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# Korean Design Strategy and the Role of Design Education Played to Build Korea into An Industrial Giant



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*Images from the 2002 Korea/Japan World Cup*



2002  
FIFA WORLD CUP  
KOREA JAPAN



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# Cool Korea: The World 11<sup>th</sup> Economic Nation



***Dare we say it? Korea is cool. This country of 48 million has become a model for developing nations everywhere.***

*Business Week*, JUNE 10, 2002

***“There were lots of surprises this year. Samsung tied Apple for most prizes won (five). The South Korean company is becoming a design powerhouse on the world scene.”***

*Business Week*, July 8, 2002

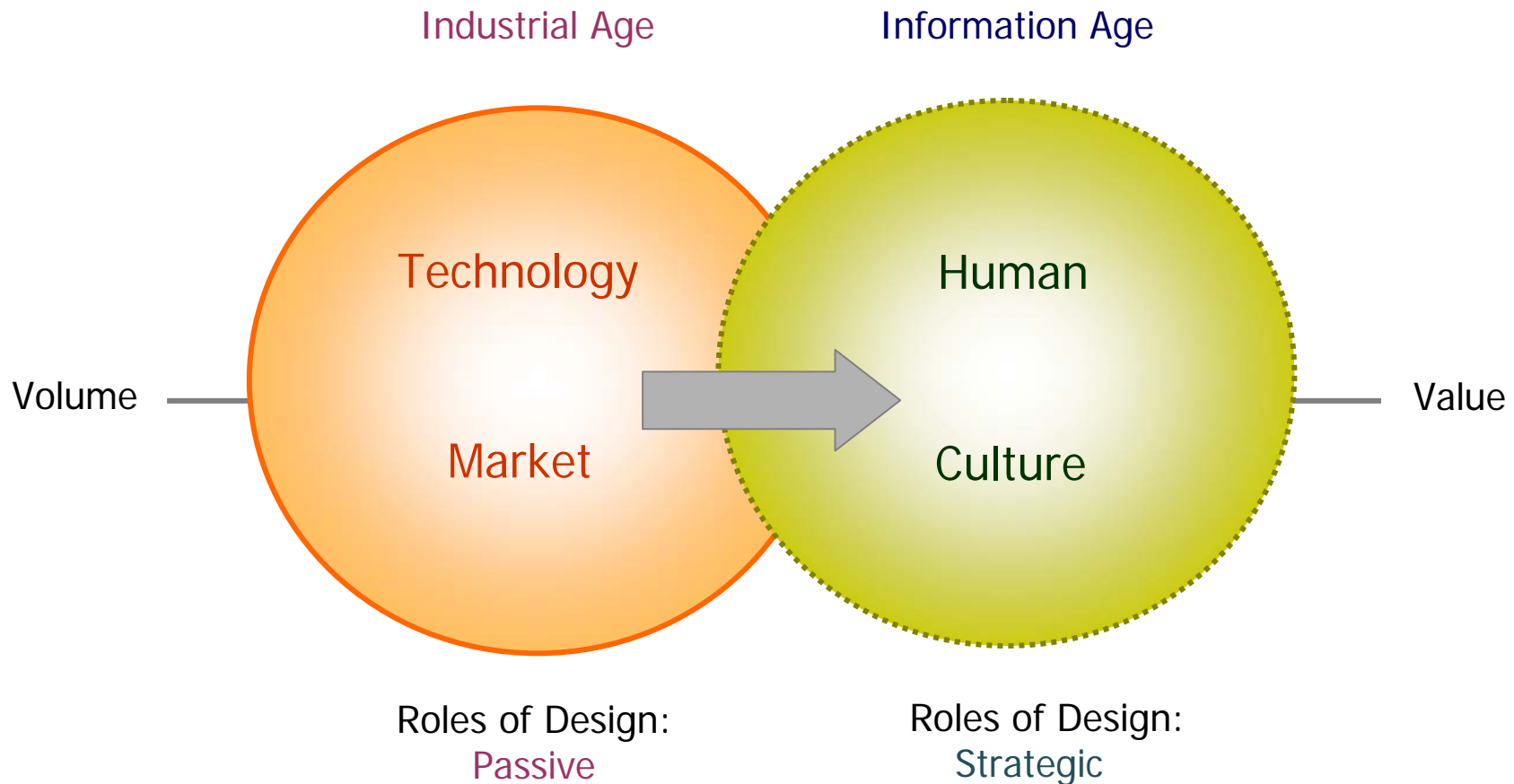
***Koreans' income per person (GNP) reached at \$11,400 and Gross national income (GNI) ranking 11<sup>th</sup> by of \$543 billion in 2002. (Bank of Korea, 2004)***

# Korean Economic Development: "The Miracle of Han River"

Year	GNP	Level of Technology	Pattern of Manufacturing	Industry Strategy	Design Strategy
1960s	\$ 80	Low Technology	Original Equipment Manufacture (OEM)	Overall Cost Leadership	Design to Cost Imitator
1990s	\$ 5,000	Medium Technology	Mass Production	Differentiation	Image Design Improver / Modifier
2000s	\$ 10,000	High Technology	Mass Customization	Focus	User-Centered Design Pioneer

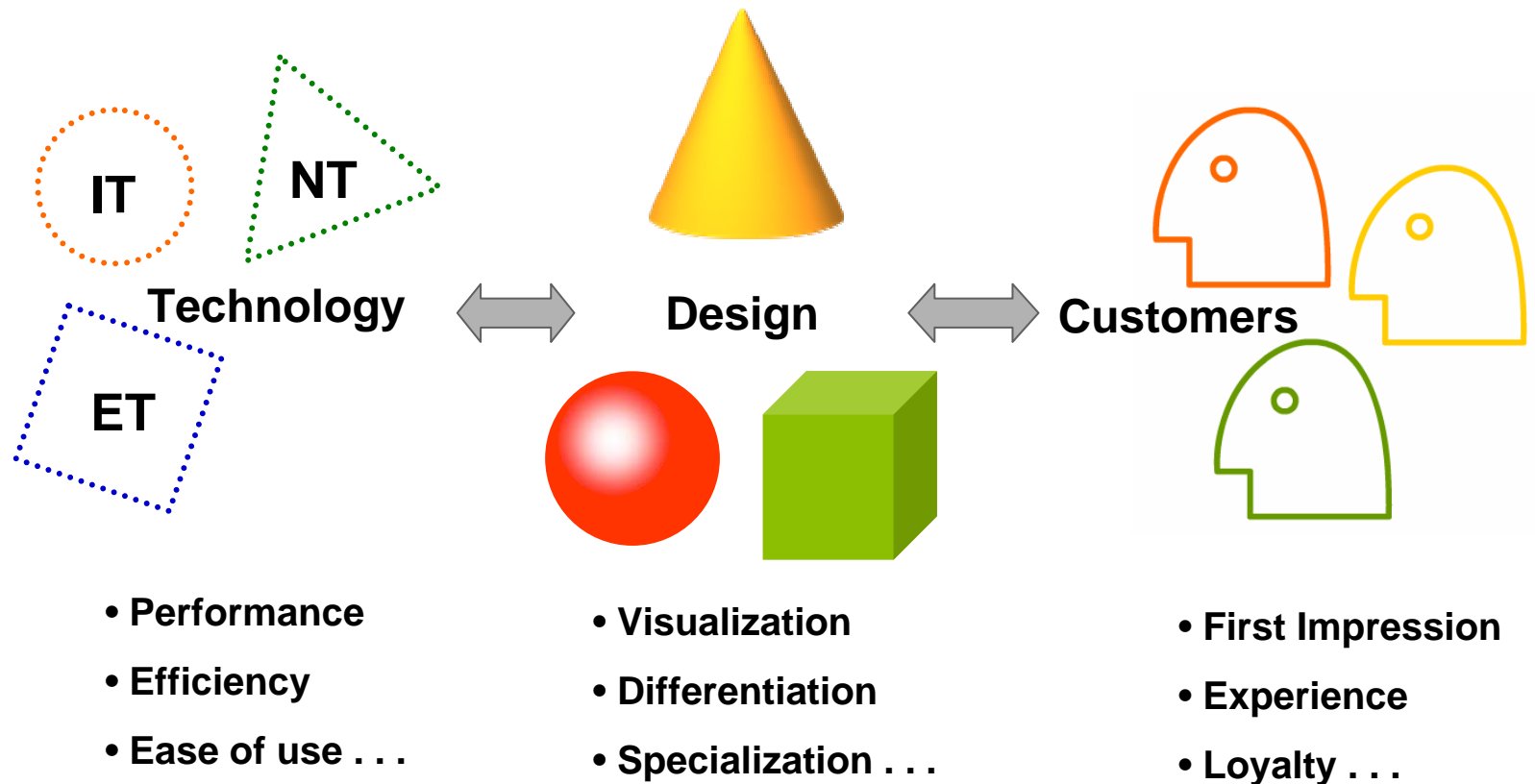
# Changing Rules of Competition: From Volume to Value

