Market Partitioning Mechanism and Competitive Dynamics

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ABSTRACT

This paper focuses on how market partitioning mechanism and competitive dynamics evolve in the turbulent business environment. As supported by Boone et al. (2000) using empirical data of Dutch auditing firms from 1986 to 1992, market partitioning interacts with regulatory changes in the institutional environment. Given that one of the primary goals for regulatory changes is to promote a competitive environment (Crandall, 2000), recently deregulated policy paradigms in the network-based industries such as telecommunications will impact on the overall processes of market partitioning mechanism and competitive dynamics.

Keywords: Market partitioning, competitive dynamics, network-based industries

INTRODUCTION

There have been several industry-specific studies on resource partitioning (resource partitioning and market partitioning mechanisms are used interchangeably here) framework (Barnett & Carroll, 1987, 1993; Boone et al., 2000; Carroll, 1985; Carroll & Swaminathan, 2000; Dobrev et al., 2002; Jaffee, 2001; Swaminathan, 2001). While the general prediction of resource partitioning framework is that generalists’ market concentration leads to specialists’ proliferating emergence, policy changes and technological innovation in a competitively dynamic market environment show rather contrasting outcomes for market partitioning when generalists’ reactionary strategies are taken into place. This paper looks at how market partitioning framework is evolved at industry level where mature and emerging players compete with each other in a dynamic manner, and finally several propositions for further studies will be briefly discussed.

LITERATURE REVIEW

Firm’s strategic actions do change with some patterns of competitive repertoires when environmental conditions, such as deregulation and technological innovation occur in the market. To organizational ecologists, on the other hand, firm’s strategies are as fixed at its inception and unchanged over time. Organizational ecology usually deals with organizational vital rates (founding and mortality rates), which emphasize on the forces of external selection over internal adaptation (Carroll et al., 2002). Carroll (1993) argued that two of external selection criteria – technology discontinuity and political discontinuity – would provide an opportunity for industry reshuffling among different organization forms, and these would relate to why successful firms are different from others. Organizational inertia, as one of the explaining variables to the environmental selection, points to the survival-enhancing organizational features, and it explains the evolution of variety in organizational forms (Hannan & Freeman, 1977). Two complementary arguments - niche width and resource partitioning - explain how various organizational forms are originated and challenged to survive in the competitive environment.

Niche Width Theory & Resource Partitioning

Previous studies investigated that the selected organizational forms were depended upon the organization-environment niche (Freeman & Hannan, 1983). Hannan & Freeman (1977) defined two different organizational forms based upon their niche width. Generalists aim their products toward a broad range of consumer tastes in the market, and they do by making their products or services available with a broad appeal in the market segments where most consumers are found, called the market center. Specialists, on the other hand, shoot for a small range of very specific customer tastes, occupying a small spot in the resource space’s periphery. As environmental conditions (or resources) are disjointed or highly dissimilar, specialists do better in the specific niche segment (Hannan & Freeman, 1977;
Freeman & Hannan, 1983). In the meantime, density dependent processes of competition and legitimation (Hanna & Freeman, 1977) have been the main theme to investigate in organizational ecology literature. Also, age (the liability of newness argument) and size (the liability of smallness argument) have been identified to test organizational death rates (Freeman & Hannan, 1983).

Market partitioning mechanism is a constantly evolving process of different organizational forms trying to capture their competitive market positions. More specifically, it explains a relationship between two organizational forms – generalists vs. specialists - not often thought to be related (Boone et al., 2002; Carroll, 1985; Carroll et al., 2002; Carroll & Hannan, 1995; Dobrev, 2000; Hannan et al., 2002; Peli & Nooteboom, 1999). It explains the dynamics of organizational populations in markets with scale economies and the focus is to explain the simultaneous occurrence of both generalists’ market concentration and specialists’ proliferation based on the widths of their niches or market postures (Carroll, 1985). Contrary to niche width theory (Hannan & Freeman, 1977), resource partitioning argues that the model is particularly applicable to industries with economies of scale and weak or non-existent price competition; firms with economies of scale advantages pass along their advantages to their customers in the form of low prices; when price competition is weak, the portion of the advantages passed on to consumers manifests itself as a superior product; and consumers in the market are heterogeneous yet retain a common basis to which appeals can be made; and environmental conditions (resources) are not dissimilar. In short, resource partitioning addresses questions about the distribution and viability of generalists and specialists in a population (Carroll, 1985). Previous studies operationalized several resource partitioning mechanisms - location (Carroll, 1985, Dobrev, 2000; Peli & Nooteboom, 1999), organizational capabilities (Boone et al., 2000), identity and status (Carroll & Swaminathan, 2000).

