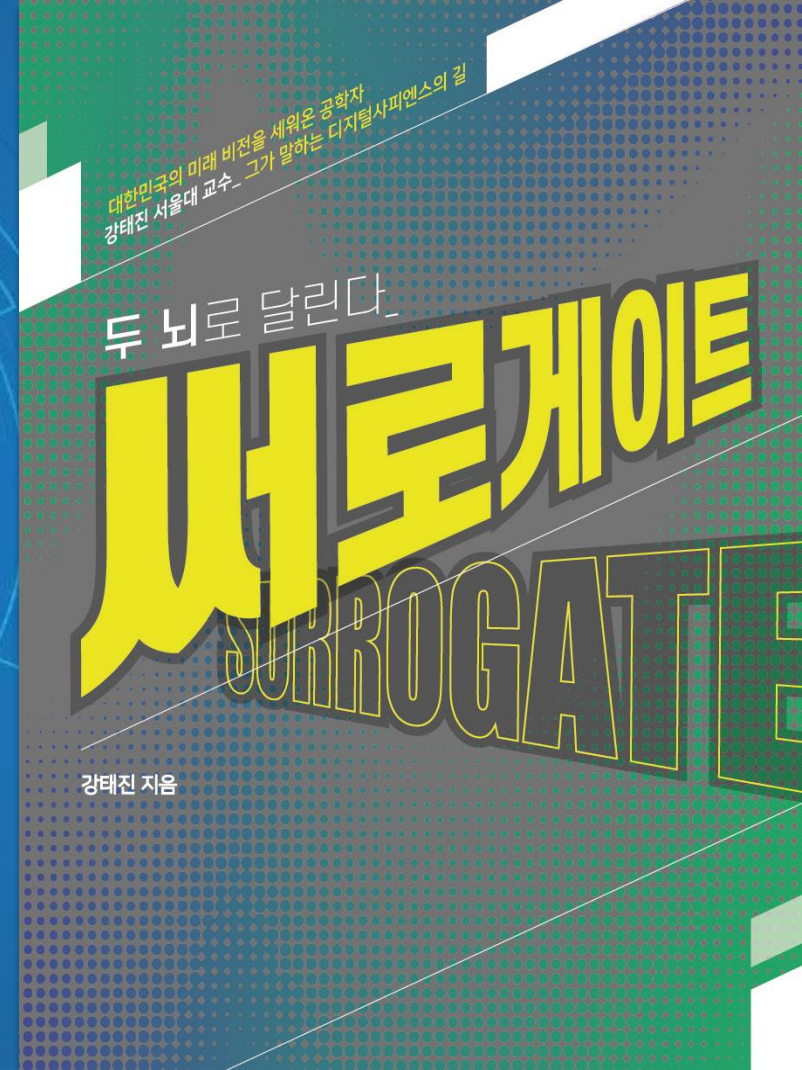


ITMF 2020

Platform Transformation of Korean Textile Industries



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Burning Questions Confronted with Covid-19

High Uncertainty with Covid-19: 90% Economy?

Global Value Chain Disruption: Protectionism

Climate Change

Sustainability: Borrowing from the future

Platform Differences

New Era of AI Digital Platform

- √ **Superconnected Society:**
‘Social life is affected by how you are connected’
- √ **Platform offers enhanced individual **Competence and Creativity****
- √ **Personal capacity elevated utilizing organization power of company or institution**
‘Windows of new opportunity’
- √ **Narrow the gap between individuals**
‘Smooth out individual intellectual level’

Social Life with AI Digital Platform

- √ **Exchange everything including merchandise and services on Platform:**
Products, Sales, Consumption, Learning, Networking, Communication, Healthcare, etc.
- √ **City & Regional Platform:**
 - **Community Competitiveness depends on Digital Infra Structure**
 - **Platform City, Platform Economics**
- √ **Accelerating Gig Economy: Overcome Extreme Poverty**

New Era of AI Digital Platform

√ **Innovations in Cloud Computing & 5G : Ambient Intelligence**

- Platform enables fusion with Ambient Intelligence
- Become more smart and genius person
- Mental wellbeing, Ethical better society
- Enjoying everyday happy and pleasant life

√ **Platform divides separate groups in society**

Connecting a rare group of people and business

√ **'Platform Differences'**

Disparity in Information, personal relations, social life, commercial ties, living standards, etc

