Post-Capitalism with Digital Transformation

- from deregulation to regulation conversion
- from the tragedy of common to the comedy of Common
- from technology innovation to business model innovation

Prof. Dr. JinHyo Joseph Yu

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Founding EIC of Journal of Open Innovation: Technology, Market, and Complexity

(https://www.sciencedirect.com/journal/journal-of-open-innovation-technology-market-and-complexity)



Journal of Open Innovation Technology, Market, and Complexity



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Aims & Scope

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Scope

Topics of interest include, but are not limited to, the following:

• Economics:

- · Management;
- · Business model design;
- · Public policy and administration;
- Politics;
- Sociology;
- · History of science:
- Philosophy of science:
- Science communication;
- Natural science;
- · Open innovation engineering;
- Non-traditional methodologies such as simulation(agentbased modeling/system dynamics, etc.), grounded theory approach(deep interview, focus group interview, participant observation, etc.), natural experiments, network analysis, and Q methodological research;

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Chesbrough, Henry W. 2003. Open Innovation: the New Imperative for Creating and Profiting from Technology. Boston: Harvard Business School Press.

Ostrom, E. (1990). Governing the commons: The evolution of institutions for collective action. Cambridge university press.

Hess, C., & Ostrom, E. (2007). Understanding knowledge as a commons. The MIT

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From Deregulation to Regulation Conversion Under the digital transformation

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Regulation architecture of open innovation under digital transformation: Case study on telemedicine and for-profit-hospital

JinHyo Joseph Yun a, b, *, Xiaofei Zhao a, b, Zheng Liu c

ARTICLEINFO

Keywords:
Regulation
Regulation conversion
Deregulation
Telemedicine
For-profit-hospital
Open innovation

ABSTRACT

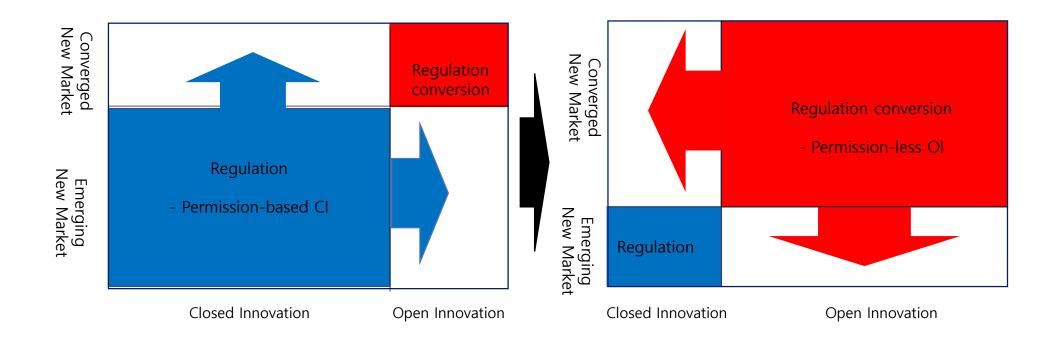
This research seeks to answer the following research question "What kind of regulation architecture can stimulate creative destruction and growth of two different types of new industries like telemedicine, and for-profit-hospital?" Online interview method was used to investigate the telemedicine industry and for-profit-hospitals at Daegu-Gyeongbuk province in South Korea and Cardiff-Wales in the UK. Findings provided following grounded theories. First, the way to create a converted new industry is not deregulation but regulation conversion. Though, deregulation helps to expand the modern market, it could disturb the emergence and growth of new markets. Second, the regulation can be an essential policy method to create emerging new markets when there are enough (potential) suppliers owing to technological developments or the accumulation of a new workforce equipped with new technologies. According to the UK for-profit-hospitals, regulations for consumer protection and decreasing transaction costs or complexity in the new market could trigger market creation. Third, digital transformation has motivated open innovation dynamics in all industries. The expanded open innovation dynamics with digital transformation can promote, most of all, the appearance of converted new industries like telemedicine.

a Daegu Gyeongbuk Institute of Science and Technology, South Korea

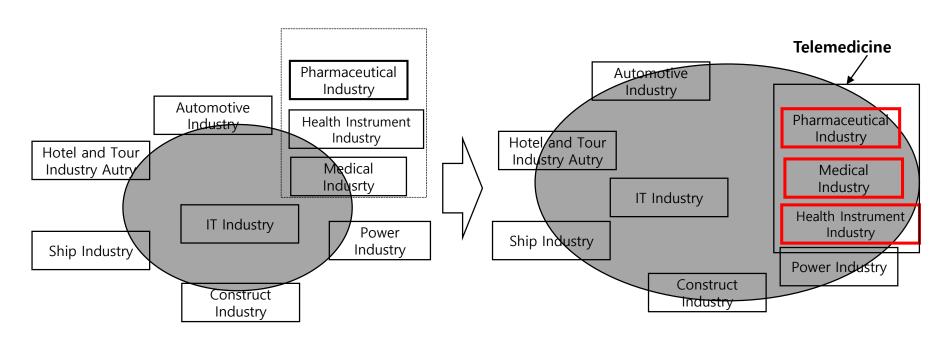
b Open Innovation Academy, South Korea

^c University of Greenwich, UK

Transaction of Major New Market with Digital Transformation



Appearance of Telemedicine with digital transformation

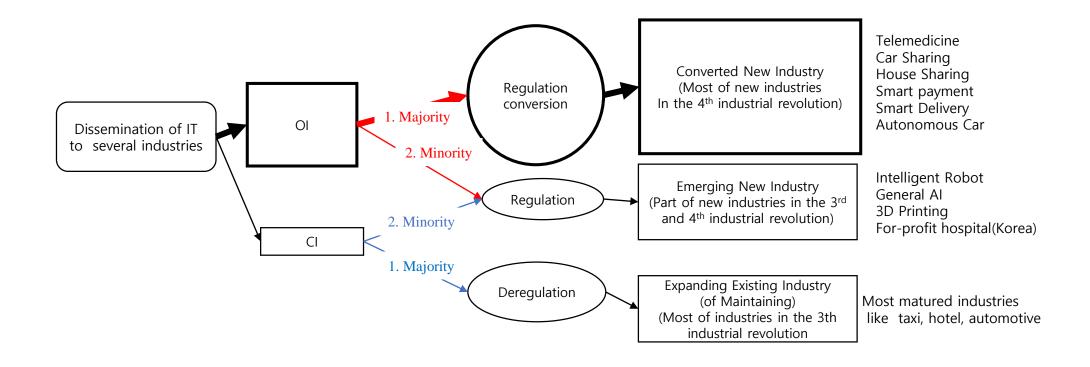


1st IT revolution(20th Century)

Digital Transformation(2nd IT revolution)

Figure. Expanding of Digitalization Scope in Digital Transformation

Process Logic of regulation conversion 1



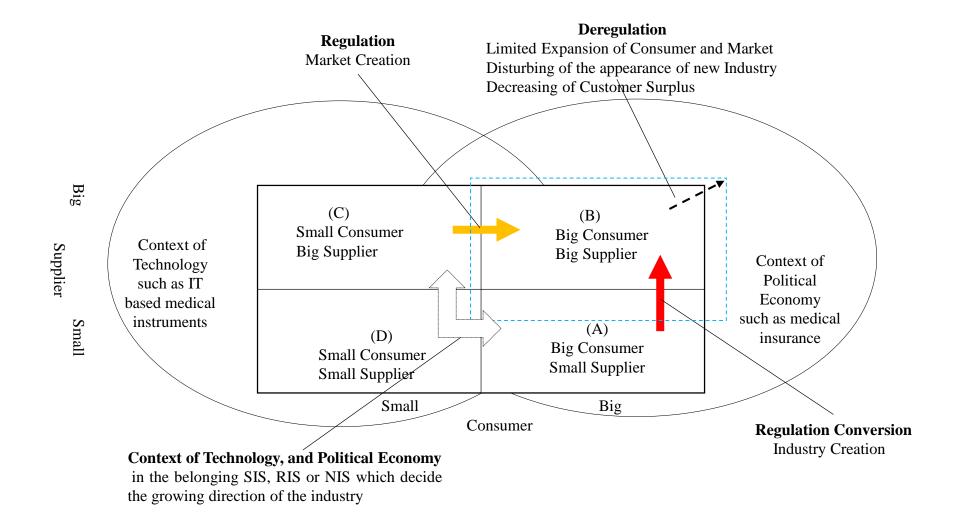
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- Research Question
- Research Framework
- Telemedicine of South Korea
- Telemedicine of United Kingdom
- For-Profit Hospital of South Korea
- For-Profit Hospital of United Kingdom
- Summary of Research Results
- Comparing between regulation conversion and deregulation
- Implication