### Table 1: Comparison between Niche Width Theory and Resource Partitioning

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<tr>
<th>Niche Width Theory</th>
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<td>Hannan &amp; Freeman (1977) Freeman &amp; Hannan (1983)</td>
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<tr>
<td>- Specialists do better in specific niche segments</td>
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<td>- Environmental conditions, resources are disjointed or highly dissimilar</td>
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<th>Resource Partitioning</th>
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<td>- Locational mechanism –competition among large generalists to occupy the center of the market frees resources at the periphery that can be used by small specialists without engaging in direct competition with the generalists</td>
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<td>- Two trends (generalists vs. specialists) occur simultaneously within the same industry, generalists provide the niche width for specialists</td>
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<td>- Economies of scale assumption, environmental resources and conditions are not dissimilar</td>
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### Two Components of Resource Partitioning Framework

Resource partitioning framework contains two components: the first deals with the consequences of generalists’ behavior that compete for resource spaces in the center with the greatest number of consumers, and the second deals with the implications of the structural outcome of the concentration of generalists on the life chances of specialist organizations (Boone et al., 2002). Most previous researches (Barnett & Carroll, 1987 (telephone companies); Boone et al., 2002; Carroll, 1985 (newspaper publishers); Carroll & Swaminathan, 2000; Swaminathan, 1998 (US beer breweries); Swaminathan, 2001 (American wineries)) were focused on measuring how the location of specialists would have an effect on their founding rates (or mortality rates) after the generalists’ center concentration had occurred.

A main prediction of the first component of resource partitioning framework holds that the shape of resource distribution, together with the presence of scale economies, drives concentration among generalists (Boone et al., 2002; Hannan et al., 2002). In order for generalists to secure their competitive advantages in the market center where resource distribution is densely located, competition among generalist organizations in the center often triggers an escalating scale-driven war for resource spaces (Boone et al., 2002). To that ends, consolidation activities enable the generalists to lower per unit costs, which can be passed along to end-users.

Carroll & Swaminathan (2000) tried to look at generalist’s vital rates, but the results were not complete due to the limited data availability, and furthermore the theory didn’t claim that all generalists would experience heightened risk as
concentration rises, only the small generalists with relative scale disadvantages would suffer from the market process in the resource partitioning framework. In a broader sense, both inter- and intra-strategic groups in a certain industry segment will have different growth path with market partitioning mechanism.

One new approach involves examining generalists’ behavior directly to look for consistency with various theory implications (Carroll & Swaminathan, 2000). For instance, Boone et al. (2002) studied the Dutch newspaper industry using data on the demographic distribution of readers in the local audience to examine how the shape of the resource space affected consolidation activities. Dobrev et al. (2001) studied the European automobile industries that firms’ inertia and mortality were investigated with respect to each others’ market positions and the implied resource distributions. However, the dynamic process of the first component of resource partitioning framework has not been actively reported in empirical research with a few exceptions mentioned above.

The second component of resource partitioning framework - structural outcome of the concentration of generalists on the life chances of specialist organizations - has reported a series of empirical supports that as generalists concentration increase, the founding rates of specialists rise (Carroll, 1985; Dobrev et al., 2001; Carroll & Swaminathan, 2000; Mezias & Mezias, 2000; Barnett & Carroll, 1987). In order to account for the proliferation of specialists as industries mature, Swaminathan (1998) examined the relative importance of four processes – density dependence in the founding rates, niche formation through changes in consumer preferences, resource partitioning, and direct institutional support – to explain the level and dispersion in the founding rates of specialists. The demise of some large organizations frees some of the market from control by a large organization, and other surviving large organizations occupying adjacent regions hold the best positions for securing these newly available areas (Hannan et al., 2002).

The forces underlying the principle of allocation make it difficult for generalists to secure the entire freed area; doing so can prove more costly than it is worth or entail loss of some of the organization’s existing target areas (Hannan et al., 2002). As competition among generalists evolves toward small-number equilibrium, the size and target breadth of the individual survivors increase but the combined resource space covered by all generalist organizations together declines somewhat (Carroll, 1985; Carroll & Hannan, 1995). Therefore, the theory yields its central prediction that the viability of organizations operating of the periphery of the market increases as overall concentration rises (Hannan et al., 2002).