As the rule of competitive game changes from volume to value, the strategic role of design has become more important.

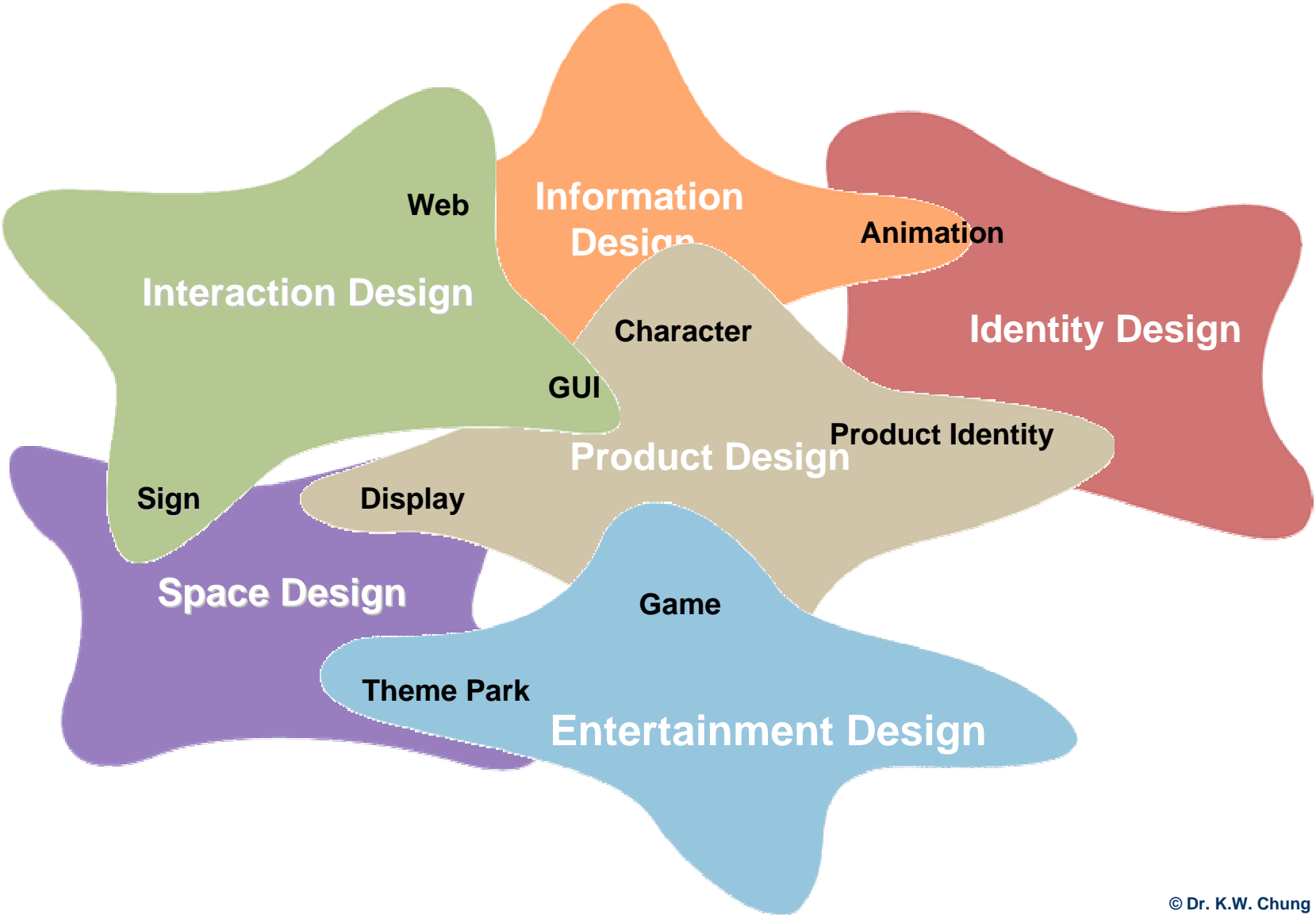


# What is Design?: Humanizing Technology for the Quality of Life

- Creative activities for harmonizing form and function of Artifacts.
- A channel for connecting technology and customers.

