

# Exploratory Research on Dualism Structure of Tourism Alliance Network

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## ABSTRACT

*This paper examines the evolution issues of regional tourism resources in complicated and networked industry the perspective of co-evolution types and dualism. Regional tourism structure has been changing more and faster according to various attractions and internal and external environment; natural resources, facilities, festivals and events, drama and movies, and public resources, etc. This paper approaches Olikowski's dualism perspective as a theoretical view about the alliance network between region's attractions and tourism industry in Korea. Exploratory analysis was explained the dualism cases performed on the matrix between resource characteristics and alliance complexity on human resources based on regional tourism industry.*

## Introduction

Stand-alone strategies don't work when your company's success depends on the collective health of the organizations that influence the creation and delivery of your product (Iansiti and Levien 2004). Industry structure has complicated and its competitiveness is boosted more and over. Each of members of a business ultimately makes strategic systems to create new market and efficient supply channels.

Strategic network in not only the private but also the public sector (for example, region, city, province, and nation level) represents the way of global competitiveness for citizens and entrepreneurs' public services in regional boundary.

Tourism industry requires various and diverse regional resources to make new tourism services among attractions, attractive facilities, foods and beverages, specific culture, and etc. Region strategic network stands for regional product and promotion linkage to customer and tourist among destination marketing organizations (DMOs) level, tourism firms level, public and private sector level, and nations level.

Province and local government organization has been spontaneously and adapted the natural and historic resources and absolutely selected and developed the artificial resources according to consumer activities and tourism market trend. Additionally, the business and service resources for consumers and tourists spread out near the attraction area and in the whole city. These resources structuralized regional business ecosystem in tourism.

Most of the public organizations adapted and selected these tourism resources based on business ecosystem and have been promoting their city to revitalize region's economy through these resources through co-evolution.

The major questions in this research are:

- What is the key resource and what kind of co-evolution types are in the public sector?
- How does the alliance network of regions structuralize in co-evolution views?

This paper explored the structure of business ecosystems and co-evolution types and suggested the strategy of alliance network in dualism views for destination marketing organization in tourism industry.

### **Alliance Network for Tourism Co-evolution**

Strategic alliance networks are embedded in and coevolve with the strategy of the firm. Building on March (1991), Levinthal and March (1993), and Lewin et al. (1998), Koza and Lewin (1998) advanced a coevolutionary process model of the strategic choice to enter an alliance and the evolution of the alliance as a function of the evolution of the firm's adaptation strategy and as a function of three morphological attributes of the alliance-absorptive capacity, control, and identification (Koza and Lewin 1998).

Lewin et al. (1998) have advanced a theory of the evolution of new organization forms as an outcome of the co-evolution of the competitive environment, firm intentionality, and the institutional environment of the firm under conditions of stochastic or chaotic environmental uncertainty. The theory distinguishes between periods of population variation and periods of organization mutation (emergence of new forms). A co-evolution perspective has the potential to inform and redirect research on alliances.

Emergent resources are new resources in region tourism properties. The literature on social networks presents a view of alliance networks as "networks of learning" that presents a model of the learning process modeled as a social network. The view of networks is of a set of relationships producing an emergent organization that is characterized by informal social relationships among industry actors (Powell et al. 1996, Koza and Lewin 1998).

Intentional resources are stable resources in region tourism properties. In more stable industries like investment banking, consulting, and accounting, intentional network structures should be even more common. These are industries in which the business model, production function, and the direction of change are more fully understood, and the relative contributions to the network can be monitored, measured, and incited (Koza and Lewin 1998).

Perhaps it is useful to understand the emergent/intended distinction as a continuum. In emerging industries, collaboration produces informal relationships that may lead to emergent network outcomes (perhaps mediated by a rational agent). In more stable industries, collaboration may be formal, with the network intentionally created and designed to pursue the strategic intent of the member firms.

Regional tourism industry is a set of actor that produces the process of tourist and consumers' expenditure among visible and invisible resources into geographic area.

DMOs make a product by alliance network among new and owned resource-based organizations. Expanding resource-based alliance network increases consumer's expenditure according to travel and experience time and scope. The public organization helps DMOs' to promote renewal and re-scheduled products through various resources for increasing a number of visitors and revenue and revitalizing region's economy. There are regional resources including not 'mine' but 'ours'.

