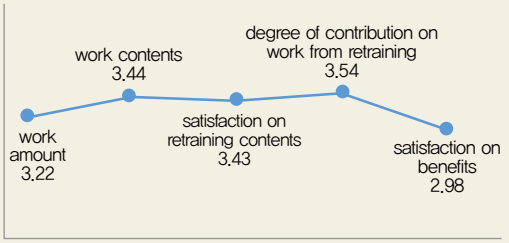
Index Item	Designer's satisfaction rate
Details	Designer's satisfaction rate on the working environment was 3.26 pts. (max = 5)
Research Method	Work load, work contents, retraining contents, contribution rate of retraining, and satisfaction rate on the benefits were measured and averaged
Source	Initial research report for the Seoul Design Survey (2008)

Designer's satisfaction: 3.36 (max = 5), designer's satisfaction rate for benefits was shown to be low

The overall score for satisfaction rate among the designers employed by the design utilizing general companies and design specializing companies in Seoul was 3.26. Among the categories, while all scored in the range of 3 points, the satisfaction rate for benefits was 2.98 with the satisfaction rate for benefits by the designers in design specializing companies was at the lowest with 2.45. The order of satisfaction rate from highest to lowest was degree of contribution from retraining 〉 work contents 〉 retraining contents 〉 work load 〉 benefits.

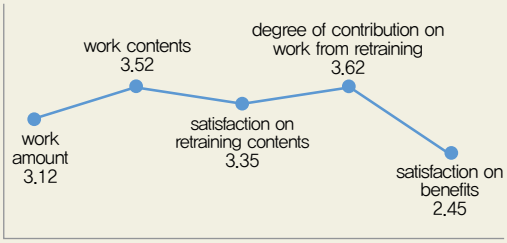
Designers' Satisfaction Rate of Designers in Design Utilizing General Companies

[Base: design utilizing general companies N=100 average (points), max = 5]



Designers' Satisfaction Rate of Designers in Design Specializing Companies

[Base: design specializing companies N=100 average (points), max = 5]



[Figure 15] Designer's Satisfaction Rate [13]

12. Seoul Design Center, Initial research for the Seoul Design Survey, 2008

13. Seoul Design Center, Initial research for the Seoul Design Survey, 2008

3.1.2 Achievements (output)

3.1.2.1 Revenue Output

3.1.2.1.1 Revenue Amount

Index Item	Revenue
Details	Average revenue of design specializing company per annum is 610 million KRW
Research Method	Total revenue of all the design specializing companies were divided by the number of companies
Source	Korea National Statistical Office (2007)

Market size for professional design is gradually increasing

According to the 2007 research on service business conducted by the National Statistics Office (NSO), the total revenue of design specializing companies in Seoul amounted to 953.289 billion KRW (approx. 756.58 m U$D; 1 U$D = 1260 KRW), which is 76.1% of the total revenue of design specializing companies in Korea (1,251.053 billion KRW; approx. 993 m U$D; 1 U$D = 1260 KRW). The average revenue per design specializing company in Seoul was 610 million KRW (approx. 484,000 U$D; 1 U$D = 1260 KRW) (953,289/1,545).

Category (rev. in million KRW)	2004	2006	2007
Revenue of Design Specializing Companies (Seoul)	494,052 (76.4% of nation's total)	673,909 (76.2%)	953,289 (76.2%)
Revenue of Design Specializing Companies (Nationwide)	646,761	884,769	1,251,053

[Table 14] Revenue of design specializing companies [14]

3.1.2.1.2 Export Status

Index Item	Export status
Details	Based on the number of outsourcing contracts of design specializing companies received from overseas clients: 3.5%; based on cost: 2.6%
Research Method	Research was conducted on the design development methods of design specializing companies in Seoul
Source	Initial research report for the Seoul Design Survey (2008)

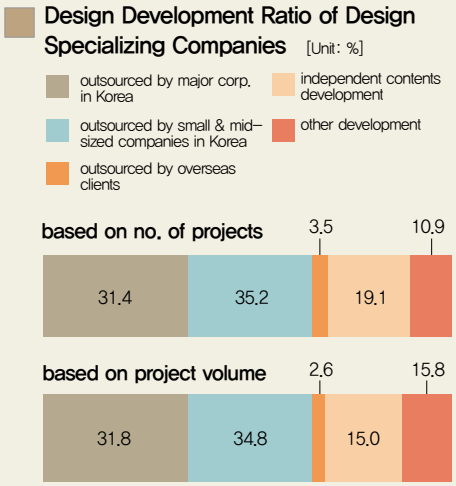
Active international marketing efforts to enhance the nation's competitiveness are necessary

According to the 2007 report by the Korea Institute of Design Promotion (KIDP), the export revenue by Korea's design industry was 7.5 billion KRW (approx. 6.25 million USD; 1 USD = 1,200 KRW), and the import amounted to 24.3 billion KRW (approx. 20.25 million USD; 1 USD = 1,200 KRW), showing significantly low volume of the import and export market. This signifies that Korea's design industry has developed as an internal market oriented industry. To improve the competitiveness of Korea's design industry, active international marketing efforts are required.[15]

Small volume outsourcing projects from overseas clients

In case of design development rate based on the 2008 revenue of the design specializing companies in Seoul, the rate for projects outsourced by Korea's small and midsized companies was at the highest in terms of both the number of projects and project volume. It was followed by the projects outsourced by major corporations in Korea. In contrast, the rate for projects outsourced by overseas clients amounted to only 3.5% when based on the number of projects and 2.6% when based on project volume, signifying that projects from outsourced was comparably lower volume projects compared to number of projects.

14. NSO, Statistics on Service Business, 2004, 2006, 2007



Design Development Ratio of Design Specializing Companies per Business Type

[Unit: %]

		out-sourced by major corp. in Korea	out-sourced by small & midsized compa-nies in Korea	out-sourced by overseas clients	inde-pendent contents develop-ment	other devel-opment
based on no. of projects	environment (N=24)	28.5	23.9	8.0	11.7	27.9
	product(N=21)	18.6	50.7	1.6	23.4	5.7
	visual(N=39)	38.1	31.7	0.8	21.4	8.0
	other(N=16)	33.9	35.8	7.7	15.2	7.4
based on project volume	environment (N=24)	26.9	15.0	2.1	16.7	39.4
	product(N=21)	27.8	51.8	5.0	8.1	7.4
	visua(N=39)	35.1	41.5	1.4	17.3	4.7
	other(N=16)	36.4	25.9	3.3	15.6	18.8

[Figure 16] Design development by design specializing companies [16]

3.1.2.2 Design Output

3.1.2.2.1 Intellectual Property Rights

Index Item	Intellectual property rights
Details	14,502 design patents registered by companies and individuals in Seoul (38.5% of the nation's total)
Research Method	Referenced the statistics on the intellectual property rights registration
Source	Korea Intellectual Property Office(2007)

The design registration from companies in Seoul region amounted to 38.5% of the total design registration in Korea. The total number of design registration by companies in Seoul in 2007 was 14,502 and this amounted to 38.5% (14,502/37,631) of the entire design registered in Korea.

2007 Intellectual Property Registration Status				
Category	Patents	Practical New Design	Design	Trademark
Seoul	31,950 (35% of nation's total)	780 (29%)	14,502 (39%)	26,237 (54%)
Nationwide	91,645	2,739	37,631	48,266

2007 Intellectual Property Application Pending Status				
Category	Patents	Practical New Design	Design	Trademark
Seoul	44,245 (35% of nation's total)	5,649 (27%)	19,028 (37%)	59,653 (53%)
Nationwide	128,701	20,632	50,868	112,157

Note: 1. based on single design and single trademark registration 2. based on registration by Korean nationals.

[Table 15] Intellectual property registration and application pending status in Seoul region [17]

15. KIDP, (in case of design export amount, the number of companies, who have design outsourcing contracts from overseas clients are identified and their average outsourcing amount per each sector is obtained and then multiplied and added. In case of import amount, the ratio of overseas outsourcing per each sector was applied to the design investment amount per each sector and totaled) Statistical Report on the Industrial Design, 2007, p.11

16. Seoul Design Center, Initial research for the Seoul Design Survey, 2008

17. NSO, 2008

3.1.2.2.2 Number of GD Mark Received

Index Item	Number of GD Mark received
Details	421 GD Marks were received by companies and individuals in Seoul (64.3% of the nation's total)
Research Method	Referenced the 2008 Outstanding Design Product award recipient data
Source	Korea Institute of Design Promotion's Good Design website (2008)

GD Mark received by companies in Seoul amounted to 64.3% of total GD Marks awarded in Korea

The Good Design (GD) Mark is a certification system for recognizing design outstanding products upon comprehensively reviewing the candidate products' exterior design, functionality, material, and competitiveness. The Good Design Contest was launched in 1985 by the Ministry of Knowledge Economy (MKE) and is held every year supervised by the Korea Institute for Design Promotion (KIDP).

Total of 655 products received the GD Mark award in 2008 and among them, the products by companies in Seoul was 421, or 64.3%. In case of Kumho E&C, which received the most GD Mark award from the construction industry in 2008, has achieved a notable success in the housing market by approaching the housing market depression with the differentiated strategy of design in their apartment construction projects.[18]

3.1.3 Satisfaction Rate (consumer)

3.1.3.1 Consumer Satisfaction Rate

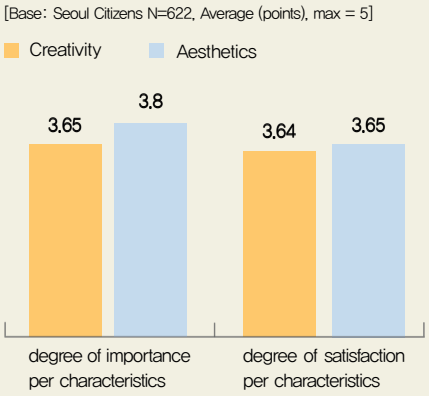
3.1.3.1.1 Satisfaction Rate – Aesthetic

Index Item	Satisfaction Rate – Aesthetic
Details	Citizen's satisfaction rate on the beauty was 3.65 pts. (max = 5)
Research Method	Importance of creativity and appreciativeness characteristics were measured and weighted average was applied to obtain the satisfaction rate
Source	Initial research report for the Seoul Design Survey (2008)

Aesthetic beauty: 3.65 (max = 5)

The score for design satisfaction for product purchased by the citizens of Seoul with weighted average for creativity and aesthetics for design characteristics was 3.65. The responses showed that among the purchased products, consumers felt comparably low satisfaction on 'creativity' category for clothing.

18. Korea Business Daily, 2008. 10. 08



Category		Creativity	Aesthetics
Degree of importance per characteristics	electronics(N=369)	3.69	3.78
	clothing(N=168)	3.55	3.82
	furniture(N=47)	3.64	3.89
	automobiles(N=30)	3.90	3.93
Degree of satisfaction per characteristics	electronics(N=369)	3.70	3.67
	clothing(N=168)	3.46	3.55
	furniture(N=47)	3.68	3.83
	automobiles(N=30)	3.63	3.67
Aesthetics satisfaction rate with the degree of importance applied as weighted average		3.65 (max = 5)	

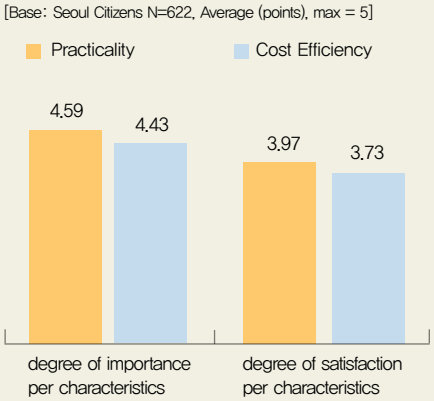
[Figure 17] Aesthetics satisfaction rate [19]

3.1.3.1.2 Satisfaction Rate – Functionality

Index Item	Satisfaction Rate – Functionality
Details	Citizen's satisfaction rate on the functionality was 3.85 pts. (max = 5)
Research Method	Importance of practicality and economic efficiency were measured and weighted average was applied to obtain the satisfaction rate
Source	Initial research report for the Seoul Design Survey (2008)

Functionality satisfaction rate: 3.85 (max = 5)

The score for functionality satisfaction for product purchased by the citizens of Seoul was comparably high with at 4.59. The satisfaction rate with weighted average for degree of importance for practicality and cost efficiency was 3.85. The responses showed that among the purchased products, consumers felt comparably low satisfaction on 'cost efficiency' category for automobiles.



Category		Practicality	Cost Efficiency
Degree of importance per characteristics	electronics(N=369)	4.64	4.50
	clothing(N=168)	4.45	4.29
	furniture(N=47)	4.68	4.38
	automobiles(N=30)	4.63	4.60
Degree of satisfaction per characteristics	electronics(N=369)	3.99	3.79
	clothing(N=168)	3.85	3.60
	furniture(N=47)	4.11	3.85
	automobiles(N=30)	4.07	3.43
Functionality satisfaction rate with the degree of importance applied as weighted average		3.85 (max = 5)	

[Figure 18] Functionality satisfaction rate [20]

19. Seoul Design Center, Initial research for the Seoul Design Survey, 2008

20. Seoul Design Center, Initial research for the Seoul Design Survey, 2008

3.2 Design Culture of Seoul

3.2.1 Cultural Resource

The design cultural resource signifies the elements that play the role of resource in the design culture. It includes design museums, art centers, galleries, libraries, data centers, various forms of media contents including broadcasting, publishing, as well as online, and design related festivals, events, and contests that allows the public to easily experience diverse forms of design.

3.2.1.1 Infrastructure

3.2.1.1.1 Design Museum

Index Item	Design Museums
Details	19 design museums
Research Method	Number of design specializing and design related museums in Seoul were totaled
Source	Ministry of Culture, Sports and Tourism' s record on special cultural infrastructure facility (2008); Seoul Design Center' s independent research (2008)

Status of design museums in Seoul (facility status)

Design specializing museums in Seoul includes the 'Contemporary Design Museum' and other various design related museums that specializes in daily life arts, handcrafts, and printed arts such as books and magazines. All these are museums for the people. As of today, there is no national or public design museum in Seoul. Total of 19 museums were identified to be design specializing and/or related museums in Seoul and they are listed as follows.

Facility Type	Name	No. of Art Works in Possession	Floor Area	No. of Visitors in 2008
Design Specializing Museum	Contemporary Design Museum	1,600 items	approx. 132㎡	3,000
Design Related Museums	Ddeuk, Kitchen Accessories Museum (Waryong-dong, Jongno-gu)	2,100 art works including metallic and earthen items	2,436㎡	22,000
	Bona Accessories Museum (Gwanhoon-dong, Jongno-gu)	10,000 art works including norigae and embroidery items	326㎡	1,000
	Samsung Publishing Museum (Gugi-dong, Jongno-gu)	100,000 art works including publishing and printing tools	916㎡	1,500
	World Accessories Museum (Hwa-dong, Jongno-gu)	2,050 art works including metallic, gem stone and earthen items	195㎡	8,350
	Locksmith Museum (Dongsu-dong, Jongno-gu)	34,160 art works including traditional locks	1,589㎡	21,000
	Sookmyung Women's University Chung Young Yang Embroidery Museum (Hyochangwon-gil, Yongsan-gu)	823 items	total area: 796.5㎡ exhibition hall: 539.7㎡	15,000
	Onggi Folk Museum (Ssangmun 1-dong, Dobong-gu)	5,020 art works including ceramic vase, onggi and earthen items	1,160㎡	6,000
	Ultra Architectural Museum (Shinjung 1-dong, Yangcheon-gu)	4,893 art works including ancient construction tools and stamps	120㎡	1,000
	Chojeon Textile & Quilt Museum (Namsan-dong, Jung-gu)	1,550 art works including wrapping cloth and accessories	585㎡	23,648
	Korea Embroidery Museum (Nonhyun-dong, Gangnam-gu)	2,000 art works including embroidery and wrapping cloth	1,922㎡	300
	Korea Magazine Information Center (Yeouido-dong, Yeongdeungpo-gu)	13,872 items	535㎡	10,000
	Han Sang Su Embroidery Museum (Gahwe-dong, Jongno-gu)	500 art works including embroidery, bokshik, chung, myojok, and other items	188㎡	7,500
	Registry Museum (Susong-dong, Jongno-gu)	230 types, over 400 registry related items (Gyojiryu, clan registry, nobility tile, etc)	exhibition hall: 446.283m² archive: 102.4798m² data center: 317.3568m²	21,100
	Robot Museum (Dongsoong-dong, Jongno-gu)	3500 items	–	–

Facility Type	Name	No. of Art Works in Possession	Floor Area	No. of Visitors in 2008
Design Related Museums	Newspaper Museum (Sejongno, Jongno-gu)	-	-	-
	Paper Nara Museum (Jangchung-dong, Jung-gu)	-	-	-
	Pulmuone Kimchi Museum (Samsung-dong, Gangnam-gu)	-	-	-
	Korea Furniture Museum (Sungbuk-dong, Sungbuk-gu)	-	-	-

Note: Data provided by each respective institute was referenced and in some cases, telephone and fax inquiries were made to obtain facility information. (There were cases in which the personnel at the facility was not well informed or uncooperative.)

[Table 16] Design museums in Seoul [21]

3.2.1.1.2 Design Art Centers / Galleries

Index Item	Design Art Centers / Galleries
Details	13 Design Art Centers / Galleries
Research Method	Number of design specializing and design related art centers / galleries in Seoul were totaled
Source	Ministry of Culture, Sports and Tourism's record on special cultural infrastructure facility (2008); Seoul Design Center's independent research (2008)

Status of art centers / galleries in Seoul (facility status)

There are total of 13 design specializing and/or related art centers / galleries in Seoul.

Based on the 2008 Nationwide Cultural Infrastructure Facilities Report, there is the Hangaram Design Art Center of the Seoul Art Center and for the design related art center there is the Sangwon Art Center in Seoul. As for the design related galleries, there are Samwon Paper Gallery, Design Seoul Gallery, Seoul Animation Center, as well as the galleries operated by design related centers and galleries operated by the design universities.

Facility Type	Name	No. of Art Works in Possession	Floor Area	No. of Visitors in 2008
Design Specializing Art Center	Hangaram Design Art Center	500 items	4,802㎡	183,793
Design Related Art Center	Sangwon Art Center	322 items	449㎡	3,047
Design Specializing Galleries	Design Seoul Gallery	does not possess its own art works	approx. 198㎡(estimate)	does not maintain record
	COEX Design Gallery	over 160 items	approx. 132㎡	does not maintain record
	Zero Won Design Gallery	only leases exhibition space	222.6㎡	does not maintain record
Design Related Galleries	Gana Art Space	only leases exhibition space	1st fl. approx. 165㎡ 2nd fl. approx. 132㎡ 3rd fl. approx. 132㎡	does not maintain record
	Gallery Mano	approx. 9 items	125㎡	does not maintain record
	Gallery Art Side	–	approx. 562㎡	–
	Gallery I-ang	only leases exhibition space	approx. 462㎡	does not maintain record
	Doosung Paper Gallery	over 5,000 items	approx. 231㎡	approx. 17,000
	Samwon Paper Gallery	approx. 3,000 items (item count is flexible since it's always expanding)	330㎡	approx. 20,000
	Sangsang Madang Art Square	only leases exhibition space	304㎡	approx. 600,000
	Yae Art Gallery	approx. 23 items	land area: 567.5㎡ structure area: 332.65㎡ floor area: 1,995.14㎡	does not maintain record

Note: Data provided by each respective institute was referenced and in some cases, telephone and fax inquiries were made to obtain facility information. (There were cases in which the personnel at the facility was not well informed or uncooperative.)

[Table 17] Art centers / galleries in Seoul [22]

21. Based on the facilities that were able to be verified at the time when the 2008 Nationwide Cultural Infrastructure Facilities Report was being prepared.

22. 2008 National Cultural Infrastructure Facility Status

3.2.1.1.1 Design Libraries / Data Centers

Index Item	Design Libraries / Data Centers
Details	16 Design Libraries / Data Centers
Research Method	Number of design specializing and design related libraries / data centers in Seoul were totaled
Source	Seoul Design Center' s independent research (2008)

Status of design libraries / data centers in Seoul (facility status)

There are total of 16 design specializing and/or related libraries / data centers in Seoul.