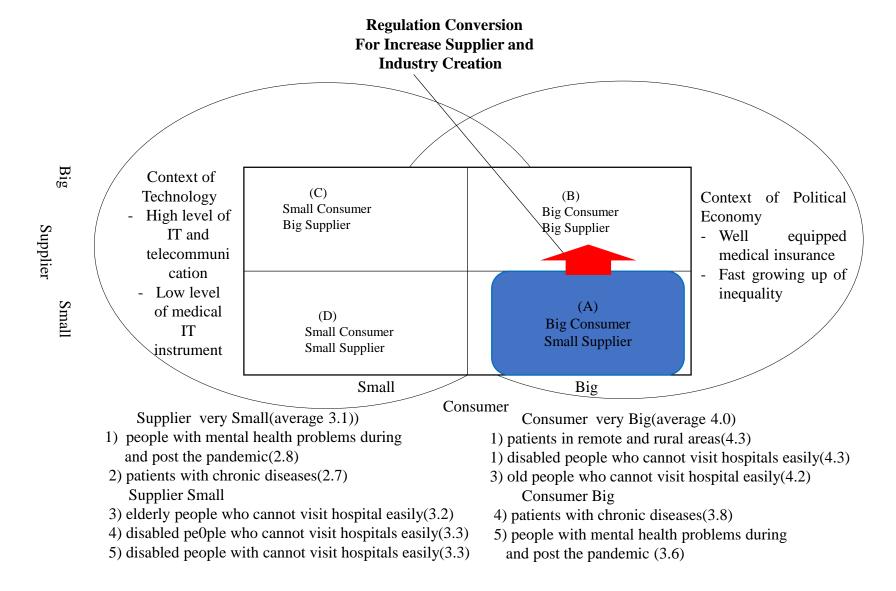
Research Question

• "What kind of regulation architecture can stimulate creative destruction and growth of two different type of new industries like telemedicine and for-profit-hospital with open innovation dynamics under the digital transformation?"

Research Framework



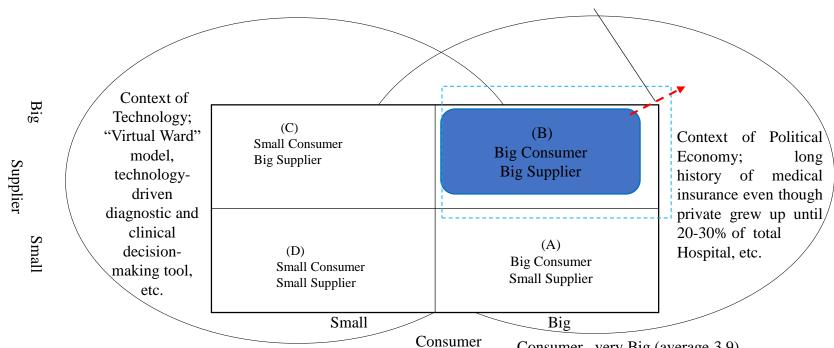
Telemedicine of South Korea



Telemedicine of United Kingdom

Deregulation

Limited Expansion of Consumer and Market



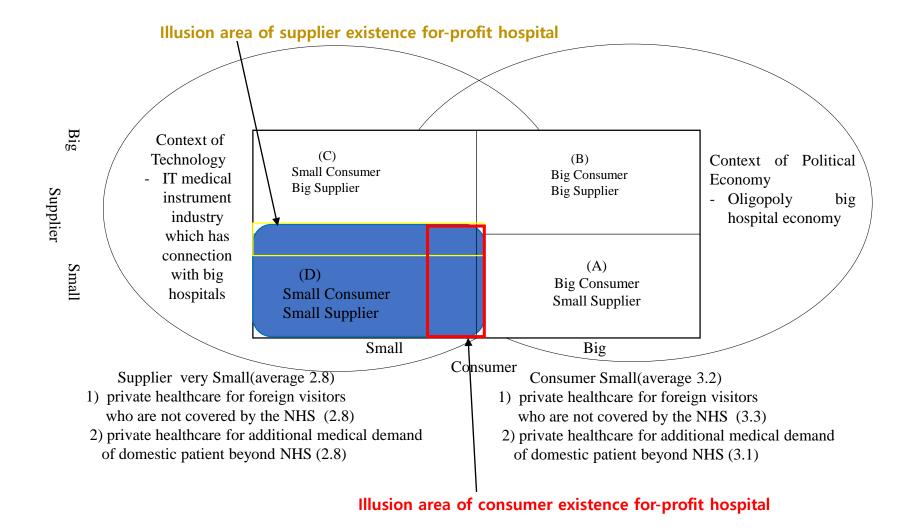
Supplier very Big(average 4.1)

- 1) patients in remote and rural areas(4.1)
- 1) elderly people who cannot visit hospital easily(4.1)
- 1) disabled people who cannot visit hospitals easily(4.1) Suppler Big
- 4) patients with chronic diseases (3.8)
- 5) people with mental health problems during and post the pandemic(3.7)

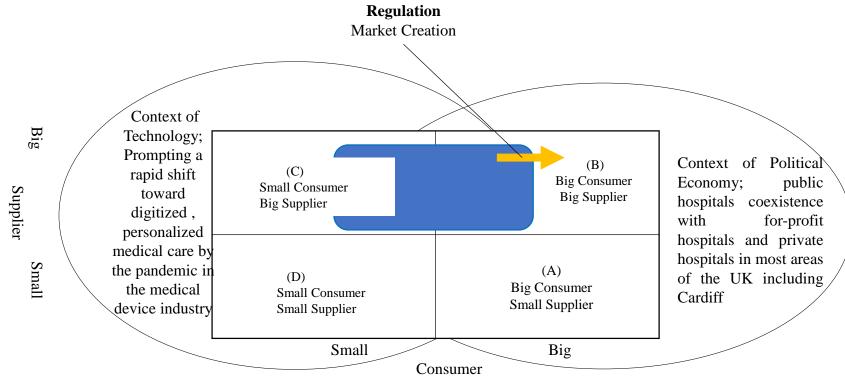
Consumer very Big (average 3.9)

- 1) disabled people who cannot visit hospitals easily(4.1)
- 2) patients in remote and rural areas(4.1)
- 2) elderly people who cannot visit hospital easily(4.1) Consumer Big
- 4) people with mental health problems during and post the pandemic (3.7)
- 5) patients with chronic diseases (3.6)

For-profit hospital of South Korea



For-profit hospital of United Kingdom



Supplier very Big(average 3.7)

of domestic patient beyond NHS (3.9)

Supplier Big

2) private healthcare for foreign visitors who are not covered by the NHS (3.5) Consumer Big(average 3.6)

1) private healthcare for additional medical demand 1) private healthcare for additional medical demand of domestic patient beyond NHS (3.8) consumer Small

> 2) private healthcare for foreign visitors who are not covered by the NHS (3.3)

Summary of Research Results

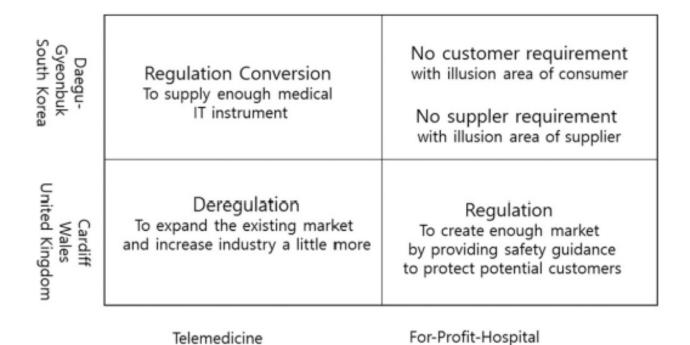


Fig. 8. Summary of research results.

Comparing between Regulation conversion and Deregulation

Table 5
Comparing regulation conversion and deregulation.