Tourism industry ecology is different from manufacture industry ecology as the attraction components of region. Therefore, co-evolution structure of alliance network is based on organizational activities.

## Dualism of Technology as Region's Tourism Resources

The duality of technology is identified prior views of technology and fostered the invisible in organizations. Technology is not only the product of human action and but also physical construction by actors working in given social context and social construction by actors through the different meaning they attach to it and the various features they emphasize and use. And more, technology as organization's resources and properties once developed and deployed, it tends to become reified and institutionalized as a part of the objective, structural properties of organization (Olikowski 1992). Wynne (1988) and Olikowski (1992) described technology as resource is the case of a British water-transfer tunnel – physically or interpretively. That is, Agency and structure in business ecosystem is the ongoing action of human agents in habitually drawing on a technology – tourism resources, too. Olikowski (1992) has been shown that a structurational model of technology comprises the following components:

- human agents - technology designers, users, and decision-makers
- technology - material artifacts mediating task execution in the workplace
- institutional properties of organizations - organizational dimensions (such as structural arrangements, business strategies, ideology, culture, control mechanisms, standard operating procedures, division of labor, expertise, communication patterns) and environmental pressures (such as government regulation, competitive forces, vendor strategies, professional norms, state of knowledge about technology, and socio-economic conditions)

Province and local government organization has been spontaneously and adapted the natural and historic resources (for example, mountain, river, culture, religion, museum, etc.) and absolutely selected and developed the artificial resources (for example, theme park, convention center, events and festivals, movie and drama, and etc.) according to consumer activities and tourism market trend. Additionally, the business and service resources (for example, restaurants, rental car, lodge, shops, etc.) for consumers and tourists spread out near the attraction area and in the whole city.

These resources increase a number of products more and more through the information systems. Recently region's resource is expanding the scope and activities in three levels; resource level among natural and historic resources, artificial resources, and business and service resources (for example, Airtel, HotelPack), region level among regions (for example, Korea Visiting Product – Seoul and Jeju, etc.), and nation level among countries (for example, BeSeTo Product – Korea Seoul, China Beijing, and Japan Tokyo).

Emerging IT leads to visible and clear product from invisible and ambiguous product in tourism industry. IT plays a key role to manage a process of variation, selection, and retention on tourism information about resources; database systems, content management systems, etc.

Lansiti and Levein (2004) suggested that industry ecology on Wal-Mart and Microsoft analyzed by 2x2 matrix structure between complexity of relationship and level of turbulence and innovation based on views of the creation and delivery of their products.

In tourism, the complexity of relationship is the organization scope of resources network (the complexity of relationship in alliance network of emergent resources is high and complexity of intentional resources is low) and the level of turbulence and innovation is the visibility of resources (the level of turbulence and innovation of the visible resource is low and the invisible resource is higher than it).

In industry ecosystems in tourism, DMOs' strategies choose the partner (a private or a public organization) to promote co-products (as one more packages) with their core resource into region's various resources. DMOs' strategy has not only been maintained for the current

resources and products and but also set up for the new one. DMOs couldn't stop their strategy for their market because there are the resource itself value and the invisible value for their shareholders. And moreover, local government or DMOs' activities affect regional economy depending on choosing the resource or not. They decide their strategy and choice for both the people and the market.

### Conceptual Model and Methodology

In the resource-based views (Bharadwaj 2000, Grant 1991), the complexity of relationship is based on organizational resources (human IT resources) and the level of turbulence and innovation is based on the tangible (physical IT infrastructure) and intangible (knowledge asset, customer orientation, and synergy)-based resources.

The co-evolution of alliance network by Koza and Lewin (1999) has been shown that both the firm strategy and the strategic intent for the alliance coevolve with changes in the competitive, technological, and institutional environment of the firm. As the strategy evolves, the initial intent for the alliance will change (Ariiio and de la Torre 1998). Similarly, alliance outcomes may affect the strategy of the firm.

Co-evolution in various resources and products (packages) lead to evolve Business ecology of region tourism industry and alliance network among visible and invisible resources, tangible and intangible resources, and organizations capabilities.