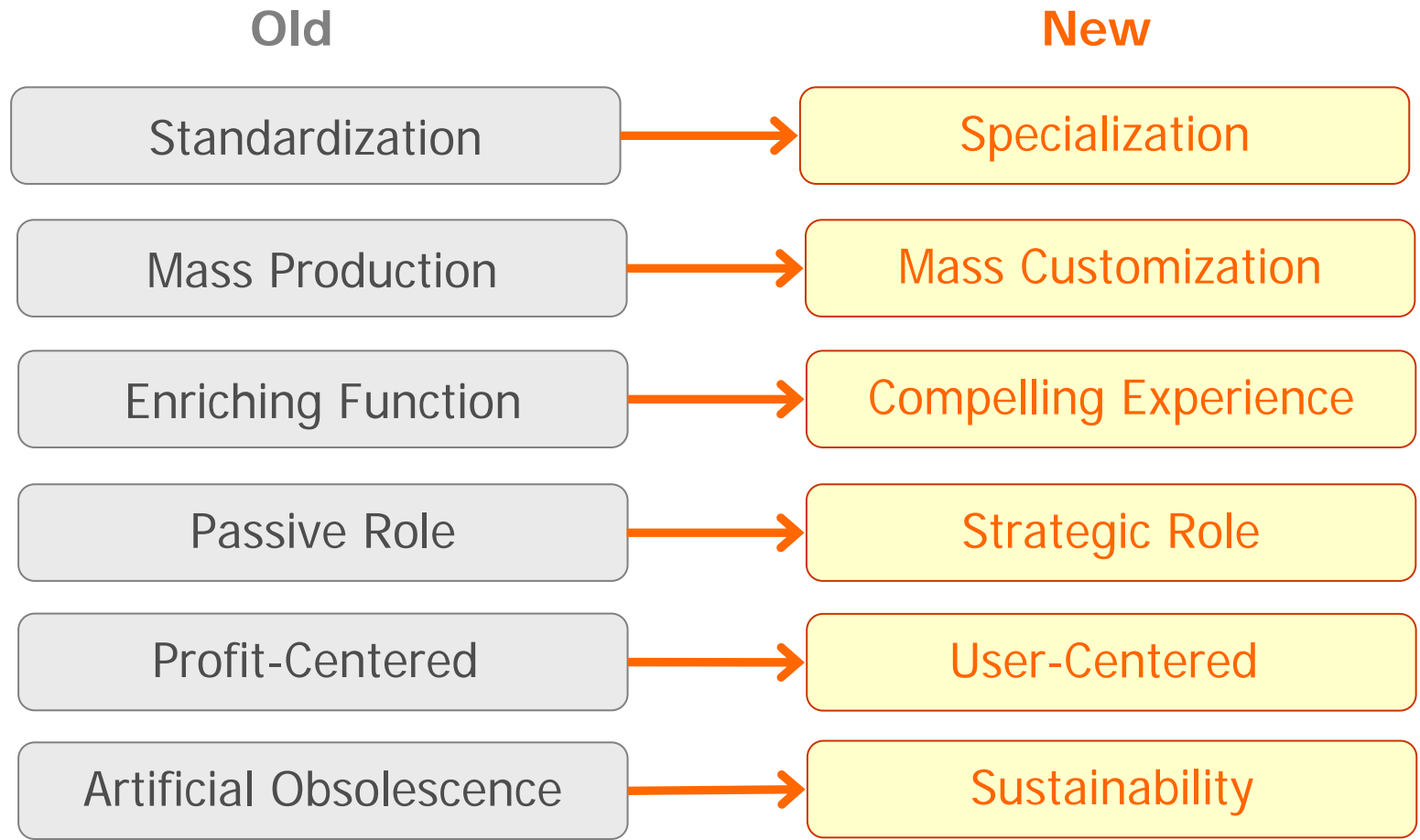


# Emerging Disciplines in Design: Needs for Integrated Approach





# Old Paradigm v.s. New Paradigm in Design: Emerging Tendencies



- ***“Pay primary attention the innovation by design ”*** (Chairman Lee, Kun - Hee,1993)
- ***Design is the core competence for global competitiveness in 21<sup>st</sup> Century*** (Chairman Lee, Kun - Hee,1996)
- **Became the world 3<sup>rd</sup> with market share of 9.6% following Nokia (34.8%) and Motorola (15.5%).** (The Data Quest )
- **Develop over 100 models every year to cope with the changing needs of the customer, while major competitors develop 20 models.**
- **The Show Innovation Award at 2001 Comdex, Selected as the Best Product by the Consumer Report.**





- **Specially designed to meet the specific needs of users in the US market.**  
**Exterior: Masculine Touch**  
**Interior: 1.8 Liter Bottle Holder**
- **Won the Presidential Prize at the 'Good Design Selection' in 2001**
- **The 1<sup>st</sup> Place at the Total Value Index by the 2002 Strategic Vision.**
- **The 1<sup>st</sup> Place at the Integrated Quality Standard in SUV Division by J.D. Power in 2004.**
- **Corporate Design Centers in Korea and abroad concentrate on developing the global-local design.**



- Vitalized the declining market of white goods through the synergy between advance information technology and excellent design.
- Whisen exported to 148 countries, and 1<sup>st</sup> place in market share in 32 countries. Hold 11.6% of world market in 2002.
- Develop new product concept with advanced technology and excellent design that fascinate the customer through the Design Creative Report.
- Selected as the 'Best Buy'(USA) by the Consumer Report for two consecutive years.



- Repositioned from the “conventional company” to the “venture company” through developing the i-Solar heater that produce the infrared light.
- Designed jointly with a design consulting firm under the “Support for Design Innovation Program” of KIDP.
- Export the i-Solar’ to 100 countries and selected as the World Best Products by MOCIE.
- Awarded the “Technology Innovation Prize and ‘2002 Success Design Prize.’



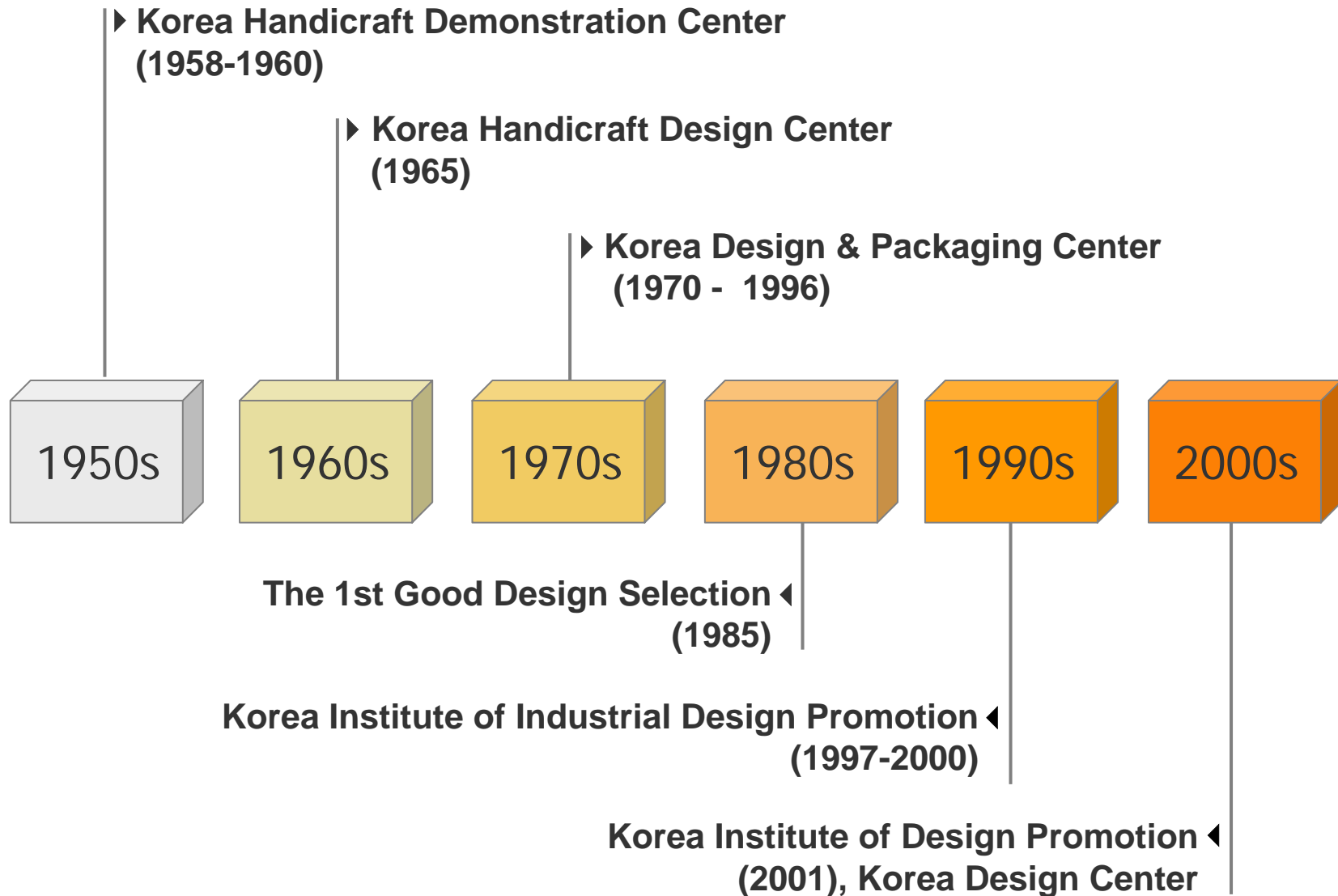
- Satisfying the customer's emotion and rationality through advance technology and excellent design.
- CEO's design management mind leads the SQC(speed, quality, creation) design strategy.
- Holding the market share (30%) in Japan and United States.
- Awarded the Most Excellent Design Management Prize at the 2002 Industrial Design Conference.
- iF Design Award in Germany, 2003  
CES Innovations Awards in MP3 Division.



- The stuffed toy industry was the most prosperous industry in 1960s, but it has been regarded as a sinking industry since 1970s .
- The Aurora World becomes world class company by operating the Design Research Center for developing advanced concept and design.
- Activating the design-led product development to lead the market trends
- Developed the “Catapillers, a guardian” right after the 9.11 and sold \$10 Million in the United States.



