

Korea's Challenges in the age of digital Transformation

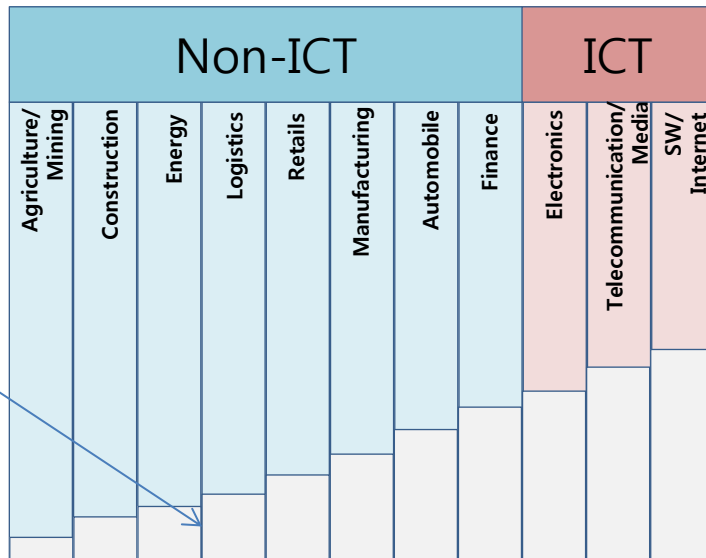
- Recent Innovation Policy Agenda under
new administration**

Byeongwon PARK

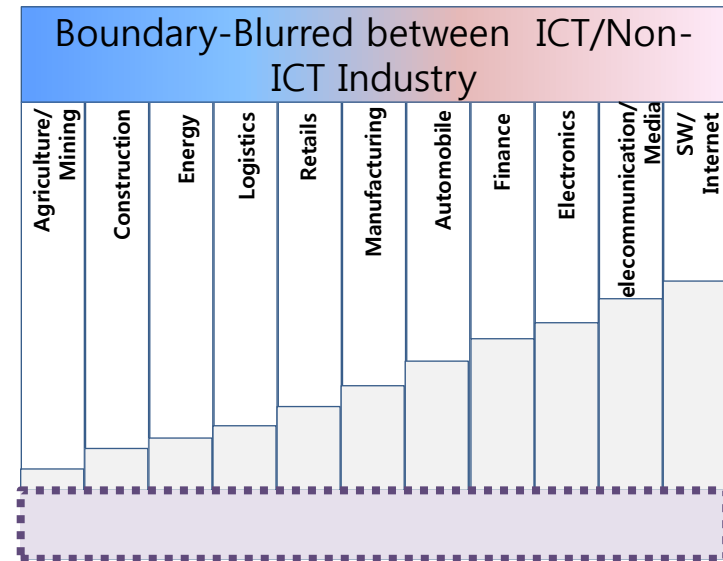
STEPI, Korea

Digitalization → Core Innovation Driver

% of Digital



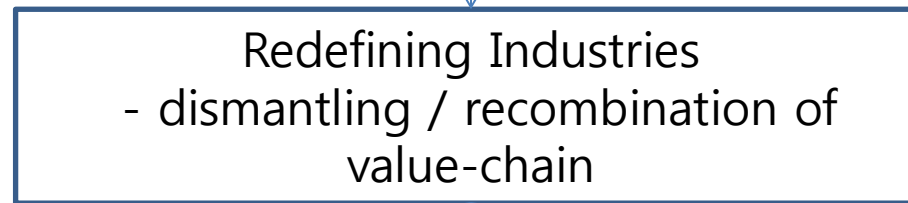
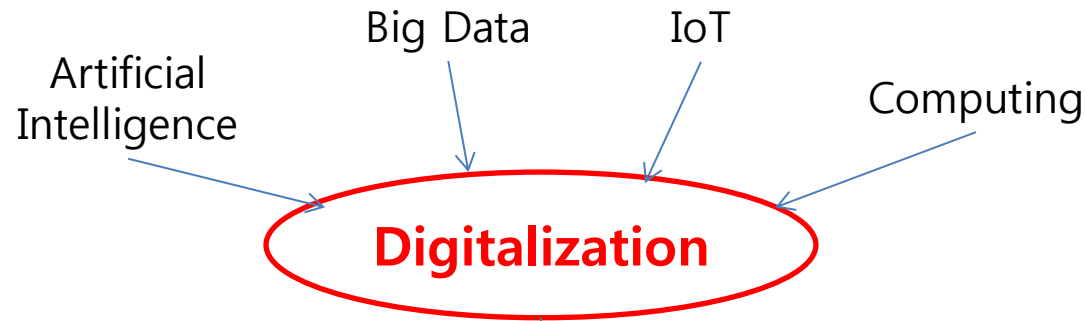
- Digitalization : Not a core function, rather complementary functions to increase operational efficiency
- Taken as a cost center