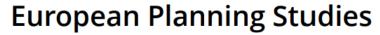
Contents	Reregulation Conversion	Deregulation
Goal	Constructing New Industry	Maximizing the modern market with the sacrifice of new industry and consumer surplus.
Effects	Emerging and Growing up of converted new market with the decrease of modern market	Short term growing up of modern market with the delay of growing of new market

Implication

- The way to create converted new industry is not deregulation but regulation conversion.
- Second, regulation can be an essential policy method to create new market, when there are enough (potential) suppliers due to technology developments, or accumulation of new manpower equipped with new technologies.
- The expanded open innovation dynamics with digital transformation can promote the appearance of open business models for converted new industry

From the Tragedy of Common to the Comedy of Common(1) Under the Digital Transformation







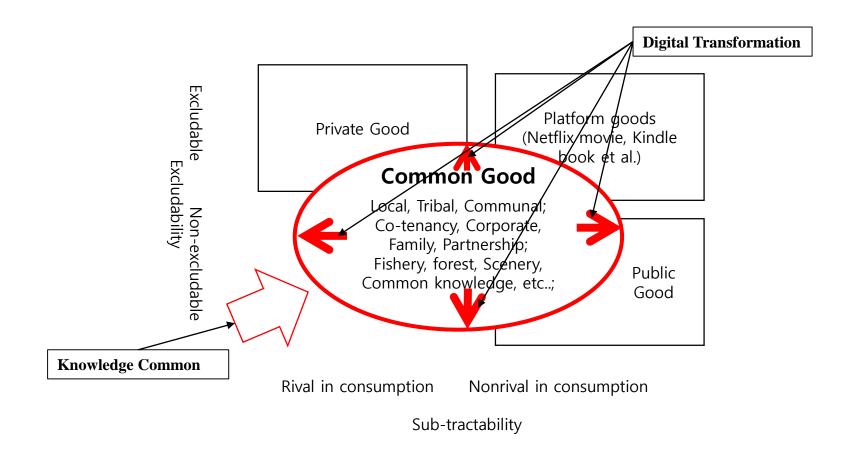
ISSN: (Print) (Online) Journal homepage: https://www.tandfonline.com/loi/ceps20

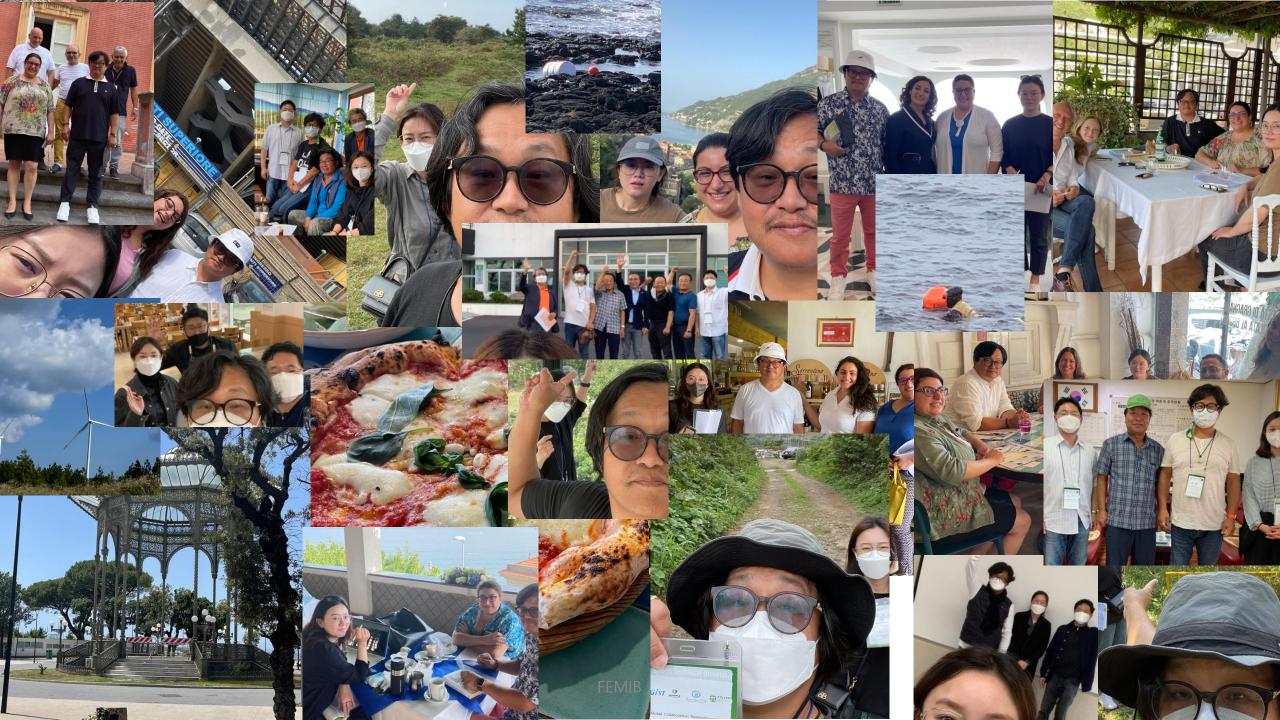
The way to the 'comedy of commons' of a new business model-finding from Naples in Italy, and Jeju Island in South Korea

JinHyo Joseph Yun, Xiaofei Zhao, KyungBae Park, Valentina Della Corte & Giovanna Del Gaudio

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The Expansion of Common Goods with Digital transformation





GOVERNING

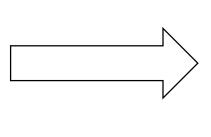
the **COMMONS**

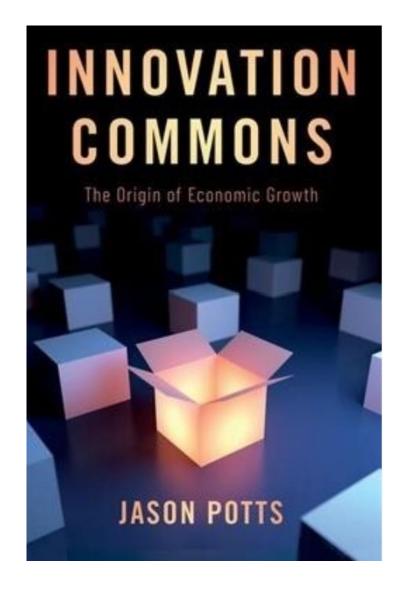




The Evolution of Institutions for Collective Action



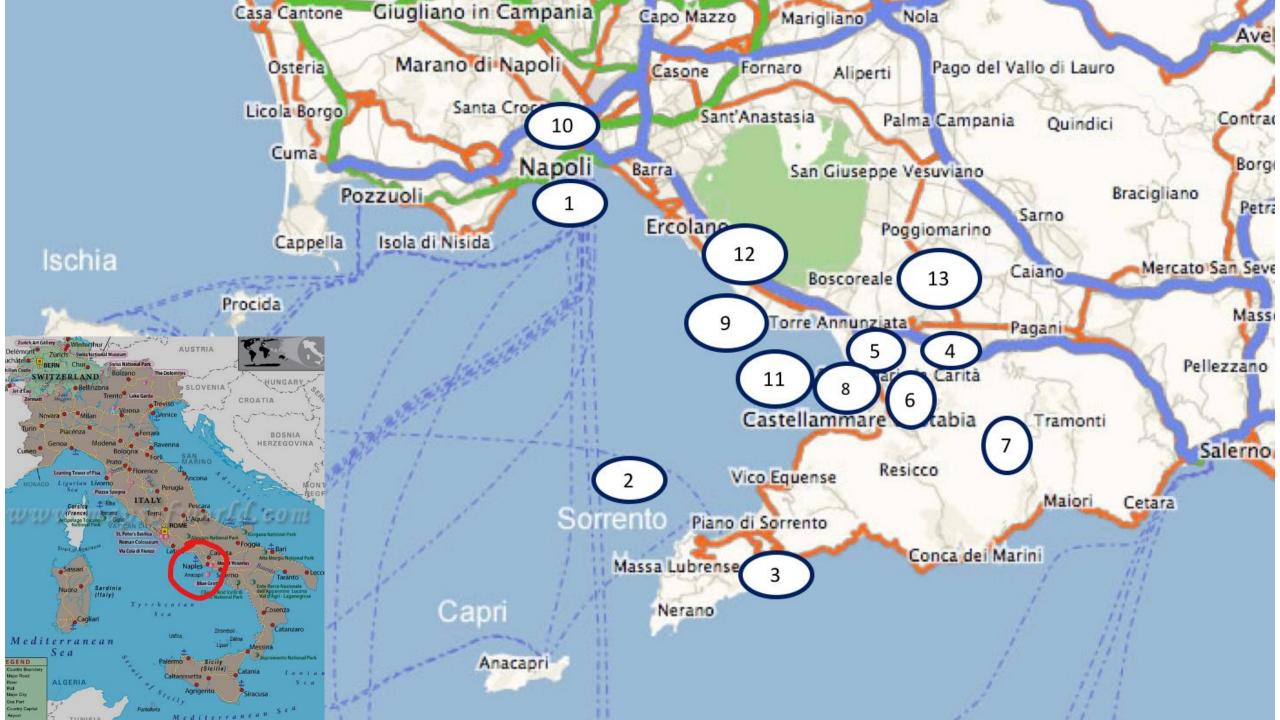




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- Research Framework
- Common Fishery in Jeju Island, Korea
- Common Pasture in Jeju Island, Korea
- Common Goods in Naples, Italy
- Discussion: Grounded Theories