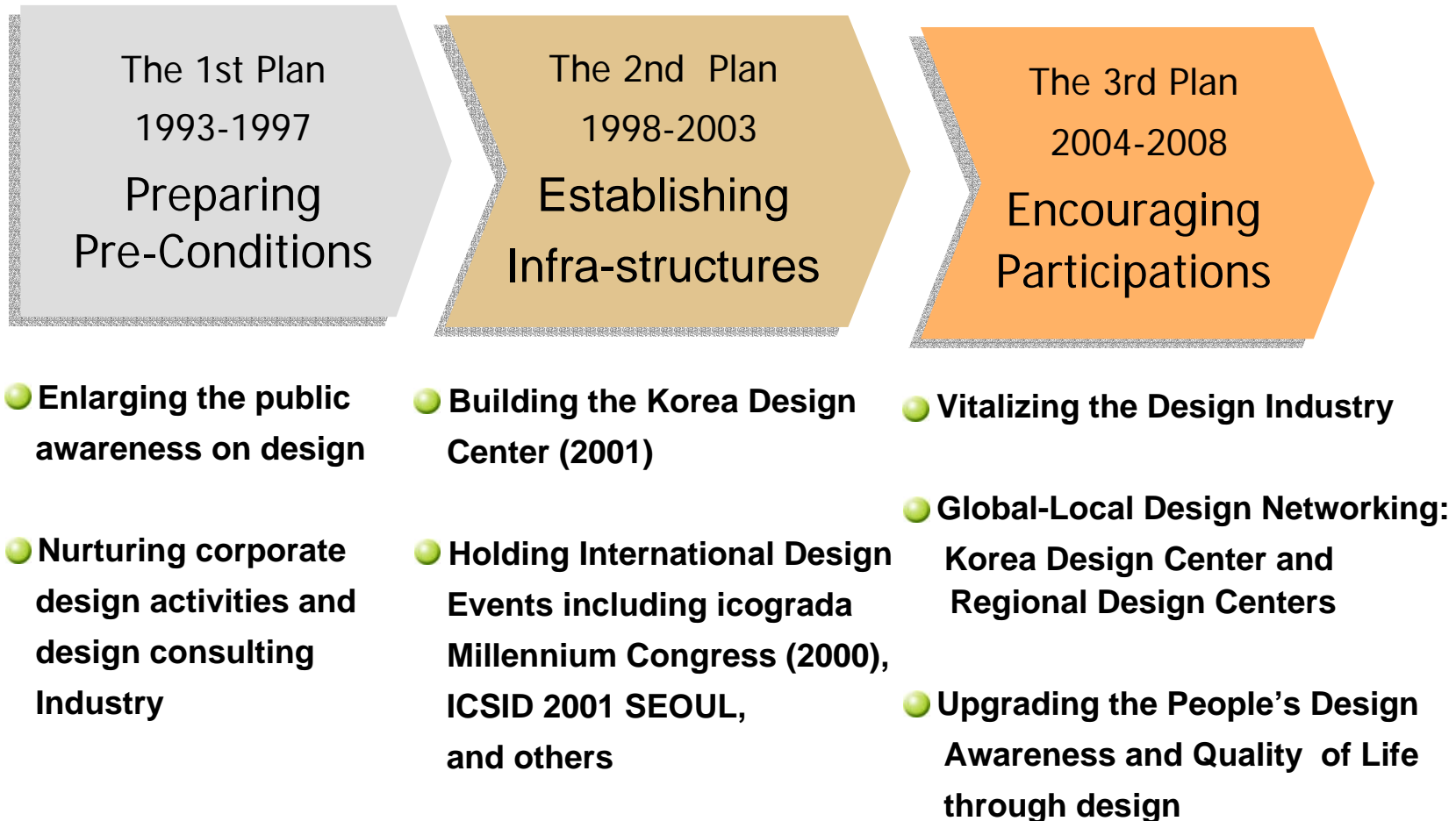
# Progresses of Korean Design Promotion





# 5 year Plans for Design Promotion: The Step-by-Step Progress

The Korean government has undertaken consecutively three Five-Year plans for design promotion since 1993.





***Korea Design Center: Hub for the Design Korea, “World Design Leader”***



***Open to Public at October, 2001 / 50,000m<sup>2</sup> / 12 Floors /US \$.100 Million***

KOREA DESIGN CENTER





# “Design Korea / Korean Power”



Opening of the Korea Design Center, Dec. 2001

World Design Leader



Rousing the Design Boom  
under  
“Design Korea”

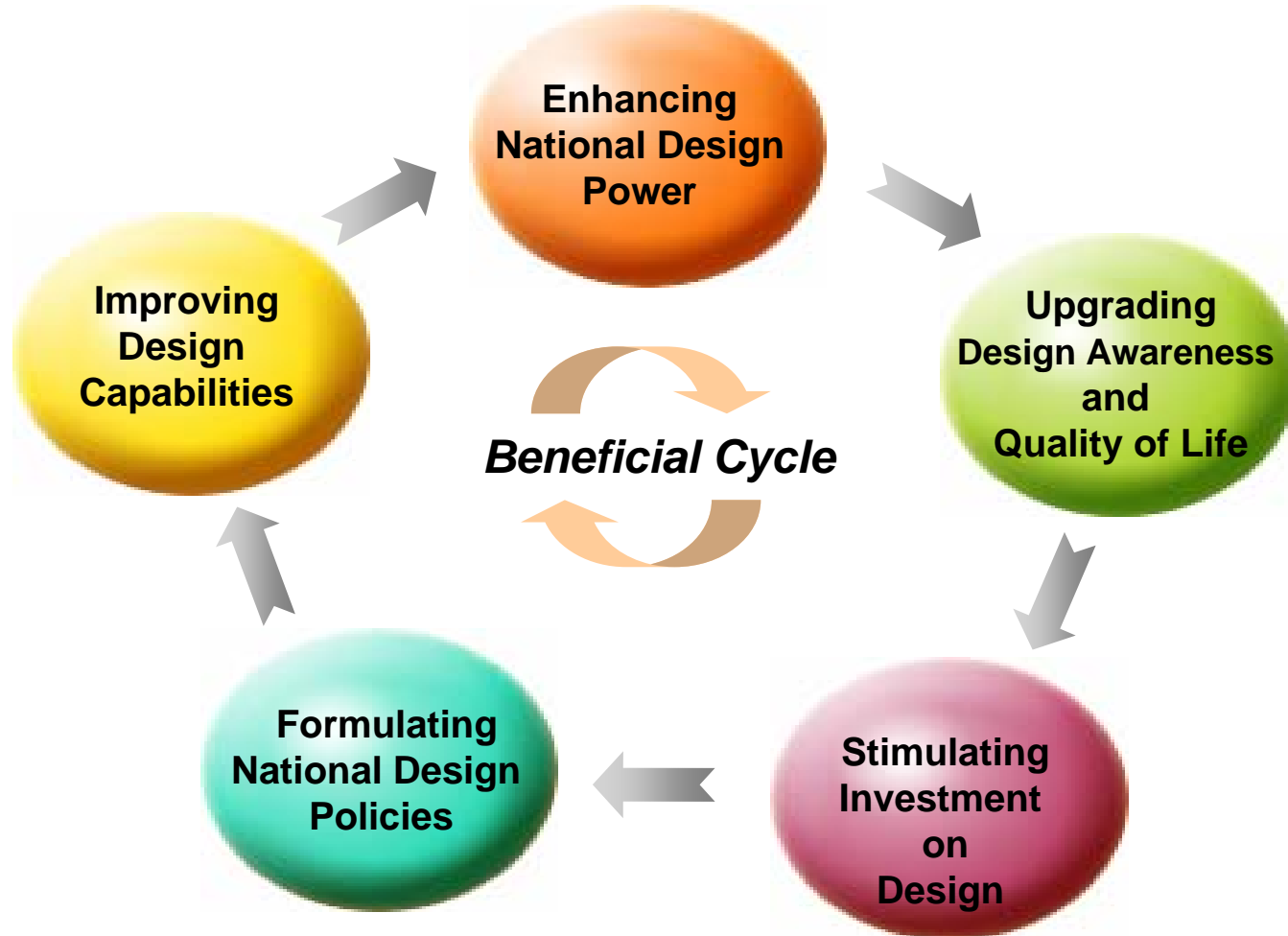


Policies for Promoting Design

- **Government** : Expanding infrastructure for the Design Industry
- **Corporations**: Activating corporate design management system
- **Universities** : Producing highly qualified designers