Deglobalization Risk, Protectionism

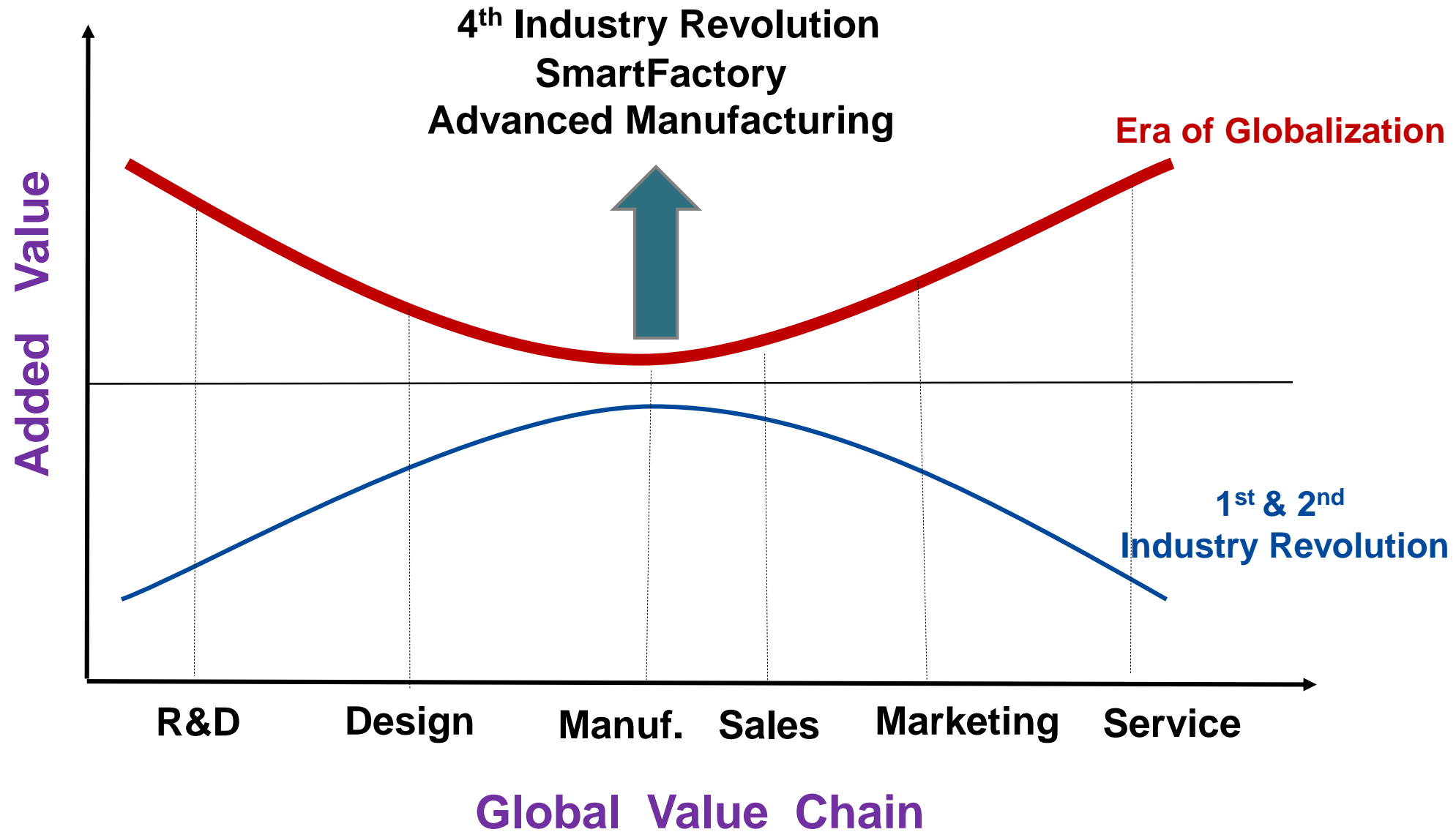
√ Economic Nationalism

- Rising Trade Barriers
- US-China Decoupling: More expensive for business
- Global Manufacturing Downturn

√ Global Supply Chain Disruption by Covid-19

- Reshoring
- Tech-Driven Innovation: Flattening of the Global Value Chain
 - ◆ Advanced Manufacturing
 - ◆ Smart Factory
- Conventional manufacturing makes profit again in advanced economies

Flattening of Global Value Chain



Robots in Advanced Manufacturing

- √ **20 million robots will be adopted in manufacturing in 2030:
30 million layoff with low skilled workers**
- √ **1 robot replaces 1.6 laborers**
- √ **800 million workers, 20% of work force, will be replaced by robot in 2030**
- √ **Rate of robot replacement during 2011~2016:
Japan 7%, Germany 27%, USA 40%, Korea 83%, China 267%**
- √ **Robot loaded with Artificial Intelligence Vision provides new dimension of flexibility in manufacturing**

Source: Oxford Economics

Industrial Robot with AI Vision: Smart Factory

FANUC



YASKAWA



ABB



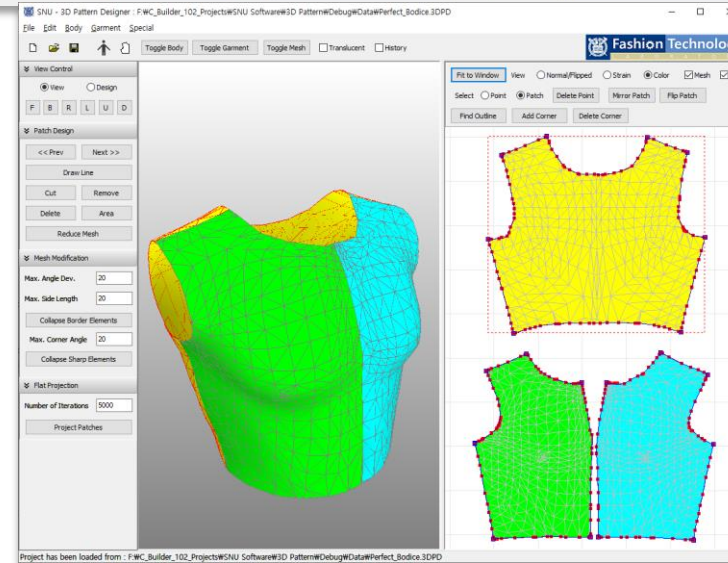
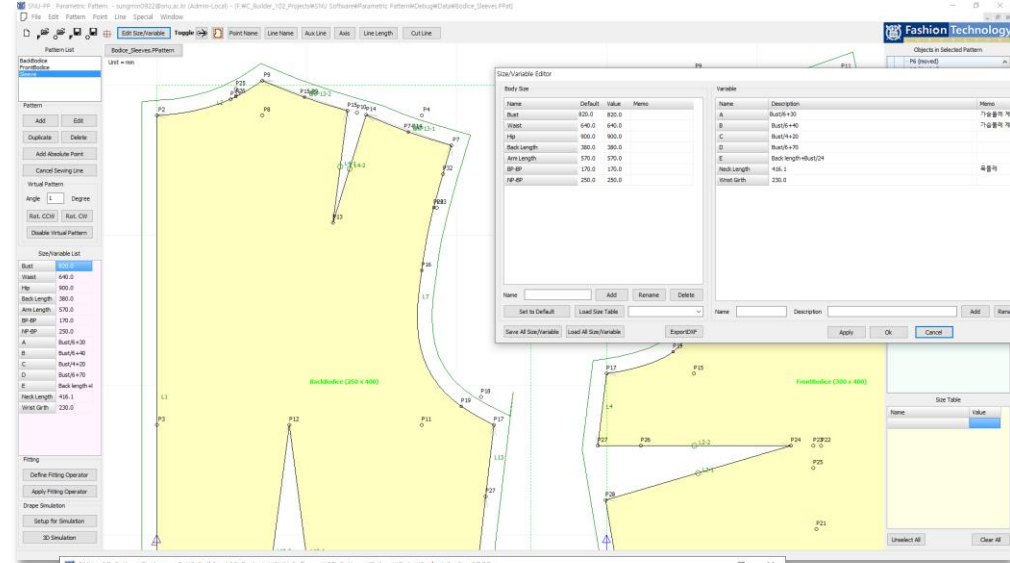
KUKA