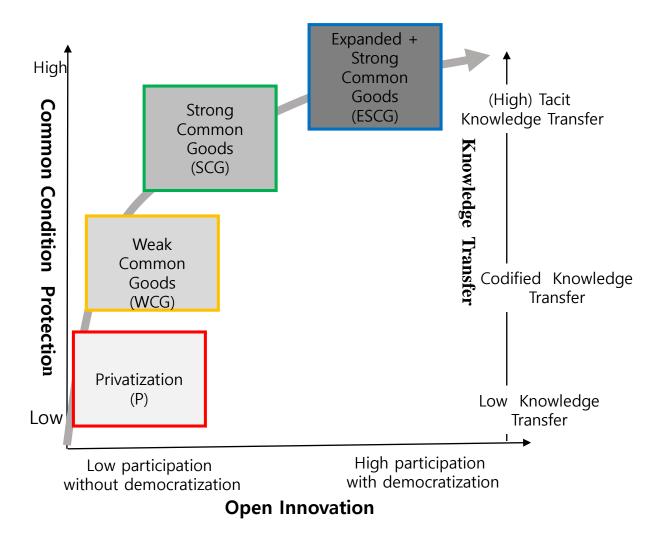


Research Question

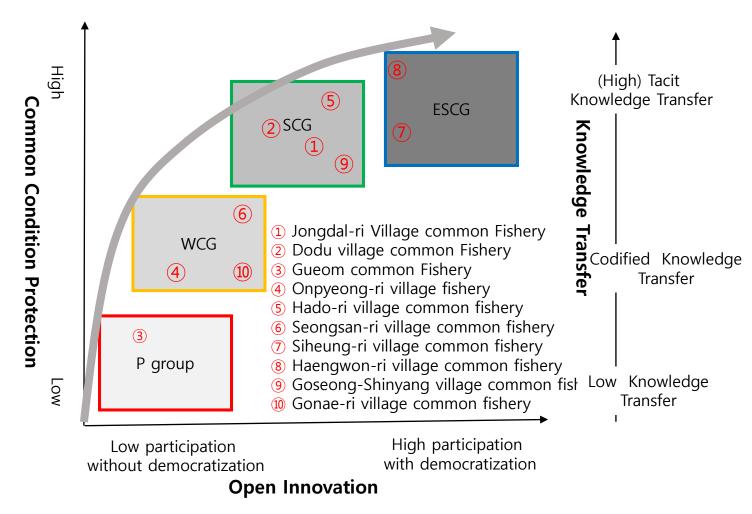
• Are there any common success factors which can be applied to produce and use common goods in different economy conditions?

We want to know the success conditions and factors of the common good from diverse capitalist economy for us to apply these at the venture ecosystems, regional innovation ecosystem, or sharing & social platforms which treat new technologies or business models as common goods when people collaborate to commercialize them.

Research Framework



Common Fishery in JeJu Island, Korea



The evolution of Bulteuk, which is the base of the common good of HeaNeu











Expanded BM with Strong Common Goods

7 Siheung-ri village common fishery

8 Haengwon-ri village common fishery

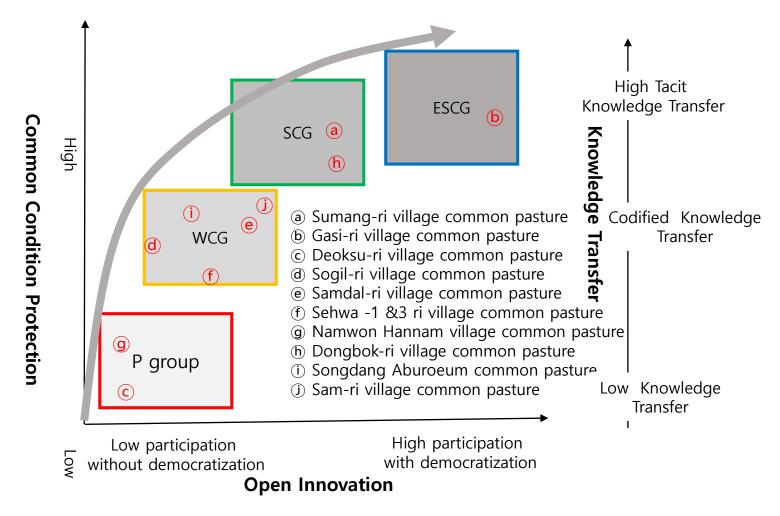
Privatization Goods

• 3 Gueom common Fishery





Common Pasture in JeJu Island, Korea



Two way of evolution of Common Pasture in JeJu island, Korea

Increase of democratic participation based

Diversification of BM of Common Pasture









Sell and destroy of the common and community



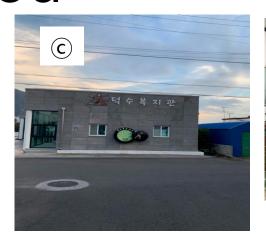
Expanded BM with Strong Common Good

(b) Gasi-ri village common pasture



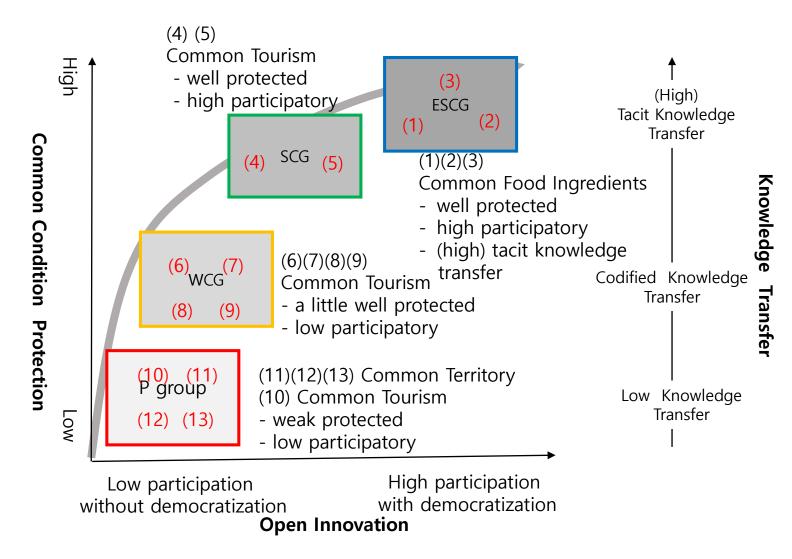
Privatization Common Good

- © Deoksu-ri village common pasture





Common Goods in Naples, Italy



Expanded BM with Strong Common Goods

- Naples and Sorento regions Common Food Ingredients
- (1) Common raw materials-(Neapolitan pizza)
- (2) Common Food and agriculture-Sorrento Slow Food(an international non-profit association)
- (3) Common raw materials in Amalfi







Privatization Common Goods

- Common Territory and Common tourism
- (10) the Naples stadium
- (11) Confcommercio; Downtown common stage; Common goods of the territory;
- (12) MAVV wine art museum
- (13) Common vineyards-Sorrentino Vini