Facility Type		Name	No. of Seating	No. of Data (volumes/type)	None Books	Annual Publica–tions	No. of Visitors in 2008
Design Special–izing Libraries	Regis–tered	Design Museum of Kookmin University	2,700	books: 43,371	5,827	5,827	92,400
	Non–Regis–tered	Design Information Center of the International Design Trend Center	62	single books: Korean and in–ternational design books: 7,000 periodicals: 104	over 100	international periodicals: 110; Korean pe–riodicals: 3	approx. 1,500
		Zero One Design Library	20	books: 516	–	308	does not maintain record
Design Related Libraries	Regis–tered	Oricom Co., Ltd., Doosan Maga–zine Data Center	10	books: 10,990	21,227	200	190
		International Broadcasting Ex–change Foundation Data Center	N/A	books: 1,746	over 80,000 broadcast–ing tapes	28	17
		Library of the Korea Art Center	68	books: 9,846	1,471	3	350
		Design House Co., Ltd., Data Center	14	books: 9,841	2,060	156	190
		Game Library of the Korea Game Development & Promotion Institute	24	books: 10,412	4,496	85	9,626
		ARKO Art Information Center of the Arts Council of Korea	226	books: 88,967	146,268	292	57,869
		Advertisement Data Center of Ko–rea Broadcast Advertising Corp.	70	books: 15,248	1,336	88	approx. 20,000
		Broadcast Data Center of the Korean Broadcasting Institute	10	books: 18,500	2,574	166	746
		Multimedia Data Viewing Center of the Korean Film Archive	63	Korean movies: 3,646; video tapes and disks 116,422; books: 9,182	11,500	periodicals: 12,927	approx. 11,000
		Newspaper Library of the Hank–ook Daily	10	books: 43,975	879	35	3,896
		Information Center of the Korea Automobile Manufacturers As–sociation	16	books: 22,672	195	162	approx. 500
	Non–Regis–tered	Publication and Multimedia Data Center of the Seoul Animation Center	14 seating for video viewing; 40 seating for the media theater	books: 35,171	7,143	–	53,460
		Library of the Seoul Fashion Center	56	books: 2,326	1,622	170	9,470

Note: Data provided by each respective institute was referenced and in some cases, telephone and fax inquiries were made to obtain facility information. (There were cases in which the personnel at the facility was not well informed or uncooperative.)

[Table 18] Design libraries / data centers in Seoul [23]

23. Based on the facilities that were able to be verified at the time when the 2008 Nationwide Cultural Infrastructure Facilities Report was being prepared.

3.2.1.2 Media

3.2.1.2.1 Design Broadcasting Contents

Index Item	Design Broadcasting Contents
Details	16 Design Broadcasting Contents
Research Method	Number of design related TV programs (terrestrial, cable and DMB) broadcasted in Seoul were totaled
Source	Seoul Design Center' s independent research (2008)

Broadcasting contents examples

The total number of broadcasting companies in Seoul numbered at 24. Among them, 13 are TV broadcasting companies and the remaining 11 are radio broadcasting companies. In addition, there are 20 MSO and 5 SOs operating cable broadcasting service in Korea.

In 2008, there were total of 16 design related programs broadcasted in Seoul are they are listed below.

Category	Type	Name	Characteristics
Design Broadcasting Contents	Terrestrial Broadcast Programs	MBC Four Gradation of Culture	– 'Designing Artistic City!' (2008.01.09) – 'Art & Design in Daily Life' (2008.07.01) – 'Trend of Thrifty Consumers, "Eco Design" is Gaining New Attention' (2008.11.18) – 'Daily Accessories Transforms to Design Masterpiece' (2008.12.09)
		MBC Unlimited Challenge	– 'Unlimited Challenge: To become a designer!' (2008.10.11), – 'Unlimited Challenge: Designing Korea!' (2008.10.18)
		KBS Interview with Dan Bak	– Steve Chan, co-founder of YouTube (2008.03.13) – Paul Smith, designer (2008.04.17)
		KBS Cultural Zone – Series	Urban design best practice by world' s leading design cities (2008.06.13 ~ 2008.08.01) weekly series
		KBS Special	'2008 Dynamic China Part 2 – Millennium Continental Nation' s Dream, Soft China' (2008.01.13)
		SBS Design Success Generation [Regular Program]	'D-DAY' that provides support benefit for new business opening, 'Hip Design' corner for reviewing unusual fashion trend (started on Oct. 28, 2008)
		SBS Let' s Go! Morning-wide – Global City Exploration	The program is a part of the 'Let' s redesign the city' campaign cooperatively planned and launched by SBS and Seoul Metropolitan Government. (Reviewing best practices of sustainable city development and identifying conditional factors for creating a joyful city.)
		EBS Knowledge Channel e	'Design for 90%' (2008.11.10)
	Cable Broadcast Programs	Living TV: Beautiful Space	Introduces glamorous and beautiful suburban homes and remodeling space and provides useful information and know-how by design and architectural experts.
		MBN: Global Korea, Design is Power [Regular Program]	It' s a design specializing program Includes various design information and provides weekly design news, exhibition and event information. (started on Nov. 2007)
		MBN: Click! Successful Enterprise [Regular Program]	Introduction of companies that placed its competitiveness on differentiated strategy through design. (started on May 2005)
		Business & 24 Individuals' Design Legend [Regular Program]	Human documentary that shares the secretes of success by successful fashion designers. (started on Aug. 2008)
	DMB Broadcast Programs	iMBC: A Book in My Hand	'Why Design?' (2008.10.21)
		iMBC: Asia, Wearing Design [Regular Program]	A documentary that searches for the origin of design through design success cases in each of the 5 major Asian nations (India, Korea, China, Japan, and Thailand) (5 series in total)
		iMBC: Trend Magazine [Regular Program]	A TV magazine that analyzes the hot trend in the consumption industry, social culture, and the economy (includes the trend and style of various industry sectors including fashion, food, arts, and architecture)
		iMBC: Fashion File [Regular Program]	Relates the latest trend and information on global fashion

[Table 19] Design Broadcasting Contents in Seoul

3.2.1.2.2 Design Publishing Contents

Index Item	Design Publishing Contents
Details	69 design magazines and 351 single publication books
Research Method	Number of design related magazines, design specializing and design related single publications were totaled
Source	KOLIS-NET; Seoul Design Center's independent research (2008)

Magazines

The Seoul Design Survey did not differentiate magazines for the industry specialists and magazines for the general public. Instead, the survey sought to introduce the magazines by separating them into 8 categories of Design General, Industry, Architectural, Interior, Landscape, Fashion, Visual, and Others (includes general design related to life-style). The research showed that there were total of 69 design related magazines published in 2008. Below are the examples of design specializing and design related magazines published in 2008.

Sector	Title	Publisher	Website	Contents
Design General	Monthly 〈Design〉	Design House	mdesign.design.co.kr	Established in 1976, it is Korea's oldest design specializing magazine and covers overall design industry.
	Design Net	Designnet Co., Ltd.	www.designnet.co.kr	Established in 1997, it includes contents with keepsake values and focuses on to be the leader in providing information and interpretation on design changes.
Industry /Prod-uct	CAD & Graphics	BB Media	cadgraphics.co.kr	It is a specialized magazine for PLM field including CAD/CAM/CAE/PDM. It provides mechanical, architectural, and industry design sector's engineering solution information.
	Monthly Packaging	packnet	www.packnet.co.kr	It was established in 1984 as Korea's first private packaging magazine. It provides information on packaging related exhibition, research, education, and service as well as information on the development and promotion of Korea's packaging industry and for creating new packaging culture.
Archi-tecture	Architecture and Environment (C3)	Architecture and Environment	www.c3korea.net	C3 Korea is also dubbed as the 'Architecture and Environment' and the C is for context. It is an architectural industry specializing magazine and includes information on architecture and environment, construction material, portfolio, contests and events.
	SPACE	SPACE Co.	www.spacea.com	It is Korea's longest running architectural magazine, established on November of 1966 by renowned Korean architect, Su-Geun Kim. It is widely recognized in Korea as a prominent architectural magazine.
	ARCHI WORLD	ArchWorld Co., Ltd.	www.archiworld-pa.com	The ARCHIWORLD focuses on introducing, analyzing, and organizing information on recently completed outstanding architectural structures and on each monthly issue, it provides in depth analysis of winning designs of architectural design contests.
	Architectural Culture	A&C Publishing	www.archious.com	Established in 1981, it is Korea's leading architectural magazine that provides issues and discussion on overall construction industry of Korea. It is a magazine for constructive communication on architecture.
	PLUS	Plus Cultural Co.	www.pluszine.co.kr	The monthly PLUS is an architecture specializing magazine first published on May of 1987. It places focus on being Korea's foremost information provider for construction and interior design industry.
Interior	Interior	Ga-In Design Group	www.INTERIORS KOREA.com	It was established on October of 1986 by Ga-In Design Group. Its objective is to provide information on Korea's interior design concept and to contribute to the society as the leading specialized magazine for general interior design.
	Interni & Decor	Interni & Decor	www.internidecor.com	Established on June of 1999, it is packed with information for creating comfortable and efficient space.
	Bob	Pine & C Publishing	www.archious.com	It is a monthly interior design specializing magazine that includes creative designs by world's renowned designers as well as diverse and practical designs.

Sector	Title	Publisher	Website	Contents
Landscape	Environment and Landscape	Rent Co., Ltd.	www.landscapeworld.co.kr	As the nation's first landscape specializing magazine, it provides diverse and professional landscape information to promote advancement of Korea's landscape industry.
	Landscape World	ArchWorld Co., Ltd.	www.archiworld-pa.com	Landscape World is a magazine that covers world's leading landscapes and includes landscape related news, column, and special reports.
Fashion	Nylon	Nylon Media Co., Ltd.	www.nylonmedia.co.kr	The title is a combined word of New York (NY) and London (LON) and is a fashion culture magazine created by Marvin Scott Jarret and designer Michelle Outland in 1999.
	Vogue	Doosan Magazine	www.vogue.co.kr	VOGUE KOREA is the Korean issue of global fashion magazine, VOGUE. It includes everything about fashion and trend including season's style, fabric color, hair, and make-up.
	Esquire	Gaya Media Co., Ltd	www.ikissyou.com	As the monthly men's magazine, it provides information on beauty, sports, celebrities, automobiles, travel, and events.
	Elle	AGE AMCO Korea Co., Ltd.	www.elle.co.kr	ELLE KOREA is the Korean issue for world's leading fashion and beauty monthly magazine for women. It includes season's collection, fashion news, trend, and make-up.
	GQ	Doosan Magazine	www.gqkorea.co.kr	GQ is a world's leading monthly magazine for men. It is a fashion and related information magazine that carries season's collection, fashion news, trends, and other diverse information.
Graphic /Visual	Graphics Live	C&G Media	www.graphicslive.co.kr	Provides latest information on graphic design and computer graphics.
	Illust	Monthly Illust	www.illusthouse.com	Established on September of 1999, it introduces renowned illustration art works from Korean and international artists. It also provides methods used by seasoned artists, contest and other diverse information.
	Monthly W.E.B	Impress Co., Ltd	www.impress.co.kr	The magazine highlights the past, current and the future of Korea's internet industry and provides web design related information.
	Mac Madang	–	www.macmadang.com	It is a trend and technology information magazine specialized for mania users.
Misc	Casa Living	Sigongsa Co., Ltd.	www.casa.co.kr	It is a lifestyle magazine that comprehensively includes global trend on design and color, architecture and interior design, fabric and flower, and fashion and beauty.
	Joyful Home	Design House	www.design.co.kr	The magazine was first published on September of 1987 under the concept that joy can be multiplied when lifestyle is designed. It does not carry flashy trends and gossips but is a family life culture magazine that includes information to create beautiful life.

[Table 20] Design magazine list

Single Issue Publication

To identify status of design related single publication books published in 2008, research was made by conducting a search with the term 'Design' (in both English and Korean languages) in the Korea Library Information System Network (KOLIS-NET).[24] The search criteria did not distinguish between the first edition and reprints. As a result, the research showed that there were total of 351 design related books published in 2008.

24. Developed by the National Library of Korea, the KOLIS-NET is the integrated data base on the books possessed by the 384 public libraries in Korea. It is also the cooperative network for sharing information among the libraries as well as for key research institutes (universities, research centers, DB centers, etc.) both in Korea and in foreign countries.

The following are some examples of design specializing or related single issue books published in 2008.

Title	Author	Publisher	Issued Year
Architectural Planning and Designing Theory (for architectural design)	Co-written by Tae-jung Kim, Jin-Hyong Ju	Gumi Publishing Co.	2008
(for more improved user experience(UX)) Interaction Design	Written by Dan Shafer; Translated by Su-in Lee	A Con	2008
(for Industrial Design) Sketch & Rendering	Jong-gook Lee, Seong-sik Jo	Iljinsa	2008
(for practical knowledge in fashion design) Fashion Drafting & Work Order	Hyeon-sook Ahn, Seon-hee Kim, Ju-hyong Bae	Iljinsa	2008
(from 1920s to 2000) Korea Design History: Korea's Unique Design Story	Jong-geun Kim	Mijinsa	2008
(Professor Young-Gul Kwon's) Stroll through Public Design	Young-Gul Kwon	Samhun	2008
(Possessing a design mind!) Design Generator	Ken Nah	Visual Story, Factory Publication Dept.	2008
(turn-on the thinking switch) Creative Guerrilla	Written by: Tom Himp; Translated by: Hong-tak Kim	Design House	2008
New Trend in Sense Design & Sense Branding: Development of Humane Brand through Sense Design	Written by: Mark Gobae; Translated by: Jang-won Ahn	Kim & Kim Books	2008
Design Management: Managing Design Strategy, Process and Implementation	Written by: Catherine Best; Translated by Kyong-won Jung, Gi-young Nam	Lux Media	2008
Designomics: A New Concept in Management Design	Wong-tae Jung, Cheol-woong Choi	Kyongmunsa	2008
Jang Gwa-Ho, Covering the World with Sense: Fashion Life Story of a Cloth Making Man	Gwang-ho Jang	Book House	2008
(Choi Soon-ja's Master of Ddeuk (rice cake) Design) If it looks good, it must taste good!	Choi Soon-ja	BnCworld	2008
Fabric Interior in Our Home: 100 Special Ideas to Create a Beautiful Home	Written by Tomsin Western; Translated by: Yoo-mi Han	Academy Book	2008
Friendly New York: New York Survival Stories by Design School Students	Ryu-ni Park, Seon-mi Kim, Min Jang	Art Books	2008
(Unfair and Incomplete) Netherlands Design Tour	Seong-min Choi, Seul-gi Choi	Ahn Graphics	2008
(BB Angle's) Tokyo Diary: Character Designer Eun-hee Seo's Character & Design Tour in Japan	Woon-hee Seo	Gilbut	2008
(HB Multiple Choice) Design Protection Law	Gyong-shik Gong, Seung-hoon Lee, Dae-won Ju	Gyong-shik Gong, Seung-hoon Lee, Dae-won Ju	2008
(20th Century) Design Icon 83	Written by Folker Alves, et al.; Translated by: Won-ho Jo, Han-hyuk Jo	Art Culture	2008
(Discussion on Korea's visual design culture) Sseul	Hu Wook, et al.	KERIS	2008
Japan's Economy, Reborn through Public Design	Chan-sook Park, Young-Gul Kwon, et al.	Ga-In	2008

[Table 21] Design specializing or related single issue publication list

3.2.1.2.1 Design Online Contents

Index Item	Design Online Contents
Details	48 Design Online Contents
Research Method	Number of design related websites (general and specializing websites) were totaled
Source	Seoul Design Center's independent research (2008)

Increase in internet usage rate

With the increase in interest in design, various types of design related information websites have been created. In addition to the online websites of the aforementioned design related magazines, numerous design related information can be found through the websites of design education institutes, design specializing companies, personal websites of professional designers, or even from a blog of individual with high interest in design.

The following are status data on design online contents types.

Category	Site Type	Characteristics	No. of Sites
Design Online Contents	Integrated Websites	Includes design news, magazine, and diverse design related information	14
	Specialized Website	Includes job information and education websites, institution websites, and information on specific design sector	34
	Total		Total 48

[Table 22] Status of design online contents per website type

Category	Category	Site Name	Characteristics	URL
Design Online Contents	Integrated Websites	DesignDB	Operated by KIDP and has Korea's largest design database. It also provides a community space for professional designers	www.designdb.com
		Design Jungle	Design information portal website	www.jungle.co.kr
		Design Flux	Provides international design information	www.designflux.co.kr
	Specialized Websites	Samsung Design Net	Provides fashion trend information	www.samsungdesign.net
		Seoul Fashion Center	Operated by the Seoul Fashion Center, which is the subsidiary institute of the Seoul Business Center (SBC)	www.sfdc.seoul.kr
		Seoul Design Headquarter	The official website of Seoul Metropolitan City's Seoul Design Headquarter	www.design.seoul.go.kr
		World Design Capital	Introduces 2010 World Design Capital Seoul	www.wdcseoul.kr
		Seoul City Gallery Project	The official website for Seoul City Gallery project initiated by the Seoul Design Headquarters	www.citygalleryproject.org
		Dongdaemun Design park & Plaza (DDP)	Provides information on the Dongdaemun Design Plaza & Park, scheduled to be completed in 2011	www.ddp.seoul.go.kr
		Seoul Culturenomics	Online community to inform the public on Creative Cultural City Seoul's core design strategy, the Culturenomics	www.culturenomicsblog.seoul.go.kr
		wow Seoul Multimedia	Fun & UCC website that provides photos and videos of Seoul's living culture, tour attractions and sceneries arranged per genre and per year	www.wow.seoul.go.kr

Category	Category	Site Name	Characteristics	URL
Design Online Contents	Design Online Con–tents	Seoul Design Olympiad	Provides in overview of the Seoul Design Olympiad and related information, including event schedules and programs.	sdo.seoul.go.kr
		Design Cluster	Provides information on designers, design companies, design management, exhibitions, and marketing support.	www.dcluster.seoul.kr
		World Design Market	Meta DB of Korea's outstanding design companies and designers, as well as their portfolios.	www.worlddesignmarket.com

[Table 23] Examples of design online content websites per site type

3.2.1.3 Events

3.2.1.3.1 Design Competitions (design contests & award ceremonies)

Index Item	Design Competitions
Details	367 Design Competitions
Research Method	Number of design contests and design award ceremonies in Seoul, hosted by both public and private institutes were totaled
Source	Seoul Design Center's independent research (2008)

The design competitions are categorized into 3 fields of Public Contests, Private Contests, and Design Awards for corporations and for products (services) already in the market. In 2008, total of 367 design contests were held in Seoul.

The following are design competition category types and case examples.

Category	Contest Type	Characteristics	Number of Events
Design Competitions	Design contests held by public institutes	Hosted by Seoul Metropolitan City, district gu's of Seoul, government institutes, and public corporations	91
	Design contests held by private institutes	Design contests held by private institutes	265
	Design Awards	Awards for corporations and for products (services) already in the market	11
	Total		367

[Table 24] Design competition types

The case examples of design competitions per type are as listed below.

Category	Type	Contest Title	Contest Sector	Hosting Institute
Design Competitions	Design contests held by public institutes	Seoul Designed by Me – 2008 Public Design Contest	Public design	Seoul Metropolitan City
		Beautiful Bench & Chair Contest	Public design	Seoul Metropolitan City
		Seoul Design Contest	Environment, space, visual, multimedia, fashion, product, craft art	Seoul Metropolitan City
		Seoul Tour Attraction Photograph Contest	Photography and multimedia	Seoul Metropolitan City
		2010 WDC Seoul UCC Festival & Contest	Multimedia and animation	Seoul Metropolitan City
	Design contests held by private institutes	Jungang Design Contest	Fashion	Jungang m&b
		Hana Bank Calendar Design Contest	Visual	Hana Bank
		Livart Design Contest	Product	Livart
		Korea Interior Design Competition	Architecture	Ga-In Design Group
		DOCOMO Korea Design Contest	Environment	DOCOMOMO KOREA
	Design Awards	Korea Design Award	Graphic, identity, digital media, product, living, and space sector (candidates of already presented or commercialized projects are reviewed for the award)	Monthly Design
		Korea Best Design Award	Outstanding design management company, outstanding design, outstanding design management by district government, and individual who has significantly contributed to the advancement of design	Ministry of Knowledge Economy
		Web Award Korea	Newly developed or renovated websites	Web Award Committee

[Table 25] Examples of design contests per type

3.2.1.3.2 Design Events

Index Item	Design Events
Details	146 Design Events
Research Method	Number of design events (academic, festival and exhibition events) held in Seoul were totaled
Source	Seoul Design Center' s independent research (2008)

The design events introduced in this survey is largely divided into 3 types. They are the Academic Events (seminars, workshops, conferences, forums, etc.) generally participated by design industry professionals and experts to hold academic and technical sessions on design; the Festival Events in which the theme of the events themselves are design or includes design related programs and is open to public; and the last is the Exhibition Events, which has the most number of events among the 3 types of design events. The main objective of the exhibition events is to exhibit and introduce the industrial and artistic sides of design and it can be participated by both the industry professionals and the general public.

The following is the category types of design events held in 2008 in Seoul.

Category	Event Type	Contents	No. of Events
Design Events	Academic Events	seminars, workshops, conferences, forums, academic presentation sessions	48
	Festival Events	small scale and large scale festivals, citizens' campaign, camp, show, commemorative events	27
	Exhibition Events	large scale product show, small and large scale exhibition, fair, convention, biennale, expo	71
	Total		146

[Table 26] Design event type list

Major events per design event type held in Seoul are as follows.