MadeForMe Platform for Fashion

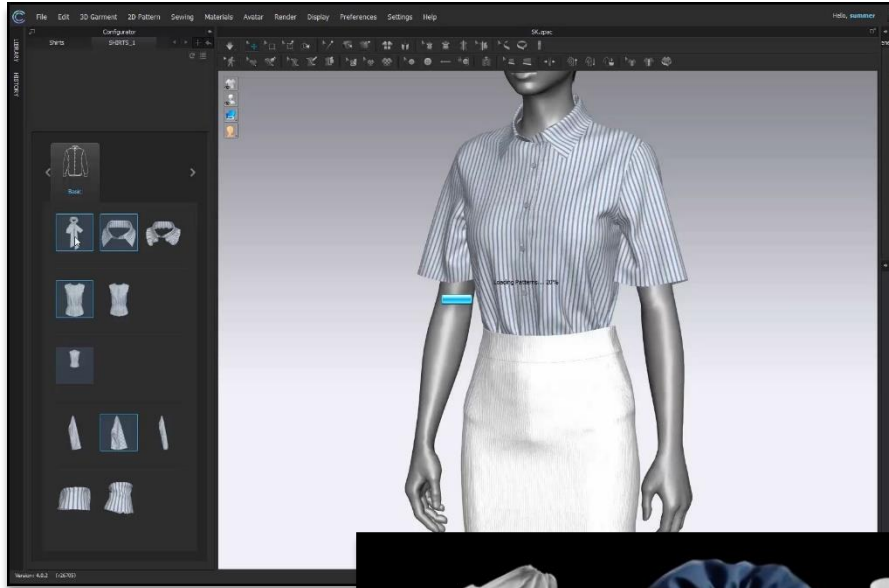


3D Body Scanning

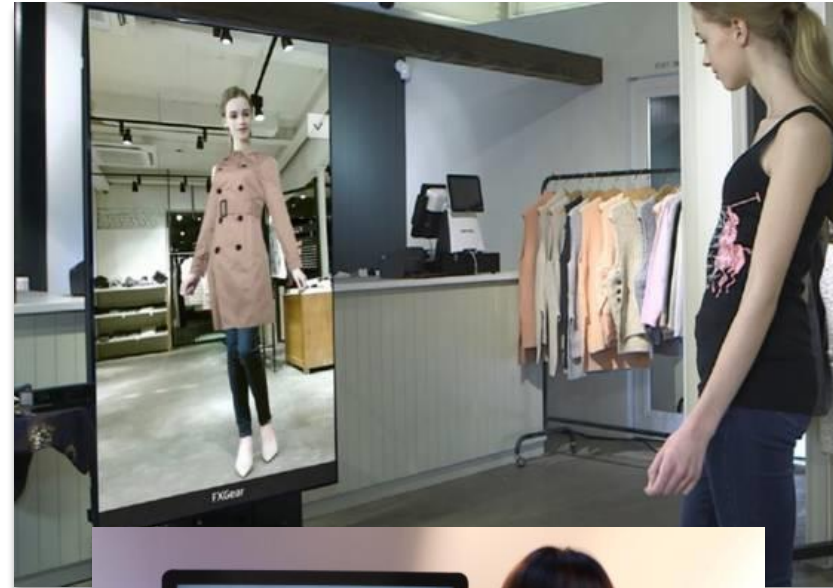


Bespoke Pattern Generation

MadeForMe Platform for Fashion



3D Drape Simulation

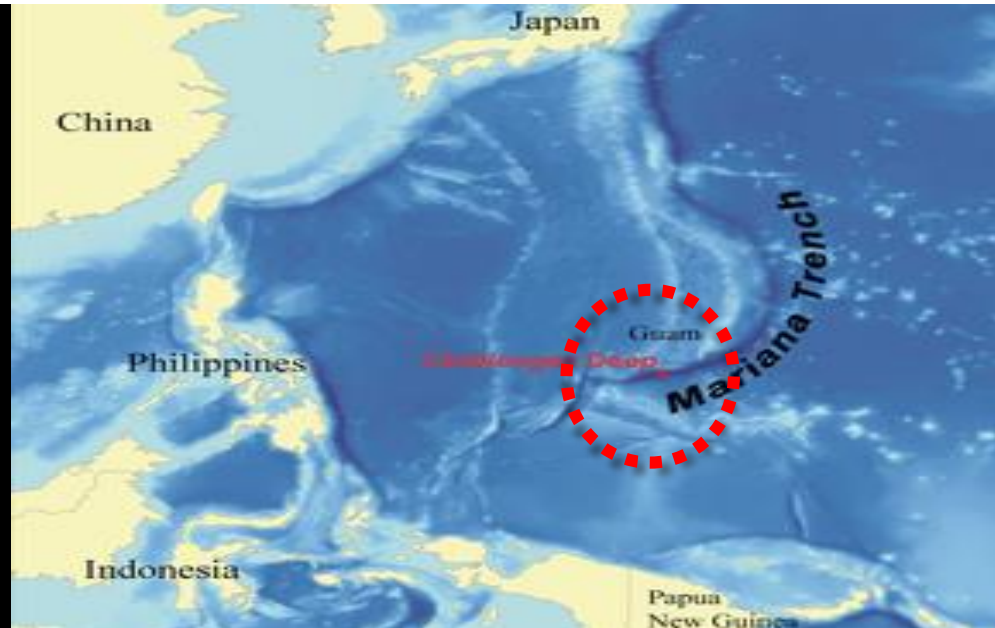


AR/VR Smart Mirror

Eurythenes Plasticus, Ocean Plastic Pollution

Eurythenes plasticus

- Found in depth of 7,000m in the Mariana Trench
- Polyester microfibre was found in its hindgut
- In 2020, Named in reference to the PET fiber found in its stomach(Dr. Alan Jamieson, Newcastle University)