Key Determining Factors for Resource Partitioning Mechanism

As described earlier, organization’s relative location in resource space usually forms the basis for empirical predictions about the specialist phenomenon (Boone et al., 2002). This logic accounts for the partitioning of certain populations such as airline passenger services where geographical routes physically play a central role in determining organization’s relative location (Hannan et al., 2002). Recent studies investigated that other complementary mechanisms in other populations took on greater importance than sheer location of products in resource space (Hannan et al., 2002). Three other mechanisms are 1) customization (Boone et al., 2000), 2) anti-mass-production cultural sentiment (Carroll & Swaminathan, 2000; Swaminathan, 2001), and 3) conspicuous status consumption (Hannan et al., 2002). Customization features the role of dynamic organizational dynamic capabilities, while other two mechanisms highlight identity (Hannan et al., 2002). In support for the reversal of resource partitioning processes, Swaminathan (2001) looked at the role of location and identity in the US wine industry, and argued that specialists were adversely affected when they violated their organizational form’s identity characteristics and also when generalists assumed a robust identity allowing them to operate both – specialists and generalists – industry segments.

From competitive strategy point of view, resource partitioning framework addresses the dynamic interplay of different organizational postures (generalists vs. specialists) with respect to the external resource environment on organizational performance, and its potential contribution particularly relates to the classic industry analysis tradition (Boone et al., 2002). Porter’s five forces framework is the well-known approach to predict the performance differences between organizations in certain environments. Even though its influences on strategy literature are overwhelming, Porter’s five force framework has been criticized for being overly static, assuming environmental stability and market equilibrium (Boeker, 1991). It further expands the analysis of competition as an explicitly and intrinsically dynamic phenomenon (Barnett, 1997; Boeker, 1991).
The main prediction of resource partitioning framework can be interpreted that changes in the competitive market structure among one strategic group of generalists may enhance performance within another strategic group of specialists (Boone et al., 2002). Boone et al. (2002) explored the dynamic impact of market structure whether concentration among the generalists would indeed enhances segregation in a population (distance in resource space) by opening resource space for specialists. Different resource spaces produce very different market structures, and researchers do not commonly analyze the relationship between the features of the resource environment and their consequences on organizational behavior although organizations are invariably viewed as open systems (Boone et al., 2002). Furthermore, theory predicts a corresponding increase in generalists’ product homogeneity (Carroll & Swaminathan, 2000) as the market concentration among generalists rises. Noda & Collis (2001) reported the evolutions of intra-industry firm heterogeneity among seven RBOCs in developing mobile services in the US. Their framework depicted that the dynamic interplay of market, competitive, and organizational forces shaped a process in which diversity among firms within an industry ought to be created, magnified, and sustained through path dependence in the firm evolution (Noda & Collis, 2001).

Boone et al. (2002) argued that the effects of the concentration variable on the survival rates of specialists should be looked at the following two factors – ① the shape of resource distributions, and ② the competitive behavior of specialists.
generalists and specialists. Unlike the conventional rendering of resource partitioning, generalists can occasionally respond to intensified competition in the center by successfully transforming their niche width (Carroll, et al., 2002) into specialists to avoid scale-based selection pressures in the market center. Strategic redirection - shifting a firm’s range of product offerings and its location - has vital consequences to the market partitioning mechanism (Dobrev et al., 2001; Dobrev et al., 2002). Given that resource partitioning is a cyclical process, there are going to be repeated fragmentations of specialist segment in the environmental resource distribution that lead to the emergence of a new generation of specialists that attempt to differentiate themselves from the initial specialists (Carroll et al., 2002). Also, the market center can be dramatically shifted to a region previously occupied by specialists (Swaminathan, 1995; Dowell & Swaminathan, 2000).

CHARACTERISTICS OF NETWORK-BASED INDUSTRIES

Often times, regulatory reform and technological innovation destabilize the industry landscape. In particular, network-based industries will show significant changes of market structure. Prior market partitioning studies mostly dealt with single product industries. Boone & Witteloostuijn (2003, working paper) extended to multi-product industries, and tried to integrate generic strategies and market partitioning. This study is another step to further expand market partitioning framework to the network-based industries.