- All industries becomes ICT-industry
- Digitalization : Critical capability to maximize efficiency and impact (must have)
 - Redefine value-creation mechanism
 - Data driven decision-making

Digital transformation

= redefining of industry, goods/services, business model

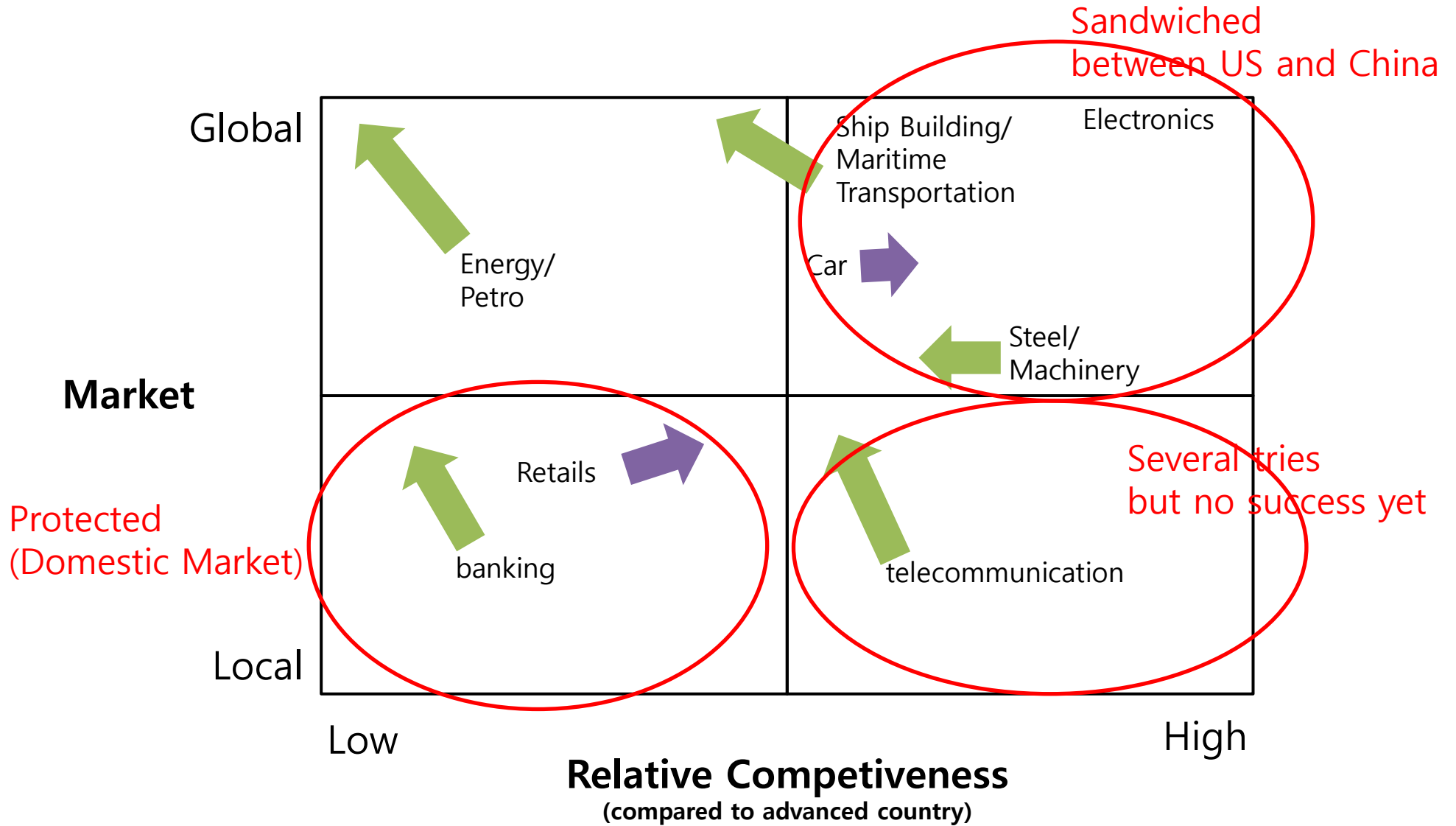


- Fundamental change in value proposition
 - servicetization

- Re-design of current legacy business process through digitalization
 - Lifecycle / lead time/ cost curve