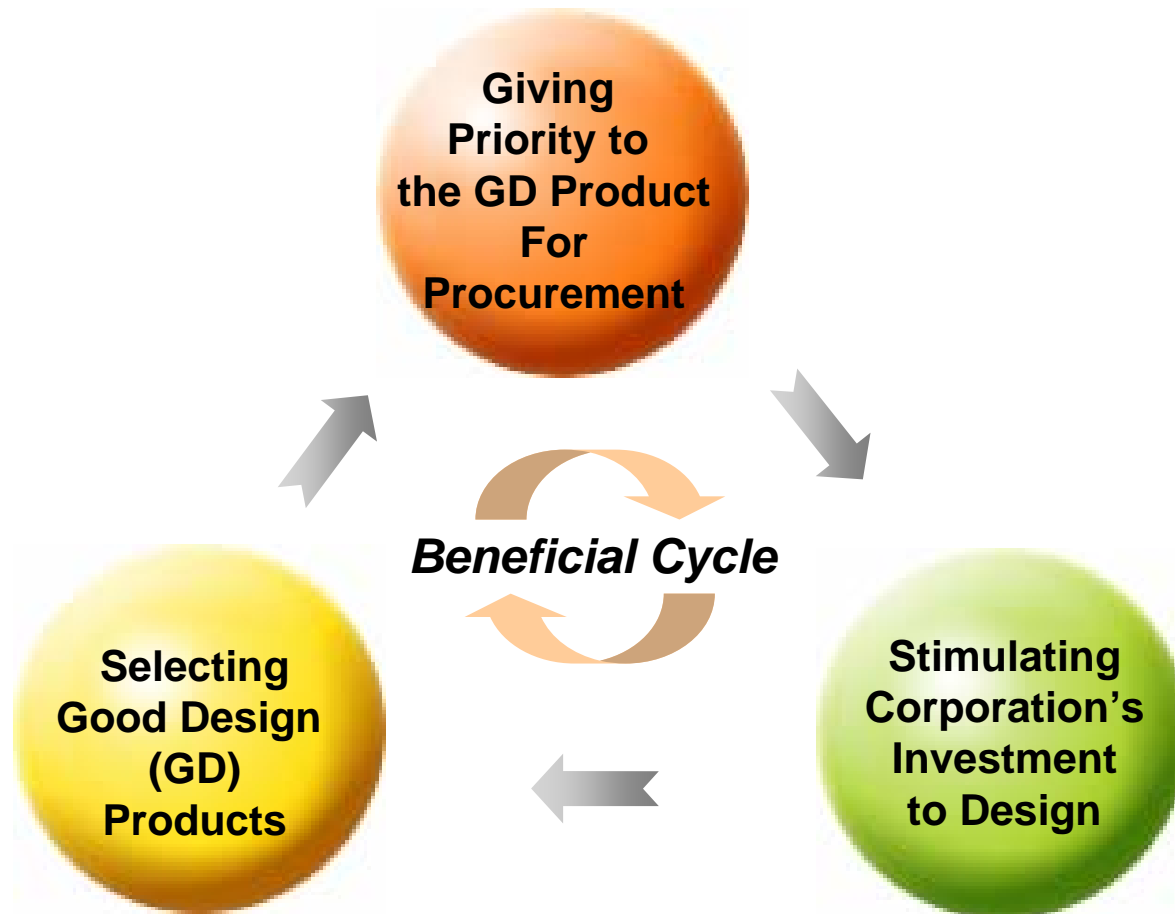
# National Design Promotion System: Making A Beneficial Cycle

The Korean design promotion aims to formulate a beneficial cycle for making synergy between efforts of government, corporations and others.



## Example I: Activating the Good Design Selection System

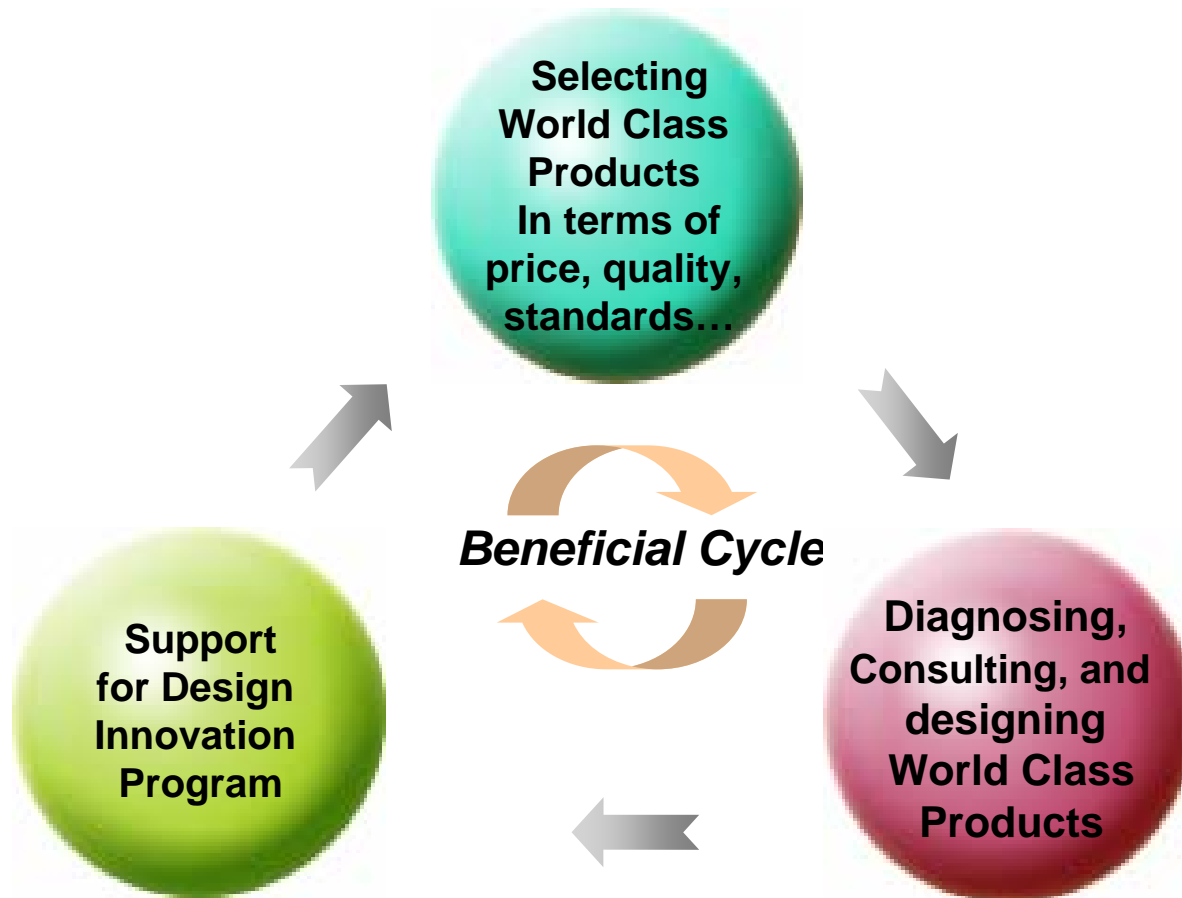
The Procurement Office and KIDP signed MOU for giving priority to the Good Design Products in selecting process for government supply in 2002.