This conceptual model is 2 x 2 matrix based on resource-based perspective and resources in tourism business of ecology views.

- Human resources view - the complexity of relationship – Organizational/Individual scope and activities of alliance network (complexity relationship in alliance network of emergent resources is higher than intentional resources)
- Tangible and intangible resources view - the level of turbulence and innovation – visibility of resources (the turbulence and innovation of a tangible/visible resource is lower than intangible/invisible resource)

In co-evolution types of alliance network in tourism ecosystem is as following:

- Type I emergent resource (multi-external) + intangible/invisible resource
- Type II emergent resource (single-external) + tangible/visible resource
- Type III intentional resource (multi-internal) + intangible/invisible resource
- Type IV intentional resource (internal) + tangible/visible resource

[Table 1] Four types of alliance network in co-evolution

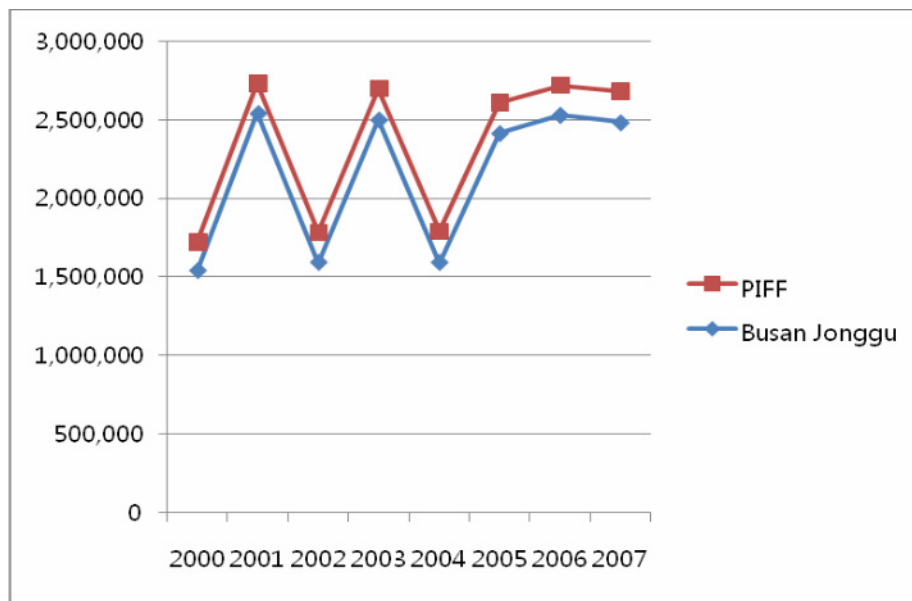
Level of turbulence and innovation	High (Intangible or invisible Resources)	Type III	Type I
	Low (Tangible or visible Resources)	Type IV	Type II
		Low (Alliance network of intentional resources)	High (Alliance network of emergent resources)
		Complexity of relationship	

Organizational ecology research is based on longitudinal data (a number of visitor) and share essential variable definitions and measurements across studies (Lewin & Volberda, 1999). This is four region cases in Korea studies and analyzed longitudinally in a number of visitor from tourism statistics (source: <http://www.tour.go.kr>) in Korea and contents analysis by the secondary data from newspapers. The national issues cases are chosen within 5 years by 4 researchers in KCTI (Korea Culture and Tourism Institute).

**Results**

**Type I. Organizational alliance network: Emergent and intangible resources**

PIFF (Pusan International Films Festival) has started from 1996 by Busan City (province level) which is located in the south and the second city in Korea. Busan has boosted up movie city as the name of ‘Friend’ screened in 2001. Busan organization made the movie festival project to be a global city for regional economic value. Alliance network of PIFF consists of organizational alliance structure among Busan and Jonggu (local government), the ministry of culture, sports, and tourism (MCST), ASIA movie committee, Korea movie association, citizens (volunteers), and etc. PIFF has created 200,000 visitors per year and represented as the movie city in Korea.



[Figure 1] A number of visiter in Busan (Joung-gu) and PIFF

This is the case of festival/event cities in the intangible tourism product and city’s infrastructure of movie and commercial sites. Recently, Busan metrcity government decided the financial investment to build the movie complex and convience feacilities.