Category	Event Type	Event Title	Period	Hosting Institute
Design Events	Academic Events	Sustainable Design Seminar: Challenges and Opportunities for Creator	2008.10.10	British Cultural Center of Korea, KIDP
		Green Map Design Workshop	2008.10.20~2008.10.23	Seoul Metropolitan City
		Seoul Design Conference	2008.10.09~2008.10.12	Seoul Metropolitan City
		Seoul Design Trend Forum	2008.12.18	Seoul Design Center
		2008 Autumn Conference of the Korean Society of Interior Design	2008.05.29	Korean Society of Interior Design
	Festival Events	2008 Seoul Design Olympiad	2008.10.10~2008.10.30	Seoul Metropolitan City
		2008 Seoul Design Festival	2008.12.03~2008.12.07	Design House Co., Ltd
		Design Citizens' Campaign	2008.05	Seoul Metropolitan City
		International Young Designer Camp	2008.10	Seoul Metropolitan City
		Seoul Fashion Week (F/W)	2008.03.17~2008.03.24	서울특별시
		22nd Textile Day Festival	2008.11.11	Korea Textile Industry Association
디자인 행사	Exhibition Events	19th MBC Architectural Fair	2008.01.23~2008.01.27	MBC
		World Design Trend 6: Verna Penton	2007.12.08~2008.02.27	Seoul Art Center
		Everything in Design Above the Sky	2008.08.15~2008.11.09	Daerim Art Center, Vitra Design Museum
		2008 Korea Interior Design and Architectural Fair / Living Design Fair	2008.11.13~2008.11.17	Korea Society of Interior Architects/Designers, LG Chemical Co., Ltd.
		2008 Seoul Living Design Fair	2008.03.20~2008.03.24	Design House Co., Ltd., COEX Co., Ltd.
		5th Seoul International Media Art Biennale	2008.09.12~2008.11.05	Seoul Metropolitan City
		2008 Korea Public Design EXPO	2008.10.28~2008.11.01	Ministry of Culture, Sports and Tourism, Public Design EXPO Organization Committee

[Table 27] Major design events per type

3.2.2 Achievements (experience)

The「2008 Initial Research for the Seoul Design Survey」included a survey on male and female citizens of Seoul aged 20-60, who have lived in Seoul for over 5 years to identify the experience status of design culture. In addition, the degree of design culture experience by the core constituents of the design industry, the professors and students of design majors as well as the designers were identified to compare the differences in the degree of experience of design culture between the those who are directly related with design and the general public.

3.2.2.1 Experience in Infrastructure

3.2.2.1.1 Experience Rate in Design Museums

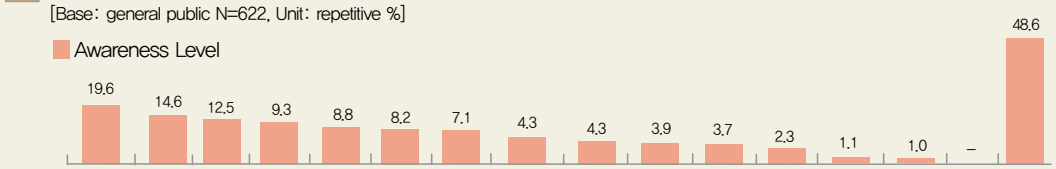
Index Item	Experience in design museums
Details	General public' s experience rate in design museum was 17.7%
Research Method	General public' s experience rate in design museum was averaged
Source	Seoul Design Center' s initial research report for the Seoul Design Survey (2008)

The awareness level of the general public with regards to design specializing or related museum was 51.4% of the total respondents.

Among the general public respondents, 51.4% responded that they were aware of design specializing or related museums in Seoul but the remaining 48.6% were not aware of the facilities.

Awareness of Design Specializing or Related Museums by the General Public

[Base: general public N=622, Unit: repetitive %]



	Samsung Publishing Museum (Gugi-dong, Jongno-gu)	Locksmith Museum (Dongsu-dong, Jongno-gu)	Onggi Folk Museum (Ssangmun 1-dong, Dobong-gu)	Ddeuk, Kitchen Accessories Museum (Waryong-dong, Jongno-gu)	Korea Furniture Museum (Sungbuk-dong, Sungbuk-gu)	Korea Embroidery Museum (Nonhyun-dong, Gangnam-gu)	World Accessories Museum (Hwa-dong, Jongno-gu)	Sookmyung Women's University Chung Young Yang Embroidery Museum (Hyochangwon-gil, Yongsan-gu)	Korea Magazine Information Center (Yeouido-dong, Yeongdeungpo-gu)	Contemporary Design Museum (Changjun-dong, Mapo-gu)	Chojeon Textile & Quilt Museum (Namsan-dong, Jung-gu)	Bona Accessories Museum (Gwan-hoon-dong, Jongno-gu)	Han Sang Su Embroidery Museum (Gahwe-dong, Jongno-gu)	Ultra Architectural Museum (Shinjung 1-dong, Yangcheon-gu)	Others	Not Aware
Citizens (N=622)	19.6	14.6	12.5	9.3	8.8	8.2	7.1	4.3	4.3	3.9	3.7	2.3	1.1	1.0	–	48.6

[Figure 19] Awareness of design specializing or related museums by the general public [25]

Visited design specializing or related museums at least once:

Respondent Group: General Public: 17.7%; Professors and Students: 41.2%; Designers: 23.5%

Among the respondent groups, the professors and students and the designers have shown higher experience rate with 41.2% and 23.5% respectively, signifying higher experience in design specializing or related museums than the general public. In addition, among all the respondents, the number of visits to design specializing or related museums was highest by those who answered 1 time with 51.8%.

25. Seoul Design Center, Initial research for the Seoul Design Survey, 2008

3.2.2.1.2 Experience Rate in Design Art Centers / Galleries

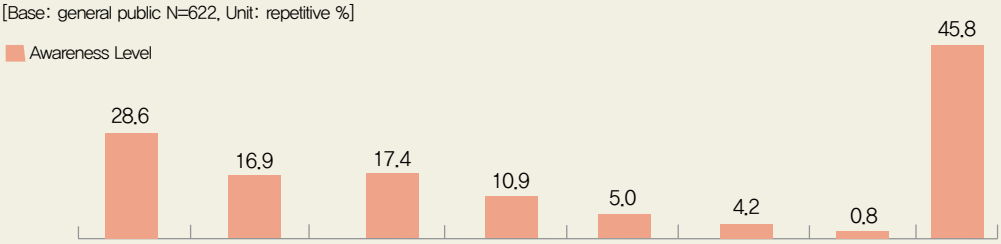
Index Item	Experience in design art centers / galleries
Details	General public' s experience rate in design art centers / galleries was 27.2%
Research Method	General public' s experience rate in design art centers / galleries was averaged
Source	Seoul Design Center' s initial research report for the Seoul Design Survey (2008)

The awareness level of the general public with regards to design related art centers / galleries was 54.2% of the total respondents.

Among the design related art centers / galleries, the Design Seoul Gallery located in the Sunyoodo Park had the highest recognition with 28.6% awareness level.

Awareness of Design Specializing or Related Art Centers / Galleries by the General Public

[Base: general public N=622, Unit: repetitive %]



	Design Seoul Gallery (Sunyoodo Park)	Hangaram Design Art Center (Seocho-dong, Seocho-gu)	Galleries operated by the Seoul Animation Center / design related centers	Sangwon Art Center (Pyongchang-dong, Jongno-gu)	Samwon Paper Gallery (Junggok-dong, Gwangjin-gu)	Galleries operated by design universities (Zero One Gallery, Gallery I-ang)	Other galleries specializing in design exhibition	Not Aware
Citizens (N=622)	28.6	16.9	17.4	10.9	5.0	4.2	0.8	45.8

[Figure 20] Awareness of design specializing or related Art centers / galleries by the general public [26]

Visited design specializing or related art centers / galleries at least once:
Respondent Group: General Public: 27.2%; Professors and Students: 80.4 %; Designers: 59.0%

Among the general public group with most number of respondents, 63.9%, have responded that they have visited the facilities once.

3.2.2.1.3 Experience Rate in Design Libraries / Data Centers

Index Item	Experience in design libraries / data centers
Details	General public' s experience rate in design libraries / data centers was 13.9%
Research Method	General public' s experience rate in design libraries / data centers was averaged
Source	Seoul Design Center' s initial research report for the Seoul Design Survey (2008)

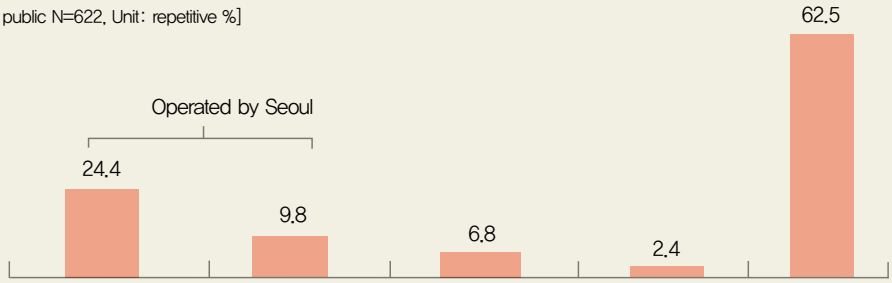
The awareness level of the general public with regards to design related libraries / data centers was : 37.5% of the total respondents.

26. Seoul Design Center, Initial research for the Seoul Design Survey, 2008

Among the design related libraries / data centers, the library and multimedia center of the Seoul Animation Center had the highest recognition with 24.4% awareness level.

Awareness of Design Specializing or Related Libraries / Data Center by the General Public

[Base: general public N=622, Unit: repetitive %]



	Library and Multimedia Center of the Seoul Animation Center (Yaejang-dong, Jung-gu)	:: Seoul Fashion Center Information Center (near Dongdaemun Stadium in Shindang-dong, Jung-gu)	IDTC (International Design Trend Center – Hongmun Cultural Center for the professors and students of Hongik University)	Other design specializing or related information center	Not Aware
Citizens (N=622)	24.4	9.8	6.8	2.4	62.5

[Figure 21] Awareness of design specializing or related libraries / data center by the general public [27]

Visited design specializing or related libraries / data center at least once:

Respondent Group: General Public: 13.9 %, Professors and Students: 38.4%; Designers: 21.0 %

Among the general public group with most number of respondents, 61.4% have responded that they have visited the facilities once.

3.2.2.2 Experience in Media

3.2.2.2.1 Experience Rate in Design Broadcasting Contents

Index Item	Experience in design broadcasting contents
Details	General public' s experience rate in design broadcasting contents was 80.7%
Research Method	General public' s experience rate in viewing design related TV programs was averaged
Source	Seoul Design Center' s initial research report for the Seoul Design Survey (2008)

Viewed design related TV programs at least once:

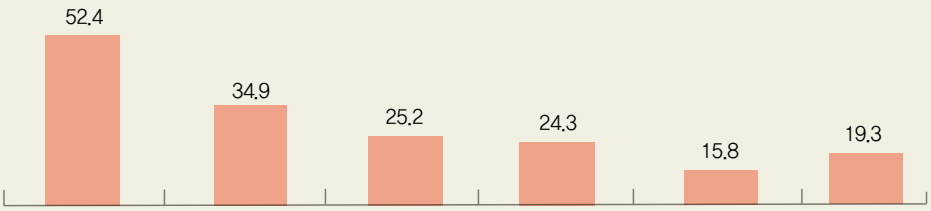
Respondent Group: Professors and Students 91.6%; General Public: 80.7%; Designers: 76%

27. Seoul Design Center, Initial research for the Seoul Design Survey, 2008

Among the general public group with most number of respondents, 52.4%, have responded that they have viewed MBC Unlimited Challenge "Challenging Seoul Design Olympiad" and Onstyle. "Entertainment Program with Design", such as the "Project Runway". It was followed by program that introduced "Korean / International Design Cities" with 34.9%.

Experience in Design Related TV Programs by the General Public

[Base: general public N=622, Unit: repetitive %]



	Entertainment Program with Design (ex: MBC Unlimited Challenge: Challenging Seoul Design Olympiad, Onstyle: Project Runway)	Programs that Introduce Korean / International Design Cities (ex: SBS Let's Go! Morning-wide Global City Exploration)	Programs that Introduces Design Related New Business and Ideas (ex: SBS Design Success Generation)	Educational Programs that Introduces Everyday Design (ex: Introduction of Easy to Do-It-Yourself Interior Design)	Educational Program with Korean / International Designers (ex: EBS Knowledge Channel e Design for 90%)	Never Viewed
Citizens (N=622)	52.4	34.9	25.2	24.3	15.8	19.3

[Figure 22] Experience in design related TV programs by the general public [28]

In case of the professors / students and the designers who have majored in design or are working in the design industry, as well as the general public group have shown highest viewing rate for Entertainment Program with Design among all the design related TV programs with 67.2% and 54.0% respectively, followed by the Programs that Introduce Korean / International Design Cities.

3.2.2.2.2 Experience Rate in Design Publishing Contents

Index Item	Experience in design publishing contents
Details	General public's experience rate in design publishing contents was 56.4%
Research Method	General public's experience rate in viewing design related books / magazines was averaged
Source	Seoul Design Center's initial research report for the Seoul Design Survey (2008)

Viewed design related publications (design related books / magazines) at least once:

Respondent Group: Professors and Students96.0%; Designers: 94.0%; General Public: 56.4%

Among the general public group most number of respondents, 74.6%, have responded that they have viewed 1-4 design related books / magazines in 2008.

28. Seoul Design Center, Initial research for the Seoul Design Survey, 2008

3.2.2.2.3 Experience Rate in Design Online Contents

Index Item	Experience in design online contents
Details	General public's experience rate in design online contents was 21.4%
Research Method	General public's experience rate in design related websites was averaged
Source	Seoul Design Center's initial research report for the Seoul Design Survey (2008)

Visited design related websites at least once:

Respondent Group: Designers: 89.0%, Professors and Students: 82.0%; General Public: 21.4 %

Among the respondent groups, the professors and students and the designers have shown comparably higher experience rate with 82.0% and 89.0% respectively, signifying higher experience in design related websites than the general public. In addition, among all the respondents, the number of visits to design related websites was highest by those who answered 1-4 times with 82.0%.

3.2.2.3 Event Experience

3.2.2.3.1 Experience in Design Competitions

Index Item	Experience in design Competitions
Details	General public's experience rate in design contests was 4.2%
Research Method	General public's experience rate in design contests was averaged
Source	Seoul Design Center's initial research report for the Seoul Design Survey (2008)

Participated in design contests at least once:

Respondent Group: Professors and Students: 38.4%, Designers: 29.0%%; General Public: 4.2 %

Among the respondent groups, the professors and students and the designers have shown comparably higher contest participation rate with 38.4% and 29.0% respectively, signifying higher experience in design related contests than the general public. In addition, among all the respondents, the number of entry to design contests in 2008 was highest by those who answered 1 time with 60.0%.

3.2.2.2.3 Experience in Design Events

Index Item	Experience Rate in design events
Details	General public's experience rate in design events was 29.6%
Research Method	General public's experience rate in design events was averaged
Source	Seoul Design Center's initial research report for the Seoul Design Survey (2008)

Visited design related websites at least once:

Respondent Group: Professors and Students: 72.4%, Designers: 62.0%; General Public: 29.6 %

Among the respondent groups, the professors and students and the designers have shown comparably higher experience rate with 72.4% and 62.0% respectively, signifying higher experience in design events than the general public. In addition, among all the respondents, the number of visits to design events in 2008 was highest by those who answered 1 time with 60.3%.

3.2.3 Satisfaction Rate (citizens)

3.2.3.1 Satisfaction Rate in Infrastructure

① Quantitative Satisfaction Rate

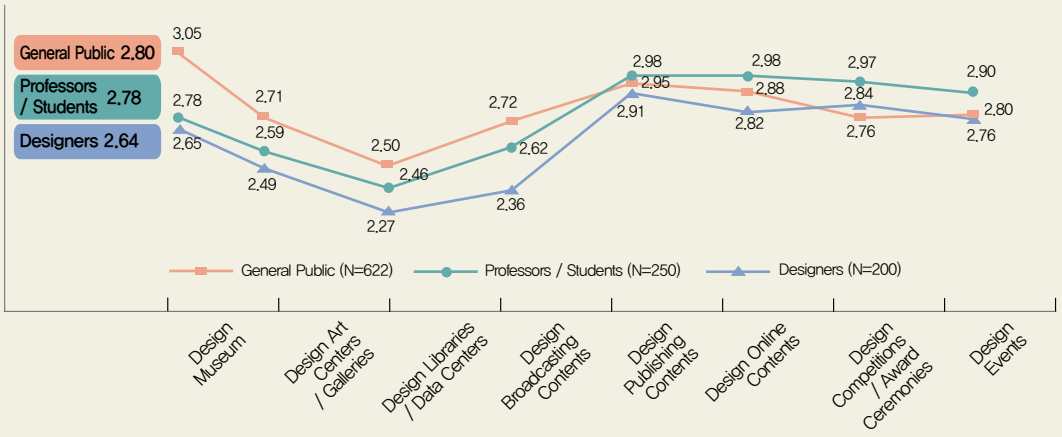
(max = 5)

Average satisfaction rate by the general public (2.80)	
Average satisfaction rate by the professors & students (2.78)	
Average satisfaction rate by the designers (2.64)	

The quantitative satisfaction rate on the overall design related cultural infrastructure by the respondent group showed to be fairly low with the highest average of 2.80 rated by the general public group. The satisfaction rate from highest to lowest respondent group order was general public 〉 professors / students 〉 designers. As for the sub-categories of infrastructure, the quantitative satisfaction rate for design libraries / data centers and design TV programs were rated the lowest.

Quantitative Satisfaction Rate

[Base: those with experience in design infrastructure, Unit: points (max = 5)]



[Figure 23] Quantitative satisfaction rate on design related infrastructure in Seoul [29]

② Qualitative Satisfaction Rate

(max = 5)

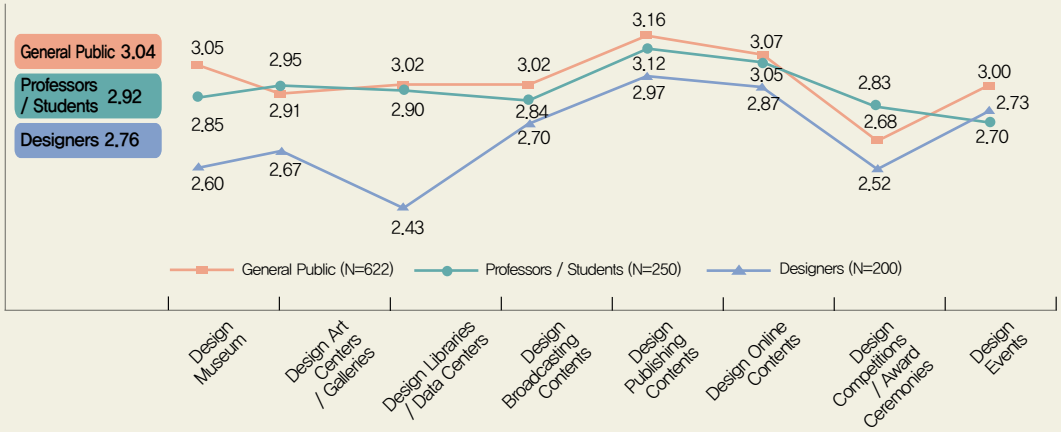
Average satisfaction rate by the general public (3.04)	
Average satisfaction rate by the professors & students (2.92)	
Average satisfaction rate by the designers (2.76)	

The qualitative satisfaction rate on the overall design related cultural infrastructure by the respondent group showed to be fairly average with the highest average of 3.04 rated by the general public group. The satisfaction rate from highest to lowest respondent group order was general public 〉 professors / students 〉 designers. As for the sub-categories of infrastructure, the qualitative satisfaction rate for design libraries / data centers and design contests were rated the lowest.

29. Seoul Design Center, Initial research for the Seoul Design Survey, 2008

Qualitative Satisfaction Rate

[Base: those with experience in design infrastructure, Unit: points (max = 5)]



[Figure 24] Qualitative satisfaction rate on design related infrastructure in Seoul [30]

3.2.3.1.1 Satisfaction Rate in Design Museums

Index Item	Satisfaction rate in design museums
Details	General public' s satisfaction rate on the design museums was 3.05 pts. (max = 5)
Research Method	General public' s quantitative and qualitative satisfaction rate in design museums was averaged
Source	Seoul Design Center' s initial research report for the Seoul Design Survey (2008)

① Quantitative Satisfaction Rate

(max = 5)

Average satisfaction rate by the general public (3.05)	
Average satisfaction rate by the professors & students (2.78)	
Average satisfaction rate by the designers (2.65)	

The quantitative satisfaction rate on the design specializing or related museums by the respondent group showed highest by the general public group with 3.05 and the lowest by the designers group with 2.65.

② Qualitative Satisfaction Rate

(max = 5)

Average satisfaction rate by the general public (3.05)	
Average satisfaction rate by the professors & students (2.85)	
Average satisfaction rate by the designers (2.60)	

The satisfaction rate on the design specializing or related museums with regards to their quality of exhibition items was 3.05 and by the respondent groups, the professors/students and designers showed significantly lower satisfaction rate than the general public group.

30. Seoul Design Center, Initial research for the Seoul Design Survey, 2008

3.2.3.1.2 Satisfaction Rate in Design Art Centers / Galleries

Index Item	Satisfaction rate in design art centers / galleries
Details	General public's satisfaction rate on the design art centers / galleries was 2.81 pts. (max = 5)
Research Method	General public's quantitative and qualitative satisfaction rate in design art centers / galleries was averaged
Source	Seoul Design Center's initial research report for the Seoul Design Survey (2008)

① Quantitative Satisfaction Rate

(max = 5)

Average satisfaction rate by the general public (3.05)	
Average satisfaction rate by the professors & students (2.78)	
Average satisfaction rate by the designers (2.65)	

The quantitative satisfaction rate on the design specializing or related art centers / galleries per respondent group was 3.05 for the general public group and the designers group showed the lowest with 2.65.