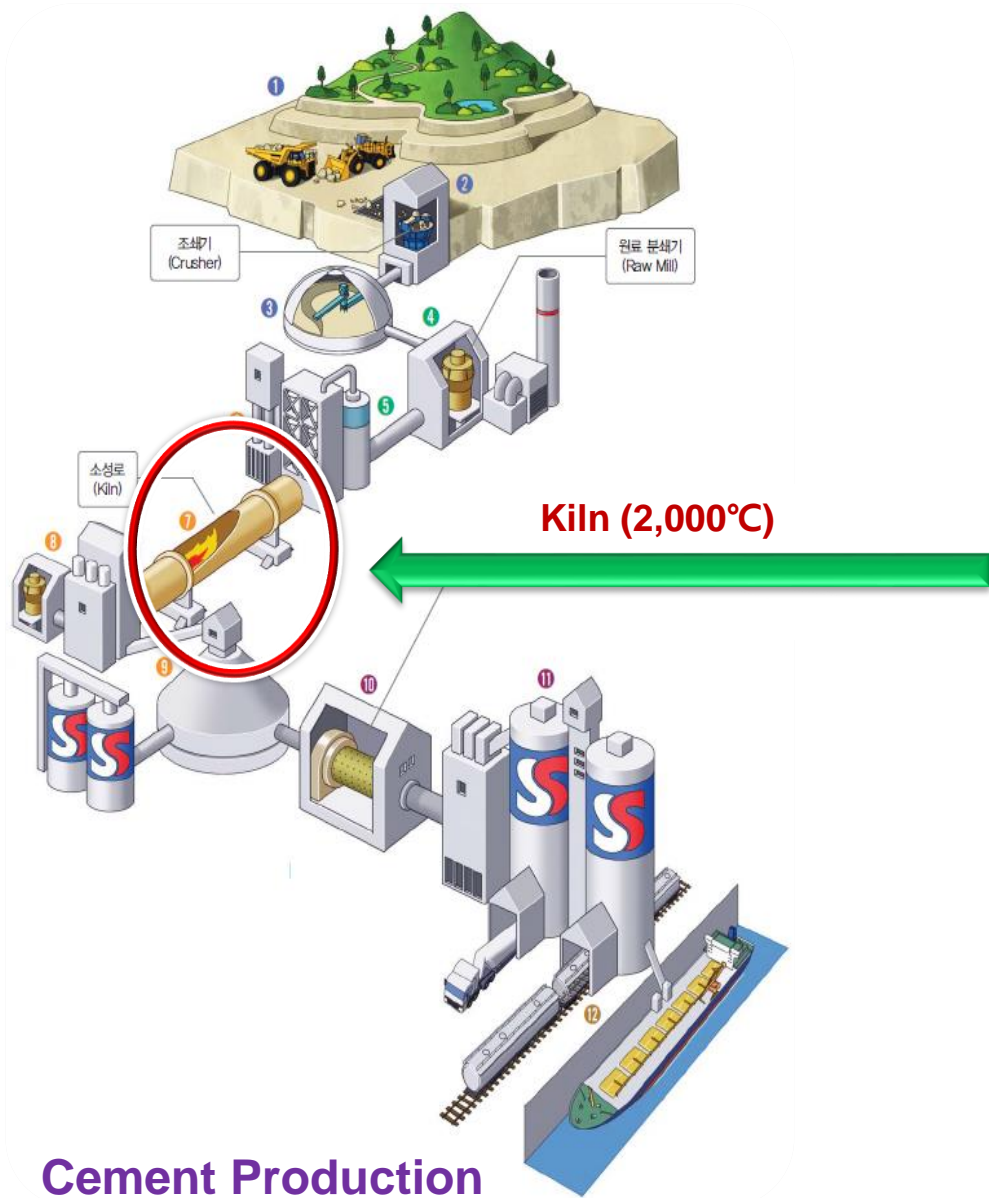


Recycling of PET Bottles & Fashion Products



Sustainability Goal: Zero Virgin Resin in 2030

Alternative Fuel with Plastic Waste for Cement Industry



Plastics & Fashion Waste



Thermal Decomposition to nature



Clean up Ocean Plastic Pollution

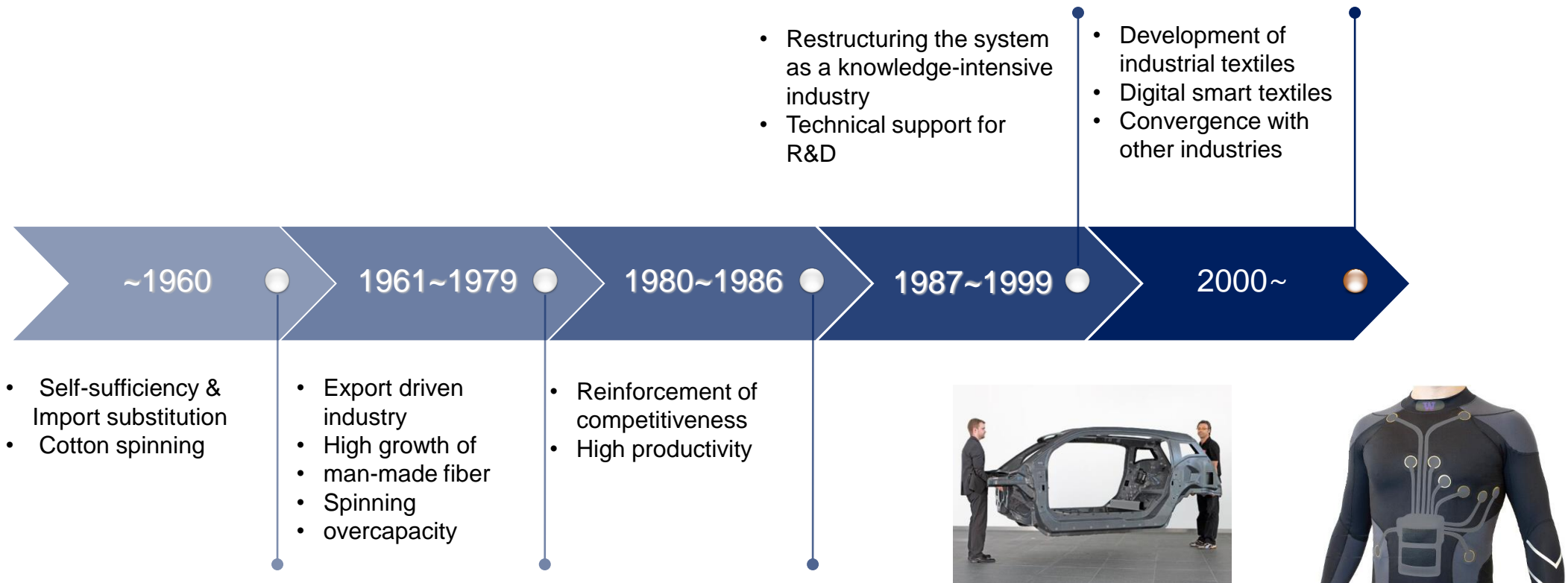
Plastic pollution in ocean will be cleaned up
in cooperation with Cement Industry