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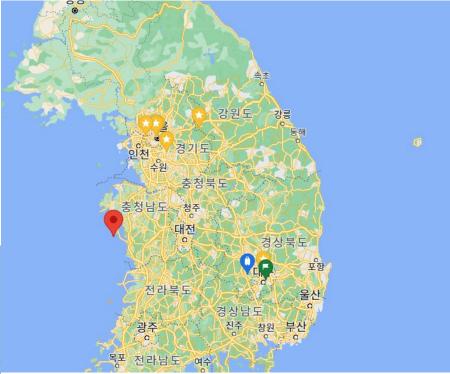
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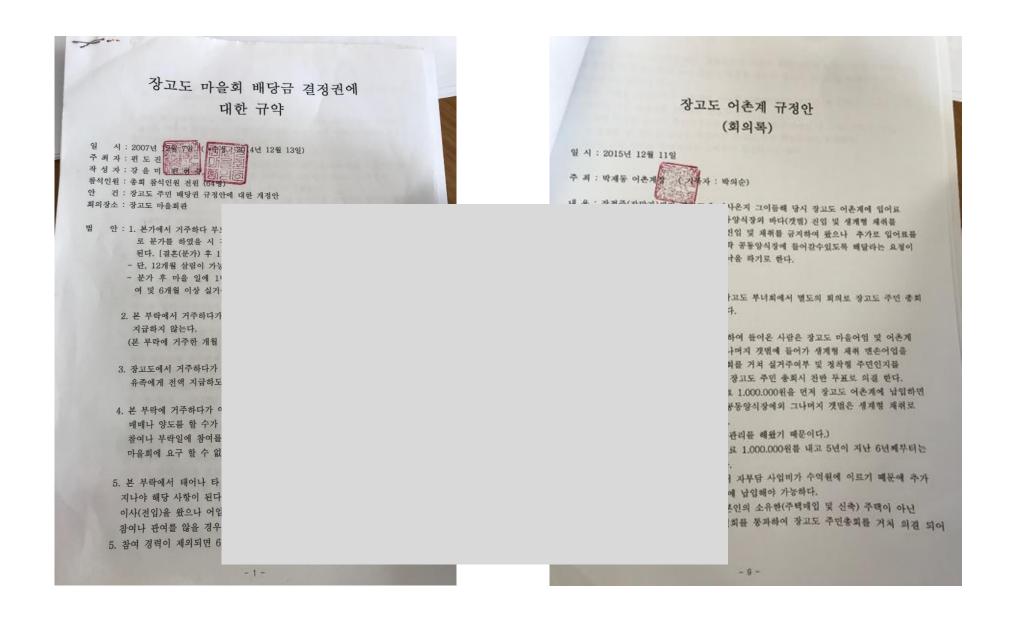
Another example of expanded BM with Strong Common Fishery Good

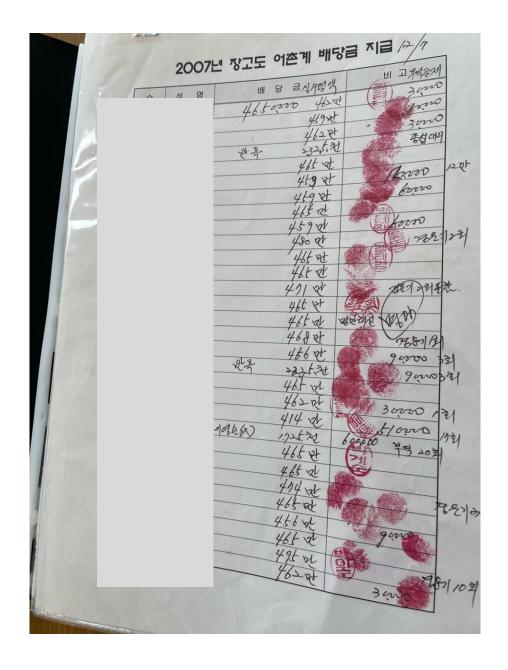
Jang-go-do in South Korea

- Sea slug + Abalone (Indirect participation) → 10,000\$
 This common good based basic income of every member/per year
- Littleneck clam (direct participation) → 20,000\$
 This common good based basic income of every member/per year.
- -- > Per House member , average per year basic income; 30,000\$
- Additional business model from common goods:
- a) self sea-in swimming and hunting of Sea Slug and Abalone
- b) payable Sea town experience course
- c) Sea town common hotel business







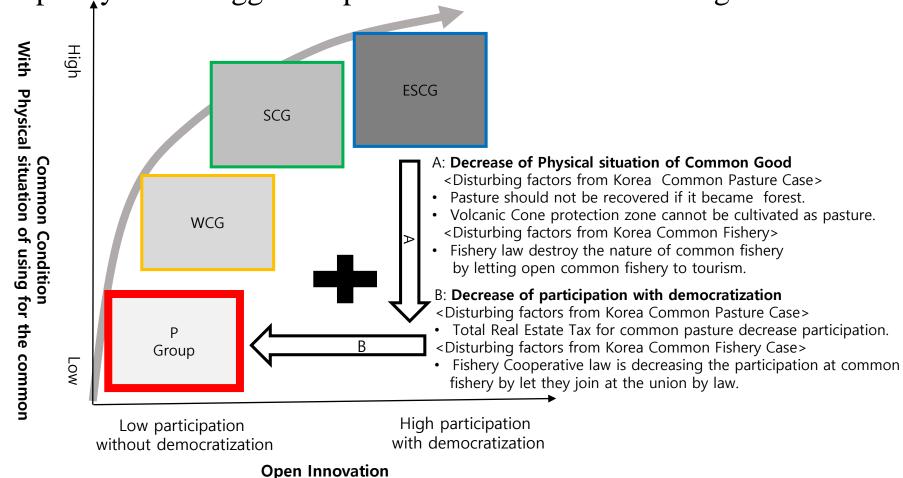


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Grounded theories

1. In digital transformation,

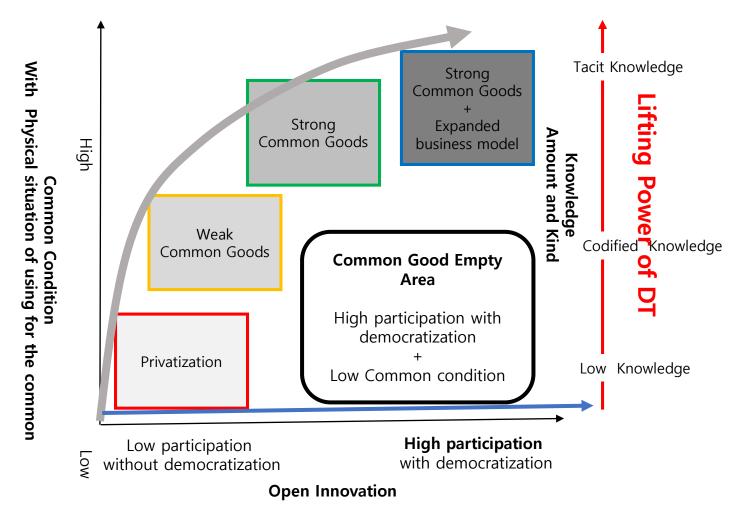
false public policy could trigger the privatization of the common good.



Discussion: Grounded Theory

2. High participation under digital transformation can escape 'the common good

empty area'



Discussion: Grounded theory

3. In digital transformation, common good could activate the regional innovation system

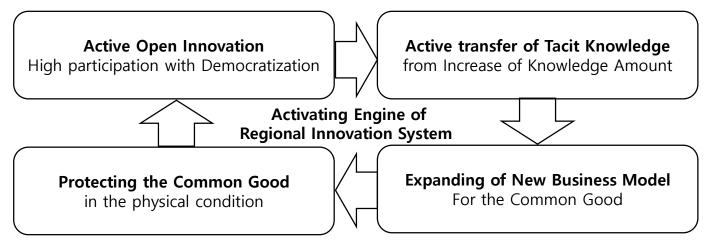


Figure 8. Activating Engine of Regional Innovation System

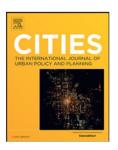
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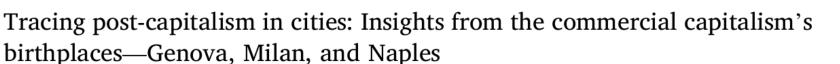


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Cities

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JinHyo Joseph Yun^{a,d,*}, Xiaofei Zhao^{a,d}, Giovanna Del Gaudio^{b,**}, Valentina Della Corte^b, Tan Yigitcanlar^c

ARTICLE INFO

Keywords:
Post-capitalism
Post-capitalist city
Post-capitalist society
Open innovation
Naples, Milan and Genova

ABSTRACT

Research on the sustainability of capitalism and the indication of post-capitalism is growing rapidly. What types of post-capitalism clues in the 21st century can be found in the three Italian cities of Genova, Milan, and Naples, which are the origins of commercial capitalism? These cities, Genova, Milan, and Naples, which have a long history from the inception of commercial capitalism from the 13th century to the present day, reveal the signs of modern capitalism's transition. The findings are as follows: (a) If the fashion industry in large businesses adopts closed open innovation to mitigate the risks of growth without employment and ecological hazards, they will exhibit signs of post-capitalism; (b) If family firms engage in social open innovation within the culture and entertainment