- Ecosystem for new product/service, process

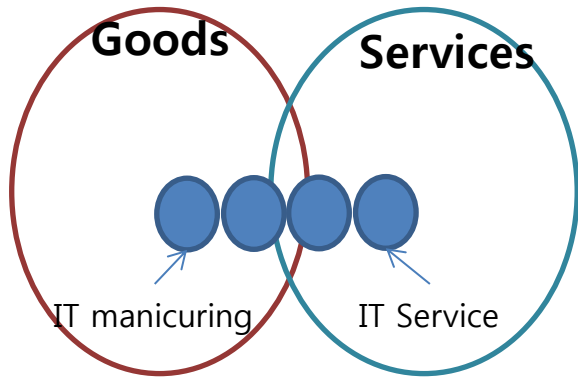
Shift in Korean industrial portfolio



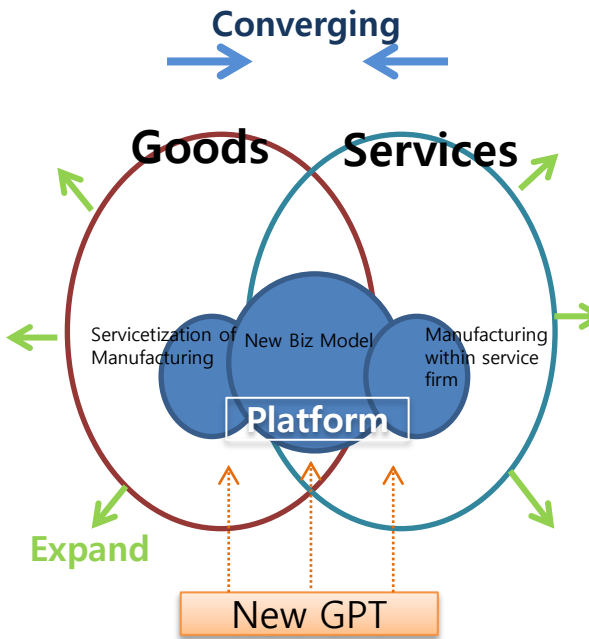
IT revolution (3rd IR)

Digitalization of 4th IR

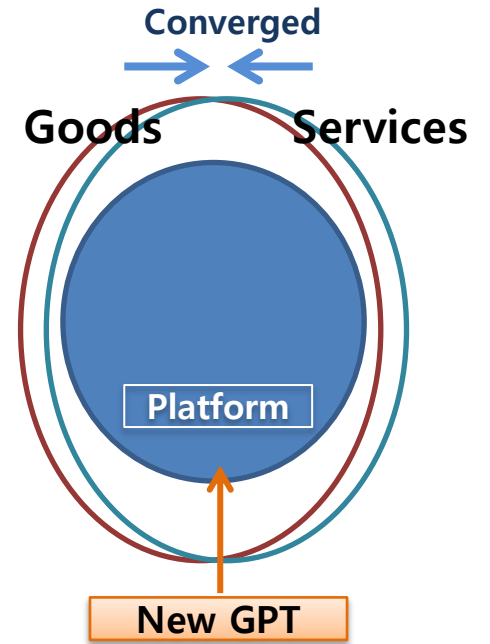
As-is



Innovation Front (current)



To be



= Digital+ Cogno / Bio / Materials

• Combination / converging of several GPT

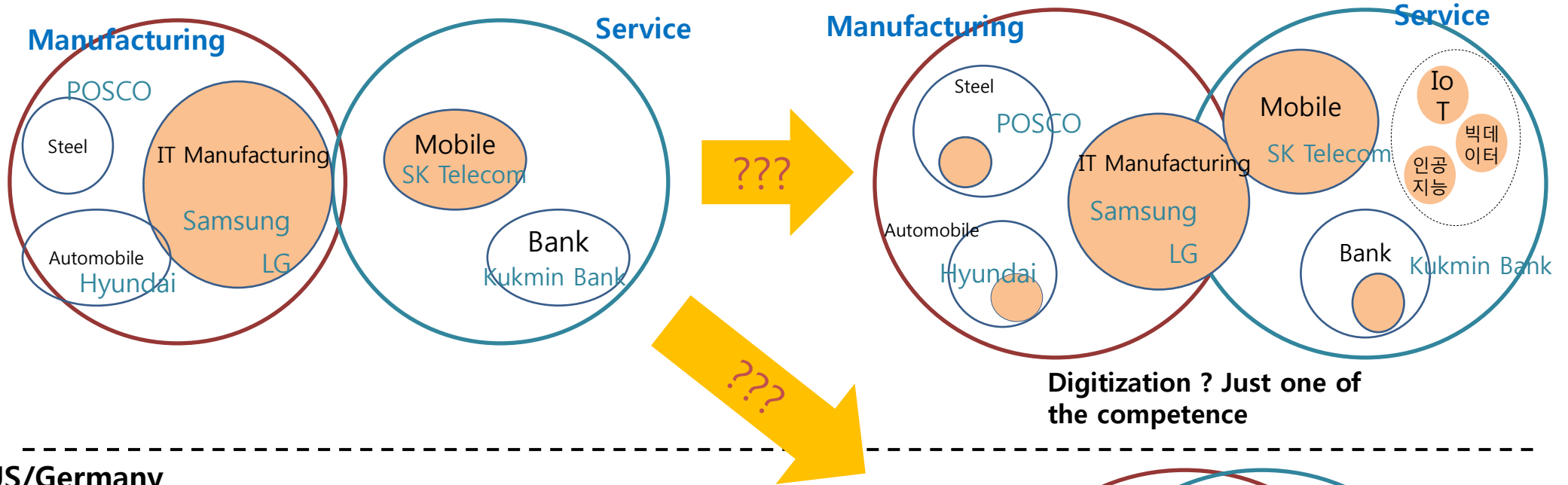
- Co-evolution of production / consumption, Convergence of goods and service
- Increasing importance of un-captured GDP