**Korea wants to be at the forefront of
creating plastic waste free future**



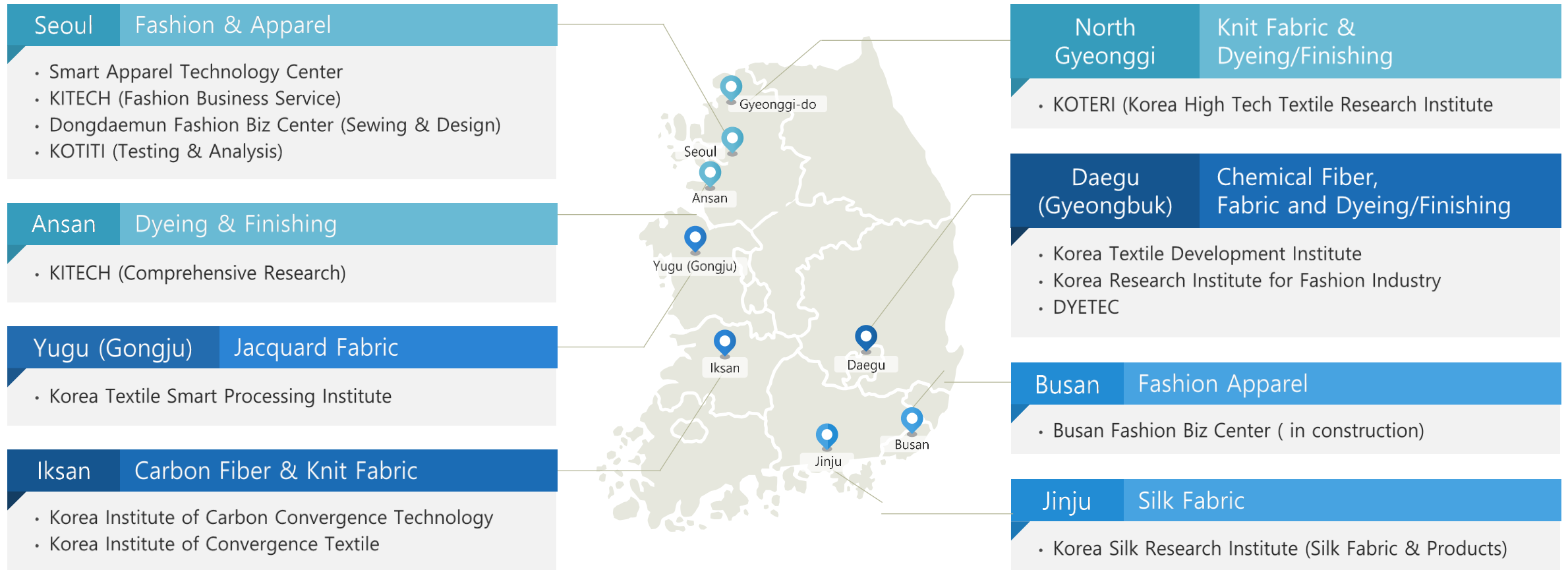
Development of Korean Textile Industry

- Korean textile industry started with the goal of self-sufficiency after Korean War in the 1950s
- It has transformed into an industry of high fashion, technical textiles, and smart textiles in the era of the 4th Industry Revolution



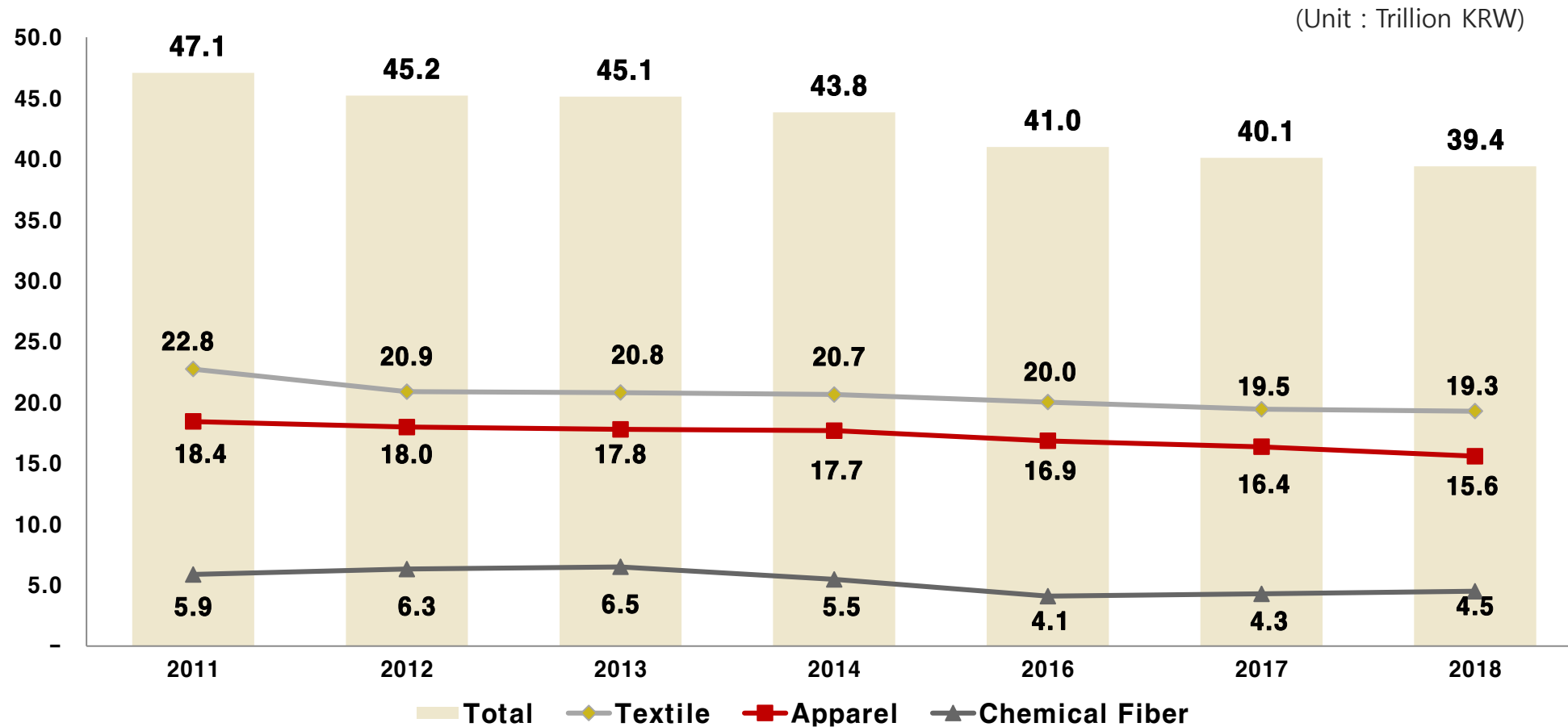
Regional Textile Clusters & Research Institutes