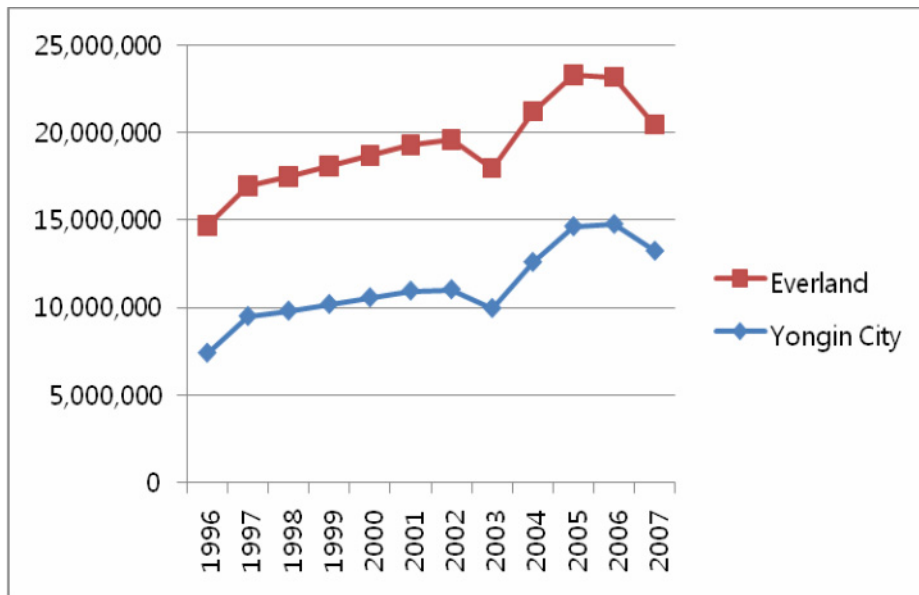
In views of the duality of technology, the key component of Busan is structured as following:

- Key resource: movie industry (technology: T)
- Alliance network: Korea Actor Union(HA), ASIA Film Market (HA), ASIA Movie Academy (HA), Movie Maker Union(HA), PIFF organization (HA), ASIA Cinema Fund and Public financing assist (Intitutional Properties: IP)
- Regional alliance network : Movie infrastructure, commercial facilities and market, Hotels, Restaurants, Natural resources (Haiwondae Beach and etc.), citizens

Tourism products in region need an emergent resource of alliance network based on organization perspectives to develop new products. The co-evolution structure of Alliance network is 1:Multi-organization. The co-evolution of alliance network among organizations is a key resource to make a product in tourism business ecosystems. PIFF is the intangible product by the co-evolution of multi-organizational alliance network as emergent resource (Type I).

**Type II. Artificial alliance network Emergent and tangible resources**

Ending ‘Yongin Nature Farm Villiage’ during 20 yaers, Everland and Caribbeanbay Waterpark (Samsung Everland) have opened in 1996 which is located in the yongin city in Korea. The private sector re-developed the new resource, theme park from the domestic attraction. Yongin city has the global themepark and related infrastructure (resorts, distribution complex, hotel/lodging, golf club, etc.). Everland and waterpark makes approximate 8 millions visitors per year. Its key resources are various pleasure facilities, festival, and global service.



[Figure 2] A number of visiter in Yongin city and Everland (theme park)