One of the primary goals for regulatory changes in network-based industries is to promote efficient level-playing field for new entrants to compete against incumbents. In many situations, network-based industries structured in such a way that only a few (or state-owned) incumbents had enjoyed natural monopoly conditions. Also, incumbents were very much reluctant to open up their networks to new entrants. Along with deregulatory processes, technological advancement and convergence in different services stimulated the competitive market structure by making possible new services and expanding the prospects to vertically integrate and compete in upstream and downstream markets (Ware, 1998). Therefore, market partitioning process became more apparent in the network-based industries than any other industries. However, initial market partitioned equilibrium doesn’t usually last long enough for new entrants to survive in a competitive intense markets. This study is looking at what regulatory reform and technological innovation would do with market partitioning processes and competitive dynamics.

One of the important determinants of specialists’ entry into the new market segment is generalists’ strategic responses and possibly subsequent specialists’ strategic actions. Swaminathan (1998) used the US Brewing industry data to address the question of what motivated firms, both new and old, to enter particular industries or venture into new geographies. In network-based industries, both incumbents and new entrants are interconnected with each other at many different businesses levels. Regulatory changes promote specialists compete against incumbents for the newly created (often times, intentionally created by regulation) resource spaces on an equal basis. Among the ways to pursue the incumbent’s market dominance in the competitive mode, according to Swaminathan (1998), were to seek for organizational transformations through boundary spanning strategies, expanding their core competencies into the new resource spaces (Carroll et al., 2002). These processes can be explained by the organizations’ efforts to balance their capabilities for leveraging, strengthening, and diversifying their distinct assets or skills (Chakravarthy, 1997).

Major structural changes led to the creation of new niche spaces where both incumbents and new entrants compete against each other. Koski & Majumdar (2000) defined the dichotomy of generalists vs. specialists as to the degree to which operators spread their resources across industry environment. The dichotomy of generalists vs. specialists can be explained by more than single scope measure such as geographical coverage. Mostly, generalists serve multiple geographic areas under a single brand name and extend geographical coverage significantly through a series of consolidating activities.
In this paper, different diversity scale of organizational forms, or different degrees of resource utilization are indexed on a multiplicative scale with two measures – products (or services) and geographic coverage. Note that abundant types of generalists and specialists have established their presences in the resource space, which prior resource partitioning studies were not explicitly clear about. As a result, competitive interactions will be much complex with more than two organizational forms – generalists vs. specialists. Interactions among mature generalists (μ-G), emerging generalists (γ-G), mature specialists (κ-S) and emerging (γ-S) will further complicate such competitive interactions. While prior resource partitioning literatures looked at the generalists’ consolidation activities as antecedent to the specialists’ proliferation, variety of inter-organizational activities such as strategic alliances should also be taken into account for. Also, specialists are physically interconnected with, or even compete against generalists in the network-based industry context. Initial outcomes of such regulatory changes seem to be consistent with the conventional resource partitioning processes, however, generalist’s strategic reactions or even further specialists’ subsequent actions explained above have complicated the consequent processes of resource partitioning framework.

PROPOSITIONS

This study proposes to investigate how certain dimensions of task environments and strategic choices play interesting roles in determining the relationships between environmental events and the different aspects of specialist’s proliferation. Industry events – deregulation and technology innovation – will have impacts on market partitioning mechanism. Often times, deregulatory reforms are aimed for providing more effective competitive business environment. In network-based industries, incumbents are required to open up their network infrastructure to any interesting players, including new entrants for their niche development. Technology innovation also provides an opportunity for new entrants to secure niche segments, but the effectiveness of new entrant’s niche development could be mitigated when network-based industry contexts are considered. In this sense, both environmental events play very interesting role in determining the various aspects of specialists’ proliferation.