Well-established research and technical infrastructures to support local manufacturers for R&D and developing human resources



Korean Textile & Apparel Production

Output recorded \$35.8 billion in 2018



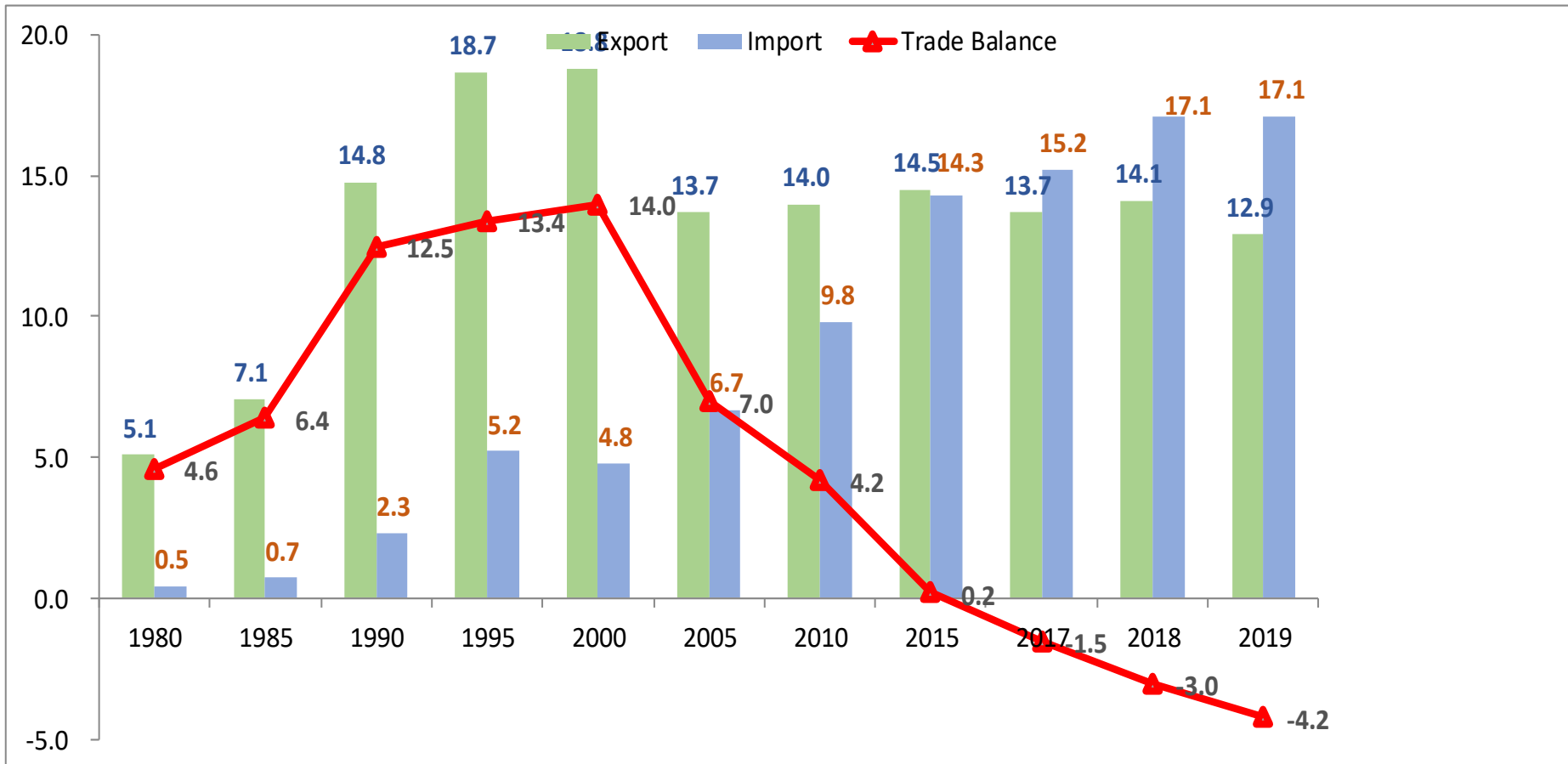
Source : Statistics Korea (KOSTAT)

International Trade of Korean T&A Industry

Korea's Textile and Apparel Trade Volume(2019)

- Export : US\$ 12.9 Bil., Import : US\$ 17.1 Bil.