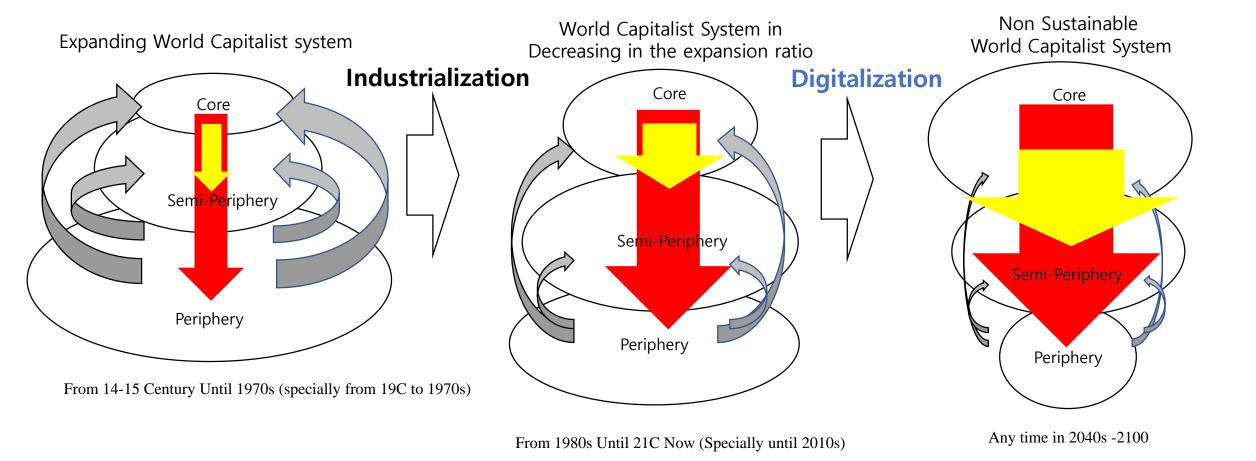
a Daegu Gyeongbuk Institute of Science and Technology (DGIST), 333, Techno Jungang Daero, Hyeongpung-Myeon, Dalseong-Gun, Daegu 42988, Republic of Korea

^b University of Naples Federico II, Italy

^c Queensland University of Technology, Australia

^d Open Innovation Academy, Republic of Korea

Change of World Capitalist System with Digital Transformation



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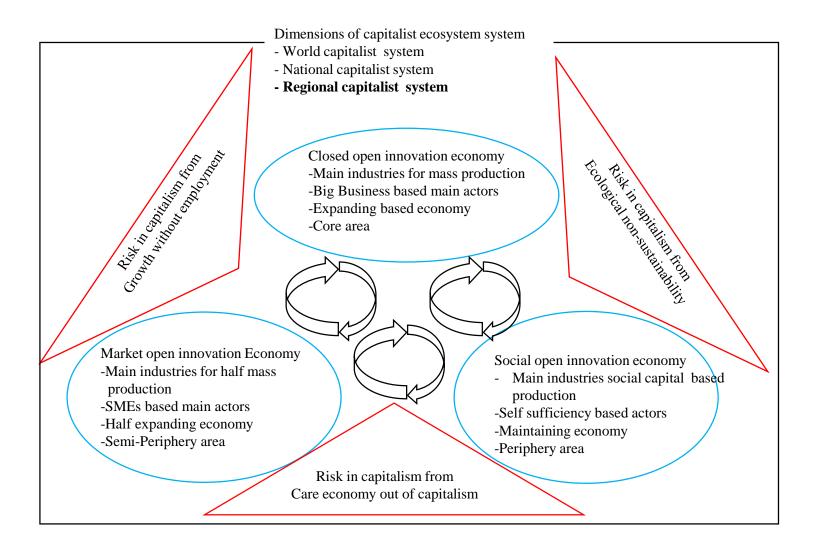
- Research Gap
- Research Question
- Research method and scope(1-3)
- Literature Review (1-2)
- Research Framework; Dynamic Balance of World Capitalist System
- Clues of post-capitalism in Genova
- Clues of post-capitalism in Milano
- Clues of post-capitalism in Naples
- Comparing the three cities in terms of major actors and industries
- Grounded theory: clues of post-capitalism economy

Research Question

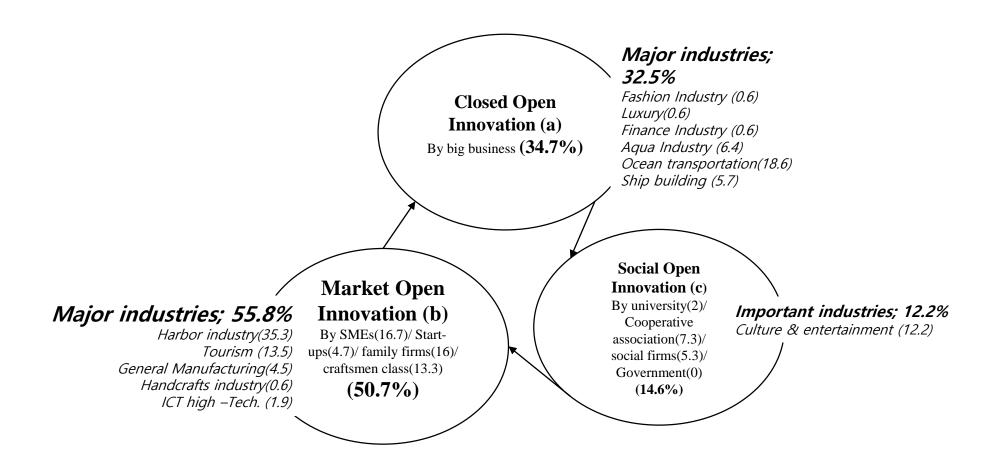
• Genova, Milano, and Naples are Italian 3 cities have long history from the starting time of commercial capitalism in 13, 14 centuries until now with the clues of post-capitalism in the 21st century, which are evolving totally differently each other even though their location are not so far each other.

• What different clues of post-capitalism in the twenty-first century are found in the three cities, namely, Genova, Milano, and Naples, which are known to have different environmental, social, and economic contexts, with the degenerating world economy of inequality and sustainability?

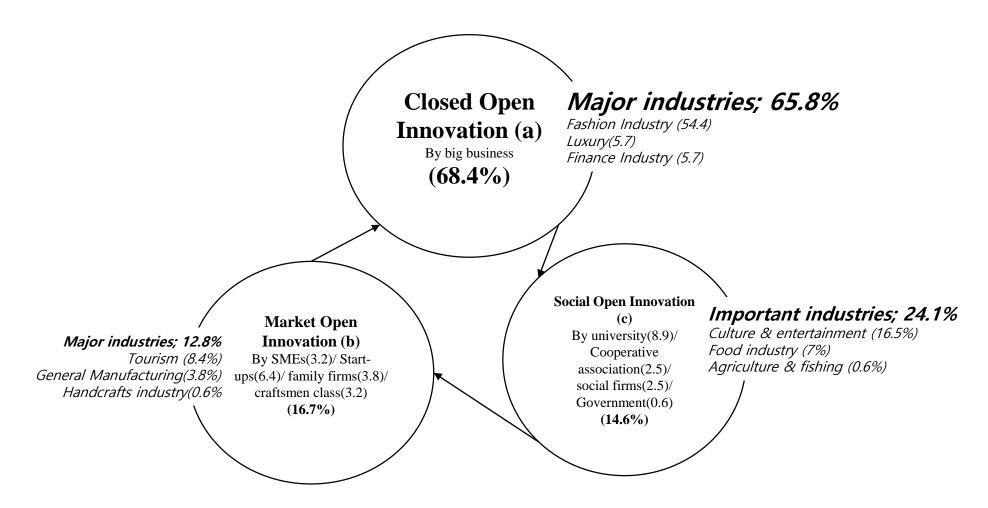
Research Framework; Dynamic Balance of Capitalist Economy System