② Qualitative Satisfaction Rate

(max = 5)

Average satisfaction rate by the general public (3.04)	
Average satisfaction rate by the professors & students (2.92)	
Average satisfaction rate by the designers (2.76)	

The satisfaction rate on the design specializing or related art centers / galleries with regards to the exhibition contents and quality per respondent group was 2.91 for the general public group and the designers group showed the lowest with 2.67.

3.2.3.1.3 Satisfaction Rate in Design Libraries / Data Centers

Index Item	Satisfaction rate in design libraries / data centers
Details	General public's satisfaction rate on the design libraries / data centers was 2.76 pts. (max = 5)
Research Method	General public's quantitative and qualitative satisfaction rate in design libraries / data centers was averaged
Source	Seoul Design Center's initial research report for the Seoul Design Survey (2008)

① Quantitative Satisfaction Rate

(max = 5)

Average satisfaction rate by the general public (2.50)	
Average satisfaction rate by the professors & students (2.46)	
Average satisfaction rate by the designers (2.27)	

The satisfaction rate on the quantity of design libraries / data centers by the respondent group was 2.50 for the general public group and the designers group showed comparably low score with 2.27.

② Qualitative Satisfaction Rate

(max = 5)

Average satisfaction rate by the general public (3.02)	
Average satisfaction rate by the professors & students (2.90)	
Average satisfaction rate by the designers (2.43)	

The satisfaction rate on the design specializing or related libraries / data centers with regards to the quality of materials per respondent group was 3.02 for the general public group and the designers group showed the lowest with 2.43.

3.2.3.2 Media Satisfaction

3.2.3.2.1 Satisfaction Rate in Design Broadcasting Contents

Index Item	Satisfaction rate in design broadcasting contents
Details	General public's satisfaction rate on the design broadcasting contents was 2.87 pts. (max = 5)
Research Method	General public's quantitative and qualitative satisfaction rate in design broadcasting contents was averaged
Source	Seoul Design Center's initial research report for the Seoul Design Survey (2008)

① Quantitative Satisfaction Rate

(max = 5)

Average satisfaction rate by the general public (2.72)	
Average satisfaction rate by the professors & students (2.62)	
Average satisfaction rate by the designers (2.36)	

The quantitative satisfaction rate on the design related TV programs per respondent group was 2.72 for the general public group and the designers group showed the lowest with 2.36.

② Qualitative Satisfaction Rate

(max = 5)

Average satisfaction rate by the general public (3.02)	
Average satisfaction rate by the professors & students (2.84)	
Average satisfaction rate by the designers (2.70)	

The satisfaction rate on the design related TV programs with regards to their contents and program schedules per respondent group was 3.02 for the general public group and the designers group showed the lowest with 2.70.

3.2.3.2.2 Satisfaction Rate in Design Publishing Contents

Index Item	Satisfaction rate in design publishing contents
Details	General public's satisfaction rate on the design publishing contents was 3.06 pts. (max = 5)
Research Method	General public's quantitative and qualitative satisfaction rate in design publishing contents was averaged
Source	Seoul Design Center's initial research report for the Seoul Design Survey (2008)

① Quantitative Satisfaction Rate

(max = 5)

Average satisfaction rate by the general public (2.95)	
Average satisfaction rate by the professors & students (2.98)	
Average satisfaction rate by the designers (2.91)	

The satisfaction rate on the quantity of design related books / magazines per respondent group was 2.95 for the general public group and the designers group showed comparably low score with 2.91.

② Qualitative Satisfaction Rate

(max = 5)

Average satisfaction rate by the general public (3.02)	
Average satisfaction rate by the professors & students (2.84)	
Average satisfaction rate by the designers (2.70)	

The satisfaction rate on the design related books / magazines with regards to their content quality per respondent group was 3.16 for the general public group and the designers group showed the comparably low score with 2.97.

3.2.3.2.3 Satisfaction Rate in Design Online Contents

Index Item	Satisfaction rate in design online contents
Details	General public's satisfaction rate on the design online contents was 2.98 pts. (max = 5)
Research Method	General public's quantitative and qualitative satisfaction rate in design online contents was averaged
Source	Seoul Design Center's initial research report for the Seoul Design Survey (2008)

① Quantitative Satisfaction Rate

(max = 5)

Average satisfaction rate by the general public (2.88)	
Average satisfaction rate by the professors & students (2.98)	
Average satisfaction rate by the designers (2.82)	

The quantitative satisfaction rate on the design related websites per respondent group was 2.88 for the general public group and the designers group showed the lowest with 2.82.

② Qualitative Satisfaction Rate

(max = 5)

Average satisfaction rate by the general public (3.07)	
Average satisfaction rate by the professors & students (3.05)	
Average satisfaction rate by the designers (2.87)	

The satisfaction rate on the design related websites with regards to their information quantity and contents quality per respondent group was 3.07 for the general public group and the designers group showed the lowest with 2.87.

3.2.3.3 Event Satisfaction

3.2.3.3.1 Satisfaction Rate in Design Competitions

Index Item	Satisfaction rate in design competitions
Details	General public's satisfaction rate on the design contests was 2.72 pts. (max = 5)
Research Method	General public's quantitative and qualitative satisfaction rate in design contests was averaged
Source	Seoul Design Center's initial research report for the Seoul Design Survey (2008)

① Quantitative Satisfaction Rate

(max = 5)

Average satisfaction rate by the general public (2.76)	
Average satisfaction rate by the professors & students (2.97)	
Average satisfaction rate by the designers (2.84)	

The quantitative satisfaction rate on the design contests per respondent group was 2.76 for the general public group and the professors/students group as well as the designers group, who are the primary contestants to the contests, showed comparably high score.

② Qualitative Satisfaction Rate

(max = 5)

Average satisfaction rate by the general public (2.68)	
Average satisfaction rate by the professors & students (2.83)	
Average satisfaction rate by the designers (2.52)	

The satisfaction rate on the design contests with regards to their quality and recognition as well as award benefits per respondent group was 2.68 for the general public group and the designers group showed the lowest with 2.52.

3.2.3.3.2 Satisfaction Rate in Design Events

Index Item	Satisfaction rate in design events
Details	General public's satisfaction rate on the design events was 2.90 pts. (max = 5)
Research Method	General public's quantitative and qualitative satisfaction rate in design events was averaged
Source	Seoul Design Center's initial research report for the Seoul Design Survey (2008)

① Quantitative Satisfaction Rate

(max = 5)

Average satisfaction rate by the general public (2.80)	
Average satisfaction rate by the professors & students (2.90)	
Average satisfaction rate by the designers (2.76)	

The quantitative satisfaction rate on the design events per respondent group was 2.80 for the general public group and the designers group showed comparably low score with 2.76.

② Qualitative Satisfaction Rate

(max = 5)

Average satisfaction rate by the general public (3.00)	
Average satisfaction rate by the professors & students (2.70)	
Average satisfaction rate by the designers (2.73)	

The satisfaction rate on the design events with regards to their contents and scale per respondent group was 3.00 for the general public group and the professors/students group showed the lowest with 2.70.

3.3 Design Education of Seoul (focused on post high school education)

3.3.1 Education Resource

3.3.1.1 Education Institutes

Education Institutes: associate degree + bachelor degree + master or higher degree + distant learning (cyber)

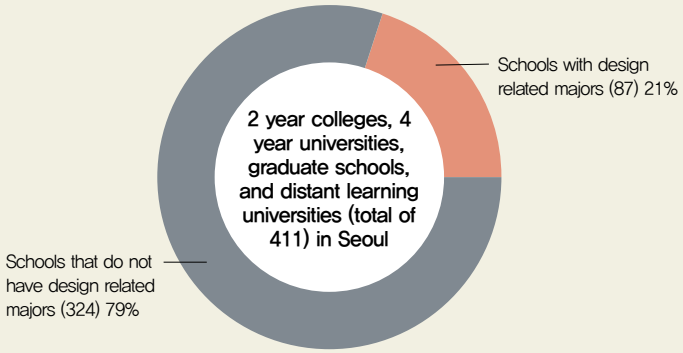
The educational institutes in the Design Survey signifies 4 types of higher education institutes of 2 year colleges, 4 year universities, graduate schools, and distant learning (cyber) universities in Seoul with design field majors.

3.3.1.1.1 Number of Universitie

Index Item	Number of education institutes
Details	Total of 87 institutes among all the higher education institutes in Seoul had majors in the design field
Research Method	Among all the higher education institutes in Seoul (community colleges, 4 year universities, distant learning universities, and graduate schools), the number of schools with design field of majors was totaled
Source	Korea Educati on Development Institute (2008); Ministry of Education, Science and Technology (2008); Seoul Design Center' s independent research (2008)

Of 411 higher education institutes in Seoul, schools with design field of majors (1,428 higher education institutes in Korea): 87 (21%)

There are total of 1,428 higher education institutes in Korea and among them, 411 are located in Seoul. Of the higher education institutes in Seoul, 87 have design field of majors, signifying 21% of total higher education institutes in Seoul.



[Figure 25] Rate of schools with design related majors among the higher education institutes in Seoul

Ratio of schools with design field of majors among higher education institutes in Seoul: 2 yr. college: 75%; 4 yr. university: 53.2%; graduate schools: 13.4%; distant learning (cyber) university: 87.5%

When examining the 4 types of higher education institutes in Seoul with design related majors per school type, their rates are as follows: 75% of all of the 2 year colleges; 53.2% of all of the 4 year universities; 13.4% of all of the graduate schools; and 87.5% of all of the distant learning universities.

● 2 Yr. Colleges [31]

Total number of 2 yr. colleges in Korea: 149; 2 yr. colleges in Seoul: 12; schools w/ design field of majors in Seoul: 9 (75%)

There are total of 149 2 year program colleges in Korea. Among them, 12 are located in Seoul and of the 12, 9 have design related majors. In other words, research showed that 75% of the 2 year colleges in Seoul are conducting design related education.

Category	School Name
2 Yr. College	Dongyang Technical College
	Myongji College
	Baehwa Women' s University
	Seoil University
	Soongeui Women' s College
	Induk Institute of Technology
	Hanyang Women' s College
Polytechnic University	Korea Polytechnic 1 Gangseo College
	Korea Politechnic 1 Jungsu College

[Table 28] Names of schools with design field of majors among 2 yr. colleges in Seoul

● 4 Yr. Universities [32]

Total number of 4 yr. universities in Korea: 207; in Seoul: 47; schools w/ design field of majors in Seoul: 25 (53.2%)

Of all the 4 yr. universities in Seoul, 25 schools or 53.2% showed to have design related courses. When compared to 2 yr colleges in Seoul with design related courses (75%), the rate of the 4 yr. universities was significantly lower.

Category	School Name	Category	School Name
4 Yr. University	Konkuk University	4 Yr. University	Sungkyunkwan University
	Kyonggi University		Seoul Women' s University
	Kyung Hee University		Sungshin Women' s University
	Korea University		Sejong University
	Kookmin University		Sookmyung Women' s University
	Dongguk University		Yonsei University
	Duksung Women' s University		Ehwa Womans University
	Dongduk Women' s University		Hansung University
	Sahmyook University		Hanyang University
	Sangmyung University		Hongik University
	Seo Kyeong University		Korea National University of Arts
	Seoul National University	Technology University	Seoul National University of Technology
	University of Seoul		

[Table 29] Names of schools with design field of majors among 4 yr. universities in Seoul [33]

31. As for the number of 2 yr. colleges in Korea, it is as mentioned in section 3.1.1. In case of Seoul, the number also includes the number of schools with secondary campus in Seoul and the number of schools as set forth in pursuant to the Special Act and the Individual Establishment Act.
32. As for the total number of 4 yr. universities in Korea, it includes general universities, industrial university, education university, various schools, open university, and technical universities and it is as mentioned in section 3.1.1. In case of Seoul, the number also includes the number of schools with secondary campus in Seoul and the number of schools as set forth in pursuant to the Special Act and the Individual Establishment Act.
33. Statistics Research Center of KEDI _ 2008 Names of Universities in Seoul

●Graduate Schools

Total number of graduate schools in Korea: 1,055; in Seoul: 344; schools w/ design field of majors in Seoul: 46 (13.4%)

There are total of 1,055 graduate schools in Korea. Among them, 344 are located in Seoul and of the 344, 46, or 13.4% of all of the graduate schools in Seoul were conducting design related education.

Category	School Name	Category	School Name
General Graduate School	Konkuk University – Graduate School	Specialized Graduate School	Kyong Hee University – Graduate School of Art Fusion Design
	Kyonggi University – Graduate School		Korea University – Graduate School of Engineering
	Kyong Hee University – Graduate School		Kookmin University – Graduate School of Design
	Kookmin University – Graduate School		Kookmin University – Graduate School of Multidisciplinary Arts
	Duksung Women' s University – Graduate School		Duksung Women' s University – Graduate School of Cultural Industry
	Sangmyung University – Graduate School		Dongduk Women' s University – Graduate School of Design
	Seo Kyeong University – Graduate School		Sangmyung University – Graduate School of Arts
	Seoul National University – Graduate School of Arts		Seoul National University of Technology – Graduate School of Industrial Science
	Seoul National University – Graduate School of Life Science		Seoul National University of Technology – Graduate School of Housing
	Seoul Women' s University – Graduate School		Sungkyunkwan University – Graduate School of Design
	Sungkyunkwan University – Graduate School		Sookmyung Women' s University – Graduate School Lifestyle Design
	Sungshin Women' s University – Graduate School		Ehwa Womans University – Graduate School of Design
	Sejong University – Graduate School		Chung Ang University – Graduate School of Arts
	Sookmyung Women' s University – Graduate School		Hansung University – Graduate School of Arts
	Soongsil University – Graduate School		Hongik University – Graduate School of Industrial Arts
	Yeonsei University – Graduate School		Hongik University – Graduate School Multimedia
	Ehwa Womans University – Graduate School	Professional Graduate School	Konkuk University – Graduate School of Design
	Chung Ang University – Graduate School		Kookmin University – Graduate School of Techno Design
	Hansung University – Graduate School		Dongduk Women' s University – Graduate School of Fashion Design
	Hanyang University – Graduate School		Seoul National University – Graduate School of Environmental Science
	Hongik University – Graduate School		Seoul National University of Technology – Graduate School of Railroad
	Konkuk University – Graduate School of Design		Seoul National University of Technology – Graduate School of NID Fusion Technology
	Konkuk University – Graduate School of Industrial Science		University of Seoul – Graduate School of Design

[Table 30] Names of schools with design field of majors among graduate schools in Seoul

●Distant Learning (Cyber) Universities

Total number of distant learning (cyber) universities in Korea: 17; in Seoul: 8; schools w/ design field of majors in Seoul: 7 (87.5%)

In addition to 2 year colleges and 4 year universities, there are total of 8 distant learning (cyber) universities in Seoul and among them, 7 have design related majors.

Category	School Name
Distant Learning (Univ.)	Kyong Hee Cyber University
	Sejong Cyber University
	Open Cyber University
	Korea Digital University
	Korea Cyber University
	Hanyang Cyber University
	Seoul Cyber University

[Table 31] Names of schools with design field of majors among distant learning (cyber) universities in Seoul [34]

34. Statistics Research Center of KEDI _ Names and number of distant learning (cyber) universities, 2 yr. colleges and universities

3.3.1.2 Human Resource for Education

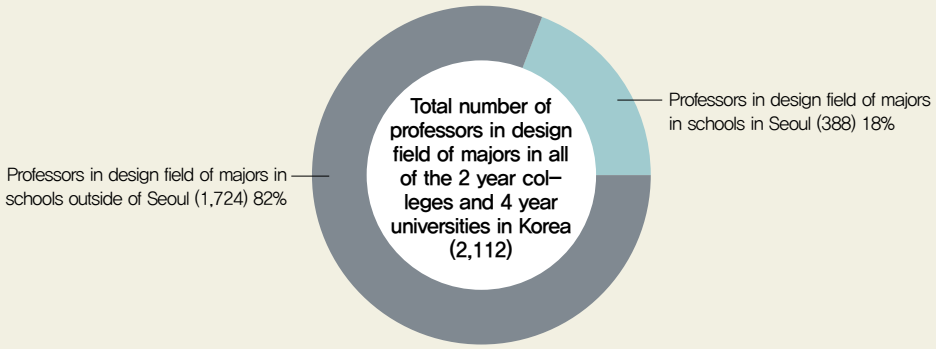
3.3.1.2.1 Number of Professors

Index Item	Number of professors
Details	Total of 388 professors in the design field of majors among the higher education institutes in Seoul
Research Method	Among all the higher education institutes in Seoul (community colleges and 4 year universities), the number of professors in the design field of majors was totaled
Source	Korea Education Development Institute (2008); Ministry of Education, Science and Technology (2008)

Ratio of professors in design field of majors in higher education institutes in Seoul compared to the nation's total:

Total number of professors in design field of majors in Korea: 2,112; in Seoul: 388 (2 yr. colleges and 4 yr. universities) (87.5%)

There are total of 2,112 professors in design field of majors throughout Korea and among them, 388 are employed by the 2 year colleges or 4 year universities in Seoul.



Category	2 yr. colleges	4 yr. universities	total
Number of professors in design field of majors in Korea	875	1,237	2,112
Number of professors in design field of majors in Seoul	149	239	388
Number of professors in design field of majors in Seoul (%)	17	19	18(%)

[Figure 26] Ratio of professors in design field of majors (2 yr. colleges and 4 yr. universities) in Seoul compared to the nation's total

● **Ratio of design field of major professor to student in 2 yr. colleges and 4 yr. universities in Seoul**

Category	2 Yr. Colleges	4 yr. universities	Remark
Average number of students per 1 professor in design field of majors in all of the schools in Korea	61	50	Jeonbuk district had the lowest with 29 and Incheon/ Gyeonggi district had the highest with 71
Average number of students per 1 professor in design field of majors in all of the schools in Seoul	51	45	

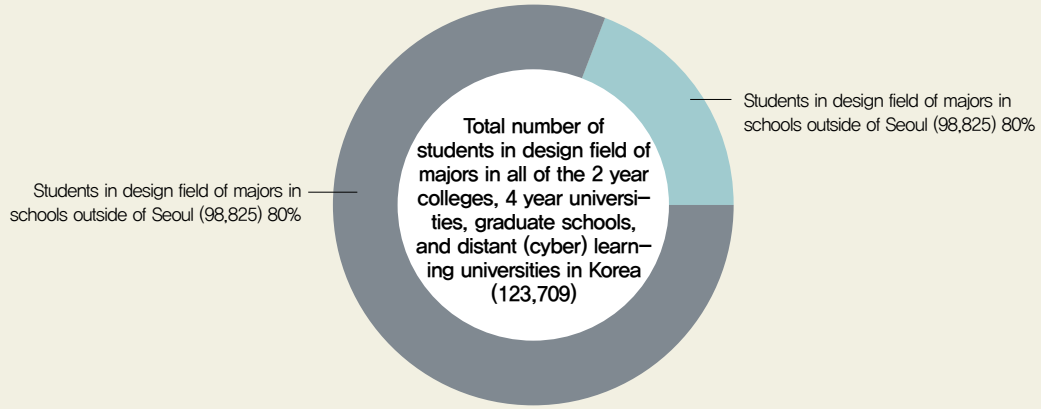
3.3.1.2.2 Number of Students

Index Item	Number of students
Details	Total of 24,884 students in the design field of majors among the higher education institutes in Seoul
Research Method	Among all the higher education institutes in Seoul (community colleges, 4 year universities, distant learning universities, and graduate schools), the number of students in the design field of majors was totaled
Source	Korea Education Development Institute (2008); Ministry of Education, Science and Technology (2008)

Ratio of students in design field of majors in higher education institutes in Seoul compared to the nation's total:

Total number of students in design field of majors in Korea: 123,709; in Seoul: 24,884 (20%)

There are total of 123,709 students in the design field of majors in all of the higher education institutes in Korea and among them, 24,884 were registered in 2 year colleges, 4 year universities, graduate schools, and distant (cyber) learning universities in Seoul. As a result, the rate of students in the design field of majors in higher education institutes in Seoul compared to the nation's total was shown to be 20%.



Category	2 Yr. College	4 Yr. University	Graduate School	Distant Learning (Cyber) University	Total
No. of students in design field of majors in Korea	53,443	61,604	5,301	3,361	123,709
No. of students in design field of majors in Seoul	7,649	10,664	3,826	2,745	24,884
Ration of students in design field of majors in Seoul (%)	14	17	72	82	20(%)

[Figure 27] Ratio of students in design field of majors in higher education institutes in Seoul compared to the nation's total

Ratio of students in design field of majors Seoul compared to the nation's total:

2 yr. colleges 14%; 4 yr. universities 17%; graduate schools 72%; distant learning (cyber) universities 82%

The research also showed that the total number of students in design fields of majors in graduate schools was significantly higher than 2 yr. colleges and 4 yr. universities in Seoul.

3.3.1.3 Curriculum

The categories for measuring the satisfaction rate of curriculum are as listed below.