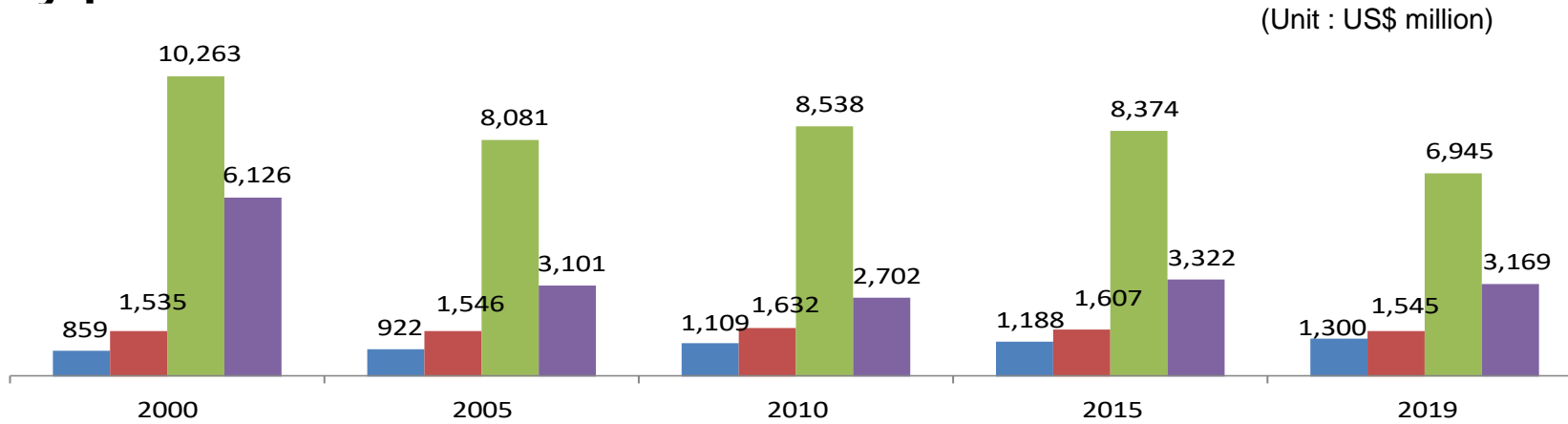
(Unit : US\$ Billion)



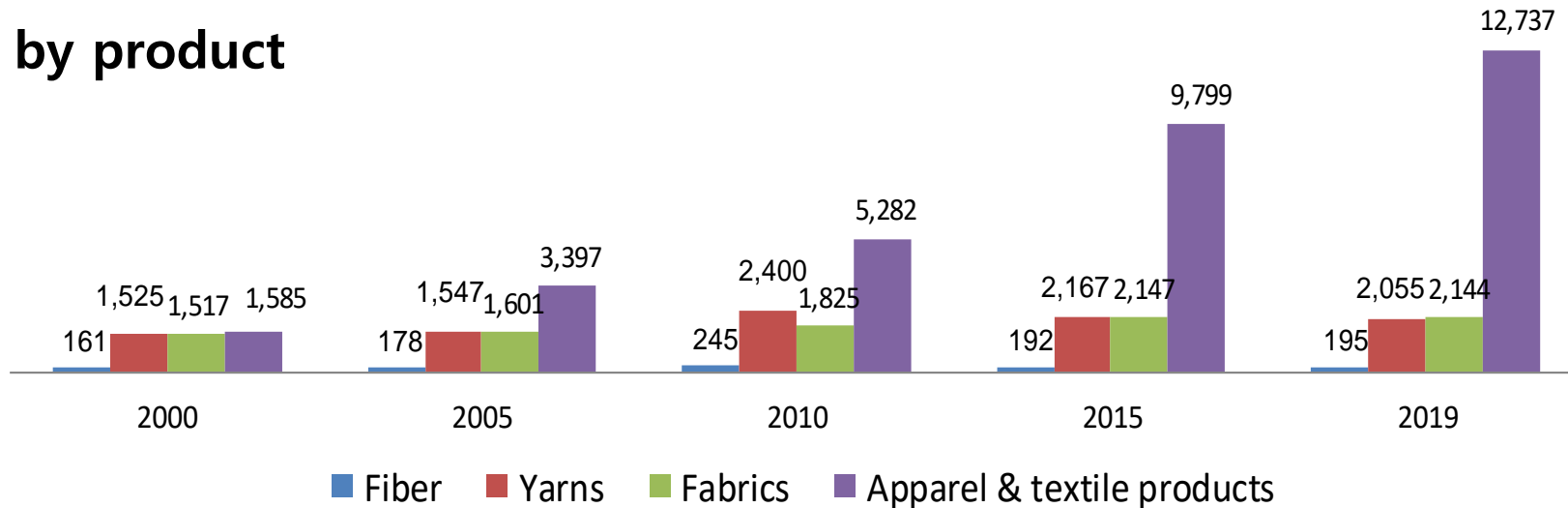
Source : Korea International Trade Association