It should be noted that market partitioning mechanism in this study is somewhat different from the ones in prior market partitioning studies. First of all, the sustainability of market partitioning is not derived from the original sequential paths of generalists’ concentration and then specialists’ proliferation. Environmental events – deregulation and technological innovation - have interesting implications in the dynamic consequences of market partitioning.
processes, as mentioned in [proposition 1]. Second, post-deregulation competitive intensity and generalists’ reactionary activities can reverse the sequence of securing specialists’ niche (Koski & Majumdar, 2002). Thus, it will be worth while to look at whether specialists’ proliferation is still hold in the reverse process of market partitioning. Third, technological changes are known to help new entrants seek for new market opportunities (Carroll, 1993), and new entrants have been making efforts to take niche resource spaces. On the other hand, service convergence and technological shift make both generalists and specialists to struggle with their location and identity (Swaminathan, 2001). Furthermore, most prior studies took market partitioning mechanism to the single-product (or service) industries while this study extends the interconnectedness of organizational forms in the network-based industries. In a network-based industry context, organizations are interdependently related with many generalists and specialists through their interconnection arrangements. Prior studies looked at the single consumer product industries (e.g. wines, newspapers, breweries) where their manufacturing processes were independent with each other. Lastly, prior studies dichotomized organizational forms into generalists and specialists, and focused on the founding (or survival) rate of specialists. In most industry context, both organizational forms as well as transitions from specialists to generalists or vice versa have been already existed or in the market, and emerging generalists and specialists can be introduced as environmental events occur over the courses of industry life cycle.

[Proposition 1] Depending upon the diversity scale of organizational forms, environmental events have interesting effects on the proliferation of specialist organizational forms.

[Proposition 1-1] Deregulatory processes have a positive influence on the proliferation of both emerging and mature specialists.

[Proposition 1-2] Technological innovation has a positive influence on the proliferation of emerging specialists, but has a negative influence on the proliferation of mature specialists.

Generally speaking, both environmental events are positively related to the specialist’s proliferation – different locations in a resource space of generalists and specialists (Carroll, 1985). Typical market partitioning processes assume that specialist’s mortality rates decrease when there are consolidations among generalists. The whole processes start with generalists competing for the central resources; then bigger generalists taking over the center; occurring consolidations among generalists; generalists can’t secure all the resource space left by the acquired generalists; and specialists capture the remaining resource spaces.

**Complexity**

Competitive Intensity

**Munificence**

Resource Space Expansion

**Environmental Events**

Deregulation

Technological Innovation

**Different Aspects of Specialist’s Proliferation**

Emerging vs. Mature Specialists

**Dynamism**

Generalists’ Strategic Choices

Figure 3: Market Partitioning Mechanism in Network-based Industries

This study introduces two significant environment events in the market partitioning processes. Also, dichotomous organizational forms are further extended to mature and emerging aspects of organization forms. In most industry context, in particular for network-based industries, both specialists and generalists are closely interconnected with each other. As two environmental events make progress, emerging organizational forms (both specialists and generalists)
develop their presences based upon the scope of geographical coverage and services (products). Deregulatory processes will have a positive influence on the proliferation of both emerging and mature specialists, because deregulatory processes usually target for restricting the monopoly power of incumbent generalists. With the help of regulatory intervention, specialists (both emerging and mature specialists) will have better chances to compete against incumbent generalists. In the events of technological innovation, its influence on the specialists’ proliferation will vary. Emerging specialists will be better positioned to explore and adapt to new technological innovation in a network-based industry context while mature specialists will need to bear higher switching costs to new technological innovation.

The subsequent propositions emphasize on how market partitioning mechanism is influenced by three dimensions of task environments such as competitive intensity (complexity), resource space expansion (munificence), and generalists’ strategic choices (dynamism) (Castrogiovanni, 2002). Interestingly, complexity and munificence dimensions of task environments are mediated by environmental events, and will affect to the different aspects of specialist’s proliferation. Prior market partitioning studies were mostly silent on to what extent generalists execute reactionary strategies on the specialists’ proliferation. As previously mentioned, this study looks at the reverse aspect of market partitioning mechanism when environmental events have positive influence on the specialist’s proliferation. Generalists’ boundary expanding choices will moderate the relationships between environmental events and specialists’ proliferation. Different types of boundary expanding choices, consolidating activities as well as inter-organizational networks, will have different consequences on the sustainability of specialist’s proliferation.

**Proposition 2** Complexity and munificence dimensions of task environments will play a mediating role between environmental events and the different aspects of specialist’s proliferation.

**Proposition 2-1** Complexity dimension (competitive intensity) of task environments has a negative effect on the specialist’s market share. Market share of emerging specialists will be greatly influenced by complexity dimension.

**Proposition 2-2** Munificence dimension (resource space expansions) of task environments has a positive effect on the specialist’s growing rates. However, growth rates of mature specialists will be negatively influenced by munificence dimension.