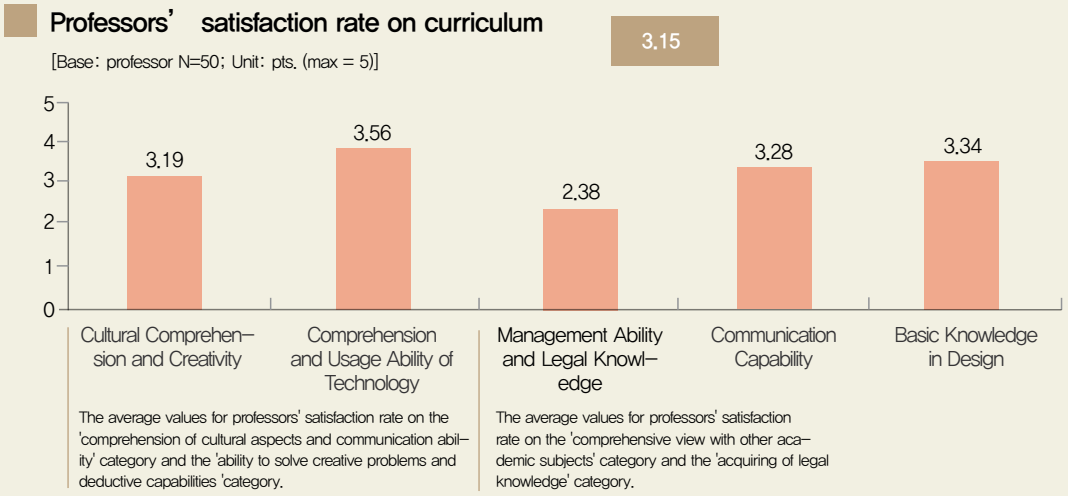
① Cultural Comprehension and Creativity ② Comprehension and Usage Ability of Technology

③ Management Ability and legal Knowledge ④ Communication Capability

⑤ Basic Knowledge in Design

The overall average for Professors' Satisfaction Rate on the curriculum satisfaction field: 3.15 (max = 5)

As a result, the satisfaction rate on the Comprehension and Usage Ability of Technology for design field of major was rated to have the highest satisfaction score with 3.56 and the Management Ability and Legal Knowledge category had the lowest satisfaction score with 2.38.



[Figure 28] Professors' satisfaction rate on the curriculum per each category [35]

3.3.1.3.1 Cultural Comprehension and Creativity

Index Item	Comprehension of cultural aspects and creativity
Details	Professors' satisfaction rate on the comprehension of cultural aspects and creativity was 3.19 pts. (max = 5)
Research Method	Comprehension of cultural aspects, communication ability, ability to solve creative problems, and deductive capabilities are measured and then averaged
Source	Seoul Design Center's initial research report for the Seoul Design Survey (2008)

Professors' satisfaction rate on the comprehension of cultural aspects and creativity was 3.19 pts. (max = 5)

The 'comprehension of cultural aspects and communication ability' is the category for evaluat–ing the curriculum that teaches the skills to understand the changes of the social trend and to ex–press such change through design. The 'ability to solve creative problems and deductive capabili–ties' is the category for evaluating the curriculum that teaches the skills to creatively approach, deduct and resolve a problem.

35. Seoul Design Center, Initial research for the Seoul Design Survey, 2008

3.3.1.3.2 Comprehension and Usage Ability of Technology

Index Item	Understanding and usage ability of technology
Details	Professors' satisfaction rate on the understanding and usage ability of technology was 3.56 pts. (max = 5)
Research Method	Professors' satisfaction rate on the understanding and usage ability of technology was measured and then averaged
Source	Seoul Design Center's initial research report for the Seoul Design Survey (2008)

Professors' satisfaction rate on the understanding and usage ability of technology was 3.56 pts. (max = 5)

It is the category for measuring the professors' satisfaction rate on the curriculum for 'understanding and usage ability of technology' and the technology here comprehensively includes various design related technologies and skills such as computer programs, sketching, modelling, and ability to fabricate prototypes. Accordingly, the evaluation for the satisfaction rate on the 'understanding and usage ability of technology' is the assessment on the curriculum related to acquiring various technologies and skills as well as their actual usage by the designers. Among the 5 categories that measures professors' satisfaction rate, the 'understanding and usage ability of technology', which is the curriculum oriented on actual design experience, was shown to have the highest satisfaction rate.

3.3.1.3.3 Management Ability and legal Knowledge

Index Item	Management capability and legal knowledge
Details	Professors' satisfaction rate on the management capability and legal knowledge was 2.38 pts. (max = 5)
Research Method	Professors' satisfaction rate on the comprehensive view with other academic subjects and acquiring of legal knowledge were measured and then averaged
Source	Seoul Design Center's initial research report for the Seoul Design Survey (2008)

Professor's satisfaction rate on the management capability and legal knowledge was 2.38 pts. (max = 5)

The 'management capability and legal knowledge' is the category for evaluating the curriculum that comprehensively includes subjects other than, but are related to design. It assesses the professors' satisfaction rate on the curriculum for acquiring knowledge in other subjects, such as business administration, required by designers from integrated perspective, and evaluation on the curriculum for learning legal knowledge (ie: patents and intellectual property rights).

3.3.1.3.4 Communication Capability

Index Item	Communication Capability
Details	Professors' satisfaction rate on the communication capability was 3.28 pts. (max = 5)
Research Method	Professors' satisfaction rate on the communication capability was measured and then averaged
Source	Seoul Design Center's initial research report for the Seoul Design Survey (2008)

Satisfaction rate on the communication capability is the measurement on the curriculum for acquiring 'communication skills' such as the presentation skills, industry-university cooperation and teamwork activities as well as the ability to communicate in the debate class, and communication between student to student, team to team, student to professor, student to company, and designers to company.

3.3.1.3.5 Basic Knowledge in Design

Index Item	Basic knowledge in design
Details	Professors' satisfaction rate on the basic knowledge in design was 3.34 pts. (max = 5)
Research Method	Professors' satisfaction rate on the basic knowledge in design was measured and then averaged
Source	Seoul Design Center's initial research report for the Seoul Design Survey (2008)

The professors' satisfaction rate on the basic knowledge in design was 3.34 pts. (max = 5)

The 'basic knowledge in design' is the category that deals with the basic academic knowledge in design and the professors' satisfaction rate on the curriculum that teaches the basic knowledge in design among the curriculums for the design major was 3.34 points.

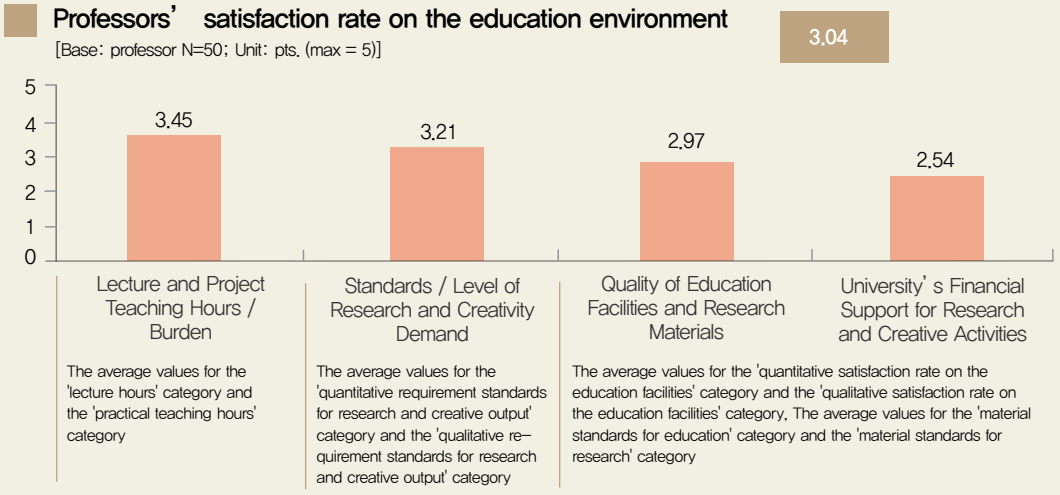
3.3.1.4 Education Environment

The Education Environment is the field for evaluating the teaching conditions or the support structure of the university to conduct the actual university education by professor. Below are the researched categories of the Education Environment.

① Lecture and Project Teaching Hours / Burden
② Standards / Level of Research and Creativity Demand
③ Quality of Education Facilities and Research Materials
④ University's Financial Support for Research and Creative Activities

The overall Professors' Satisfaction Rate for the education environment field: 3.04 (max = 5)

As a result, the satisfaction rate on the Lecture and Project Teaching Hours / Burden was shown to be comparably high with 3.45 while the University's Financial Support for Research and Creative Activities category received low satisfaction rating of 2.54.



[Figure 29] Professors' satisfaction rate on the education environment [36]

3.3.1.4.1 Lecture and Project Teaching Hours / Burden

Index Item	Lecture and practical teaching hours / burden
Details	Professors' satisfaction rate on the lecture and practical teaching hours / burden was 3.45 pts. (max = 5)
Research Method	Professors' satisfaction rate on the hours of lecturing and practical teaching was measured and then averaged
Source	Seoul Design Center's initial research report for the Seoul Design Survey (2008)

Professors' satisfaction rate on the lecture and practical teaching hours was 3.45 pts. (max = 5)

The result of research on the satisfaction rate on the 'lecturing hours' and on the 'practical teaching hours' by the professors showed an average score of 3.45 points for the professors' satisfaction rate on the 'lecture and practical teaching hours' category.

36. Seoul Design Center, Initial research for the Seoul Design Survey, 2008

3.3.1.4.2 Standards / Level of Research and Creativity Demand

Index Item	Research and creativity requirement standards / level
Details	Professors' satisfaction rate on the research and creativity requirement standards / level was 3.21 pts. (max = 5)
Research Method	Professors' satisfaction rate on the research and the qualitative and quantitative standards on creative output were measured and the averaged
Source	Seoul Design Center's initial research report for the Seoul Design Survey (2008)

Professors' satisfaction rate on the research and creativity requirement standards / level was 3.21 pts. (max = 5)

It is the category for measuring the satisfaction rate on the 'research and creativity requirement standards / level' required from the professors and the survey was conducted in two parts of quantitative satisfaction and qualitative satisfaction on the required research and creative output. The results showed that the average satisfaction rate for 'research and creativity requirement standards / level' among the professors teaching design field of majors was 3.21 points.

3.3.1.4.3 Quality of Education Facilities and Research Materials

Index Item	Standards of education facility and research materials
Details	Professors' satisfaction rate on the standards of education facility and research materials was 2.97 pts. (max = 5)
Research Method	Professors' satisfaction rate on the quantitative and qualitative standards of education facilities and materials for teaching (lecturing) as well as for research are measured and averaged
Source	Seoul Design Center's initial research report for the Seoul Design Survey (2008)

Professor's satisfaction rate on the standards of education and research materials was 2.97 pts. (max = 5)

The 'education and research material' is the category that measures the professors' satisfaction rate on the 'material for education (lecture)' and on the 'material for research' by the professors themselves. The 'education facility' category measures the average 'quantitative satisfaction rate on the education facilities (lecture halls)' and the 'qualitative satisfaction rate on the education facilities (lecture halls)' by the professors. The average score for all the questionnaires related to the satisfaction rate on the category showed 2.97 points, which was less than the average for the overall satisfaction.

3.3.1.4.4 University's Financial Support for Research and Creative Activities

Index Item	University's financial support for research and creative activities
Details	Professors' satisfaction rate on the university's financial support for research and creativity activities was 2.54 pts. (max = 5)
Research Method	Professors' satisfaction rate on the university's financial support for research and creativity activities was measured and then averaged
Source	Seoul Design Center's initial research report for the Seoul Design Survey (2008)

Professors' satisfaction rate on the university's financial support for research and creative activities was 2.54 pts. (max = 5)

The professors' satisfaction rate on the 'university's financial support for research and creative activities' is the category for measuring the satisfaction on the universities' financial support for the professors' research / creative activities. Like the aforementioned satisfaction rate on the 'materials for research' by the professors, the satisfaction rate for the 'financial support' for professors teaching design related majors showed low score of 2.54.

3.3.2 Achievements (output)

In this research, the design education's characteristics are considered and the achievements (output) are measured in two categories of Research Output and Human Resource Fostering Output.

3.3.2.1 Research Output

In the Research Output category, the status of research output were measured by identifying the number of thesis published in the international and domestic academic journals by higher education institutes in Seoul.

3.3.2.1.1 International Journals [37]

Index Item	International Journals
Details	12 design related thesis were published in the 4 international journals by the higher education institutes in Seoul
Research Method	Of the total thesis published in the 4 international academic journals, number of thesis published by the higher education institutes in Seoul were counted
Source	Wiley Science; Korea Education & Research Information Service (2008)

Number of thesis published in the 4 international academic journals by higher education institutes in Seoul from total of 395 thesis by all of the higher education institutes in Korea: 12

In case of international academic journals, 4 major journals of 'Structural Design of Tall and Special Buildings', 'Computer Graphics Forum', 'Design Management Review',and the 'Design studies' were reviewed. There were no thesis published in the 'Design Management Review' but there were 6 cases published in the 'Structural Design of Tall and Special Buildings', 5 in 'Computer Graphics Forum', and 1 in the 'Design studies'. In addition, the research showed that total of 29 individuals participated in all of previously mentioned published thesis published.

Journal Title	Thesis Title	University
Structural design of tall and special buildings	Dynamic control of structures subjected to constraints	Chaung-Ang
	Application of GPS to monitoring of wind-induced responses of high-rise buildings	Yonsei
	Practical issues and solutions on installation of viscoelastic dampers in a 46-story reinforced concrete building structure	Dankook
	Development of drift design model for high-rise buildings subjected to lateral and vertical loads	Yonsei
	Drift design model for high-rise buildings based on resizing algorithm with a weight control factor	Yonsei
	An analytical model for high-rise wall-frame structures with outriggers	Sejong
Computer Graphics Forum	Expressive Facial Gestures From Motion Capture Data	Seoul
	A Semi-Lagrangian CIP Fluid Solver without Dimensional Splitting	Seoul, Sejong
	Exaggerating Character Motions Using Sub-Joint Hierarchy	Yonsei
	A Hidden-picture Puzzles Generator	Yonsei
	Real-Time Depth-of-Field Rendering Using Point Splitting on Per-Pixel Layers	Korea
Design studies	The impact of tangible user interfaces on spatial cognition during collaborative design	Kyung Hee

[Table 32] Status of thesis published in the international academic journals by higher education institutes in Seoul

37. Wiley Science, KERIS

3.3.2.1.2 Domestic Journals[38]

Index Item	Domestic Journals
Details	Of the total thesis published in the 34 domestic academic journals, 718 thesis were published by the higher education institutes in Seoul
Research Method	Of the total thesis published in the 34 domestic academic journals, thesis published by the higher education institutes in Seoul were counted
Source	Korea Education & Research Information Service (2008); Korea Education & Research Index (2008)

Total number of thesis published in the 34 domestic academic journals: 2,662

Number of design related thesis published by higher education institutes in Seoul: 718 (27%)

In case of domestic academic journals, design related thesis, by higher education institutes in Seoul that were published or were candidates in the journals, which included 4 fields of society, engineering, arts and sports, and multidisciplinary and at the same time, published design related thesis, registered in the National Academic Foundation (NAF) were measured.

Published Status	Field	Journal Title	Publishing Institute	Total No. of Thesis Published in 2008	No. of Design Related Thesis
Published	Society	Seoul Urban Research	Seoul City Policy Development Research Center	35	3
		Research in Advertising Science	Korea Advertising Society	56	1
		Korea Advertising Promotion Journal	Korea Advertising Promotion Society	42	3
	Engineering	Architecture Institute of Korea Thesis Collection (Blue Print Journal)	Architecture Institute of Korea	399	14
		Korea Human Engineering Journal	Korea Human Engineering Society	41	6
		Multimedia Academic Journal	Korea Multimedia Society	171	7
		Thesis Journal of Information Science	Korea Information Science Society	386	2
	Arts & Sports	Artists and Visual Culture	Artists and Visual Culture Society	10	1
		Sculpture Education	Society for Art Education of Korea	29	3
		Hanbok Culture	Hanbok Culture Society	40	7
		Basic Sculpture Science Research	Korea Society of Basic Sculpture Science	256	155
		Korea Design Culture Journal	Korea Design Culture Society	183	97
		Korea Design Forum	Korea Design Trend Society	119	45
		Design Science Research	Korean Society of Design Science	124	54
		Digital Design Science Research	Korea Digital Design Society	157	62
		Thesis Journal of Korea Institute of Interior Design	Korea Institute of Interior Design	109	61
		Korea Fashion Design Society Journal	Korea Fashion Design Society	42	28
Candidates	Arts & Sports	Research on Cartoons and Animation	Korean Society of Cartoon and Animation Studies	28	6
		Multimedia Technology Research	Korean Society of Multimedia Technology	6	1
		Multimedia Arts Research	Multimedia Arts Society	23	2
		Fashion & Knit	Korea Knit Design Society	13	5
		Korea Institute of Cultural Architecture	Korea Institute of Cultural Architecture	33	18
		Thesis Journal of Korean Society of Color Design Studies	Korean Society of Color Design Studies	37	14
		Research on Animation	Korea Animation Society	21	15
		Sculpture Media Science	Korea Society of Illustration Art	60	23
		Illustration Forum	Korea Society of Illustration Art	20	9
		Korea Craft Art Journal	Korea Craft Art Society	47	24
		Korea Design Knowledge Forum Journal (Design Knowledge Journal)	Korea Design Knowledge Forum	48	19

Pub-lished Status	Field	Journal Title	Publishing Institute	Total No. of Thesis Published in 2008	No. of Design Related Thesis
Candi-dates	Arts & Sports	Brand Design Science Research	Korea Society of Brand Design	30	4
		Korea Society of Fashion Design Journal	Korea Society of Fashion Design	23	11
		Korea Paintings and Arts Design Research	Korea Society of Paintings and Arts Design	13	2
	Multidisci-plinary	Info Design Issue	Korean Society of Information Design	22	11
	Engineer-ing	Thesis Journal of Korea Computer Graphics	Korea Computer Graphics Society	18	3
		Thesis Journal of Korea Digital Archi-tecture and Interior Design Society	Korea Digital Architecture and Interior Design Society	21	2
Total				2,662	718

[Table 33] Status of thesis published in the domestic academic journals in 2008 [38]

3.3.2.2 Human Resource Fostering Output

For this part of the research, the human resource fostering output was evaluated by researching the status of graduates with bachelor, master, and doctorate degrees.

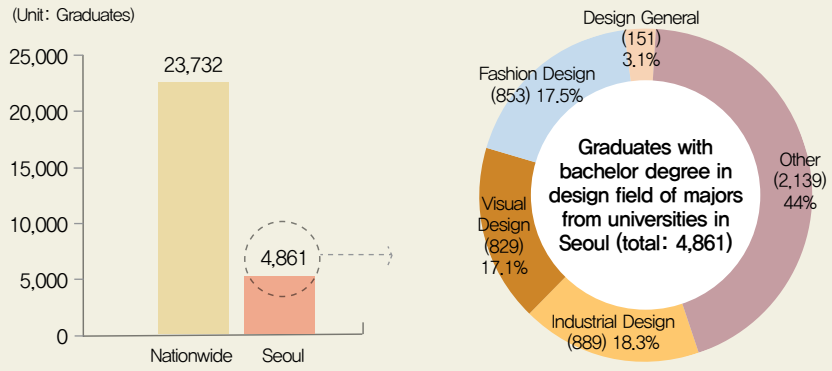
Total number of graduates from design field of major in higher education institutes in Korea: 24,833
From higher education institutes in Seoul: associate and bachelor degree: 4,861(86%);
master degree 738 (13%); doctorate degree 53 (1%); (total 5,652)

3.3.2.2.1 Associate and Bachelor Degree Graduates

Index Item	Bachelor degree graduates
Details	Total of 4,861 students graduated with a bachelor degree in the design field of majors from the higher education institutes in Seoul
Research Method	The number of graduates with bachelor degree in the design field of majors from community colleges, 4 year universities, and distant learning universities were totaled
Source	Korea Education Development Institute (2008); Ministry of Education, Science and Technology (2008)

Total number of graduates from design field of majors in higher education institutes in Seoul: 4,861
2 yr. colleges: 2,502 (51.5%); 4 yr. universities: 1,955 (40.2%); distant learning (cyber) universities: 404 (8.3%);
Of the total number of graduates with bachelor degree from design field of majors in Korea, 20.5% were shown to be from institutes in Seoul and among them, graduates from 2 yr. colleges accounted for 51.5%, 4 yr. universities accounted for 40.2%, and distant learning (cyber) universities accounted for 8.3%.

38. KERIS, Korea Academic Journal Citation Report
When researching the publication status of thesis in journals, information pertaining to main school and branch campus were sometimes not available. Therefore, pertaining thesis, when the contents were on the design related thesis and either the main school or the branch campus was located in Seoul, then the thesis was credited as published by higher education instituted in Seoul. In addition, the thesis were counted based on the affiliation of the primary author, regardless of the affiliation of co-authors, when applicable. The thesis that were counted for the research were the ones that were registered or are candidates to be registered by the National Academic Foundation.