International Trade of Korean T&A Industry

- Export by product



- Import by product



FTA with Other Countries

In Effect

16 Cases, 56 Countries



Chile



India



EFTA



EU



Singapore



ASEAN



Peru



Vietnam



US



Turkey



Australia



Canada



China



New Zealand



Colombia



Central America

Concluded

4 Cases, 4 Countries



Central America



Israel



UK



Indonesia

In Negotiation

7 Cases, 24 Countries



RCEP



MERCOSUR



Korea·China·Japan



Ecuador SECA



Philippines



Malaysia

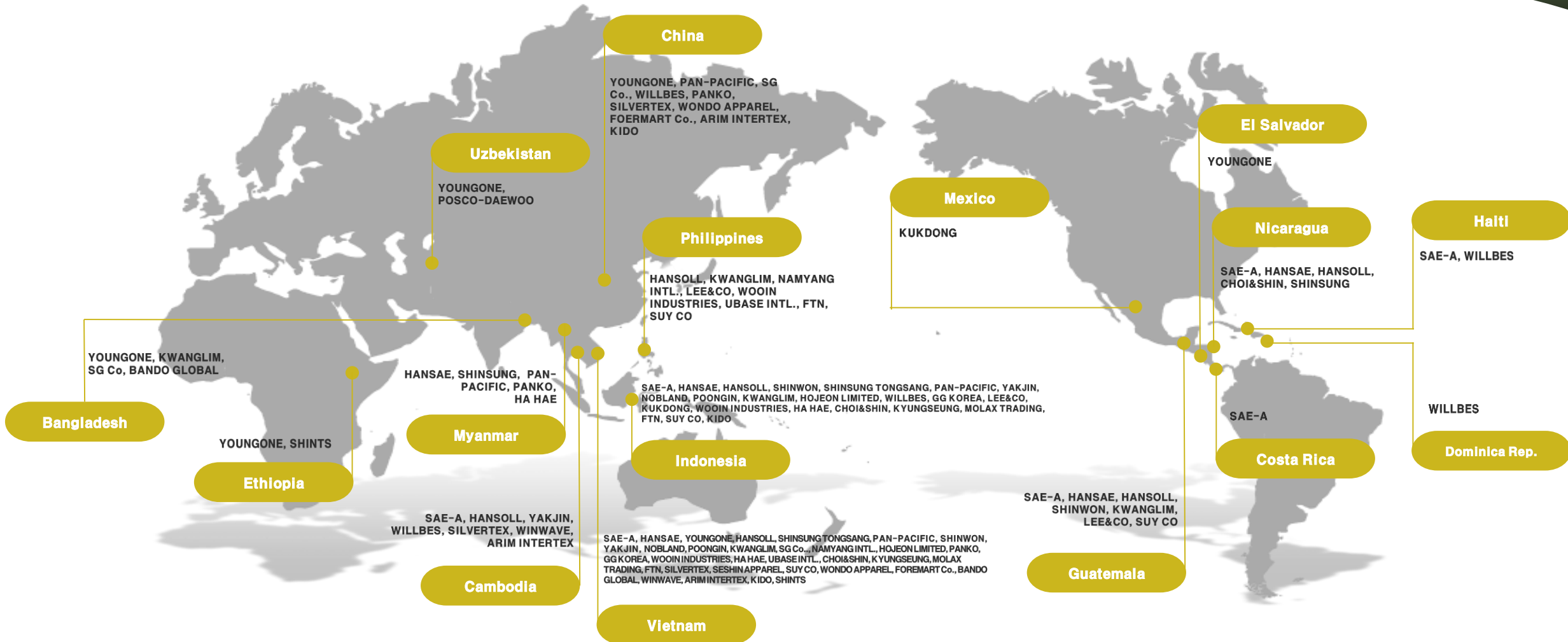


Russia

1. Central Americas : Honduras, El Salvador, Costa Rica, Panama, Nicaragua
2. RCEP: Korea, China, Japan, ASEAN(10 countries), Australia, India, New Zealand
3. MERCOSUR : Brazil, Argentina, Paraguay, Uruguay

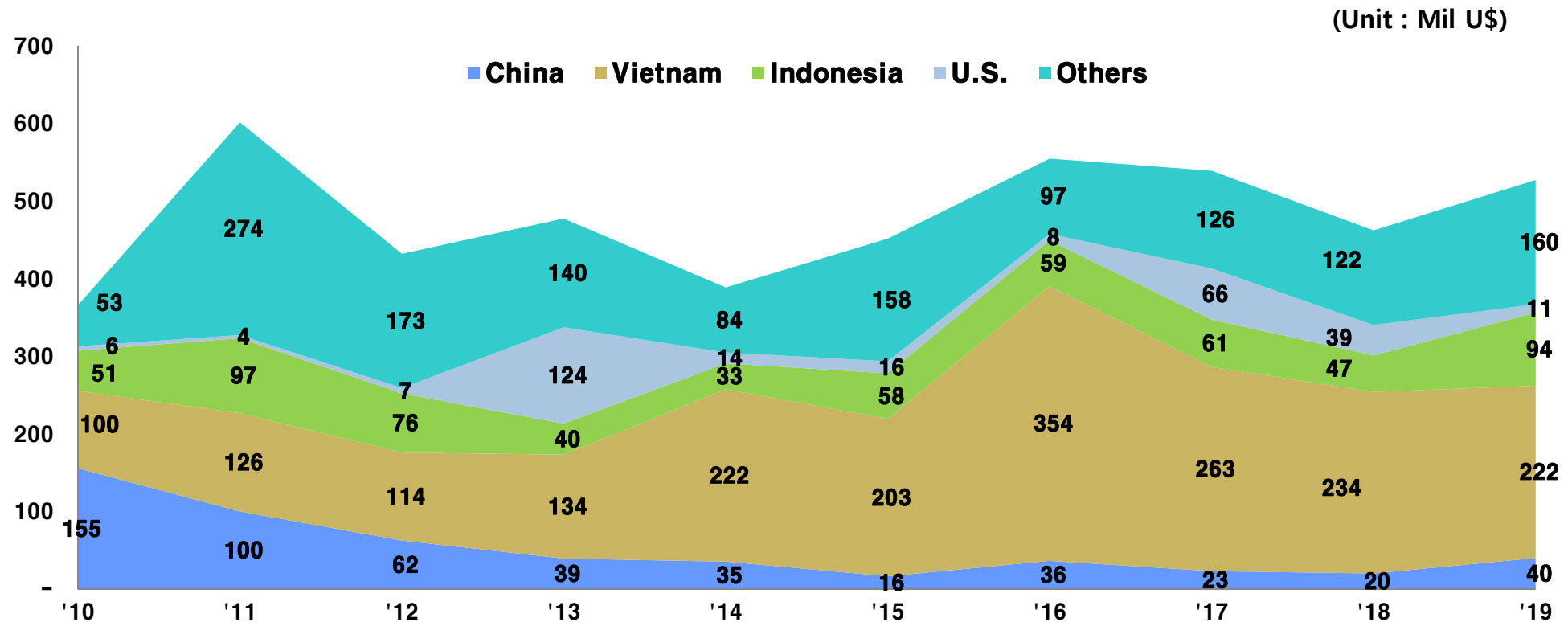
Korean Overseas Investments in Textile & Apparel

Cumulative Investment as of 2019 : \$ 10.2 Billion



Korean Overseas Investments in Textile & Apparel

During the past ten years, investment to Vietnam has continued to increase, whereas investment to China has been on the decline.



Trend of Korea's Textile and Apparel Overseas Investment by Year

Source : Export-Import Bank of Korea

Korean Overseas Investments in Textile & Apparel

- ✓ Overseas investment has slowed down from upward trend due to the uncertainty caused by Covid-19 and the US-China trade war
 - Industry as a whole is taking a wait-and-see approach
 - Worsening domestic business environment likely lead to more companies to invest in foreign countries
- ✓ Increased investment in spinning, weaving & dyeing
 - Establishing vertical integration through investment in Up & Middle Stream
- ✓ Investment in Vietnam and Indonesia has been increasing
 - Investment in Asia's sourcing-hub countries is expected to increase further.
 - EU-Vietnam FTA & Korea-Indonesia CEPA expected to improve trade environment

Human/Cultural Competitiveness of Korean Textile & Fashion Industry



Securing abundant human resources in fashion design field

01



Abundant human resources specialized in digital

02



Korean wave that is expanding across the globe

03

FUTURE AHEAD

You can't solve a problem on the same level that it was created. You have to rise above it to the next level.

- Albert Einstein