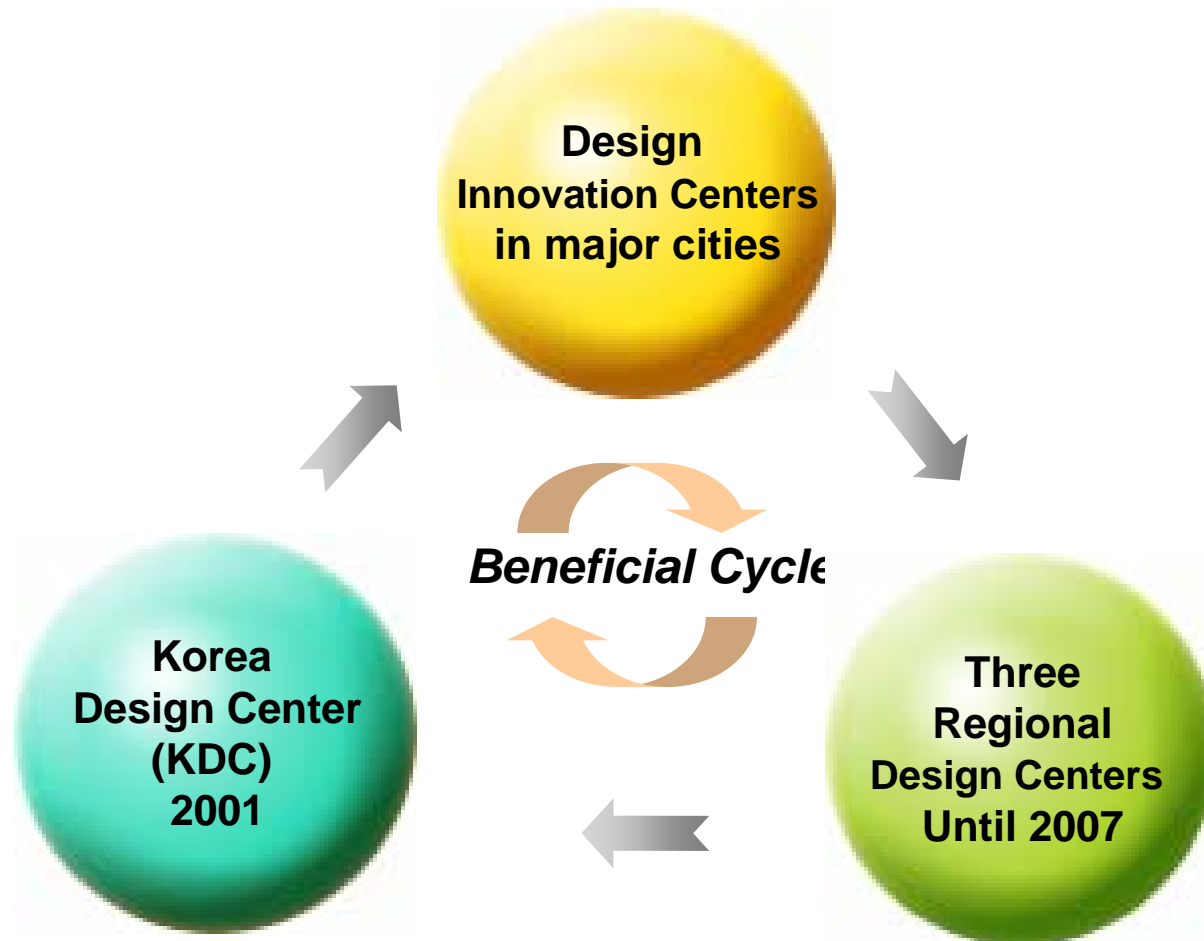
## Example II: Synergy between Government Policies

Combining “Support for Design Innovation Program” and “Selecting World Class Products” for upgrading the competitiveness.



## Example III: Network of Design Promotion Facilities

Networking infrastructures that comprise Korea Design Center, Regional Design Center (RDC) and Design Innovation Center (DIC).

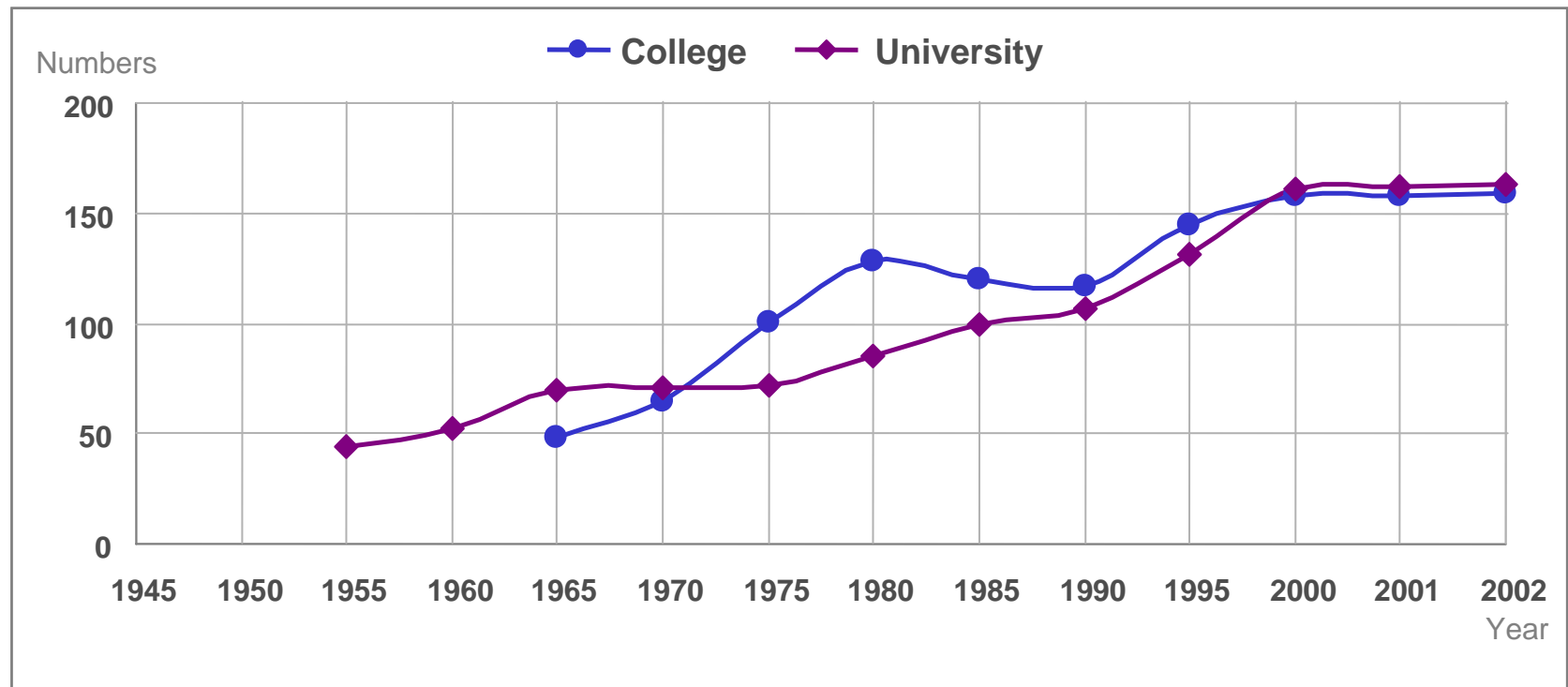




# The Revolution in Korean Design Education

# Increase of Higher Education Institutions

Number of higher education institutions has increased in conjunction with rapid industrialization since mid of 1970s.