• Physical System	→	Cyber-physical system (O2O)
• Producer	→	Producer + Consumer
• Supply	→	Supply + Demand (user-driven)
• Goods and Service	→	blurring of goods & service

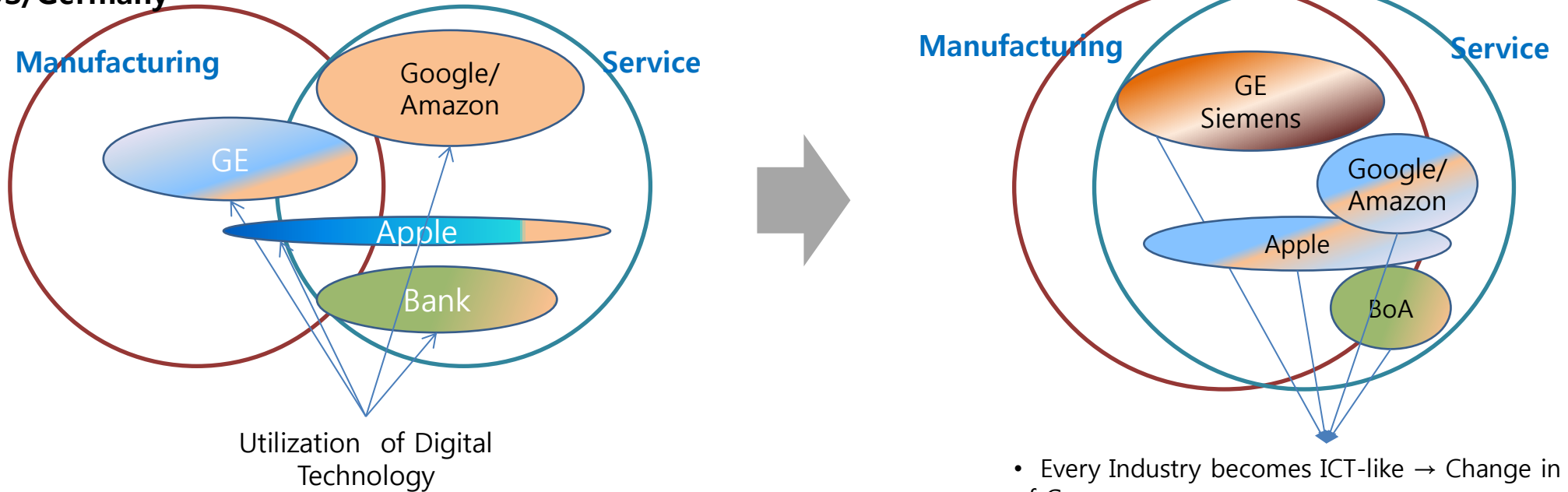
Present

Future

Korea



US/Germany



- Every Industry becomes ICT-like → Change in rule of Game

Innovation Policy Agenda under new administration

- **Currently new executive branch is under construction**
- **Bur several agenda related with Innovation Policy is discussed**

(1) Digitalization : One of three Policy Priority

- **(1) Job creation, (2) 4th IR and (3) low birth rate**
- **Creation of so-called “Presidential Committee for 4th IR”**

(2) Re-established “Office of STI” (revived after 9 years)

- **budget coordination, pre-feasibility study, performance evaluation etc.**

(3) New Ministry “Ministry of SM & venture Enterprises”

(5) Increasing the funding for basic research

END