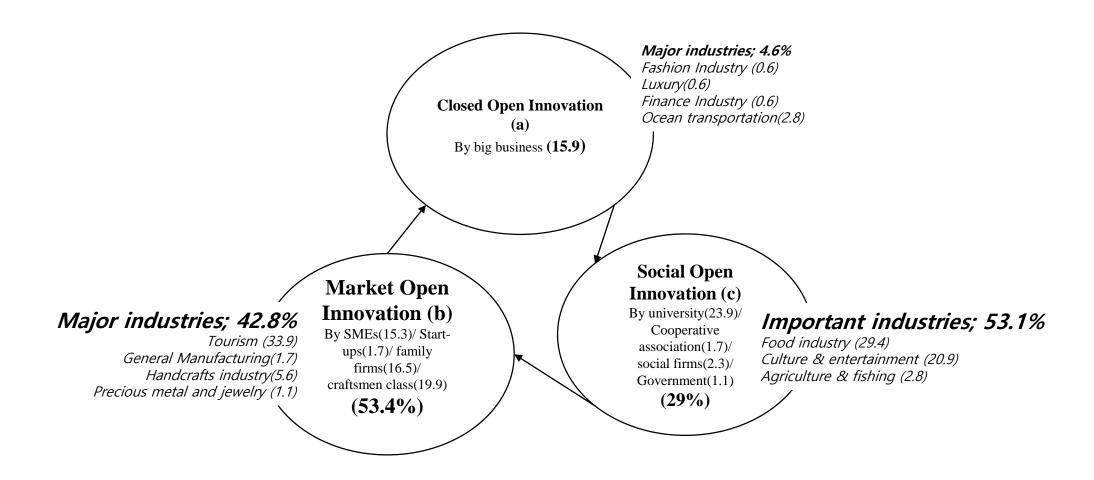
Clues of post-capitalism in Genova



Clues of post-capitalism in Milano



Clues of post-capitalism in Naples



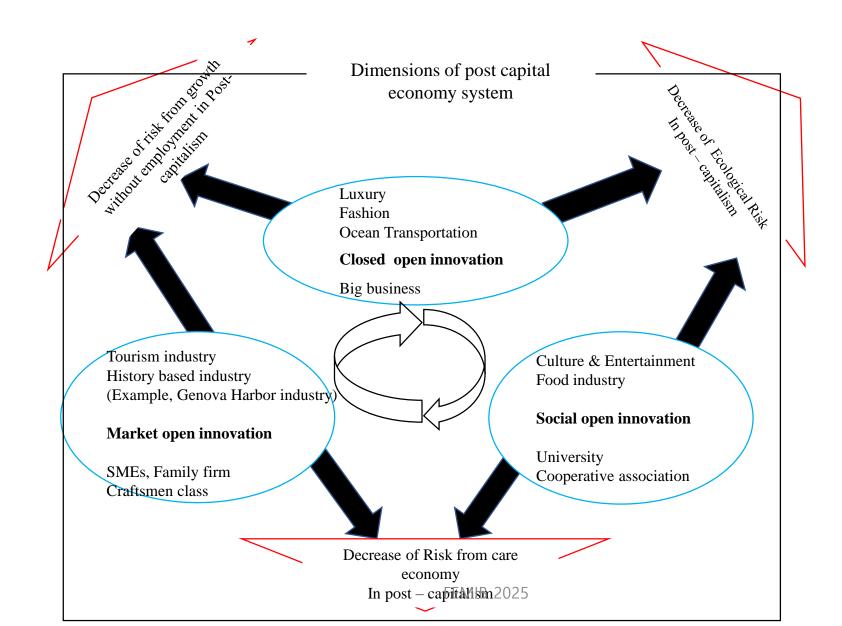
Summary, Comparing of 3 cities

Common Goods based Main Industries

3 cities/ Categories	Genova	Milano	Naples	
Belonging OI system -main economy actors	Market OI (50.7%) - SMEs (16.7%) - Family firm(16%) - Craftsmen class(13.3%)	Closed OI (64.4%) - Big Business (64.4%)	Market OI(53.4%) - Craftsmen class(19.9%) - Family firms(16.5%) - SMEs(15.3%)	
Belong OI system -main industries	Market OI (55.8) - Harbor Industry(35.5%) - Tourism(13.5%) - General Manufacturing(4.5%)	Closed OI (65.8%) -Fashion industry(54.4%) -Luxury(5.7%) -Finance Industry(5.7%)	Social OI (53.1%) - Food industry(29.4%) - Culture & entertainment(20.9)	
			- Agriculture & Fishing(2.8%)	
Four economic actors	Big business (34.7%) Family firms(16%) Craftsmen class (13.3%) Cooperative association(7.3%)	Big business (68.4%) Craftsmen class (16.7%) University (8.9%) Start-ups (6.4%)	University (23.9%) Craftsmen class(19.9%) Family firms(16.5%) SMEs (15.3%)	
Four economic industries	Harbor industry (35.5%) Ocean transportation (18.6%) Tourism (13.5%) Culture & entertainment (12.2%)	Fashion industry (54.4%) Culture & entertainment (16.5%) Tourism (8.4%) Food industry (7%)	Tourism (33.9%) Food industry(29.4%) Culture & Entertainment(20.9%) Handcrafts industry(5.6%)	

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Grounded Theory: Clues of post-capitalism economy



From Technology Innovation to Business Model Innovation Under the Digital Transformation



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Leveraging business model innovation through the dynamics of open innovation: a multi-country investigation in the restaurant industry

Business model innovation

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Department of Economics Management Institutions, University of Naples Federico II, Naples, Italy, and

Yuri Sadoi

Faculty of Economics, Meijo University, Nagoya, Japan

Abstract

Purpose – As the restaurant industry is a representative service industry, long-living restaurants could carry the secrets of key factors that are needed to establish "sustainable business models" in service industry. The authors aim to answer the following question: How can restaurants innovate business model sustainably to last for more than 50 years through the era of digital transformation with open innovation dynamics?

Design/methodology/approach – Five long-lived restaurants from Daegu, Kyoto and Naples were selected separately by using the snowballing approach, and were analyzed through in-depth interviews and participatory observations

Open Innovation as the power engine of business model innovation in digital transformation

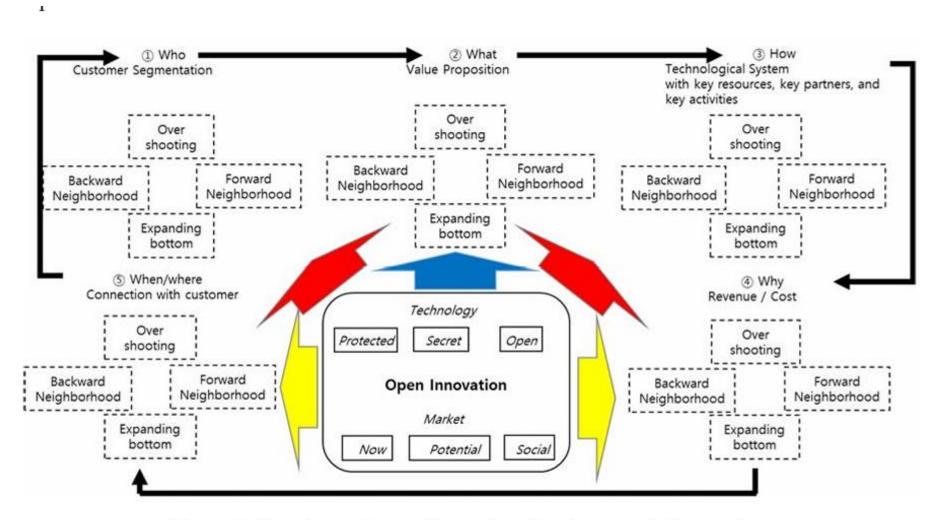


Figure 7. Open innovation as the engine of business model innovation.

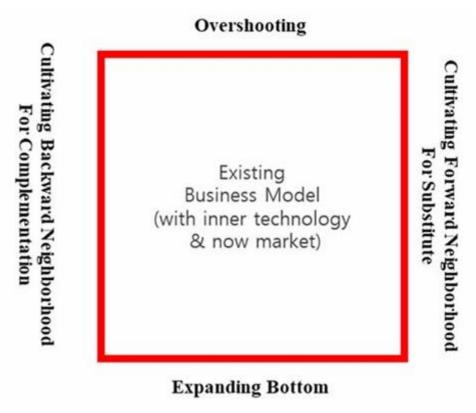


Figure 1. Research Framework I: rectangular compass concept building for business model innovation.

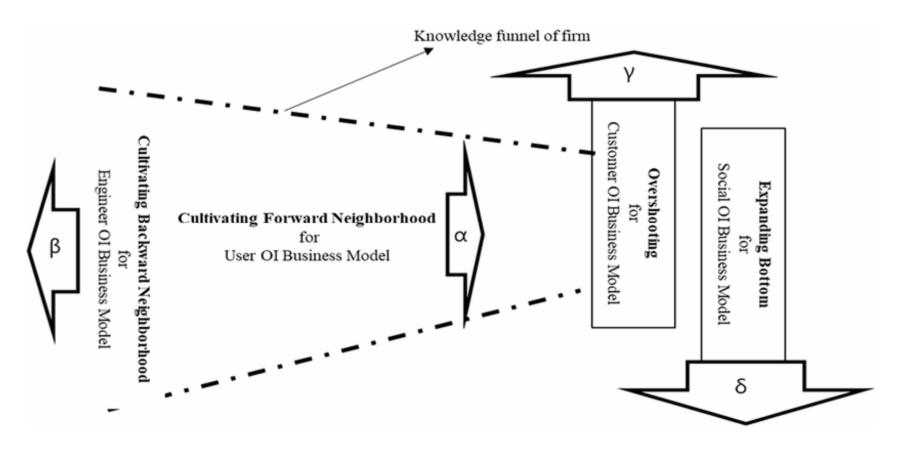


Figure 2. Research Framework II: rectangular compass in the knowledge funnel.