# Number of Design Programs and Students

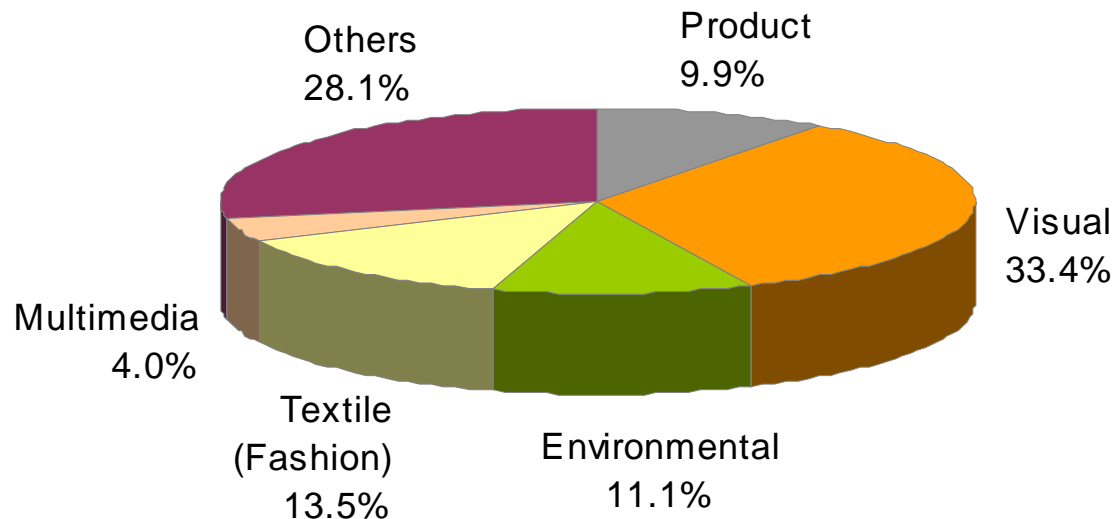
125 Colleges, 131 universities and 134 graduate schools offer design related programs in 2002.

Institutions	Number	Department (Major)	Number of Quarter	Number of Enrollment	Number of Graduates (2002)
<b>2 Year College</b>	125	292	97,962	63,621	24,027
<b>University</b>	131	247	64,388	49,241	10,814
<b>Graduate School</b>	<b>Master</b>	-	7,436	6,058	1,491
	<b>Doctor</b>	-	542	477	65
	<b>Sub</b>	114 (272Majors)	7,978	6,535	1,556
<b>Total</b>	390	653 (811)	170,328	119,397	36,397

# Students Majors in Various Design Disciplines

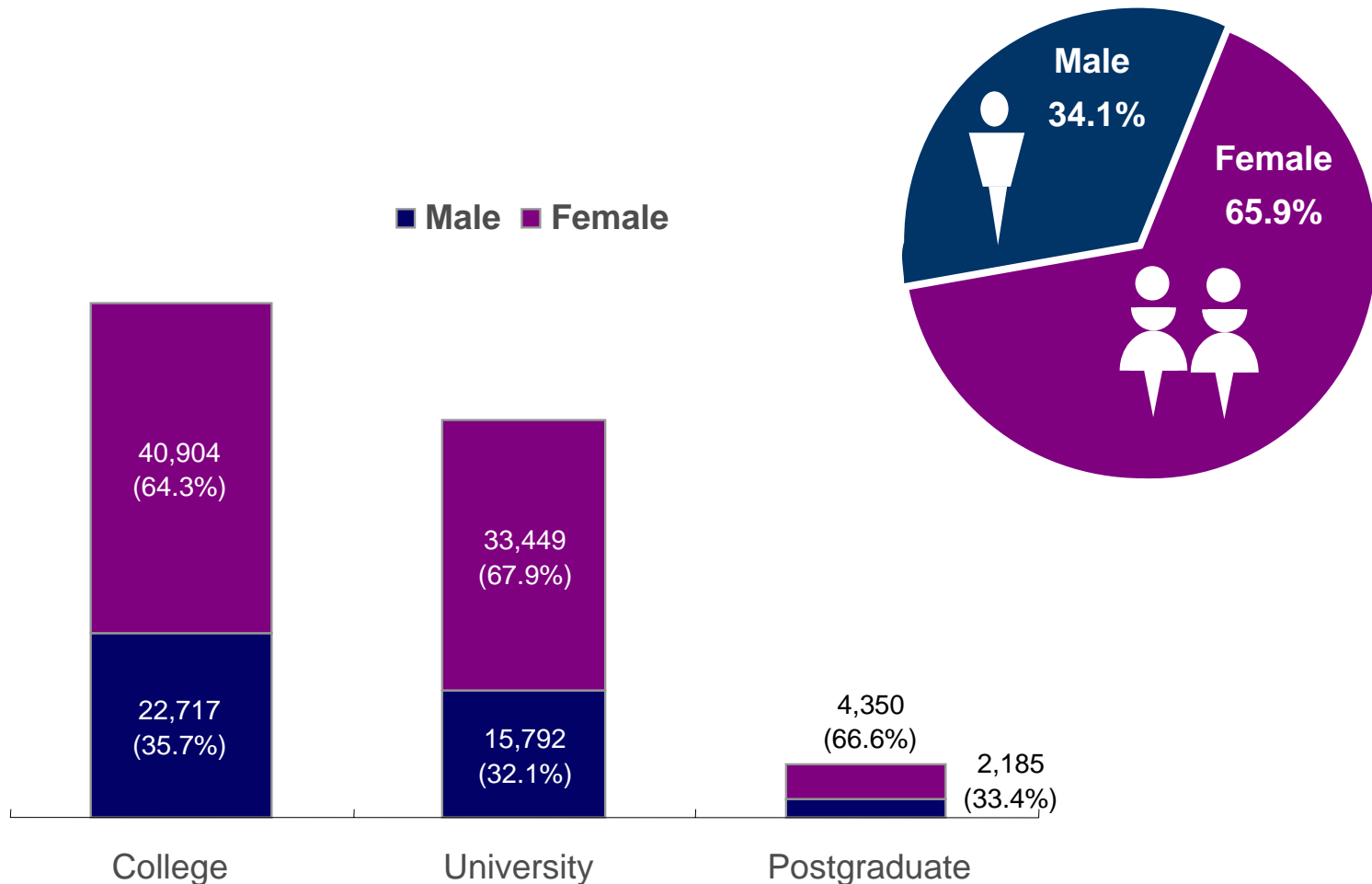
38% of total students major in visual design, 10% in product design, and 13% in textile design

Fields	Product Design	Visual Design	Environmental Design	Textile (Fashion) Design	Multimedia Design	Others	Total
Number of Students	11,795	39,931	13,209	16,147	4,814	33,501	119,397