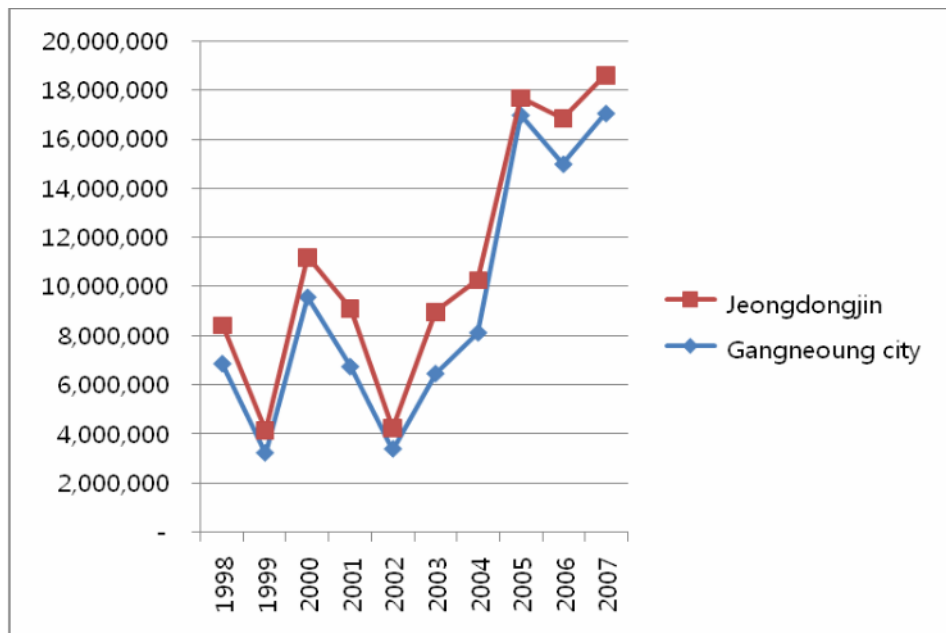
In views of the duality of technology, the key component of Yongin city is structured as following:

- Key resource: themepark - Everland and waterpark (T)
- Alliance network: Samsung Everland (HA) - pleasure facilities and festival(T), service academy (HA)
- Regional alliance network : Region resources, Korea Folk Villiage

This is the case of themepark cities in the tangible tourism product. Yongin city (local government) has the great resource and macro alliance network with Everland. Everland as a private sector focuses on business as leading firm of business ecology and Yongin city as a public sector (as Everland is regional resource) focuses on global image and Everland product networked regional resources. This is co-evolution between organization and tangible resources. Yongin city allied with Everland resource as the tangible product by the co-evolution of artificial alliance network as emergent resource (Type II).

**Type III. Functional alliance network: Intentional and intangible resources**

Jeongdongjin (as a name of Jeongdongjin train station) in Gangneoung City is located in the east sea in Korea. This place is popular for the scene of drama ‘Sandwatch’ in 1995. Drama and movie place is a core method to develop and promote region tourism resources. Jeongdongjin could be the first case as a drama place. Before Jeongdongjin, this place is one of small train station beside a beach and not a tourism resource in city. After broadcasting ‘Sandwatch’ drama, Jeongdongjin has been named by the people from Jeongdongjin station. Jeongdongjin has created approximate 2 millions visitors per year allied with Sculpture Park, restaurants, lodgings, and etc.



[Figure 3] A number of visiter in Gangneoung city and Jeongdongjin

In views of the duality of technology, the key component of Gangneoung city is structured as following:

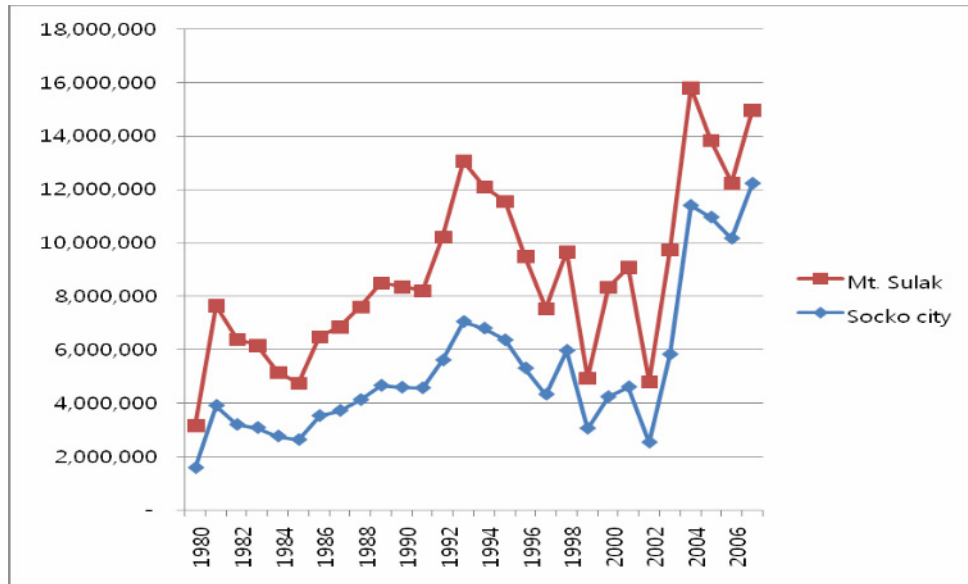
- Key resource: drama (T: intangible resource)
- Alliance network: Korea Railroad(HA), Region Commercial/Tourism Associations
- Regional alliance network: Gangwon (province) and Gangneong (local) government (HA), Commercial facilities and market, lodging, restaurants, natural resources (beach and etc.), citizens