2.3. Research Scope and Method

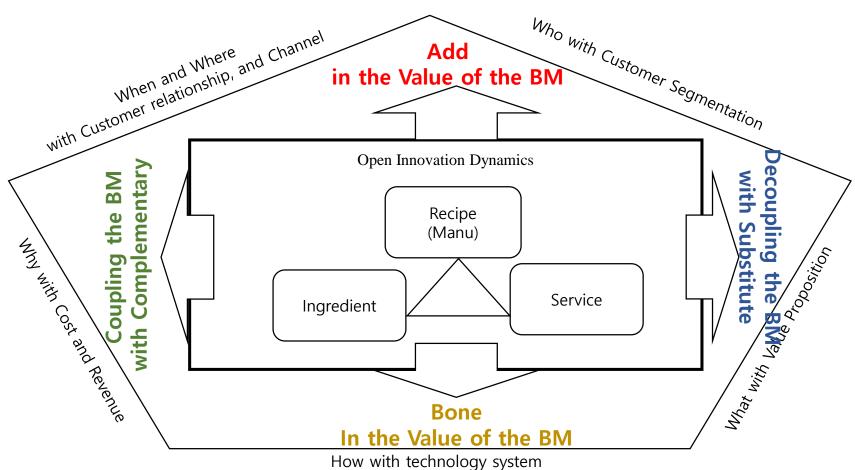
Contents

- Research Question
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- Analysis (1); Korea long-lived restaurants
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- Discussion

Research question

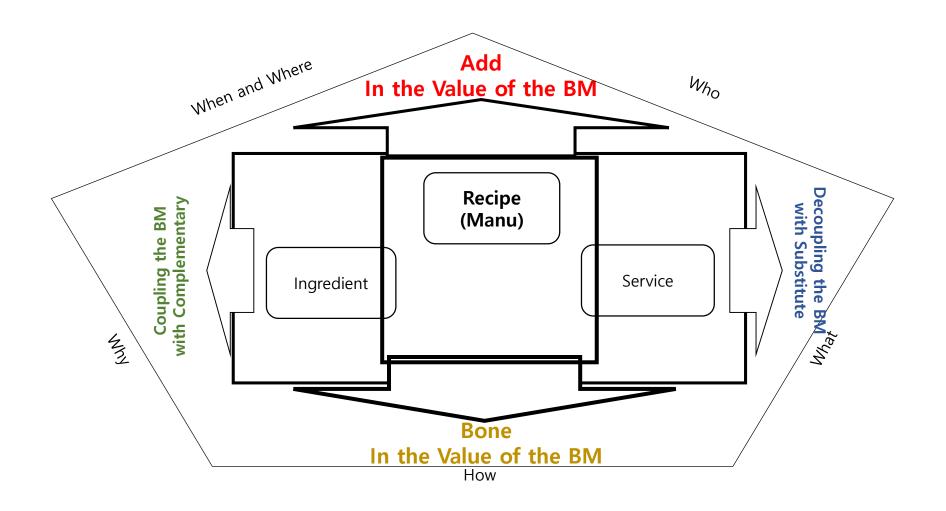
• How can restaurants as representative service industry firms innovate business models sustainably to last for more than 50 years through the era of digital transformation with open innovation dynamics?

Research Framework

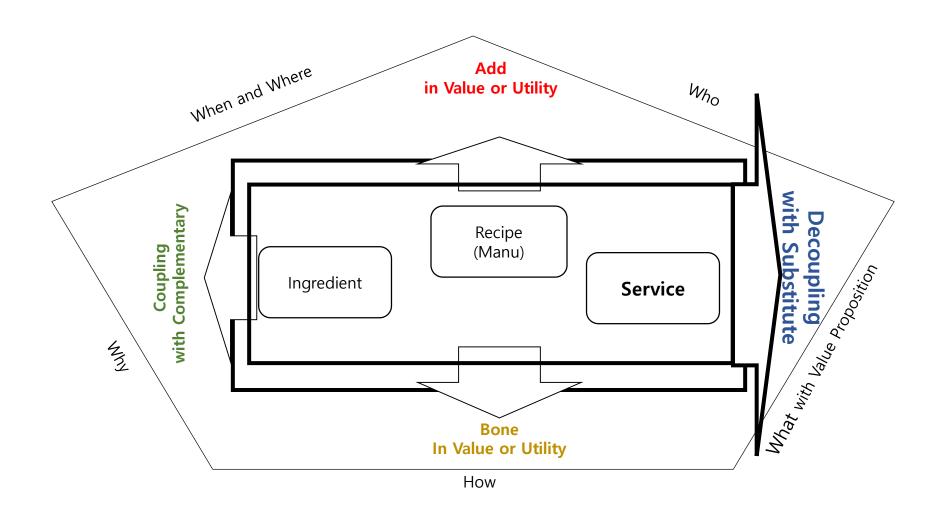


How with technology system including key activity, resource, and partner

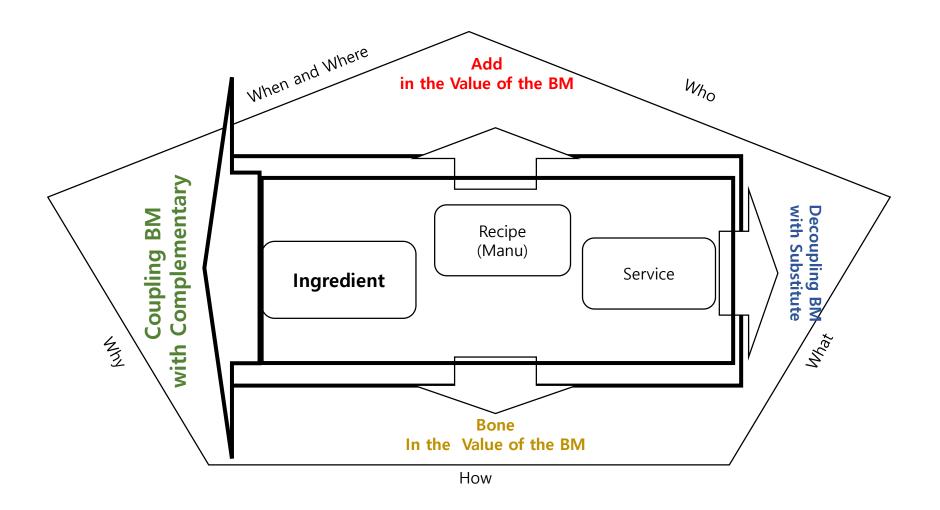
Analysis (1); Korean Long-lived Restaurants



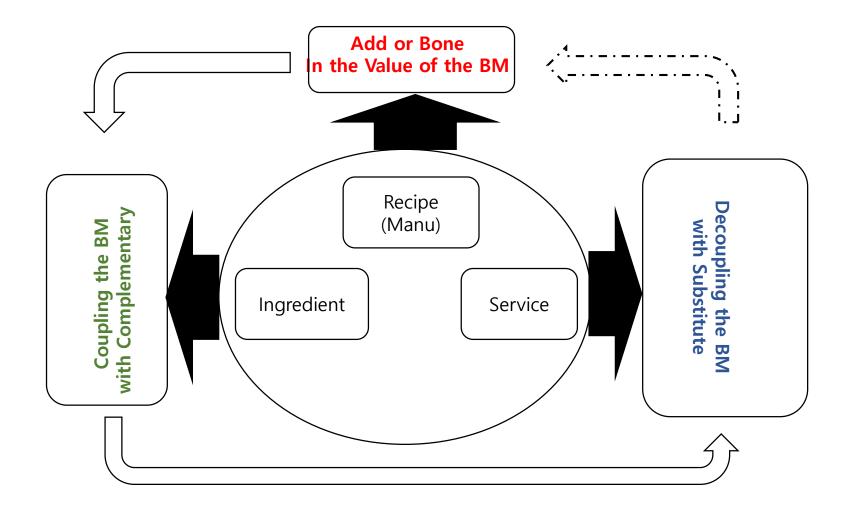
Analysis (2): Japan Long-lived Restaurants



Analysis (3) Italy Long-lived Restaurants



Discussion; Sustainable innovation of the BM of Service Industry



The End

Thank you for paying attention to my lecture