Market structure determines the strategic options available to firms and the effect of these options on growth and profitability (Boone et al., 2002). Under such conditions with a market center and scale economies, there may be two fundamentally different routes toward above-average organizational performance: either large size or differentiation (Boone et al., 2002). In other words, firms can at any moment in time be confronted with the fundamental dilemma that is central to market partitioning framework: a firm either opts for a scale competition strategy of fighting for the center of the market to avoid head-on competition by moving into the market’s periphery (Boone et al., 2002). Dobrev (2000) looked at the Bulgarian Newspapers market if resource partitioning showed a symmetric process, and argued that decreasing specialists’ founding rates can be explained in two ways. First, industry deregulation and resource scarcity negatively impact on the specialists’ founding rates because scale-economy advantage of the large generalists forces to compete against specialists that can be detrimental to specialists. Second, technological innovations, or greater resource abundance (which increases the population carrying capacity) flattens of the resource distribution (availability), and it will lower the generalists’ concentration and increase the specialists’ founding rates.

In network-based industries, new entrants take advantage of cream-skimming opportunities in capturing their niche spaces against incumbents, because price competition is structured in such a way that new entrants can bypass incumbent’s networks. Niche spaces are created as competitive pricing plans by new entrants attract high-volume customers in densely populated areas. Deregulatory processes eliminate entry barriers, which have been restricted any interesting new entrants from entering the market. Shape of resource distribution is determined by changes in the total number of firms in each market segment. In short, environmental events such as regulatory reform play a key role in shaping the variance of resource distribution (“niche width”) and support the basic market partitioning mechanism.

Even though environmental events – deregulation and technological innovation - establish the ground rules for competition in the marketplace, they create varieties of phenomena and market behaviors that can be differentiated from
those in the prior market partitioning studies (Wholly & Sanchez, 1991). Prior market partitioning framework argues that specialist performance can be stimulated only when specialists have ample opportunity to differentiate themselves from generalists, if not generalists will be direct competitors with lower per unit costs as a result of their size advantage, a competitive battle that is hard to win for specialists (Boone et al., 2002). The basic market partitioning framework predicts that the impacts of specialist strategies and the success of specialists depend on the organizational positioning in the resource space (Boone et al., 2002).

This study looks at three dimensions of task environments. First, complexity is the range and heterogeneity of competitors, customers, and other environmental elements (Castrogiovanni, 2002; Child, 1972). Castrogiovanni (2002) used two ratios to measure complexity – specialization ratio (ratio of primary product shipments to total product shipments expressed as a percentage) and coverage ratio (ratio of primary product shipments by industry members to total primary product shipments expressed as a percentage) among manufacturing firms in 45 different industries. Among environmental elements, this study looks at competitive intensity (Barnett, 1997; Ramaswamy, 2001). Competitive intensity is defined as the magnitude of effect that an organizational has on its rivals’ life chances regardless of the particular tactics or strategies involved (Barnett, 1997). In other words, competitive intensity is proportional to niche-overlap density, and can be operationalized with the number of organizations present in the focal firm’s niche (Dobrev et al., 2001). Even though deregulatory processes aim for promoting competition among players in the marketplace, the interconnected nature of network-based industry context force specialists to compete against generalists as competitive environment intensifies in the deregulatory process. The consequences of competitive intensity will be more detrimental to emerging specialists since established customer bases are hard to break apart from the existing incumbents. For instance, very competitive segment like mobile services have about 3% churn rate.

Second, munificence is the extent to which the environment provides enough resources to support established organizations and new entrants, and to enable them to grow and prosper (Castrogiovanni, 2002; Child & Kieser, 1981). According to the population ecology version of lifecycle effect, environmental carrying capacity is a theoretical upper limit on resources available to organizations occupying a particular environmental niche or resource space, and thus is a limit on the number of organizations that a given environment can support (Castrogiovanni, 2002; Aldrich, 1979). Munificence declines as that limit is approached because there are fewer unexploited resources available to support population growth, and it becomes increasingly difficult for the population to locate and utilize additional resource, thus population growth rate tends to diminish (Castrogiovanni, 2002). Castrogiovanni (2002) looked at four growth items – sales, employment, value added and price-cost margin - to measure munificence. Resource space expansion in a network-based industry context can be measured with the number of various new services (or products) being added to complement or even extend the existing service (or product) market segment mainly from technological innovation. In many network-based industries, different service market segments have been emerged, and generalist’s consolidating activities are lowered as the resource distribution flattens (Dobrev, 2000). Thus, resource space expansions will have a positive effect on the specialist’s growing rates. However, as new services (or products) are recognized as the competing services (or products), the munificence dimension will negatively influence the growth rates of mature. Recent trend of technological convergence and competitive dynamic intensify industrial transformation at the same time, and will have a negative effect on the specialists’ proliferation.