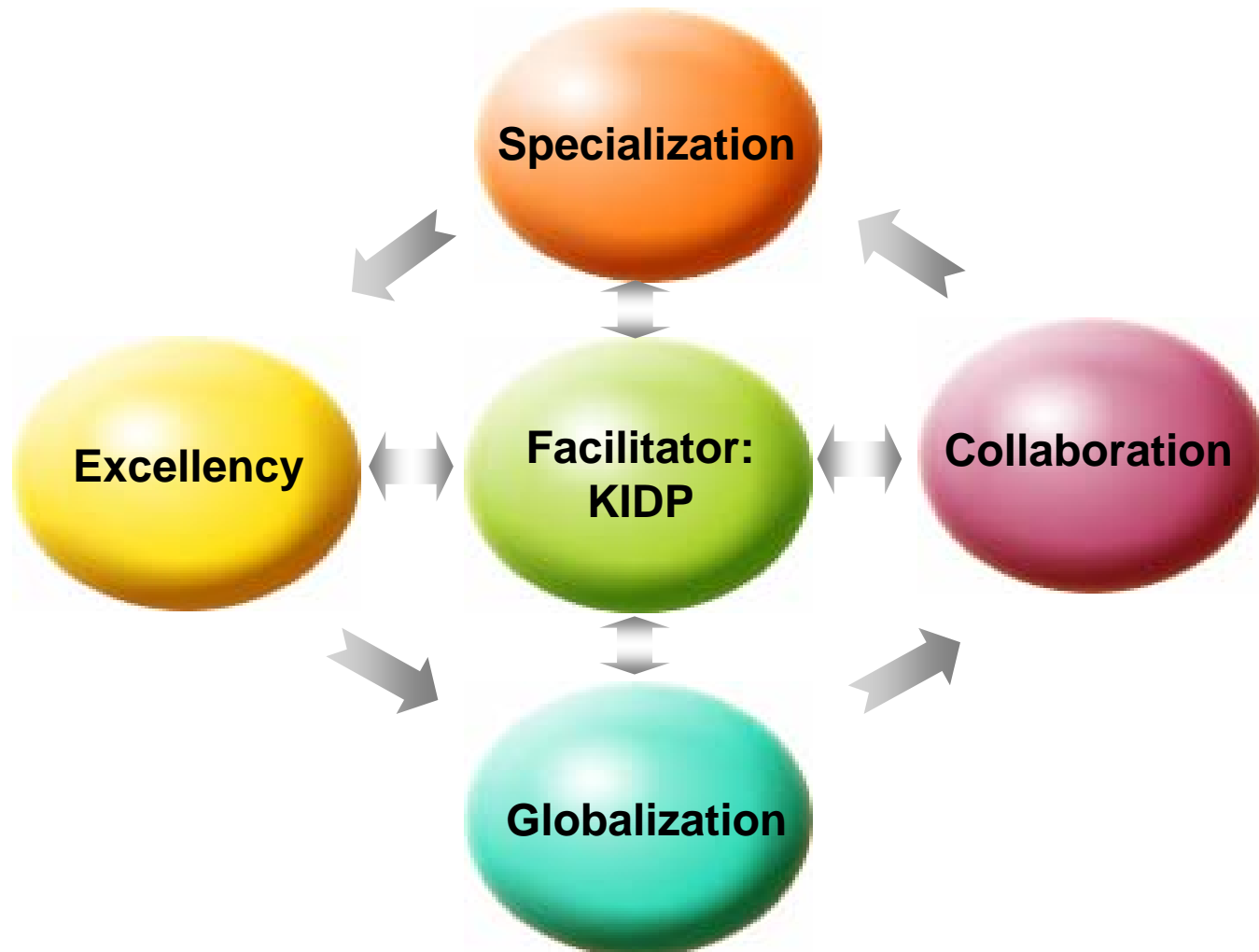
# Gender Issues in Design Education

Typical example of female-dominated situation in number. 66% of students are female, while male students are 34% in 2002.



# Design Education Strategy: “No more Quantity, but Quality”

In order to upgrade the quality of design education, four strategies for pursuing the supremacy have been undertaken.

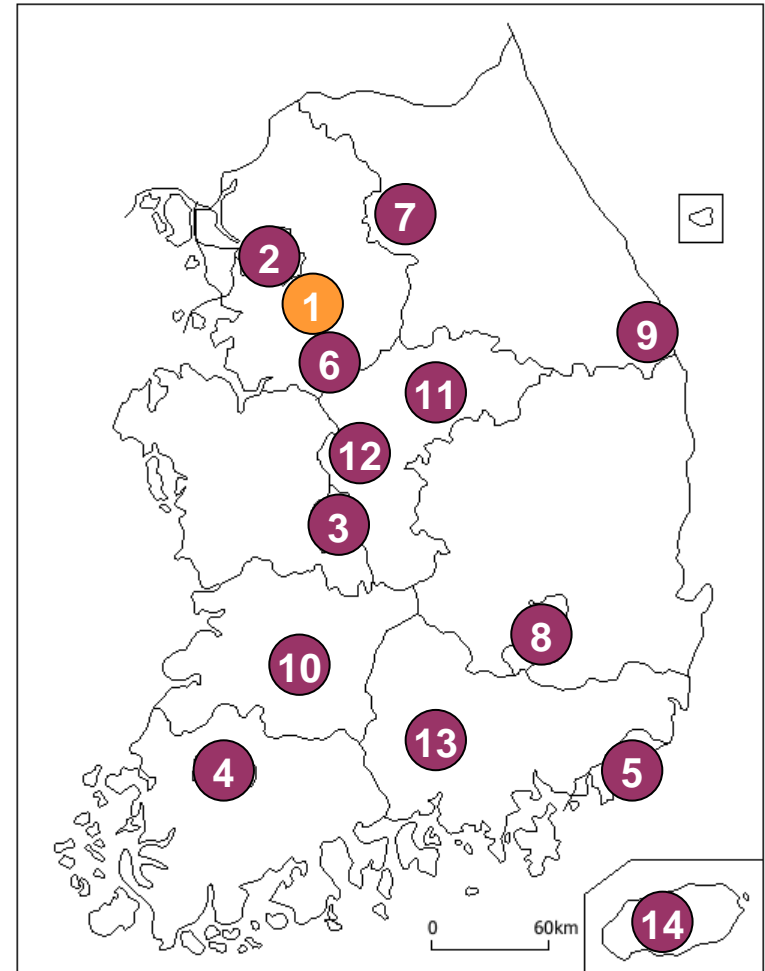




# Design Innovation Centers: Hub for the Local Design Industry











14 Design Innovation Centers including KIDP's "IDIC" are operating as hub for local design industry in major cities throughout Korea.

1. KIDP (Bundang)
2. IDAS (Seoul)
3. KAIST (Daejeon)
4. Gwangju Univ.
5. Dongseo Univ. (Pusan)
6. Joongng Univ. (Ansong)
7. Gangwon Univ. (Chuncheon)
8. Gyemyung Univ. (Daegu)
9. Sasmchuk Univ. (Samchuk)
10. Jeonbuk(Jeonju)
11. Semyung Univ. (Jecheon)
12. Cheongju Univ. (Cheongju)
13. Bio21 Center (Jinju)
14. Cheju College (Jeju)



# Prospectus: Next-Generation Growth Engines and Design

**10 industries that have been selected as the growth engine by Government are design-sensitive.**

Growth Engine Industries	Design Sensitiveness		
	High	Middle	Low
Smart Home Industry			
Digital Appliance Industry			
Post-PC Industry			
Non-Memory Industry			
NIT Component and Materials Industry			
BIT New Technology Industry			
Electronic Medical Equipment Industry			
Bio-Industry			
Environmentally-Friendly Energy Industry			
Aerospace Industry			

## Design Korea 2008: The Leading Design Nation

- Enlarging the Design Industry
- Upgrading the Design Standards
- Cultivating World Class Brands

### *Design Hub for North-East Asia & Basis for World Design leader*

- **Creating and Cultivating the Design Industry**
- **Enforcing Competences of Design Innovation for the Industry**
- **Enlarging International Cooperation: Establishing a Design Hub**
- **Promoting Design Capabilities in Regions**
- **Making New Design Job Opportunities**
- **Expanding the Design Culture**

## ● Key Factors for Success

### - *Symbiotic cooperation between government and civilian sectors:*

A classical example of “Government-Pull, Civilian–Push” model of design promotion system.

### - *Highly qualified design human resources:*

Cultivating design experts with diverse backgrounds through the reformation of design education.

### - *Increase of corporate investment on design management:*

Establishing large scaled corporate design centers. Formulating the corporate design system for up grading the quality.



Thank You