[Figure 30] Seoul_ Rate of bachelor degree graduates per each design field of major [39]

Category (Seoul)	Design General	Industrial Design	Visual Design	Fashion Design	Other	Total
2 Yr. Colleges	–	409	351	478	1,264	2,502
4 Yr. Universities	151	480	478	375	471	1,955
Distant Learning (Cyber) Universities	–	–	–	–	404	404
Total	151	889	829	853	2,139	4,861

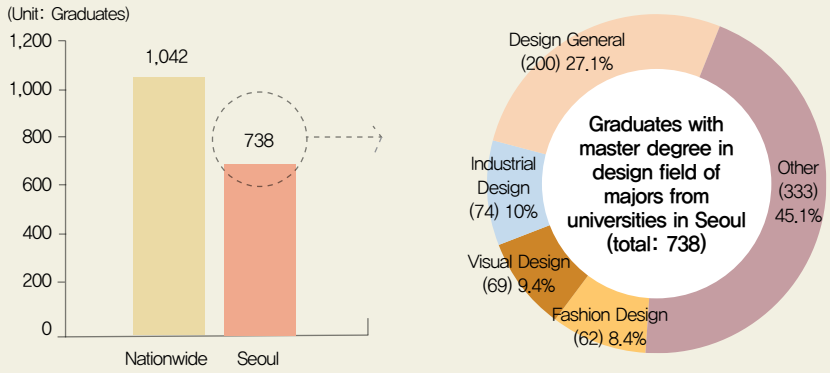
[Table 34] Total number of bachelor degree graduates from design field of majors per higher education institute and per major [40]

3.3.2.2.2 Master Degree Graduates [41]

Index Item	Master degree graduates
Details	Total of 738 students graduated with a master degree in the design field of majors from the higher education institutes in Seoul
Research Method	The number of students graduated with a master degree in the design field of majors from the higher education institutes in Seoul were totaled
Source	Korea Education Development Institute (2008)

Total number of graduates with master degree from design field of majors in higher education institutes in Seoul: 738
other 45.1% 〉 design general 27.1% 〉 industrial design 10% 〉 visual design 9.4% 〉 fashion design 8.4%

When viewing from each field of major, design general had 200 graduates, 74 for industrial design, 69 for visual design, 62 for fashion design, and others was 333. The ratio from highest number of graduates to lowest was in the order of other, design general, industrial design, visual design, and fashion design.



[Figure 31] Seoul_ Rate of master degree graduates per each design field of major

Category (Seoul)	Design General	Industrial Design	Visual Design	Fashion Design	Other	Total
Graduate School	200	74	69	62	333	738

[Table 35] Seoul – number of master degree graduates from design field per major

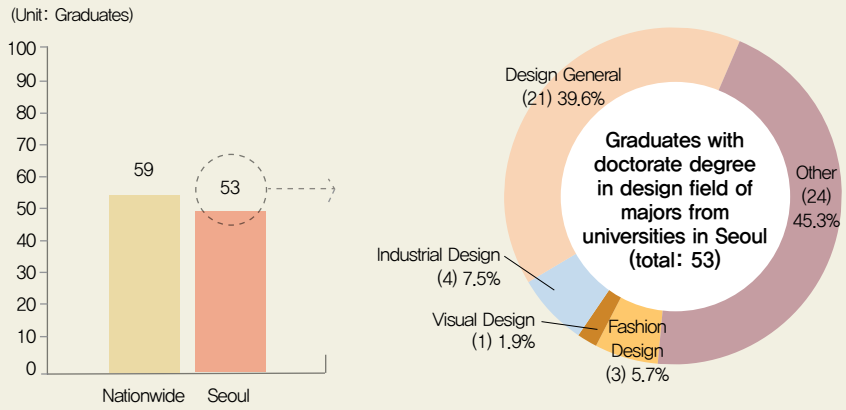
3.3.2.2.3 Doctorate Degree Graduates [42]

Index Item	Doctorate degree graduates
Details	Total of 53 students graduated with a doctorate degree in the design field of majors from the higher education institutes in Seoul
Research Method	The number of students graduated with a doctorate degree in the design field of majors from the higher education institutes in Seoul were totaled
Source	Korea Education Development Institute (2008)

Total number of graduates with doctorate degree from design field of majors in higher education institutes in Seoul: 53

other 45.3% 〉design general 39.6% 〉industrial design 7.5% 〉fashion design 5.7% 〉visual design 1.9%

When viewing from each field of major, design general had 21 graduates, 4 for industrial design, 1 for visual design, 3 for fashion design, and others was 24. The ratio from highest number of graduates to lowest was in the order of other, design general, industrial design, fashion design, and visual design, which is similar order to the master degree graduates.



[Figure 32] Seoul_ Rate of doctorate degree graduates per each design field of major

Category (Seoul)	Design General	Industrial Design	Visual Design	Fashion Design	Other	Total
Doctorate Degree Graduates	21	4	1	3	24	53

[Table 36] Seoul – number of doctorate degree graduates from design field per major

3.3.3 Satisfaction Rate (students)

To measure the students' satisfaction rate on the curriculum and learning conditions, 200 subject group's characteristics were categorized into school, gender, grade, and major. The ratio of re-spondents per characteristic are detailed below. The combined student satisfaction rate of curriculum and learning conditions averaged to 3.13 (max = 5).

39. Statistics Research Center of KEDI, Number of graduates from 2 yr. colleges and 4 yr. universities per major, 2008 / Statistics Service of MEST _ total number of students in higher education institutes per field of major and per department and in 2 yr. colleges

40. Statistics Research Center of KEDI, Number of graduates from 2 yr. colleges and 4 yr. universities per major, 2008 / Statistics Service of MEST _ total number of students in higher education institutes per field of major and per department and in 2 yr. colleges

41. Statistics Research Center of KEDI, Number of master and doctorate degree graduates per major, 2008

42. Statistics Research Center of KEDI, Number of master and doctorate degree graduates per major, 2008

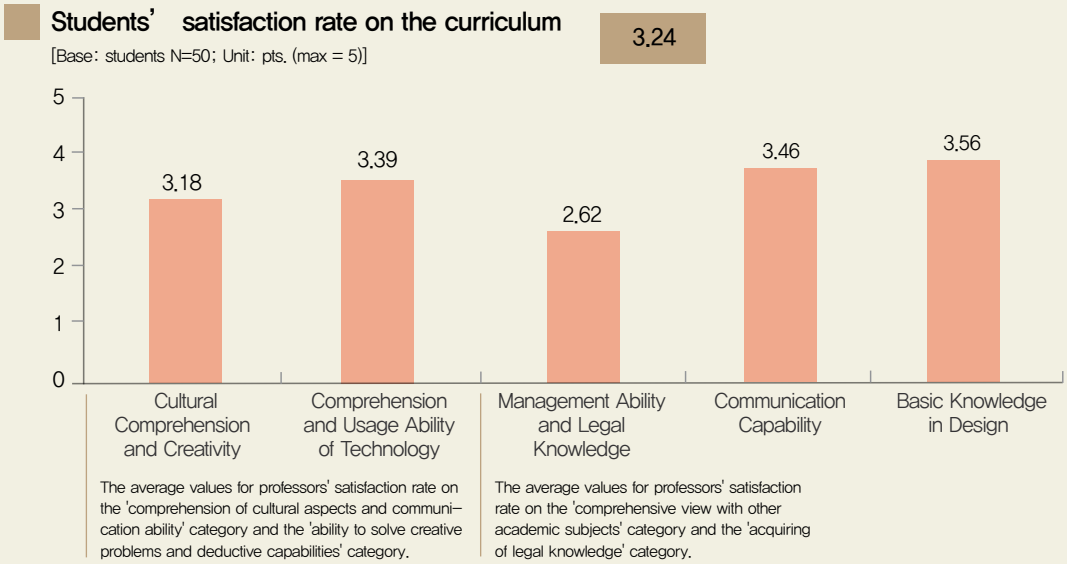
3.3.3.1 Curriculum

To measure the students' satisfaction rate, the students' satisfaction rate on the following categories per major were also measured.

① Cultural Comprehension and Creativity ② Comprehension and Usage Ability of Technology
③ Management Ability and Legal Knowledge ④ Communication Capability
⑤ Basic Knowledge in Design

The overall average for students' satisfaction rate on the curriculum satisfaction field: 3.24 (max = 5)

As a result, the satisfaction rate on the Basic Knowledge in Design category was rated to have the highest satisfaction score with 3.56 and the Management Ability and Legal Knowledge category had the lowest satisfaction score with 2.62.



[Figure 33] Students' satisfaction rate on the curriculum per each category [43]

3.3.3.1.1 Cultural Comprehension and Creativity

Index Item	Comprehension of cultural aspects and creativity
Details	Students' satisfaction rate on the comprehension of cultural aspects and creativity was 3.18 pts. (max = 5)
Research Method	Students' satisfaction rate on the comprehension of cultural aspects, communication ability, ability to solve creative problems, and deductive capabilities are measured and then averaged
Source	Seoul Design Center's initial research report for the Seoul Design Survey (2008)

Students' satisfaction rate on the comprehension of cultural aspects and creativity was 3.18 pts. (max = 5)

As the same measuring method applied to assess the professors' satisfaction rate, the satisfaction rate for the 'comprehension of cultural aspects and creativity' curriculum among the education subjects required by the design field of majors were divided into two categories of 'comprehension of cultural aspects and communication ability' and 'ability to solve creative problems and deductive capabilities' and then measured. The research showed that the average satisfaction rate by the stu-

43. Seoul Design Center, Initial research for the Seoul Design Survey, 2008

dents on the curriculum for learning 'comprehension of cultural aspects and creativity' was 3.18, with the highest score of 3.42 by the graduate school students.

3.3.3.1.2 Comprehension and Usage Ability of Technology

Index Item	Understanding and usage ability of technology
Details	Students' satisfaction rate on the understanding and usage ability of technology was 3.39 pts. (max = 5)
Research Method	Students' satisfaction rate on the understanding and usage ability of technology was measured and then averaged
Source	Seoul Design Center's initial research report for the Seoul Design Survey (2008)

Students' satisfaction rate on the understanding and usage ability of technology was 3.39 pts. (max = 5)

For the satisfaction rate on the 'understanding and usage ability of technology' was scored comparably low by the students in 2 year colleges and showed to be similar level by the students in 4 year universities and graduate schools. This is a contrast to the satisfaction rate among the professors in the same category, which showed the professors in 2 year universities to have the highest satisfaction rate. When viewing the category per each major, the satisfaction rate by students in the majors of Product Design, Visual Design, Environment Design, and Textile Design showed similar level of satisfaction rate. Notably, the students in Multimedia major showed the lowest satisfaction rate with the score of 3.00.

3.3.3.1.3 Management Ability and Legal Knowledge

Index Item	Management capability and legal knowledge
Details	Students' satisfaction rate on the management capability and legal knowledge was 2.62 pts. (max = 5)
Research Method	Students' satisfaction rate on the comprehensive view with other academic subjects and acquiring of legal knowledge were measured and then averaged
Source	Seoul Design Center's initial research report for the Seoul Design Survey (2008)

Students' satisfaction rate on the management capability and legal knowledge was 2.62 pts. (max = 5)

The students' satisfaction rate on the 'management capability and legal knowledge' scored similarly low level as the professors. The score is the average value on two categories of 'comprehensive view with the other academic subjects' and 'acquiring of legal knowledge' and the average score by the students showed low satisfaction rate of 2.62. In addition, the average score per education institute type and per majors did not pass 3 points.

3.3.3.1.4 Communication Capability

Index Item	Communication capability
Details	Students' satisfaction rate on the communication capability was 3.46 pts. (max = 5)
Research Method	Students' satisfaction rate on the communication capability was measured and then averaged
Source	Seoul Design Center's initial research report for the Seoul Design Survey (2008)

Students' satisfaction rate on the communication capability was 3.46 pts. (max = 5)

Among the curriculums required in the design field of majors, the students' satisfaction rate on the curriculum for learning 'communication capability' was 3.46. In addition, the satisfaction rate on the pertaining category was highest among the graduate school students and per majors, the students in the Environment Design major scored the highest satisfaction rate.

3.3.3.1.5 Basic Knowledge in Design

Index Item	Basic knowledge in design
Details	Students' satisfaction rate on the basic knowledge in design was 3.56 pts. (max = 5)
Research Method	Students' satisfaction rate on the basic knowledge in design was measured and then averaged
Source	Seoul Design Center's initial research report for the Seoul Design Survey (2008)

Students' satisfaction rate on the basic knowledge in design was 3.56 pts. (max = 5)

The 'basic knowledge in design' is the category that deals with the basic academic knowledge in design and the students' satisfaction rate on the curriculum that teaches the basic knowledge in design among the curriculums for the design major was 3.56 points.

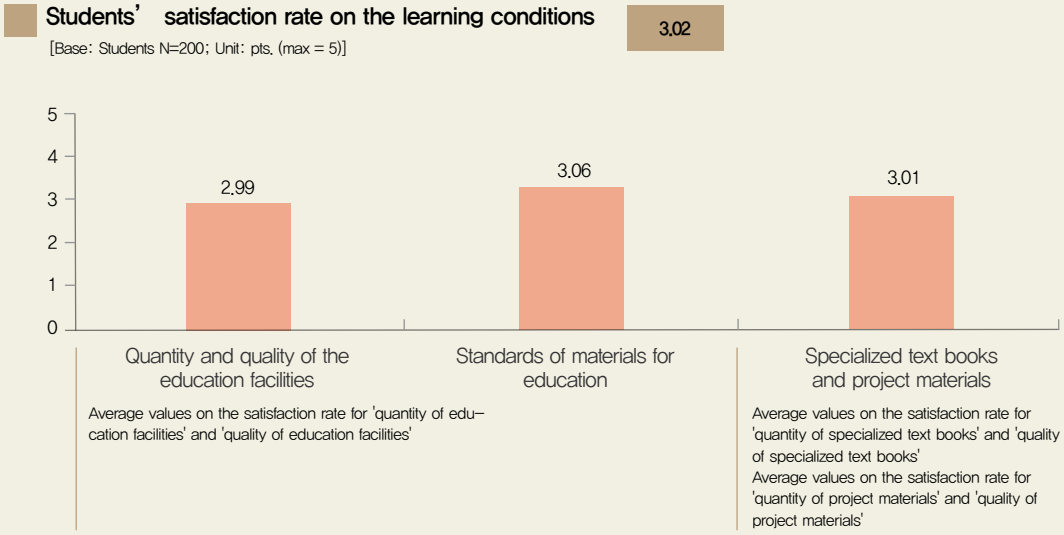
3.3.3.2 Learning Conditions

Below are the researched categories for the assessment of Learning Conditions.

① Learning Facilities ② Learning Materials ③ Specialized Books and Project Materials

The overall average for students' satisfaction rate on the learning condition: 3.02 (max = 5)

The overall students' satisfaction rate per category for the learning condition field ranged from 2.99–3.01 (max = 5), which signifies similar level of all around average.



[Figure 34] Students' satisfaction rate on the education facilities [44]

44. Seoul Design Center, Initial research for the Seoul Design Survey, 2008

3.3.3.2.1 Learning Facilities

Index Item	Learning facilities
Details	Students' satisfaction rate on the learning facilities was 2.99 pts. (max = 5)
Research Method	Students' satisfaction rate on the quantitative and qualitative standards of learning facilities were measured and then averaged
Source	Seoul Design Center's initial research report for the Seoul Design Survey (2008)

Students' satisfaction rate on the learning facilities was 2.99 pts. (max = 5)

The satisfaction rate for the 'education facilities' category was measured in two parts of quantitative and qualitative satisfaction rate on the education facilities. The average satisfaction rate by the students in the design field of majors on the 'education facilities' quantity and quality' was 2.99, with comparably low satisfaction rate among the students in 2 year colleges and 4 year universities than the students in graduate schools.

3.3.3.2.2 Learning Materials

Index Item	Learning materials
Details	Students' satisfaction rate on the learning materials was 3.06 pts. (max = 5)
Research Method	Students' satisfaction rate on the quantitative and qualitative standards of the learning materials was measured and then averaged
Source	Seoul Design Center's initial research report for the Seoul Design Survey (2008)

Students' satisfaction rate on the learning materials was 3.06 pts. (max = 5)

To the questionnaires related to quantitative and qualitative satisfaction rate on the 'standards of learning materials' for education (lectures), the high percentage of the students (16.7%) in the Multimedia major answered with 'Very Dissatisfied' and the average score for the satisfaction rate on the 'standards of the learning material' for education (lecture) among the students in design field of majors was 3.06. Particularly, the 'Satisfied' response was comparably low among the students in 2 year colleges and 4 year universities.

3.3.3.2.3 Specialized Books and Project Materials

Index Item	Specialized text books and project materials
Details	Students' satisfaction rate on the specialized text books and project materials was 3.01 pts. (max = 5)
Research Method	Students' satisfaction rate on the quantitative and qualitative standards of the specialized textbooks as well as the project materials was measured and then averaged
Source	Seoul Design Center's initial research report for the Seoul Design Survey (2008)

Students' satisfaction rate on specialized text books and project materials was 3.01 pts. (max = 5)

The satisfaction rate for the 'specialized text books and project materials' category were measured by taking quantitative and qualitative satisfaction rate on the specialized text books as well as by taking quantitative and qualitative satisfaction rate on the project materials. The average satisfaction rate for the 'specialized text books and project materials' by the students in design field of majors was 3.01 with comparably low satisfaction rate among the students in 2 year colleges and 4 year universities than the students in graduate schools.

3.4 Design Policy Status of Seoul

3.4.1 Design Policy Introduction

The objective of Seoul's design policy is the materialization of a Creative City with the characteristics of cultural city and vibrant economy city. To achieve this, the city has announced diverse support measures and is actively pursuing investments and urban development. To ensure effectiveness as well as efficiency of the various projects that are currently being pursued, balanced design policy strategy and continuous implementation of the policies are necessary to strengthen the competitiveness of Seoul's public design policies and its overall industries by promoting design in citizens' everyday life. In order to transform Seoul as the Creative City in today's rapidly changing world, design is being diversely applied to achieve transparency in the city's policy implementation and to facilitate communication with its people.

The first part of the initiative is to approach all of the city's governmental affairs with design policy. With the establishment of the Seoul Design Headquarters and appointment of Vice Mayor level division chief to lead the design related affairs, Seoul has established design institute in the center of the city's administrative branch to lead physical changes of Seoul's mountains, river, streets, and plazas as well as to utilize the design as the core asset for city's competitiveness.
Based on such initiative, Seoul is taking steps to fully launch major design related events including the 2010 World Design Capital and the Seoul Design Olympiad. The city is enacting various guidelines to widely promote the uniqueness of the city.

Category	Details
Design Seoul symbol and urban design	Seoul symbol, Seoul color, Seoul font Seoul Scenic Plan Design Seoul Guideline (Public design enhancement best practice)
Proliferate design culture	2010 World Design Capital Seoul Design Olympiad Dongdaemun Design Plaza & Park Urban Gallery Project Design Seoul Gallery
Design through citizens participation	Seoul Design Contest Public Design Contest
Sustainable design	Seoul Renaissance Saewoon Green Belt Dream Forest of Buk (North) Seoul World Cup Park Cheonggyecheon Seonyudo Park Seoul Forest
Develop design infrastructure	Design Cluster (Gangnam: corporate oriented, Mapo: university oriented) Seoul Design DB
Foster design professionals	Seoul Design Helloship (identify and foster new designers) Design Creative Studio (develop studio infrastructure to stimulate networking among designers; provide support for product development and exhibition)
Support promotion and marketing of design	Hold Seoul Design Week Promote and support creative design deals Overseas marketing support for Seoul's design Commercialization support for outstanding design products (fashion and traditional craft art products are excluded)

[Table 37] Key design policies of Seoul

3.4.1.1 Design Policy Implementation System of Seoul

Seoul has established the Seoul Design Headquarters with Vice Mayor level leading the division. In addition to being the design management organization, the division also plays an important role as being the organization that hauls the design policies of the city. The will of Seoul of establishing design culture as the center of all aspects of Seoul is even more strongly reinforced by such organization system.

● Seoul Design Headquarters

The Seoul Design Headquarters was established to lead a drastic paradigm transformation of public design policies and to create city brand that will be well received by the international community through various urban design enhancement projects. Established under the theme of the 21st Century is the Generation of Design in which senses are Commercialized, the Seoul Design Headquarters has set forth Soft Seoul as the Design Seoul's vision. As of January 2009, the Seoul Design Headquarter is organized with 1 Department Director, 1 Assistant Department Director, 1 Strategy Team, 4 Project Management Teams, and 1 Implementation Team. The effects of project implementation started to visualize through projects including the Design Seoul Guideline, Design Seoul Street Beautification Project, Seoul Design Olympiad as well as the Seoul Font and Signage Beautification Project.