Jeongdongjin changed from one of station to the main attraction in city’s tourism resources (function). Gangneong city make the product according to co-evolution among Korea Railroad Cooperation (public sector) and regional commercial association based on an intangible resource as drama. Jeongdongjin is an intangible product by the co-evolution of organizational alliance network as intentional resource (Type III).

**Type IV. Resourced alliance network: Intentional and tangible resources**

Socho City as Mountain of Sulak (Mt. Sulak, 1,708m) is located in the east sea in Korea. This place is one of the best attractions for vacation. Mt. Sulak is in Socho city and one of the best

mountain in Korea. Mt. Sulak is managed by Korea National Park Organization (KNPO) in the ministry of environment (ME). Although two organizations' roles are different in spite of public sector, Socho city has actively allied with Mt. Solak and KNPO in the level of organization. Mt. Solak is a key product of region tourism industry ecology; hotel, resost, lodging, restaurants, facilities, etc.



[Figure 4] A number of visiter in Sokcho city and Mt. Sulak

In views of the duality of technology, the key component of Sokcho city is structured as following:

- Key resource: nature - Mt. Sulak (T)
- Alliance network: Korea National Park Organiation (HA)
- Regional alliance network: region commercial union (HA), Commercial facilities and market, Hotels, Restaurants, Natural resources (Beaches, attractions and etc.)

These natural resources in region have largely affected region tourism industry. Therefore, organizations (one of public sector) owned the natural resources are related with local government, tourism facilities, people, and infrastructure in the alliance scope. Mt. Sulak is the tangible product by the co-evolution of 1:1 organizational alliance network as emergent resource (Type IV).

### Implications and Further Research

The duality of technology for regional resource-based views is not choice of strategy but co-evolution of alliance network structurization in tourism business ecosystem. The ecosystem-based perspective we have described has a number of broad implications for managers. One is the central importance of interdependency in business: a company's performance is increasingly dependent on the firm influencing assets outside its direct control. This has wide-ranging implications for strategy, operations, and even policy and product design (Iansiti and Lewin 2004).

We approached a model of strategy as ecology by Iansiti and Levien (2004). They refered that a company's choice of ecosystem strategy – keystone, physical dominator, or niche – governed



primarily by the kind of company it is or aims to be. But the choice also can be affected by the business context in which it operate: the general level of turbulence and the complexity of its relationships with other in the ecosystems.

In views of the public sector, tourism resources in region are a core of environment to make the advanced one step by step. Each of regions, provinces, and countries chooses the resources and makes new product for tourist and consumer into their geographical boundary. In the resource views, an emergent resource is needed to make new scope and activities in alliance networks and an invisible resource is difficult to expect the turbulence and innovation because of human and culture based product. Therefore, we classified four environments in alliance network structure in region’s tourism industry.

[Table 2] Co-evolution of four alliance network in Tourism Ecosystems

Level of turbulence and innovation	High (Intangible or Invisible Resources)	Functional alliance network	Organizational alliance network
	Low (Tangible or Visible Resources)	Resourced alliance network	Artificial alliance network
		Internal(low) (Alliance network of intentional resources)	External(High) (Alliance network of emergent resources)
		Complexity of relationship (Human resources)	

Duality of technology as region’s tourism resources is different from what kinds of resources are developed, varied, selected, and maintained in tourism industry ecosystem in perspective of co-evolution. And more, the concept of dualism needs to adopt in destination marketing strategy.

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