**[Proposition 3]** Dynamism dimension (generalists’ strategic choices) of task environments will play a moderating role between environmental events and the different aspects of specialist’s proliferation.

**[Proposition 3-1]** While generalists’ consolidating activities have a positive effect on the specialist’s proliferation, generalists’ inter-organizational relationships have a negative effect on the specialist’s proliferation.

**[Proposition 3-2]** Generalists’ boundary expanding activities will have an increasing effect on the evolution of market partitioning mechanism.

Depending on the degree and location of specialist’s proliferation, generalists’ strategic reactions may vary. As a result, different types of specialists whether they are mature or emerging specialists will be ended up with the different survival rates in the whole processes of market partitioning mechanism. For example, generalists’ actions can address to
which competitors are aiming for. If generalists aware of the new emergence of specialists (i.e. because of specialists’ scream-skimming behaviors), generalists will take necessary strategic reactions against emerging specialists’ entry and their opportunistic behaviors. Incumbent generalists may go after emerging specialists since the location of resource spaces by specialists is too lucrative to lose generalists’ market presence there. In a network-based industry context, specialists’ entry may helps to build generalists’ own resource space and improve their network externality by having additional specialists. Dynamism is the degree, frequency, and unpredictability of change among environmental elements (Castrogiovanni, 2002; Child, 1972). Therefore, it would be interesting to know how often and to what extent generalists exercise different types of their strategic choices in the marketplace, and it is going to be one of the determining factors for the sustainability of specialist’s proliferation. In this study, types of generalists’ boundary expanding choices are emphasized on the dynamism dimension of task environments.

The basic market partitioning processes assume that more homogeneous or concentrated resource bases create the conditions for generalists to accumulate even stronger advantages and then beget concentration (Carroll, 1985; Boone et al., 2002). As a result, the total amount of resource space open to specialists expands (Carroll et al., 2002). Generalists react to the specialists’ new entries by executing consolidation activities more frequently. In other word, consolidation among generalists sets in motion a process of specialization at the population level of analysis making the coexistence of different organizational forms at population level a sustainable and even likely outcome even though escalating competition increases standardization and reduces organizational variety in the short term, ultimately it may also sow the seeds for future diversity (Boone et al., 2002). Generalists’ strategic choices should not necessarily be limited to consolidation activities but also to strengthen and to diversify their core competencies through strategic alliances and other boundary spanning strategies (Chakravarthy, 1997; Smith & Zeithaml, 1996). Not only consolidating activities among generalists as described in the resource partitioning framework, but also inter-organizational network forms like strategic alliances are frequently formed in order to maintain their dominant market positions. While generalists’ consolidating activities have a positive effect on the specialist’s proliferation, inter-organizational networks will constrain the niche creation and proliferation of specialists at different rates.

As generalists’ boundary spanning activities indicate the reversal of resource partitioning process, specialists may tend to look for newer and more distanced niches. If market partitioning is a cyclical process, the specialist segment may fragment repeatedly, and a few large specialists that occupy the center of the specialist resource space will dominate the segment (Carroll et al., 2002). Such a development will lead to the emergence of a new generation of specialists that attempt to differentiate themselves from the initial specialists (Swaminathan, 1995). Also, environmental resource distribution may change so dramatically that the market center shifts to a region previously occupied by specialists as Dowell & Swaminathan (2000) investigated with the US bicycle industry. Unlike the conventional rendering of resource partitioning, generalists can occasionally respond to intensified competition in the center by successfully changing the width (or positions) of their niches by transforming themselves into specialists (such as corporate venturing) to avoid scale-based selection pressures in the market center (Carroll et al., 2002). Shifting a firm’s range of product offerings and its location may have vital consequences as Dobrev et al. (2001; 2002) investigated with European auto-manufacturers. Thus, it is worthwhile to follow the whole sequential processes of market partitioning mechanism. Prior studies were limited to look at the initial phase of market partitioning mechanism that generalists’ concentration leads to specialists’ proliferation. However, in reality, multiple phases of interactions among organizational forms can occur. Subsequently, specialists’ resource space can be split into another specialist’s resource space and evolve into generalist’s resource space as well.

REFERENCES