Project		Introduction
Developed framework plan for the Namsan Renaissance Project		The project was launched to give Namsan a complete facelift with implementation of cultural and art related contents and create symbolic image that is Uniquely Namsan by introducing new transportation methods and improving accessibility
Urban Gallery Project		Improve the life qualities of the people of Seoul by elevating sentimental satisfaction rate through improvement in accessibility to arts by general public
Design Seoul Guideline		Initiative that became the key milestone for the city's transformation efforts from qualitative value based on development and growth to qualitative values based on culture and life quality
Design Seoul Street Beautification Project		The project to transform the streets of Seoul into a place where the culture and communication factors are merged and people's daily lives are harmoniously coexisting with the region's culture by comprehensively redesigning all the composing elements of the street
Basic Scenery Plan		The project will establish effective implementation strategies for the scenic landscape development by setting the basic plans for systematic scenery management and by establishing urban scenery management plan
Cooperative project with international cities in lighting sector		Established alliance with the LUCI Association and through participating in the organization's activities, Seoul's night scenery was upgraded by cooperating with other cities' and learning through their accumulated experience in LUCI and festival best practices and by applying the gained knowledge to the night scenery infrastructure development project
Construction of the Dongdaemun Design Plaza and Park (DDP) and preparing for the operation of the DDP		Will develop the DDP to become the comprehensive support infrastructure specialized for design and as the representative landmark structure of Seoul
World Design Capital Seoul 2010		Identify ways to utilize WDC project to provide real and physical contribution towards the development of Seoul's economy and culture
Detailed Projects	Establish and operate the World Design Capital Organization Committee and the International Advisory Board	· Develop multi-directional network structure that links the Seoul Metropolitan Government with the central government, design organizations, citizens, and private corporations
	Implement WDC international cooperative projects	· Exchange and cooperation with ICSID, promote participation of international design community in design events in Seoul
	Hold Seoul Design Vision Declaration Ceremony	· Present and promote Seoul's fundamental philosophy on future design city
	Hold Pre-World Design market	· Establish a milestone for creating Seoul as the world's design business hub
	Implement design culture events	· Promote citizens' interest and participation and stimulate the design industry
	Implement Seoul Design Asset Project	· Develop and utilize Seoul's cultural heritage as design assets
	Implement WDC promotional projects	· Elevate Seoul's international recognition, strengthen city's brand, and proliferate design mind
	Strengthen WDC international marketing efforts	· Worldwide media promotions, IR road shows, conventions, etc.
Publish the World Design Survey		International cooperative project for creating the world's design map

Project	Introduction
Seoul Design Commission	The Seoul Design Commission was established to ensure efforts are placed in developing urban image by transferring the focus of the significance of a facility to its surrounding environment and to review and advice the city in creating an urban environment that can haul Seoul's brand image by transforming the existing independent and individual image into more original and integrated image. · Reviews public space and public facilities · Advises on public building's exterior design
Public Art Commission	The commission is composed of industry professionals with vast experience and was established to enhance Seoul's urban image by advising the city on production and installation of high quality arts in public space as a part of the Urban Gallery Project · Advises and reviews Urban Gallery Project Plan · Reviews the art work and the artists for the Urban Gallery Project · Other advises and reviewing service on public art projects requested by the city
Art Accessories Commission	The commission was organized to review the appropriateness of the art accessories installed in preset scale of buildings in terms of their artistic value, public appropriateness and price to ultimately contribute to the improvement of Seoul citizens' quality of life through promotion of traditional cultural art and urban environment enhancement
Design Seoul Forum	The commission was organized to review the appropriateness of the art accessories installed in preset scale of buildings in terms of their artistic value, public appropriateness and price to ultimately contribute to the improvement of Seoul citizens' quality of life through promotion of traditional cultural art and urban environment enhancement · Seek out design policy development ideas and advises on policies · Hold discussion on design related issues · Debate and cooperate on city's design related projects

[Table 38] Introduction of key responsibilities and duties of the Seoul Design Headquarters

● Urban Competitiveness Headquarters (Cultural Industry Department)

Within the Cultural Industry Department, there is a design team and within the Headquarters' subsidiary organization, the Seoul Business Agency (SBA), there is also a design team. To systematically implement Seoul's industrial design promotional efforts, the Headquarters has also established the Seoul Design Center, in conjunction with private institutes, and have been implementing diverse design related projects for fostering as well as enhancing global competitiveness of Seoul's design industry.

The Urban Competitiveness Headquarters has established and operates 2 Design Clusters in Seoul with the objective of strengthening global competitiveness of Korea's design. The Headquarters provides support for both the design companies and designers and through the Design Creative Studio, the Headquarters provides creative space as well as support for the next generation designers. It also pursues and implements various other projects to promote the design industry.

In addition, the Urban Competitiveness Headquarters provides support for strengthening competitiveness of products and contributes towards creating high value in the design industry as well as for fostering professionals in the design sector. The projects currently being implemented by the Urban Competitiveness Headquarters are as follows.

Projects	Introduction
Revise the Design Industry Promotion Charter	· Promote the advancement of Seoul's design industry and create social consensus
Establish comprehensive strategy for the development of Seoul's design industry	· Present design industry's advancement plan for creating international design city
Develop and operate the Seoul Design DB	· Develop design information system in line with the knowledge and information society
Establish and operate Design Creative Studio	· Develop growth infrastructure for next generation designers and contribute towards the advancement of the design industry
Operate Design Cluster	· Develop one-stop solution by promoting relative facilities and businesses to form a business cluster
Operate Seoul Design Fellowship	· Identify outstanding new designers and foster to become HR with global design competitive edge and cooperate with private corporations to establish growth basis
Operate designer retraining programs	· Foster designers who can lead the design paradigm and contribute towards strengthening of corporations' competitiveness

Projects	Introduction
Hold the Seoul Design Week	· Provide exchange opportunities for Korean and international designers and create business market
Support for creative design deals and promotions	· Establish a market through which design specializing companies and clients can come together and utilize the market for exhibiting and as a test bed for new design products
Overseas marketing support for Seoul's design	· Foster design hub city and globalize Seoul' s design
Operate the Seoul Design Center	· Conduct design related research and development activities and establish cooperative network with similar organizations

[Table 39] Introduction of key responsibilities and duties of the Urban Competitiveness Headquarters

Other Subsidiary Organizations of Seoul Metropolitan City

● Seoul Design Foundation

The Seoul Design Foundation is a specialized design supporting organization for providing comprehensive support that will realistically contribute towards fostering Seoul' s design competitiveness. The Seoul Design Foundation will be in charge of operating the Dongdaemun Design Plaza & Park (DDP), which is currently under construction. The DDP is being built to become the heart of the design industry in Korea. By implementing diverse design related projects, the foundation is planning to develop the DDP to become the landmark of the creative industry as well as the global design center. Particularly, the foundation will develop diverse exhibition and convention programs, design information system, and global network to allow international design industry professionals to gain latest information through DDB and advance the DDB to become the design hub of the world.

In addition, the Seoul Design Foundation also implements the Seoul Design Olympiad (SDO), the World Design Capital (WDC), the Seoul Urban Gallery Project, and other design related specialized projects of Seoul, including support projects for the design industry.

Projects	Introduction
Contents and Program Planning per DDP Facility	· Strategy for the contents for the future design exhibition center, wall side exhibition center, design experience centers, and museums · Strategy for developing basement floor · DDP business feasibility study and research on advancement strategy
Strategy for Contents for DDP Information System	· Strategy for contents of interactive design information platform, Design Silk Road, and the World Design Map · Strategy for design experience centers and educational contents · Strategy for design knowledge based management contents · Strategy for interactive design business system
DDP Promotion and Marketing	· Operation of the DDP Promotion Center · Participate in Korean and international design exhibitions · Establish design industry network
Design related specialized projects	· Hold the Seoul Design Olympiad · Implement the WDC Projects · Implement the Seoul Urban Gallery Project · Develop design industry infrastructure, foster industry professionals, and provide marketing support

[Table 40] Introduction of key responsibilities and duties of the Seoul Design Foundation

● Seoul Business Agency

The Seoul Business Agency (SBA) was established in 1998 to acquire professionalism and efficiency by the small and medium sized businesses in Seoul and gained its current name of the Seoul Business Agency in 2005. The agency seeks to strengthen the competitiveness in technology, management and

human resource of the small and medium sized businesses through comprehensive and systematic support projects and achieve citywide balanced development through such efforts. The ultimate objective of the SBA is to strengthen the competitiveness of Seoul. The SBA provides support for and fosters core projects for new growth engine and promotes opening of new businesses. The organization also supports domestic and international marketing activities to establish new sales channels as well as support for attracting foreign investments for small and medium sized businesses.

– Subsidiary Organizations of the Seoul Business Agency

· Fashion Design Center: The Fashion Design Center was established within the SBA to foster the fashion industry. The center is responsible for the Fashion Week and implements the policies for fostering professionals in fashion industry and fashion design support projects.

· Seoul Animation Center: The Seoul Animation Center, established on May of 1999 to foster and provide comprehensive support for cartoon animation industry, implements diverse projects such as education programs for fostering professionals in cartoon animation industry, identifying new artists, creation and production support, animation film festivals, relative events and exhibition, and operation of information center to expand the horizon of the contents industry.

Projects	Introduction
Foster and support Uniquely Seoul strategic projects	· Seoul's industry–university cooperative projects such as fashion and animation projects are fostered and supported
Support for establishing new domestic and international sales channels for small and medium sized businesses	· Operates SETEC, participates and holds domestic exhibitions and conventions, and runs exhibition sales market for small and medium sized businesses. · Hi Seoul Brand Project
Support for promoting new business ventures	· Operates New Technology Business Opening Center, Venture Town, and training program for opening new specialized business (new business establishment school)
Support for international trade and attracting foreign investments	· Operates support projects for entering into foreign markets and management efficiency for export companies, the Seoul Foreigners Support Center, · Also operates Beijing ~ Seoul trade center, DMC Promotion Center, DMC High Tech Industry Center, and DMC corporation–university research center
Design Cluster	A support center will be established for implementing organization, vitalization and marketing support for the design cluster which will be developed starting on September of 2009 in Gangnam and Mapo districts where the design related companies are concentrated in. The formation of design cluster is a project initiated by Seoul with objective of fostering and supporting the design industry in the city and will be managed by the SBA. The Design Cluster will become the information hub for design companies. Seoul seeks to provide increased business opportunities and enhance the economic effects of design specializing companies by establishing regional network. In addition, design contest will be held for city residents and invitational artists as well on design for public facilities that is easily accessible by the public and its outcome will be exhibited to create a foundation for urban design improvement that is cooperatively conducted to create value.

[Table 41] Introduction of responsibilities and duties of the Seoul Business Agency

● Seoul Design Center

The Seoul Design Center is a design promotion agency established by the Metropolitan City of Seoul to acquire organic support system for design related infrastructures and to develop sustainable design promotion system. The Seoul Design Center's objective is to strengthen the competitive edge of the small and medium businesses' products through design and to contribute towards creation of high value in design related sectors.

Projects	Introduction
Design development support	· Development support for small and medium sized businesses and support for developing Uniquely Seoul products · On-site designer support system · Professional designer support group · Design consultation center
Design research	· Policy research · Publish Design Seoul Who's Who
Design education	· Design education for the public sector · On-site oriented design education curriculum (seminars and workshops) · Designer retraining program (Seoul Design Consultant Certification Program · Design Trend Report (Forum)
Design Culture	· International exchange
World Design Capital	· World Design Market (Off-line project part) · Seoul Design Asset · World Design Survey (Seoul Design Survey, Asia Design Survey) · Publish the World Design Capital Seoul 2010 Calendar Book · Design Citizens Campaign

[Table 42] Introduction of major responsibilities and duties of the Seoul Design Center

3.4.2 Policy Resource

3.4.2.1 Policy Departments

As of 2007, Seoul has established the Seoul Design Headquarters as the exclusive design management division. As of 2008, each of the 25 district gu's have design exclusive departments for managing district design projects, urban design, public design, and designs related to signs.

Category	Department
Design supervising dept. of Seoul	Design Seoul Headquarter

[Table 43] Design related departments of Seoul

3.4.2.1.1 Design Budget

Index Item	Design budget
Details	2008 budget of the design managing division (Seoul Design Headquarters) of Seoul: 76 billion 535.53 million KRW (approx. 60.74 million U$D, 1 U$D = 1260 KRW; 0.37% of Seoul's total annual budget)
Research Method	Comprehensively includes all the project budgets of Seoul's exclusive design division and institutes (Seoul Design Headquarters)
Source	Seoul Metropolitan City (2008)

The Design Budget section is to identify how much financial resource is inputted in the budget for various design policies by Seoul's design managing departments.

2008 design budget of Seoul: 76 billion 535.53 million KRW (approx. 60.74 million U$D, 1 U$D = 1260 KRW; 0.37% of Seoul's total annual budget)

There are numerous difficulties in obtaining precise cost breakdown of the budget under the current project budget system operated by Seoul Metropolitan Government. However, bookkeeping and managing the budget inputted in design policy projects is not only a highly important practice but it is also necessary for efficient management of the policy implementation. As a result, the design budget for this report is not the amount obtained through cost data analysis but the overall budget of the design managing departments, which are the lead implementing organizations of Seoul's design policies. The budget is as detailed below.

2008 Total Budget for Seoul Metropolitan City	2008 Design Budget	Ratio
20,974,402,000,000 KRW (approx. 16.65 billion U$D; 1 U$D = 1260 KRW)	76,535,530,000 KRW (approx. 60.74 million U$D; 1 U$D = 1260 KRW)	0.37%

[Table 44] Design budget ratio

The Seoul Design Headquarters is the department that implements the Design Seoul policies and therefore, it's no exaggeration to say that the budget for the department is THE design budget. The 2008 budget for Seoul Design Headquarters was 76 billion 535.53 million KRW (approx. 60.74 million U$D, 1 U$D = 1260 KRW). For the design related budget of the Urban Competitiveness Headquarters, only the budget of its Cultural Industry Department will be computed. The budget for the Cultural Industry Department for 2008 was 17 billion 450 million KRW (approx. 13.85 million U$D, 1 U$D = 1260 KRW). In addition, the budget for the Dongdaemun Design Plaza & Park (DDP), which supervision was transferred from the Balanced Development Headquarters to the Seoul Design Headquarters, is 92 billion 527 million KRW (approx. 73.43 million U$D, 1 U$D = 1260 KRW). When adding all of the afore mentioned managing departments' budget with the DDP project budget, the 2008 budget for Seoul's major design policies are obtained, which is 186 billion 467 million KRW (approx. 147.99 million U$D, 1 U$D = 1260 KRW). This sum amounts to the 0.89% of Seoul's total 2008 budget of 20 trillion 974 billion 402 million KRW (approx. 16.65 billion U$D; 1 U$D = 1260 KRW).

Managing and Related Dept.	Project Name	Amount
Managing Dept.		
Seoul Design Headquarter	Soft Seoul	27,776,488,000 KRW
	Urban Scenery Enhancement & Improvement of Signs	40,337,827,000 KRW
	Design City Seoul	8,008,482,000 KRW
	General Budget (general expense and wages)	412,733,000 KRW
Sub Total		76 billion 535.53 million KRW
Related Dept.		
Urban Competitiveness Headquarter Cultural Industry Department	Support for fostering cultural industry	17 billion 405 million KRW
Balanced Development Headquarter	Dongdaemun Design Plaza & Park Construction Project	92 billion 527 KRW
Sub Total		1,099 billion 3,200 KRW
Total		186 billion 467.53 million KRW

[Table 45] Design budget inputted in the design related projects of Seoul in 2008 [45]

The rate of budget increase from 2007 to 2008 for Seoul Design Headquarters

Seoul's commitment in design is clearly visible when comparing the budget of the Seoul Design Headquarter, which is the strategic core design department for Seoul's Design Seoul policy. The budget for 2008, which was the year when the Seoul Design Headquarter fully launched its projects, compared to the budget for 2007, which was the year when the Headquarter was established, shows significant increase of 426%. In addition, the budget for 2009 compared to 2008 was further increased by 115%. This signifies that Seoul has fully initiated its design related projects in 2008 and 2009 shows the continuation of the projects launched in 2008.

Year	Budget	Increased Amount	Increase Rate	Remarks
2007	17 billion 941 million KRW	–	–	–
2008	76 billion 535.53 million KRW	58 billion 594.53 million KRW	approx. 426%	2008 compared to 2007
2009	88 billion 214 million KRW	11 billion 678.47 million KRW	approx. 115%	2009 compared to 2008

[Table 46] Seoul Design Headquarters' budget increase status

45. Provided by Seoul

3.4.2.1.2 Human Resources at the Managing Department

Index Item	Human Resources at the Managing Department
Details	104 personnel in design exclusive division
Research Method	Number of employees in the Seoul Design Headquarters
Source	Seoul Metropolitan City (2008)

As of 2008, Seoul has a design exclusive division, like the Seoul Design Headquarters, and design related departments that implements design policies in cooperation with relative organizations. As of December 31, 2008, there were total of 104 employees in the Seoul Design Headquarters and the Cultural Industry Department of the Urban Competitiveness Headquarters had 18 employees. As for the related department, 21 employees of the Dongdaemun Design Plaza & Park Department of the Balanced Development Headquarters were handling the DDP construction project.

Category	Headquarter	Total
Managing Department	Seoul Design Headquarters	104
Related Department	Urban Competitiveness Headquarters (Cultural Industry Dept.)	18
	Balanced Development Headquarters	21

[Table 47] Design related organization and personnel status of Seoul's design related departments [46]

● Managing Department

Human resource status of the Seoul Design Headquarters

The Seoul Design Headquarters includes the Design Planning Bureau, Urban Landscape Bureau, Public Design Bureau, and the WDC Bureau.

Category		Total
Personnel Status of the Seoul Design Headquarters	Design Seoul Headquarter	2
	Design Planning Dept.	34
	Urban Scenery Dept.	25
	Public Design Dept.	29
	WDC Dept.	9
	Seoul Design Olympiad Team	5
	Total	104

[Table 48] Personnel status of the Seoul Design Headquarters [47]

3.4.2.1.3 Number of Years of Employment of Personnel in Charge

Index Item	Number of Years of Employment of Personnel in Charge
Details	82.4% of the employees have been employed for less than 2 years
Research Method	Research on the personnel in charge of design related affairs in Seoul City Hall
Source	Initial research report for the Seoul Design Survey (2008)

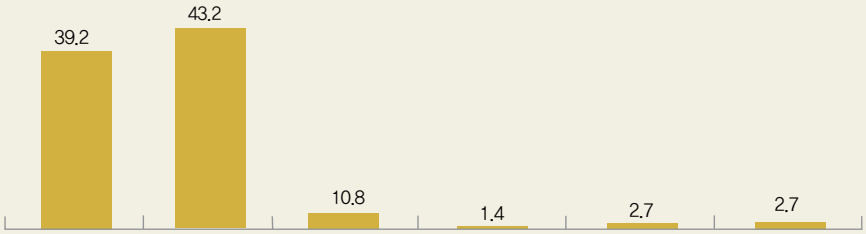
In the process of adding more personnel while implementing design policies

A study was conducted to identify the number of years in employment of the public employees in design related division of Seoul Metropolitan Government and the 25 district gu governments. Public employees in the design division was identified to have the highest concentration in the 2 years of below with 84.7% of the total and only 5.6% of the public employees in the design related divisions was identified to be employed for 5 or more years.

46/47. Provided by Seoul (as of 2008. 12. 31)

The reason for such high concentration in 2 years of less bracket can be based on the fact that the public employees have rotational assignments but in case of design, it can be attributed to the fact that the Seoul Metropolitan Government has commenced implementing design policies only in 2007 and it was not fully launched until 2008. As a result, it is deemed to be somewhat too early to assess the length of employment of the personnel in the design divisions. It would be more appropriate to continuously monitor the change in the length of employment among the employees of the design related divisions in the future and make the assessment at a later date.

Continuous Years of Employment by Public Employee in Charge of Design
[Base: public employees N=74, Unit: %]



	below 1 yr.	1–2 yrs.	2–3 yrs.	3–5 yrs.	5–10 yrs.	over 10 yrs.
public employee (N=74)	39.2	43.2	10.8	1.4	2.7	2.7

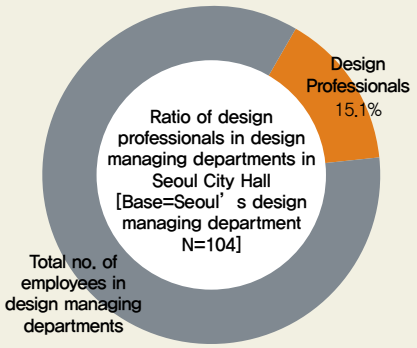
[Figure 35] Number of years of employment by public employees in charge of design [48]

3.4.2.1.4 Number of personnel with a degree in design field of major in the design managing division

Index Item	Number of personnel with a degree in design field of major in the design managing division
Details	15.1% of the total employees in design exclusive division
Research Method	Number of design majored employees in Seoul's exclusive design divisions was counted
Source	Seoul Metropolitan City (2008)

Increase of specialists in the filed

Of total of 104 employees of the Seoul Design Headquarters, only 16, or 15.1%(16/104) were found to have a degree in the design field of major. Although the number of employees who have specialized in design is comparably low at the moment, the implementation of design policies has only been fully launched in 2008 and when considering the fact that the relative projects are continuously being expanded, it is anticipated



[Figure 36] Status of design specialists in design managing divisions in city hall [49]

48. Seoul Design Center, Initial research for the Seoul Design Survey, 2008

49. Provided by Seoul (as of 2008. 12. 31)

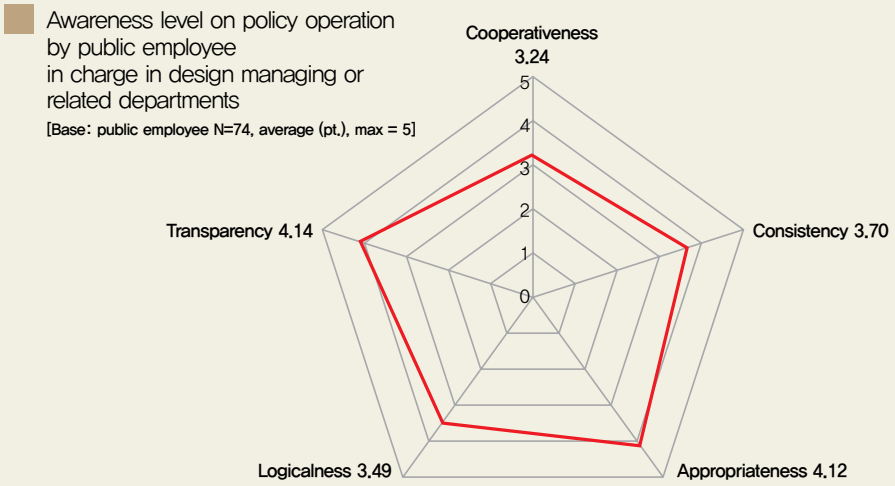
that the ratio of design specialists will increase in the future. Additionally, conducting a trend analysis on the changes of the design specialists ratio and what effects such changes have on the design related projects will also provide a useful information.

3.4.2.2 Policy Operation

Even though there are numerous factors to consider when evaluating the city's design policy operation, this report focused on the 5 categories of Collaboration, Uniformity, Appropriateness, Reasonableness, and Transparency to identify the awareness level of the public employees in the design exclusive divisions that manage Seoul's design related projects.

The study shows that the public employees have favorable view on the city's design policies and the importance in project implementation were identified to be in the order of Transparency 〉Appropriateness 〉Uniformity 〉Reasonableness 〉Collaboration.

There is a general understanding and agreement on the design policies implemented by Seoul among the public employees in the city's design divisions and when considering the fact that these employees have highly favorable views on the transparency of the design policy from the budget setting to the policy implementation and on the appropriateness of the policy for enhancing the city's competitiveness as well as the quality life of its citizens, the employees in the city's design divisions can be said to conduct their work in design related projects with pride and responsibility. The evaluation per each category showed that when conducting design projects, the public employees in charge of the projects placed importance in the order of Transparency in project implementation (4.14 pts.), Appropriateness of the project for the urban development (4.12 pts.), Uniformity of the project in line with Seoul's vision and urban development plan (3.70 pts.), Reasonableness of the design guidelines (3.49 pts.), and Collaboration with relative organizations (3.24 pts.).



[Figure 37] Awareness level of public employee [50]

(max = 5)	Transparency	Appropriateness	Consistency	Logicalness	Cooperativeness
public employee (N=74)	4.14	4.12	3.70	3.49	3.24

50. Seoul Design Center, Initial research for the Seoul Design Survey, 2008

3.4.2.2.1 Transparency (transparency in related projects and budget implementation)

Index Item	Transparency (transparency in budget allocation as well as implementation of related projects)
Details	Degree of transparency on the budget allocation and implementation of Seoul's design related projects was 4.14 pts. (max = 5)
Research Method	Research on the degree of awareness by the public employees in the design managing division
Source	Initial research report for the Seoul Design Survey (2008)

Transparency: 4.14 pts. (max = 5); integrity was recognized as the most important standard for implementation of all the projects.

The average score for the degree of transparency from budget allocation to the project implementation of Seoul's design related projects was 4.14 points (max = 5). Seoul Metropolitan Government has been emphasizing on elevating integrity in all city administrative affairs and has been developing diverse measures to achieve high level of integrity. As a result, on December 18, 2008, Seoul placed 1st place in the evaluation for integrity among the 16 metropolitan cities and do's in Korea, conducted by the Anti-corruption & Civil Rights Commission. Seoul announced that even on the coming year, the Seoul Metropolitan Government will concentrate its efforts to ensure that the anti-corruption culture of the city's "Reliable & Transparent Administration and Zero Corruption & Integrity Seoul" become deeply rooted in all level of the city government.

From such perspective, it is no surprise that this research showed integrity (transparency) as the most important standard, not only for design related policies, but for implementation of all the projects.

3.4.2.2.2 Appropriateness (appropriateness of urban development and design related projects)

Index Item	Appropriateness (appropriateness of urban development and design related projects)
Details	The degree of appropriateness of design related projects currently in progress in terms of enhancing the competitiveness of Seoul and improving the quality of life of the people of Seoul was 4.12 pts. (max = 5)
Research Method	Research on the degree of awareness by the public employees in the design managing division
Source	Initial research report for the Seoul Design Survey (2008)

Appropriateness: 4.12 pts. (max = 5); Recognizing the policy to be in line with Seoul's efforts to improve the quality of life for its citizens and strengthening the city's competitiveness

The average score for the degree of appropriateness of Seoul's design related projects in terms of enhancing the competitiveness of the city and improving the quality of life of the city's citizens was 4.12 pts. (max = 5).. Particularly, the response for appropriateness was the second highest following the response for transparency. This signifies that the design policies implemented by the city are evaluated to strengthen Seoul's urban competitiveness and enhancing the quality of life for its citizens and also signifies that the personnel in Seoul's design divisions well agrees with the large picture the city seeks to create through the design policies.

3.4.2.2.3 Uniformity (uniformity in design related projects)

Index Item	Uniformity (uniformity in design related projects)
Details	The degree of uniformity of design related projects in line with Seoul's vision and the city's urban development plan was 3.70 pts. (max = 5)
Research Method	Research on the degree of awareness by the public employees in the design managing division
Source	Initial research report for the Seoul Design Survey (2008)

Uniformity: 3.70 pts. (max = 5); positive response on forming reliability based on the uniformity of the projects

The average score for the degree of uniformity of Seoul's design related projects in terms of being in line with the city's vision and its urban development plan was shown to be 3.7 pts. (max = 5). Such comparably positive response even though the short period of average employment years among the personnel in Seoul's design divisions signifies that the city has established the strategies and objectives for the design projects in line with Seoul's urban development plan and vision and personnel also have sense of reliability and credibility on the design projects based on such uniformity.

3.4.2.2.4 Reasonableness (reasonableness of Seoul's design guideline and budget)

Index Item	Reasonableness (reasonableness of Seoul's design guideline and budget)
Details	Degree of reasonableness on the budget and guidelines of Seoul's design related projects was 3.49 pts. (max = 5)
Research Method	Research on the degree of awareness by the public employees in the design managing division
Source	Initial research report for the Seoul Design Survey (2008)

Reasonableness: 3.49 pts. (max = 5); signifies that the city is systematically implementing the design projects in line with Seoul's guideline

The average score for the degree of reasonableness of Seoul's design related projects in terms of being in line with the city's guidelines as well as in their budget allocation was 3.49 pts. (5 = max). The survey response signifies that the city has established design policies with uniformity that will well lead the city's ultimate objective of improving the quality of life for its citizens. The score also signifies that reasonable budget that best suits the project in reaching its intended objectives has been allocated and there is a systematic effort in implementing the policies by the city.

3.4.2.2.5 Collaboration (cooperation w/ relative institutes)

Index Item	Collaboration (cooperation w/ relative institutes)
Details	Degree of cooperation capability with the relative institutes as well as subsidiary design related organizations of Seoul Metropolitan Government 3.24 pts. (max = 5)
Research Method	Research on the degree of awareness by the public employees in the design managing division
Source	Initial research report for the Seoul Design Survey (2008)

Collaboration: 3.24 pts. (max = 5); necessary to expand the efforts in exchanging appropriate information

The average score for the degree of cooperation with relative and subsidiary organizations when handling design related assignments showed somewhat favorable response of 3.24 pts. (max = 5). The reason for comparably low awareness for the collaboration compared to other policy operation categories is attributed to lack of communication or difficulties in executing the policies since Seoul's design division develops the policy and other relative and subsidiary organizations as well as the district gu's carries out such policies in the actual projects. For more successful policy operation in the future, there is a necessity to expand the efforts in exchanging appropriate level of information to improve the cooperation with relative and subsidiary organizations.

3.4.3 Policy Contribution

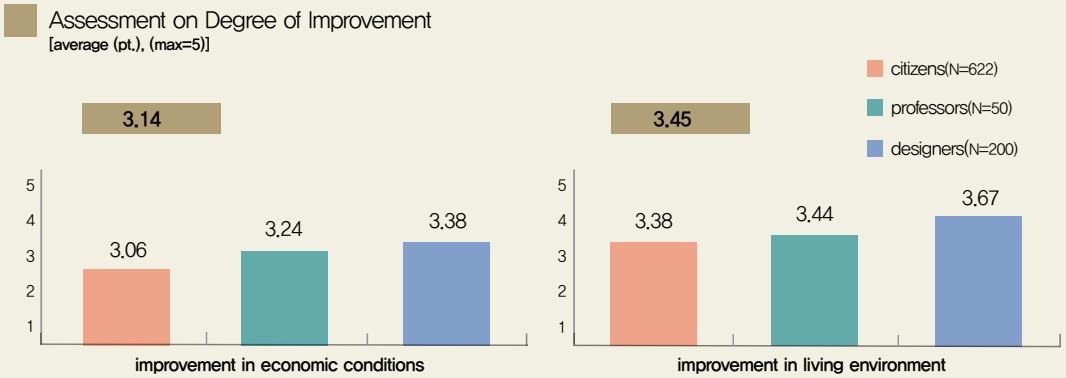
Index Item	Assessment on the contribution to the economic conditions
Details	Seoul's design policies' contribution towards the improvement of Seoul's economic conditions (tourist attraction, create new jobs, etc.) was 3.14 pts. (max = 5)
Research Method	Survey on the awareness among the general public, professors and designers
Source	Initial research report for the Seoul Design Survey (2008)

Index Item	Assessment on the contribution to the improvement on the living environment conditions
Details	Seoul's design policies' contribution towards the improvement of Seoul's living environment conditions (urban beauty, urban safety, and urban comfortableness) was 3.45 pts. (max = 5)
Research Method	Survey on the awareness among the general public, professors and designers
Source	Initial research report for the Seoul Design Survey (2008)

In order to identify the degree of effectiveness of design related policies to the urban development of Seoul, assessment on the degree of improvements in the categories of economic conditions tourist attraction, creation of new jobs, etc.) and living environment conditions (urban beauty, urban safety, and urban comfortableness) were measured in group subjects of the general public group, and the design experts and professional groups of the professor group and the designer group. The average score for the contribution towards the improvement in economic conditions by Seoul's design policies was 3.14 pts. (max = 5) and the improvement in the living environment conditions was comparably higher than the improvement in economic conditions with a score of 3.45. This signifies that in general, all three groups of the general public, professors and designers have favorable assessments on the design policies in terms of their contribution towards the urban development of Seoul.

3.4.3.1 Positive assessment on the degree of contribution by Seoul's design policies

Generally, all the responding groups of the general public, professors, designers, and the working group have gave favorable assessment on the contribution by the design policies towards the improvement in economic conditions and living environment conditions. Per group, the designers and professors groups have shown comparably higher assessment score than the general public. This signifies that the profes sionals and the working group have more access to design related policies and/or have higher interest in design related policies than the general public and have better understanding on the design related



[Figure 38] Assessment on Degree of Improvement [51]

51. Seoul Design Center, Initial research for the Seoul Design Survey, 2008

policies. Therefore, the study shows the necessity to inform the general public on the Design Seoul visions and objectives and promote the design related policies, projects as well as the transformation the city will undergo through design to continuously increase the citizens' awareness in the city's design policies..

Positive assessment on the improvement in economic conditions and living environment conditions (in the order of assessments by the general public 〈 professors 〈 designers)

The survey on the general public group for the positive contribution by Seoul's design policies towards the improvement in economic conditions scored an average of 3.06 pts. (max = 5) and an average of 3.38 for the improvement in living environment conditions. As for the design professionals and working groups, the professors in the design field of major scored an average of 3.24 pts for contribution towards the improvement in the economic conditions and 3.44 for the improvement in the living environment conditions, while the designers employed by the general companies utilizing design and the design specializing companies scored the average of 3.38 and 3.67 respectively. This signifies that all the survey groups have evaluated the contribution towards the improvement in the living environment conditions comparably higher than towards the improvement in the economic conditions. Particularly, the working level designer group has provided the most favorable response, which is deemed to be attributed to the fact that these designers can more closely experience and view the degree of transformation in the urban environment and improvements in the economic conditions.

In addition, all the groups of the general public, professors and designers have provided higher assessment for the contribution towards the improvement in the living environment conditions than the improvement in the economic conditions. This may have been impacted by the global economic recession but it can be more attributed to the physical improvements on the city's landscape through the efforts of Seoul government in improving the urban scenery, safety and comfortableness to improve the quality of life for the citizens, whereas the efforts in improving the economic conditions has yet to achieve its full impact and is difficult to feel the scale and the process of the actual policy implementation.

Furthermore, there is comparably high expectation for vitalizing the economic as a measure to recover from the current economic difficulties. The study shows the necessity to revamp the infrastructure facilities of the city through design and enhance the city's brand by conducting an overall improvement on the city's image. Through such efforts, conditions for attracting domestic and international investments as well as for promoting tourism are anticipated to improve.
Ultimately, the continuous implementation of design policies to improve the quality of life for the citizens will improve the city's brand image while improving the degree of contribution towards the improvement in the economic conditions of the city.

Reference

- Initial Research Report for the Seoul Design Survey, Seoul Design Center, 2008
- Seoul Design Survey, Seoul Metropolitan City, 2007
- Seoul Design Education Index Development Research Report, Seoul Design Center, 2008
- Statistical Report on the Industrial Design (Design Census), 2007, KIDP
- Korea Design Forum 2007 (International Design Conference, Research Report on Design Policy) 'The Future of Korea Found through Design' 2007, KIDP
- CEO Information (issue # 514), Conditions of Good Design and Response by the Corporation, Ahn-jae Lee, SERI, 2007
- Issue Paper – Evolution of Design and Corporate Application Strategies, Song Ha, SERI, 2008
- SERI Economic Focus (issue # 25), Recent Trends and Viewpoints of Design Management, Ahn-jae Lee, SERI, 2007

Industry

- Research Report for the Construction of the Dongdaemun Design Plaza & Park, SBA, 2008
- Statistical Research Report on the Service Industry, NSO, 2004, 2006, 2007
- Statistical Report on the Industrial Design (Design Census) – Investigative Research on the Human Resource and the Actual Status of the General Companies in the Design Sector, KIDP, 2007
- Statistical Report on the Industrial Design (Design Census) _ Investigative Research on the Human Resource and the Actual Status of the Design Specializing Companies, KIDP, 2007
- Assessment Report on the National Design Competitiveness, KIDP, 2008
- Statistics on the Intellectual Property Rights, NSO, 2008
- Acquiring Competitive Edge for the Design Industry, Gook-hyon Jung, 2005
- Research Report on the Awareness Level of Design by Koreans and the International Competitiveness Status, KIDP, 2006
- The 4th Strategic Report on Comprehensive Planning for Design Promotion, Arts & Design Research Institute, Hongik University, 2008

Culture

- Record on Cultural Infrastructure Facilities, MCST, 2008
- Statistical System of National Libraries, MCST, 2008
- (KOLIS-NET), http://www.nl.go.kr/kolisnet/index.php
- Internet Statistics Search System, Summarized Report of the Utilization Status of the Internet, 2008

Education

- Education Human Resource Statistics Service, Education HR Research Center, KEDI, (2008 Annual Report on the Education Statistics)
- Statistical Report on the Industrial Design (Design Census) _ Investigative Research on the Human Resource and the Actual Status of Design Related Higher Education Institutes, KIDP, 2007
- University Application Design Education Model and Text Books, MCIE, 2006.5
- Wiley InterScience, http://www3.interscience.wiley.com
- KERIS, http://www.riss4u.net/index.jsp
- Korea Research Foundation, http://www.kci.go.kr

Policy

- Statistical Report on the Industrial Design (Design Census) _ Investigative Research on the Development Status of the Public Design (District Governments), KIDP, 2007
- Research Report on the Comprehensive Strategies for the Development of Seoul's Design Industry, Urban Competitiveness Headquarters, Seoul Metropolitan City, 2008
- Various reports and information furnished by the Seoul City Hall and the websites of diverse institutes

찾아보기

ㄱ

강의 및 실습지도 시간 229
경영능력 및 법률지식 221, 252
경쟁력강화본부
경제성
경제적 여건 개선 기여도 평가
공공기관 주최 디자인 공모전
교과과정 216, 248
교수 만족도
교수 수 200
교육 기자재 261
교육공간 시설 및 연구를 위한 기자재 수준 231
교육공간과 시설 259
교육과정
교육기관 193
교육인력 199
교육인적자원부
교육자원
교육환경 227
국가자료공동목록시스템(KOLIS-NET)
국내학술지 논문 236
국제학술지 논문 235
기능적 만족도
기술의 이해 및 활용능력 220, 251

ㄷ

담당공무원 근속기간
대기업
대학 수 194
도시디자인
동대문디자인플라자&파크
디자이너 고용 형태
디자이너 만족
디자이너 역량
디자이너 연봉
디자이너 학력분포
디자인 공모전
디자인 관련 단행본/잡지
디자인 기초지식 226, 256
디자인 도서관/자료실
디자인 미술관/갤러리
디자인 박물관
디자인 방송 콘텐츠
디자인 실적
디자인 예산
디자인 온라인 콘텐츠
디자인 자체 개발 비율
디자인 자체개발 비율
디자인 전담부서
디자인 전문회사
디자인 정보 프레임워크
디자인 정보분석 모델
디자인 정보분석 지표
디자인 출판 콘텐츠
디자인 투자
디자인 행사
디자인문화 확산
디자인서울 가이드라인
디자인서울총괄본부
디자인정책 추진체계
디자인학과 보유 학교

ㅁ

만족도 247
매출액
문화산업담당관
문화자원
문화적 맥락의 이해 및 창의성 218, 249
문화적 맥락의 이해 및 표현능력
미디어
미적 만족도
민간기관 주최 디자인 공모전

ㅂ

박사졸업생 245
복리후생 만족도
분석의 한계

ㅅ

산업자원
산업집중도
생활환경 개선 기여도 평가
서울 경관계획
서울 소재 고등교육기관
서울 소재 고등교육기관 소속 논문
서울디자인서베이
서울디자인서베이를 위한 기초조사 보고서
서울디자인서베이를 위한 기초조사보고서
서울디자인센터
서울상징
서울색

서울서체
서울시 디자인 전담부서 공무원 인식
석사졸업생 243
소비자 만족
수학여건 257
시민참여 디자인
실용성
심미성

ㅇ

양적 만족도
업무의 내용
업무의 양
업체 수
연구 및 창작 요구 기준/수준 230
연구 및 창작에 대한 학내 재정지원 233
연구수행체계
연구실적 234
우수디자인 상품전
이벤트
인력양성실적 238
인프라
일관성
일반기업

ㅈ

자본금
재교육의 내용
적합성
전공도서 및 실습재료 262
전국문화기반시설현황
전담부서 디자인 전공자 수
전담부서 인력
전문디자인업 종사자
전시형 행사
정책 기여도
정책 부서
정책 운영
정책자원
지속가능한 디자인
지식재산권
질적 만족도

ㅊ

창의적 문제 해결 및 추론능력
창조성
축제형 행사

ㅋ

커뮤니케이션 능력 224, 255

ㅌ

타 학문과의 통합적 관점
통계청
투명성
특허청

ㅎ

학력 분포
학사졸업생 240
학생 만족도
학생 수 208
학술형 행사
한국교육개발원
한국교육학술정보원
한국디자인진흥원(KIDP)
한국학술지인용색인
합리성
해외 아웃소싱
협력성
활용 가치

English

GD마크
Wiley Science

Seoul Design Survey

Published by I Oh Se-hoon _ Mayor of Seoul Metropolitan City
Published date I 2009. 10
Supervision I Seoul Metropolitan City
Planning I Kyong-won Jung _ Seoul Design Headquarters (Vice Mayor)
Chief Researcher I Soon-in Lee _ President, Seoul Design Center
I Jeung-woo Park _ Seoul Design Center
Research support I So-yeon Kang, Hae-jin Ko, Ji-eun Park,
Min-jung Yoo, Keun-wook Lee,
Jin-shil Lee, Hae-yong Choi(Seoul Design Center)

Outsourced Research Project I Korean Society of Design Science
Chief Researcher I Keun-pyo Lee, Director (KAIST Industrial Design)
I In-seok Park, Professor (Korea National University of Arts)
I Dong-Kwon Min, Professor (Sookmyong Women's Univ.)
I Dr. Sori Kim (Sookmyong Women's Univ)

Advisory Board I Prof. Kyong-woo Min (Myongji Univ.), Prof. Keun-jae Oh (Hongik Univ),
Prof. Soon-jong Lee (Seoul National Univ), Dr. Soo-yeon Han (KIGA)
Translation I Alex Kang

Contact I +82. 2. 6361. 3571 / wdc2010@citizen.seoul.kr
Website I http://www.wdcseoul.kr

Seoul Design Survey

Framework research to analyze Seoul's design status
within the World Design Survey pilot project.

This book utilized Seoul Fonts and Seoul Colors for graphical elements.
The copyright of this publication belongs to Seoul Metropolitan Government.